January 16, 2019

**Resolution 01-19** – A resolution adopting the investment policy for the Tualatin Valley Water District

**Resolution 02-19** – A resolution approving a cooperative service agreement between Tualatin Valley Water District, the City of Hillsboro (Cooperator) and the United States Department of Agriculture, Animal and Plant Health Inspection Service Wildlife Services (APHIS-WS)

**Resolution 03-19** – A resolution approving the intergovernmental agreement between Washington County and Tualatin Valley Water District for construction of waterline work on SW 198th Avenue from SW Farmington Road to SW Tualatin Valley Highway

**Resolution 04-19** – A resolution approving a project management services agreement for Willamette Water Supply System improvements between Tualatin Valley Water District and the Willamette Water Supply Program for Metzger Pipeline East (MPE_1.0)

**Resolution 05-19** – A resolution amending system development charges for the Tualatin Valley Water District and declaring an effective date

February 20, 2019

**Resolution 06-19** – A resolution adopting definitions and guidance for Tualatin Valley Water District in the analysis and implementation of public improvement and other projects

**Resolution 07-19** – A resolution adopting revised policies of the Board of Commissioners

March 20, 2019

**Resolution 08-19** – A resolution adopting Financial Management Policies for the Tualatin Valley Water District

**Resolution 09-19** – A resolution amending the Local Contract Review Board Rules
April 17, 2019

Resolution 10-19 – A resolution approving and ratifying a settlement agreement with Gregory Toye for acquisition of real property in fee simple (1S236 Tax Lot 200) for the Willamette Water Supply System

Resolution 11-19 – A resolution approving an intergovernmental agreement between the City of Wilsonville, Tualatin Valley Water District and the City of Hillsboro for joint design and construction of Garden Acres Road and Project PLM_1.2 Garden Acres to SW 124th Avenue Pipeline Projects

May 15, 2019

Resolution 12-19 – No resolution due to numbering error

Resolution 13-19 – A resolution approving the Chief Executive Officer employment agreement and the Chief Executive Officer transition and relocation agreement between Tualatin Valley Water District and Tom Hickmann and authorizing the Board President to execute the agreements

Resolution 14-19 – A resolution reaffirming the declaration of public necessity in Resolution 36-17 to acquire permanent easements and temporary construction easements for pipeline section PLM_1.1 for the Willamette Water Supply System and continuation of condemnation proceedings

Resolution 15-19 – A resolution of the Tualatin Valley Water District approving the 2019-2020 Financial Plan

Resolution 16-19 – A resolution approving the draft Master Revenue Bond Declaration

June 4, 2019

Resolution 17-19 – A resolution declaring public necessity to acquire fee title to the real property known as 1S225BD Tax Lot 1105, Willamette Meridian, Washington County, Oregon for the Miller Hill Road Aquifer Storage and Recovery Project

June 19, 2019

Resolution 18-19 – A resolution adopting the budget and making appropriations for the Tualatin Valley Water District for the 2019-21 biennium

Resolution 19-19 – A resolution endorsing the annexation to the Tualatin Valley Water District of a single property located at Tax Lot 100, T1NR2W, Section 14, Willamette Meridian, at 21627 NW West Union Road, in Washington County
Resolution 20-19 – A resolution reaffirming the declaration of public necessity in Resolution 20-18 to acquire permanent easements and temporary construction easements for pipeline section PLM_5.2 for the Willamette Water Supply System and continuation of condemnation proceedings

July 17, 2019

Resolution 21-19 – A resolution approving the intergovernmental agreement between Washington County, Tualatin Valley Water District and the City of Hillsboro for the Willamette Water Supply Program – Water System Facilities Right-of-Way Permits

Resolution 22-19 – A resolution authorizing transfer of real property interests by Tualatin Valley Water District to the Willamette Water Supply System Commission

Resolution 23-19 – A resolution designating Registered Agent, transferring duties and granting signature authority to Tom Hickmann as Chief Executive Officer

September 18, 2019

Resolution 24-19 – A resolution establishing water rates and other service charges for the Tualatin Valley Water District with an effective date of November 1, 2019

Resolution 25-19 – A resolution declaring public necessity to acquire permanent easements and temporary construction easements on Tax Lot 2S106B000500 for pipeline section PLM_5.2 for the Willamette Water Supply System

Resolution 26-19 – A resolution declaring public necessity to acquire permanent easements and temporary construction easements on Tax Lot 2S20100800 for pipeline section PLM_5.2 for the Willamette Water Supply System

October 16, 2019

Resolution 27-19 – A resolution approving the intergovernmental agreement between Tualatin Valley Water District, the City of Wilsonville and the Willamette Water Supply System Commission for the Raw Water Facilities Project (RWF_1.0)

November 20, 2019

Resolution 28-19 – Acting as the Local Contract Review Board, a resolution declaring an exemption from competitive bidding for the Farmington Road Booster Pump Station and Discharge Main Project and authorize proceeding with a construction manager/general contractor contract
December 18, 2019

Resolution 29-19 – A resolution establishing regular monthly meeting dates of the Board of Commissioners for the calendar year 2020
RESOLUTION NO. 01-19

A RESOLUTION ADOPTING THE INVESTMENT POLICY FOR THE TUALATIN VALLEY WATER DISTRICT.

WHEREAS, the District’s Board of Commissioners (Board) in compliance with ORS 294.135 adopts its Investment Policy annually; and

WHEREAS, the Investment Policy was last adopted by the Board through its approval of Resolution 01-18 on January 17, 2018; and

WHEREAS, the Investment Policy provides guidance on investment decisions and operating principles for the effective management of financial risks, portfolio diversification and internal controls, and allows for the purchase of investments having a maturity longer than 18 months as allowed by ORS 294.135; and

WHEREAS, the Investment Policy remains in compliance with ORS 294.035 regulating the investment of public funds by municipal subdivisions, and policy guidelines established by the State of Oregon Short Term Fund Board (OSTF); and

WHEREAS, the OSTF Board approved the District’s Investment Policy on April 24, 2009 and subsequent amendments to the Investment Policy since that time have conformed with OSTF guidance; and

WHEREAS, the District periodically reviews the Investment Policy; and

WHEREAS, there are no recommended changes to the Investment Policy other than the requirement of its annual adoption by the Board, and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The Investment Policy attached hereto as Exhibit A and incorporated by reference is hereby adopted and staff is directed to implement in the ordinary course of District business.

Approved and adopted at a regular meeting held on the 16th day of January 2019.

__________________________________________  ________________________________
Bernice Bagnall, President                           Todd Sanders, Secretary
Exhibit A

INVESTMENT POLICY

Tualatin Valley Water District

Adopted January 16, 2019
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I. Scope

This policy applies to activities of Tualatin Valley Water District (District) with regard to investing the financial assets of all funds as defined by the District in its Chart of Accounts except that funds held by trustees or fiscal agents are excluded from these rules; however, all funds are subject to regulations established by the State of Oregon.

The purpose of this Investment Policy is to establish the investment objectives, delegation of authority, standards of prudence, eligible investments and transactions, internal controls, reporting requirements, and safekeeping and custodial procedures necessary for the prudent management and investment of the funds of the District.

This policy has been adopted by Resolution No. 01-19 by the District’s Board of Commissioners on January 16, 2019 and replaces the District’s previous Investment Policy.

Other than bond proceeds or other unusual situations, the total of all funds ranges from $40,000,000 to $140,000,000. The Chart of Accounts currently defines the following funds that are not held by trustee or fiscal agent:

1.) Cash Pool
2.) General Fund
3.) Capital Improvement Fund
4.) Willamette Water Supply Program Fund
5.) Capital Reserve Fund
6.) Revenue Bond Debt Service Fund
7.) Willamette River Water Coalition Fund
8.) Customer Emergency Assistance Fund
9.) Willamette Intake Facilities Fund

If, in the course of its activities, the District should define further funds (not held by trustee or fiscal agent), these rules shall also apply to the investment of the financial assets of those new funds. These funds will be invested in compliance with the provisions of, but not necessarily limited to, ORS 294.035 through ORS 294.048; and ORS 294.125 through ORS 294.155. Investment of any tax exempt borrowing proceeds and any related debt service funds will comply with the arbitrage restrictions on all applicable Internal Revenue Codes.

The District acts as collection agent for several other utilities. These funds are to be transferred to the respective agency in compliance with the intergovernmental agreements. Currently the agreements vary from two business days from receipt, the second business day following the week of collection, and twice a month following the 15th and end of month. The method of transfer is by requesting a Pool-to-Pool account transfer at the Local Government Investment Pool (LGIP), a check, or an automated clearing house (ACH) deposit if the agency requests it.
II. OBJECTIVES

The District's investment objectives are as follows:

2.1: Safety
   ▪ Preservation of capital and the protection of principal.
   ▪ Diversification to avoid incurring unreasonable risks regarding specific security types or individual issuers.

2.2: Liquidity
   ▪ Maintenance of sufficient liquidity to meet operating requirements.

2.3: Limit Risk
   ▪ Avoidance of imprudent credit, market, or speculative risk.

2.4: Legality
   ▪ Conformance with federal, state, and other legal requirements.

2.5: Return
   ▪ Attainment of a market rate of return throughout all economic and fiscal cycles.

III. STANDARDS OF CARE

3.1: Delegation of Authority

   ▪ The Chief Financial Officer is the designated Investment Officer of the District and is responsible for investment decisions, under the review of the Board of Commissioners. The Chief Financial Officer may delegate authority to another member of the Finance and Information Technology Department to perform all or some of the duties of the Investment Officer.

   ▪ The Investment Officer is responsible for setting investment policy and guidelines subject to review and adoption by the Board of Commissioners and, if required, review and comment by the Oregon Short Term Fund Board. Further, the Investment Officer will be responsible for the day-to-day operations of the investment process which include, but are not limited to, choosing what to buy or sell, from whom investments will be purchased, executing the buy/sell orders, producing necessary reports, and supervising staff. In addition to the active management of the investment portfolio, the Investment Officer is responsible for the maintenance of other written administrative procedures consistent with this policy and the requisite compliance.

   ▪ To further optimize the total return of the investment portfolio, the Investment Officer will administer an active cash management program the goal of which will maintain historical cash flow information, e.g., debt service, payroll, revenue receipts, and, any extraordinary expenditures.

Subject to required procurement procedures, the District may engage the support services of outside professionals and services as necessary for the efficient management of the investment program. External service providers shall be subject to Oregon Revised Statutes and the provisions of this Investment Policy.
3.2: Prudence

- The standard of prudence to be used by the Investment Officer in the context of managing the financial resources shall be the prudent person rule, which states: “Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived.”

- The Investment Officer and staff, acting in accordance with the Investment Policy and exercising due diligence, shall not be held personally responsible for a specific security’s credit risk, market price changes, or loss of principal if securities are liquidated prior to maturity provided these deviations and losses are reported as soon as practical and action is taken to control adverse developments.

3.3: Ethics and Conflict of Interest

- District officers and employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the investment program, or that could impair their ability to make impartial decisions. Employees and investment officials shall disclose to the Chief Executive Officer any material interests in financial institutions with which they conduct business. They shall further disclose any person financial/investment positions that could be related to the performance of the investment portfolio. Employees, officers and their families shall refrain from undertaking personal investment transactions with the same individual with whom business is conducted on behalf of the District. Officers and employees shall, at all times, comply with the State of Oregon’s Government Ethics requirements set forth in ORS 244.

IV. SAFEKEEPING, ACCOUNTING, AND CONTROLS

4.1: Safekeeping and Collateralization

- Purchased investment securities will be delivered by Fed book entry, DTC, or physical delivery, and held in third-party safekeeping with a designated custodian. The trust department of a bank may be designated as custodian for safekeeping securities purchased from that bank. The purchase and sale of securities will be on a delivery versus payment basis. The custodian shall provide monthly statements and accrual basis reports to Tualatin Valley Water District listing security holdings, issuer, coupon, maturity, CUSIP number, purchase or sale price, transaction date, accrued interest, and other pertinent information. The custodian shall also provide daily access regarding pending investment transactions, future call notices, and any other important information. Delivery versus payment will also be required for all repurchase transactions and with the collateral priced and limited in maturity in compliance with ORS 294.035 (j).

- Demand and time deposits shall be collateralized through the State collateral pool as required by ORS 295 for any excess over the amount insured by an agency of the US Government. Additional collateral requirements may be required if the Chief Financial Officer or the Investment Officer deems increased collateral is beneficial to the protection of the monies under the District’s management.
4.2: Accounting Method

- The District shall comply with all required legal provisions and Generally Accepted Accounting Principles (GAAP). The accounting principles are those contained in the pronouncements of the authoritative bodies including, but not necessarily limited to, the American Institute of Certified Public Accountants (AICPA); the Financial Accounting Standards Board (FASB); and the Government Accounting Standards Board (GASB).

4.3: Internal Controls

- The Chief Financial Officer shall maintain a system of written internal controls which shall be reviewed and tested by the independent auditor at least annually or upon any extraordinary event, e.g., turnover of key personnel, the discovery of any inappropriate activity.

V. QUALIFIED INSTITUTIONS, DIRECT ISSUERS, INVESTMENT ADVISORY SERVICES, AND SELECTION OF BIDS OR OFFERS

5.1: Qualified Financial Institutions

- The Investment Officer, and if applicable, the investment advisory firm as described in Section 5.3, shall maintain a list of all authorized broker/dealers and financial institutions which are approved for investment purposes or investment dealings. Any firm is eligible to make an application to the District, and on due consideration and approval, may be added to the list. Additions or deletions to the list will be made at the Investment Officer’s discretion.

- At the request of the District, the firms performing investment services shall provide their most recent financial statements for review. Further, there should be in place, proof as to all the necessary credentials and licenses held by employees of the broker/dealers who will have contact with the District as specified by, but not necessarily limited to, the Financial Industry Regulatory Authority (FINRA), Securities and Exchange Commission (SEC), etc. The District, or District’s Investment Advisory Firm, shall conduct an annual evaluation of each firm’s creditworthiness to determine if it should remain on the list. Securities broker/dealers not affiliated with a bank shall be required to be registered in the state of Oregon or be classified as reporting dealers affiliated with the Federal Reserve as primary dealers.

- If an investment advisory firm is retained by the District to execute transactions on the District’s behalf, it will have authority to execute investment trades and transactions from its list of authorized broker/dealers and financial institutions.

5.2: Qualified Financial Institutions – Banks

- All bank financial institutions that provide deposits, certificates or any other deposit of the District must be either fully covered by the Federal Deposit Insurance Corporation (FDIC) or the bank must be a participant of the State of Oregon – Public Funds Collateralization Program (PFCP). ORS Chapter 295 governs the collateralization program for banks at the State level. Bank depositories are required to pledge collateral against any public fund deposits in excess of the FDIC insurance amounts. This provides additional protection for public funds in the event of a bank loss. ORS 295 sets the specific value of the collateral, as well as the types of collateral that are acceptable. ORS 295 creates a shared
liability structure for participating bank depositories, better protecting public funds though still not guaranteeing that all funds are 100% protected.

5.3 Direct Issuers

- The District is permitted to purchase investments directly from issuers that meet the criteria under Section VI - Authorized and Suitable Investments.

5.4: Investment Advisory Services

- The District may enter into contracts with external investment advisory firms as it applies to the investment of its short-term operating funds and capital funds including bond proceeds and bond reserve funds. The investment advisory firm must work on a nondiscretionary basis, which requires that the Investment Officer approves all transactions prior to execution.

- If an investment advisor is hired, the manager will serve as fiduciary for the District and comply with all requirements of this Investment Policy. The Investment Officer remains the person ultimately responsible for the prudent management of the portfolio.

- Factors to be considered when hiring an investment advisory firm may include, but are not limited to:
  
  i. The firm’s major business
  ii. Ownership and organization of the firm
  iii. The background and experience of key members of the firm, including portfolio manager expected to be responsible for the District’s account
  iv. The size of the firm’s asset base, and the portion of that base which would be made up by Tualatin Valley Water District’s portfolio if the firm were hired
  v. Management fees
  vi. Cost analysis by Chief Financial Officer/Investment Officer

- The investment advisory firm will be monitored on a monthly basis. Results will be compared to benchmarks developed by the District appropriate to the level of risk.

- Requirements of Investment Advisors

  i. The investment advisor firm must be registered with the Securities and Exchange Commission (SEC) or licensed by the state of Oregon; (Note: Investment advisor firms with assets under management exceeding $100 million must be registered with the SEC, otherwise the firm must be licensed by the State of Oregon).
  ii. All investment advisor firm representatives conducting investment transactions on behalf of District must be registered representatives with FINRA.
  iii. All investment advisor firm representatives conducting investment transactions on behalf of District must be licensed by the State of Oregon.
  iv. Contract terms will include that the Investment advisor will comply with the District’s Investment Policy.

- The Investment Advisor must notify the District immediately if any of the following issues arise while serving under a District Contract:

  i. Pending investigations by securities regulators
ii. Significant changes in net capital
iii. Pending customer arbitration cases
iv. Regulatory enforcement actions
5.5: Competitive Selection of Bids or Offers

- Each investment transaction shall be competitively transacted with broker/dealers who have been authorized by the District or investment advisory firm. At least two broker/dealers shall be contacted for each transaction and their bids and offering prices shall be recorded. A record, subject to District archiving policy, shall be maintained by the District of all bids and offerings for security transactions in order to ensure that the District receives competitive pricing.

- If the District is offered a security for which there is no readily available competitive offering, then the Investment Officer shall document quotations for comparable or alternative securities. When purchasing original issue instrumentality securities, no competitive offerings will be required as all dealers in the selling group offer those securities at the same original issue price.

VI. AUTHORIZED AND SUITABLE INVESTMENTS

6.1: Authorized Investments

- All investments of the District shall be made in accordance with Oregon Revised Statutes: ORS 294.035 (Investment of surplus funds of political subdivisions; approved investments), ORS 294.040 (Restriction on investments under ORS 294.035), ORS 294.135 (Investment maturity dates), ORS 294.145 (Prohibited conduct for Investment Officer including not committing to invest funds or sell securities more than 14 business days prior to the anticipated date of settlement), ORS 294.805 to 294.895 (Local Government Investment Pool). Any revisions or extensions of these sections of the ORS shall be assumed to be part of this Investment Policy immediately on being enacted.

6.2: Suitable Investments

**US Treasury Obligations**: Direct obligations of the United States Treasury whose payment is guaranteed by the United States. [ORS 294.035(3)(a)]

**US Agency Obligations Primary**: Senior debenture obligations of US federal agencies and instrumentalities or U.S. government sponsored enterprises (GSE) that have actively traded markets and provide a higher level of liquidity. These include: Federal National Mortgage Association (FNMA), the Federal Home Loan Mortgage Corporation (FHLMC), Federal Home Loan Banks (FHLB), and the Federal Farm Credit Bureau (FFCB).

**US Agency Obligations Secondary**: Other US government sponsored enterprises that are less marketable are considered secondary GSEs. They include, but are not limited to: Private Export Funding Corporation (PEFCO), Tennessee Valley Authority (TVA), Financing Corporation (FICO) and Federal Agricultural Mortgage Corporation, (Farmer Mac).

**Municipal Debt**: Lawfully issued debt obligations of the States of Oregon, California, Idaho, and Washington and political subdivisions of those states if the obligations have a long-term rating of AA- or better by S&P or Aa3 or better by Moody’s. In the case of a split rating, the lowest rating of these two rating agencies will be used.
**Corporate Debt:** Corporate Notes must be rated AA- or better by S&P or Aa3 or better by Moody’s [ORS 294.035(3)(B)]. In the case of a split rating, the lowest rating will be used.

**Local Government Investment Pool:** State treasurer’s local short-term investment fund up to the statutory limit per ORS 294.810

**Bank Deposit/ Savings Accounts:** Time deposit open accounts or savings accounts in insured institutions as defined in ORS Section 706.008, in credit unions as defined in ORS Section 723.006 or in federal credit unions, if the institution or credit union maintains a head office or a branch in Oregon [ORS Section 294.035(3)(d)].

**Certificates of Deposit:** Certificates of deposit in insured institutions as defined in ORS 706.008, in credit unions as defined in ORS Section 723.006 or in federal credit unions, if the institution or credit union maintains a head office or a branch in Oregon [ORS Section 294.035(3)(d)].

**Commercial Paper:** Commercial Paper must be rated A1 or better by Standard and Poor’s, or P1 or better by Moody’s Services [ORS 294.035(3)(B)], and has long-term bonds which have a minimum rating of AA- by Standard and Poor’s and Aa3 by Moody’s. In the case of a split rating the lowest rating will be used.

**Bankers’ Acceptances:** Bankers’ acceptances, if the bankers’ acceptances are: (i) Guaranteed by, and carried on the books of, a qualified financial institution; (ii) Eligible for discount by the Federal Reserve System; and (iii) Issued by a qualified financial institution whose short-term letter of credit rating is rated AAA by S&P or Aaa by Moody’s. For the purposes of this paragraph, “qualified financial institution” means: (i) A financial institution that is located and licensed to do banking business in the State of Oregon; or (ii) A financial institution that is wholly owned by a financial holding company or a bank holding company that owns a financial institution that is located and licensed to do banking business in the State of Oregon. [ORS 294.035(3)(h)]
VII. INVESTMENT PARAMETERS

7.1: Investment Maturity

- The Investment Officer may invest funds that are related to cash flows for future construction projects or that are being accumulated for future renewal and replacement of infrastructure, by purchasing securities that will be held for a maximum of 5 years. Except for the aforesaid funds and funds requiring special handling (bond proceeds subject to arbitrage, etc.), investments beyond 5 years require the express approval of the Board of Commissioners. The first priority will be to invest in maturities that match liquidity needs of the District. Thereafter, the District shall target to maintain maturities within the following parameters for the total portfolio:

<table>
<thead>
<tr>
<th>Maturity Constraints</th>
<th>Minimum % of Total Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30 days</td>
<td>10%</td>
</tr>
<tr>
<td>Under 1 year</td>
<td>25%</td>
</tr>
<tr>
<td>Under 5 years</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Maturity Constraints</th>
<th>Maximum of Total Portfolio in Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted Average Maturity</td>
<td>2.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Security Structure Constraint</th>
<th>Maximum % of Total Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Callable Agency Securities</td>
<td>25%</td>
</tr>
</tbody>
</table>

- Five-years maximum maturity of any single issue.

- Further, the District shall target the weighted average maturity (WAM) of the total fund to one year which includes both liquidity funds and core investments.

- Cash flow projections will be reviewed and updated at least monthly and will be the controlling guide to establishing maturities. Maturities will be selected to ensure that sufficient cash is available to meet requirements. At least one month’s estimated cash operating requirements will be maintained in the Local Government Investment Pool (LGIP) at all times.
### Diversification Constraints on Total Holdings:
#### Liquidity and Core Funds

<table>
<thead>
<tr>
<th>Issue Type</th>
<th>Maximum % Holdings</th>
<th>Maximum % per Issuer</th>
<th>Ratings S&amp;P</th>
<th>Ratings Moody's</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Treasury Obligations</td>
<td>100%</td>
<td>None</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>US Agency Primary Securities FHLB, FNMA, FHLMC, FFCB</td>
<td>100%</td>
<td>40%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>US Agency Secondary Securities FICO, FARMER MAC etc.</td>
<td>10%</td>
<td>5%</td>
<td>Security must be rated</td>
<td>Security must be rated</td>
</tr>
<tr>
<td>Municipal Bonds (OR, CA, ID, WA)</td>
<td>10%</td>
<td>5%</td>
<td>AA-</td>
<td>Aa3</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>20%</td>
<td>5%</td>
<td>AA-</td>
<td>Aa3</td>
</tr>
<tr>
<td>Oregon Short Term Fund</td>
<td>Maximum allowed per ORS 294.810</td>
<td>None</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Bank Time Deposits/Savings Accounts</td>
<td>20%</td>
<td>10%</td>
<td>Oregon Public Depository</td>
<td>Oregon Public Depository</td>
</tr>
<tr>
<td>Certificates of Deposit</td>
<td>10%</td>
<td>5%</td>
<td>Oregon Public Depository</td>
<td>Oregon Public Depository</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>10%</td>
<td>5%</td>
<td>A1</td>
<td>P1</td>
</tr>
<tr>
<td>Banker's Acceptance</td>
<td>25%</td>
<td>5%</td>
<td>AAA Underlying</td>
<td>Aaa Underlying</td>
</tr>
</tbody>
</table>

### 7.3: Prohibited Investments
- The District shall not lend securities nor directly participate in a securities lending or reverse repurchase program.
- The District shall not purchase mortgage-backed securities.

### 7.4: Investment of Proceeds from Debt Issuance
- Investments of bond proceeds are restricted under bond covenants that may be more restrictive than the investment parameters included in this policy. Bond proceeds shall be invested in accordance with the parameters of this policy and the applicable bond covenants and tax laws.
- Funds from bond proceeds and amounts held in a bond payment reserve or proceeds fund may be invested pursuant to ORS 294.052. Investments of bond proceeds are typically not invested for resale and are maturity matched with outflows. Consequently, surplus funds within the scope of ORS 294.052 are not subject to this policy's liquidity risk constraints within section 7.1.
VIII. Investment Policy Compliance

8.1: Compliance Report

- A compliance report shall be maintained quarterly, to document the portfolio versus the investment policy.

8.2: Compliance Measurement and Adherence

- Compliance Measurement
  
  i. Guideline measurements will use market value of investments based in investment parameters.
  
  ii. Rating and distribution criteria will be based on the settlement date of each purchase.

- Compliance Procedures
  
  i. If the portfolio falls outside of compliance with adopted investment policy guidelines or is being managed inconsistently with this policy, the Investment Officer shall bring the portfolio back into compliance in a prudent manner and as soon as prudently feasible.

  ii. Violations of portfolio guidelines as a result of transactions; actions to bring the portfolio back into compliance and; reasoning for actions taken to bring the portfolio back into compliance shall be documented and reported to the Board of Commissioners.

  iii. Due to fluctuations in the aggregate surplus funds balance, maximum percentages for a particular issuer or investment type may be exceeded at a point in time. Securities need not be liquidated to realign the portfolio; however, consideration should be given to this matter when future purchases are made to ensure that appropriate diversification is maintained.

  iv. As determined on any date that the security is held within the portfolio. If the credit rating of a security is subsequently downgraded below the minimum rating level for a new investment of that security, the Investment Officer shall evaluate the downgrading on a case-by-case basis in order to determine if the security should be held or sold. The Investment Officer will apply the general objectives of safety, liquidity and legality to make the decision.
IX. REPORTING REQUIREMENTS AND PERFORMANCE MEASUREMENT

9.1: Reporting Requirements

- The Investment Officer shall generate monthly reports for management purposes. The Board of Commissioners will be provided with reports which will include but not necessarily be limited to; portfolio activity, instruments held by type, investment allocations by maturity, estimated market valuations, as well as any narrative necessary for adequate clarification.

9.2: Performance Evaluation

- The performance of investments will be measured against the performance of the Local Government Investment Pool, using monthly net yield of both portfolios as the benchmark. Preservation of capital and maintenance of sufficient liquidity will be considered prior to attainment of market return performance. Given these considerations, the District’s portfolio should provide a net yield that is equal or better to that attained by the Local Government Investment Pool over interest rate cycles. Additionally, a market benchmark (e.g.: 0-3 or 0-5 Treasury or Agency Index) will be determined that is appropriate for longer term investments based on the District’s risk and return profile. Return comparisons of the portfolio to the market benchmark will be calculated on a monthly basis. When comparing the performance of the District’s portfolio, all fees and expenses involved with managing the portfolio shall be included in the computation of the portfolio’s rate of return.

- The Investment Advisor shall make available quarterly and annual reports to the District that contains sufficient information to permit an informed outside reader to evaluate the performance of the investment program.

9.3: Monitoring and Adjusting the Portfolio

- The Investment Officer will routinely monitor the contents of the portfolio comparing the holdings to the markets, relative values of competing instruments, changes in credit quality, and benchmarks. If there are advantageous transactions, the portfolio may be adjusted accordingly.

- The policies set forth in this document will be adhered to and monitored on a monthly basis.

X. INVESTMENT POLICY ADOPTION

This Investment Policy will be formally adopted by the Board of Commissioners; and thereafter, this policy will be readopted annually, even if there are no changes. Prior to adoption by the Board of Commissioners, if changes to the Investment Policy require review and comment by the Oregon Short Term Fund Board, such review will be sought prior to formal adoption.
XI. GLOSSARY OF INVESTMENT TERMS:

Accrued Interest: The interest accumulated on a security since the issue date or since the last coupon payment. The buyer of the security pays the market price plus accrued interest.


Basis Point: One-hundredth of 1 percent. One hundred basis points equal 1 percent.

Bond: An interest-bearing security issued by a corporation, government, governmental agency, or other body. It is a form of debt with an interest rate, maturity, and face value, and it is usually secured by specific assets. Most bonds have a maturity of greater than one year and generally pay interest semiannually.

Bond Discount: The difference between a bond’s face value and a selling price, when the selling price is lower than the face value.

Broker: An intermediary who brings buyers and sellers together and handles their orders, generally charging a commission for this service. In contrast to a principal or a dealer, the broker does not own or take a position in securities.

Callable: A bond that may be redeemed by the issuer before maturity for a call price specified at the time of issuance.

Call Date: The date before maturity on which a bond may be redeemed at the option of the issuer.

Collateral: Securities or other property that a borrower pledges as security for the repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.

Commercial Paper: Short-term, unsecured, negotiable promissory notes issued by businesses.

Commission: Broker’s or agent’s fee for purchasing or selling securities for a client.

Core Fund: Core funds are defined as operating fund balance which exceeds the District’s daily liquidity needs.

Coupon Rate: The annual rate of interest that the issuer of a bond promises to pay to the holder of the bond.

Coupon Yield: The annual interest rate of a bond, divided by the bond’s face value and stated as a percentage. This usually is not equal to the bond’s current yield or its yield to maturity.

Current Maturity: The amount of time left until an obligation matures. For example, a one-year bill issued nine months ago has a current maturity of three months.

Current Yield: The remaining or final interest due on a security as a percentage of a security’s market price.

CUSIP: The Committee on Uniform Security Identification Procedures, which was established under the auspices of the American Bankers Association to develop a uniform method of identifying municipal, U.S. government, and corporate securities.
Dealer: An individual or firm that ordinarily acts as a principal in security transactions. Typically, dealers buy for their own account and sell to a customer from their inventory. The dealer’s profit is determined by the difference between the price paid and the price received.

Delivery: Either of two methods of delivering securities: delivery vs. payment and delivery vs. receipt (also called "free"). Delivery vs. payment is delivery of securities with an exchange of money for the securities. Delivery vs. receipt is delivery of securities with an exchange of a signed receipt for the securities.

Discount: The reduction in the price of a security; the difference between its selling price and its face value at maturity. A security may sell below face value in return of such things as prompt payment and quantity purchase. “At a discount” refers to a security selling at less than the face value, as opposed to “at a premium”, when it sells for more than the face value.

Full Faith and Credit: Indicator that the unconditional guarantee of the issuer (e.g., the United States government, State of Oregon) backs the repayment of a debt.

Government Bonds: Securities issued by the federal government; they are obligations of the U.S. Treasury. Also known as “governments.”

Government Sponsored Enterprise (GSE): Financial services corporations created by the United States government. Their function is to enhance the flow of credit to targeted sectors of the economy, make those segments of the capital market more efficient, and reduce the risk to investors. The desired effect of the GSEs is to enhance the availability and reduce the cost of credit to the targets. Examples include Federal Home Loan Banks (FHLB), Federal National Mortgage Association (FNMA), Federal Home Loan Mortgage Corporation (FHLMC), and Federal Farm Credit Banks (FFCB).

Interest: Compensation paid, or to be paid, for the use of money. The rate of interest is generally expressed as an annual percentage.

Interest Rate: The interest payable each year on borrowed funds, expressed as a percentage of the principal.

Investment Advisor or Manager: An investment advisor that acts on a non-discretionary basis to provide investment and risk strategies. The advisor must act in a fiduciary capacity.

Investment Portfolio: A collection of securities owned by the District and held by a custodian.

Investment Securities: Securities purchased for an investment portfolio, as opposed to those purchased for resale to customers.

Liquidity: The ease at which a security can be bought or sold (converted to cash) in the market. A large number of buyers and sellers and a high volume of trading activity are important components of liquidity.

Liquidity Component: A percentage of the total portfolio dedicated to providing liquidity needs for the District.

Local Government Investment Pool: Oregon’s Local Government Investment Pool (LGIP) created by Oregon Laws in 1973, Chapter 748. It is a diversified portfolio offered to eligible participants of the State of Oregon. The Local Government Investment Pool is an alternate investment vehicle offered to participants that includes, but is not limited to, any municipality, political subdivision or public corporation of Oregon that by
law is made the custodian of, or has control of, any public funds. The LGIP is commingled with the State's short-term funds.

**Mark to Market:** Adjustment of an account or portfolio to reflect actual market price rather than book price, purchase price, or some other valuation.

**Mortgage-Backed Securities:** Mortgage-backed securities are debt obligations that represent claims to the cash flows from pools of mortgage loans, most commonly on residential property. Mortgage loans are purchased from banks, mortgage companies, and other originators and then assembled into pools by a governmental, quasi-governmental, or private entity. The entity then issues securities that represent claims on the principal and interest payments made by borrowers on the loans in the pool, a process known as securitization. Senior debentures of GSE’s Federal National Mortgage Association (FNMA), Federal Home Loan Mortgage Corporation (FHLMC) are not considered mortgage-backed securities.

**Municipals (Munis):** Securities, usually bonds, issued by a state or its agencies. The interest on munis is generally exempt from federal income taxes and state and local income taxes in the state of issuance. Municipal securities may or may not be backed by the issuing agency’s taxation powers.

**Par Value:** The value of a security expressed as a specific dollar amount marked on the face of the security, or the amount of money due at maturity. Par value should not be confused with market value.

**Portfolio:** A collection of securities held by an individual or institution.

**Prudent Person Rule:** A long-standing common-law rule that requires a trustee who is investing for another to behave in the same way as a prudent individual of reasonable discretion and intelligence who is seeking a reasonable income and preservation of capital.

**Quotation, or Quote:** The highest bid to buy or the lowest offer to sell a security at a particular time.

**Settlement Date:** The actual date when a security is purchased and comes under the ownership of the buyer.

**Spread:** The difference between two figures or percentages. E.g. the difference between the bid and ask prices of a quote or between the amount paid when a security is bought, and an amount received when sold.

**Trade Date:** The date when a security transaction is executed.

**Treasury Bill (T-Bill):** An obligation of the U.S. government with a maturity of one year or less. T-bills bear no interest but are sold at a discount.

**Treasury Bonds and Notes:** Obligations of the U.S. government that bear interest. Notes have maturities of one to ten years; bonds have longer maturities.

**Weighted Average Maturity:** The weighted sum of the average years to maturity of the investments held by the District.

**Yield:** The annual rate of return on an investment, expressed as a percentage of the investment. Income yield is obtained by dividing the current dollar income by the current market price for the security. Net yield, or yield to maturity, is the current income yield minus any premium above par or plus any discount from par in
the purchase price, with the adjustment spread over the period from the date of purchase to the date of maturity of the bond.

**Yield to Maturity**: The average annual yield on a security, assuming it is held to maturity; equals to the rate at which all principal and interest payments would be discounted to produce a present value equal to the purchase price of the bond.
RESOLUTION NO. 02-19


WHEREAS, Tualatin Valley Water District and the City of Hillsboro have entered into various intergovernmental agreements to establish responsibilities and obligations for the planning, permitting, design and construction of the Willamette Water Supply System (WWSS); and

WHEREAS, the Federal and State regulatory permit processes for the WWSS project in its entirety and for individual components of the WWSS requires entry into the Cooperative Services Agreement Between Tualatin Valley Water District and City of Hillsboro (Cooperator) and United States Department of Agriculture Animal and Plant Health Inspection Service Wildlife Services (APHIS-WS) and Work and Financial Plan regarding wildlife damage management that may be encountered, attached hereto as Exhibit 1 and incorporated by reference (Agreement); and

WHEREAS, the Agreement provides that APHIS-WS will provide wildlife damage management for the WWSS project for a five-year period according to the Agreement and annual Work and Financial Plans to avoid, minimize or mitigate adverse effects to wildlife so that the WWSS Project can proceed and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The Cooperative Service Agreement Between Tualatin Valley Water District and City of Hillsboro (Cooperator) and The United States Department of Agriculture Animal and Plant Health Inspection Service Wildlife Services (APHIS-WS), (Agreement) and the Work and Financial Plan attached hereto as Exhibit 1 and incorporated by reference is hereby approved.

Section 2: The Agreement is for a term of five years with Work and Financial Plans to be developed each year for an aggregate cost not to exceed $100,000. The Chief Executive Officer is authorized to execute the annual Work and Financial Plans over the term of the Agreement.

Section 3: The Chief Executive Officer is authorized to execute the Agreement on behalf of the District. The Board recognizes that there may be edits or other corrections to the final Agreement and the Work and Financial Plan, and the Chief Executive Officer is authorized to sign on behalf of the District so long as the amendments are not substantial in nature, and the District’s Legal Counsel approves.

Approved and adopted at a regular meeting held on the 16th day of January 2019.

________________________________________    _________________________________________
Bernice Bagnall, President                        Todd Sanders, Secretary
ARTICLE 1 – PURPOSE

The purpose of this Agreement is to conduct wildlife damage management (WDM) activities to reduce and minimize migratory bird activity, such as nesting, at identified project sites and designated vegetation in Washington and Clackamas counties, Oregon. These WDM activities are necessary to avoid and minimize effects of project activities on birds.

ARTICLE 2 - AUTHORITY

APHIS-WS has statutory authority under the Animal Damage Control Act of March 2, 1931, as amended (46 Stat. 1468; 7 U.S.C. 8351-352), and the Act of December 22, 1987 (101 Stat. 1329-331, 7 U.S.C. 8353), the Secretary of Agriculture may conduct a program of wildlife services with respect to injurious animal species and take any action the Secretary considers necessary in conducting the program. Additionally, the Secretary of Agriculture, except for management of urban rodents, is authorized to conduct activities to manage nuisance mammals and birds and those mammal and bird species that are reservoirs for zoonotic diseases. In carrying out a program of wildlife services involving injurious and/or nuisance animal species or involving mammal and bird species that are reservoirs for zoonotic diseases, the Secretary is authorized to cooperate with States, local jurisdictions, individuals, public and private agencies, organizations, and institutions.

Under the Consolidated Appropriations Act, 2017, (Pub. L. No. 115-31, 131 Stat. 144, H.R. 244 — 115th Congress (2017-2018), APHIS is authorized to collect fees to cover the total costs of providing technical assistance, goods, or services requested by States, other political subdivisions, domestic and international organizations, foreign governments, or individuals, provided that such fees are structured such that any entity’s liability for such fees is reasonably based on the technical assistance, goods, or services provided to the entity by the Agency, and such fees shall be credited to this account, to remain available until expended, without further appropriation, for providing such assistance, good, or services.

ARTICLE 3 - MUTUAL RESPONSIBILITIES

The cooperating parties mutually understand and agree to/that:

a. Confer and plan a WDM program that addresses the need for managing conflicts caused by nesting birds in Washington and Clackamas counties, Oregon. Based on this consultation, WS will formulate, in writing, the program work plan and associated budget and present them to the Cooperator for approval.

b. Develop a mutually agreed upon Work Plan and Financial Plan which are incorporated into this Agreement by reference. It is understood and agreed that any monies allocated for the purpose of this Agreement shall be expended only towards the activities and related expenses outlined therein.

c. When either of the Cooperating parties address the media or incorporate information into reports and/or publications, both Cooperating parties must agree, in writing, to have their identities disclosed when
receiving due credit related to the activities covered by this Agreement.

d. APHIS-WS has advised the Cooperator that other private sector service providers may be available to provide wildlife management services and notwithstanding these other options, Cooperator requests that APHIS-WS provide wildlife management services as stated under the terms of this Agreement.

e. All equipment with a purchase price of $5,000 or more per unit, purchased directly with funds from the Cooperator for use solely on this project shall be subject to disposal according to APHIS policy, and shall be specifically listed in the Work and Financial Plan. Property title/disposal shall be determined when the project (including all continuations and revisions of this Agreement) terminates, or when the equipment is otherwise directed to other projects, whichever comes first. If the equipment is sold prior to the project end, the proceeds should be allocated according to APHIS Policy. Continuations and revisions to this Agreement shall list any equipment with a purchase price of $5,000 or more per unit, carried over from a purchase directly with funds from the cooperator for use solely for this project. All other equipment purchased for the program is and remain the property of APHIS-WS.

f. APHIS-WS will provide overall direction and control of the program.

ARTICLE 4 - COOPERATOR RESPONSIBILITIES

The Cooperator agrees to:

a. Designate Jill Chomycia, Permitting Coordinator, 1850 SW 170th Ave, Beaverton, Oregon, 97003, 503-941-4573, jill.chomycia@tvwd.org as the authorized representative who shall be responsible for collaboratively administering the activities conducted in this Agreement;

b. Designate David Kraska, Willamette Water Supply Program Director, 1850 SW 170th Ave, Beaverton, Oregon, 97003, 503-941-4561, David.kraska@tvwd.org as the authorized signatory for all Work and Financial Plans pursuant to this Agreement.

c. Reimburse APHIS-WS for costs, not to exceed the annually approved amount specified in the Work and Financial Plan. If costs are projected to exceed the amount reflected in the Financial Plan, the Work and Financial Plan shall be formally revised and signed by both parties before services resulting in additional costs are performed. The Cooperator agrees to pay all undisputed costs of service submitted via an invoice within 30 days of the date of the submitted invoice or invoices as submitted by APHIS-WS. Late payments are subject to interest, penalties, and administrative charges and costs as set forth under the Debt Collection Improvement Act of 1996. If the Cooperator is delinquent in paying the full amount of the due service costs submitted by APHIS-WS, and/or is delinquent in paying the due late payments, and/or is delinquent in paying the interest, penalties, and/or administrative costs on any delinquent due service costs, APHIS-WS will immediately cease to provide the respective service associated with the submitted service costs. APHIS-WS will not reinstate or provide the respective service until all due service costs, and/or due late payments, and/or due interest, penalty, and/or administrative costs are first paid in full.

d. To provide a Tax Identification Number or Social Security Number in compliance with the Debt Collection Improvement Act of 1996.

e. As a condition of this Agreement, The Cooperator ensures and certifies that it is not currently debarred or suspended and is free of delinquent Federal debt.
ARTICLE 5 – WS RESPONSIBILITIES

WS agrees:

a. To designate David Williams, State Director, 6135 NE 80th Avenue Suite A8 Portland, Oregon, 503-326-2346, david.e.williams@aphis.usda.gov as the authorized representative who shall be responsible for collaboratively administering the activities conducted in this Agreement.

b. The performance of wildlife damage management actions by WS under this Agreement is contingent upon a determination by WS that such actions are in compliance with the National Environmental Policy Act, Endangered Species Act, and any other applicable federal statutes. WS will not make a final decision to conduct requested wildlife damage management actions until it has made the determination of such compliance.

c. To provide qualified personnel and other resources necessary to implement the approved WDM activities delineated in the Work and Financial Plan referenced in 3.a of this Agreement.

d. To bill the Cooperator for costs incurred in performing WDM activities as authorized in the approved annual Work and Financial Plan as may be amended.

e. To notify the Cooperator if costs are projected to exceed the amounts estimated and agreed upon in the Financial Plan. WS will cease providing goods or services until a revision to the Work and Financial Plan, as appropriate, have been agreed to and signed by both parties to this Agreement.

f. Authorized auditing representatives of the Cooperator shall be accorded reasonable opportunity to inspect the accounts and records of WS pertaining to such claims for reimbursement to the extent permitted by Federal law and regulations.

ARTICLE 6 – CONTINGENCY STATEMENT

For costs borne by WS, this Agreement is contingent upon the passage of the Agriculture, Rural Development, and Related Agencies Appropriation Act for the current fiscal year from which expenditures may be legally met and shall not obligate APHIS upon failure of Congress to so appropriate. This Agreement also may be reduced or terminated if Congress provides APHIS funds only for a finite period under a Continuing Resolution.

ARTICLE 7 – NON-EXCLUSIVE SERVICE CLAUSE

Nothing in this Agreement shall prevent any other country, State government or its political subdivisions, local government, university, or college, organization, association, or individual from entering into separate agreements with WS for same or similar activities provided under the terms of this Agreement.

ARTICLE 8 – CONGRESSIONAL RESTRICTIONS

Pursuant to Section 22, Title 41, United States Code, no member of or delegate to Congress shall be admitted to any share or part of this Agreement or to any benefit to arise therefrom.
ARTICLE 9 – APPLICABLE REGULATIONS

All WDM activities will be conducted in accordance with applicable Federal, State, and local laws and regulations.

This Agreement is not a procurement contract (31 U.S.C. 6303), nor is it considered a grant (31 U.S.C. 6304). In this Agreement, APHIS provides goods or services on a cost recovery basis to nonfederal recipients.

ARTICLE 10 – LIABILITY

APHIS assumes no liability for any actions or activities conducted under this Agreement except to the extent the recourse or remedies are provided by Congress under the Federal Tort Claims Act (28 USC 1346(b), 2401(b), 2671-2680).

ARTICLE 11 – NON-DISCRIMINATION CLAUSE

The United States Department of Agriculture prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual’s income is derived from any public assistance program. Not all prohibited bases apply to all programs.

ARTICLE 12 – FAILURE TO PAY FEES

The Cooperator is liable for fees assessed for services performed under this Agreement. APHIS will assess a late payment penalty for failure to pay fees when due. In addition, the overdue fees shall accrue interest as required by 31 U.S.C. 3717.

ARTICLE 13 – AGREEMENT EFFECTIVE DATE

This Agreement shall become effective January 1, 2019, and shall continue to December 31, 2024. Further, this Agreement may be amended or extended at any time by mutual agreement of the parties in writing. The Cooperator must submit a written request to extend at least 30 days prior to expiration of the Agreement. It may be terminated by either party upon 60 days notice in writing to the other party.
AUTHORIZATION:

Tualatin Valley Water District
Beaverton, Oregon
Tax Identification Number: 93-6002085

__________________________________________________________________________
Mark Knudson
Tualatin Valley Water District

City of Hillsboro
Hillsboro, Oregon
Tax Identification Number: 93-6002183

__________________________________________________________________________
Michael Brown
City of Hillsboro

UNITED STATES DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
WILDLIFE SERVICES
Tax Identification Number: 41-0696271

__________________________________________________________________________
State Director, Oregon

__________________________________________________________________________
Director, Western Region
Pursuant to Cooperative Service Agreement No. 19-7341-6986-RA between Tualatin Valley Water District and City of Hillsboro (Cooperator) and the United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services (APHIS-WS), this Work and Financial Plan defines the objectives, plan of action, resources and budget for cooperative wildlife services program.

OBJECTIVES/GOALS

APHIS-WS objective is to provide professional wildlife management assistance to prevent or reduce nesting by protected species, including American Robin, to enable removal of vegetation and construction activities during the nesting season.

Specific goals are:
1. Reduce the risk of viable bird nests that could cause delays in implementing construction timelines.
2. To provide assistance in the form of educational information.

PLAN OF ACTION

The objectives of the wildlife damage management program will be accomplished in the following manner:

1. APHIS-WS will provide Cooperator with bird nest deterrence and removal at construction sites and designated vegetation areas, as described in Attachment A. The WS specialist will conduct 1 to 3 nest inspections per week from March 1, 2019 until the earlier of the following: (1) vegetation is removed; (2) August 31, 2019; or (3) Cooperator informs the WS in writing the project is complete. Nest removal will be conducted using extension poles, paint balls, or other projectiles as necessary.

APHIS-WS will provide technical assistance and or direct management at times and locations for where it is determined there is a need to resolve problems caused by wildlife. Lethal management efforts will be directed towards specific offending individuals or local populations. Method selection will be based on an evaluation of selectivity, humaneness, human safety, effectiveness, legality, and practicality.

2. APHIS-WS District Supervisor Brian Thomas Salem, Oregon will supervise this project, (503) 399-5814. This project will be monitored by David E. Williams, State Director, Portland, Oregon (503) 326-2346.

3. APHIS-WS will invoice Cooperator quarterly for actual costs incurred in providing service, not to exceed $10,000.00 in total for this agreement.

4. In accordance with the Debt Collection Improvement Act (DCIA) of 1996, invoices issued by APHIS-WS are due and payable within 30 days of the invoice date. The DCIA requires that all debts older than 120 days be forwarded to debt collection centers or commercial collection agencies for more aggressive action. Debtors have the option to verify, challenge and compromise claims, and have access to administrative appeals procedures which are both reasonable and protect the interests of the United States.
PROCUREMENT

Cooperator understands that additional supplies and equipment may need to be purchased under this agreement to replace consumed, damaged or lost supplies/equipment. Any items remaining at the end of the agreement will remain in the possession of APHIS-WS.

STIPULATIONS AND RESTRICTIONS:

1. All operations shall have the joint concurrence of APHIS-WS and Cooperator and shall be under the direct supervision of APHIS-WS. APHIS-WS will conduct the program in accordance with its established operating policies and all applicable state and federal laws and regulations.

2. APHIS-WS will cooperate with the Oregon Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, Oregon Department of Transportation, Oregon Fire marshal’s Office, county and local city governments, and other entities to ensure compliance with Federal, State, and local laws and regulations.

3. Wildlife Damage Management: A Work Initiation Document for Wildlife Damage Management (WS Form 12A), a Work Initiation Document for Wildlife Damage Management – Multiple Resource Owners (WS Form 12B) or a Work Initiation Document for Management of Wildlife Damage on Urban Properties (WS Form 12C) will be executed between APHIS-WS and the landowner, lessee, administrator before any APHIS-WS work is conducted.

COST ESTIMATE FOR SERVICES:

Salary including possible overtime, benefits, vehicle, supplies and material costs charged at actual cost. The distribution of the budget for this work plan may vary as necessary to accomplish the purpose of this Agreement.

AUTHORIZATION:

Tualatin Valley Water District
1850 SW 170th Avenue
Beaverton, OR 97003

David Kraska, Willamette Water Supply Program

Date

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE WILDLIFE SERVICES

State Director, Oregon

Date

Director, Western Region

Date
Attachment A – Activity Area

The area for activities described in this plan is depicted in this attachment, and includes the following Willamette Water Supply Program work packages:

- PLM_1.1 – The activity area for PLM_1.1 includes a corridor of variable width but typically approximately 100 feet wide beginning near the intersection of SW Industrial Way and SW Arrowhead Creek Road in Wilsonville, Oregon (Clackamas County). The corridor crosses Coffee Lake Creek north of SW Orepac Avenue, then follows SW Kinsman Road north to approximately 300 feet north of SW Wilsonville Road.
- PLM_5.2 – The activity area for PLM_5.2 includes a corridor of variable width but typically approximately 100 feet wide beginning near the intersection of SW Scholls Ferry Road and SW Roy Rogers Road in Tigard, Oregon (Washington County). The corridor follows SW Scholls Ferry Road west to SW Tile Flat Road, continues along SW Tile Flat Road to SW Grabhorn Road, and ends approximately 500 feet north of SW Tile Flat Road.
- Additional Willamette Water Supply Work Areas to be determined and included on an on-call basis.

The activity area is depicted in the following figures.
Willamette Water Supply Program
Scholls Area Pipeline Project
USFWS Migratory Bird Treaty Act
Permit Application
Project PLM 1.1
Figure 2 - Sheet 1 of 2

Imagery: ESRI World Imagery

PLM 1.1 Pipeline Alignment

Hydric Soils
Delineated Wetland
NWI Wetland
Creek (USGS NHD)
Beaverton City Limits

Extent of Construction
Impact

Tree Retained
Tree Removal

0 125 Feet

Sheet 1 of 2
PLM 5.2 Pipeline Alignment
Extent of Construction Impact
Tree Retained
Tree Removal

Hydric Soils
Delineated Wetland
NWI Wetland
Creek (USGS NHD)
Beaverton City Limits

Willamette Water Supply Program
Scholls Area Pipeline Project
USFWS Migratory Bird Treaty Act Permit Application
Project PLM 5.2
Figure 3 - Sheet 2 of 2
Attachment

FINANCIAL PLAN

For the disbursement of funds from
Tualatin Valley Water District and City of Hillsboro - Washington
to
USDA APHIS Wildlife Services for
MBTA Compliance, American robins

from
1/1/2019
to
12/31/2019

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Subtotal (Direct Charges) $7,864.73

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<td>Aviation Flat Rate Collection</td>
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Agreement Total $10,000.00

The distribution of the budget from this Financial Plan may vary as necessary to accomplish the purpose of this agreement, but may not exceed: $10,000.00
RESOLUTION NO. 03-19

A RESOLUTION APPROVING THE INTERGOVERNMENTAL AGREEMENT BETWEEN WASHINGTON COUNTY AND TUALATIN VALLEY WATER DISTRICT FOR CONSTRUCTION OF WATERLINE WORK ON SW 198TH AVENUE FROM SW FARMINGTON ROAD TO SW TUALATIN VALLEY HIGHWAY.

WHEREAS, Washington County has approved and funded a Major Streets Transportation Improvement Program project to construct road improvements to SW 198th Avenue from SW Farmington Road to SW Tualatin Valley Highway (“Road Project”); and

WHEREAS, Tualatin Valley Water District (TVWD) has existing waterlines located in the existing roadway which need to be relocated on SW 198th Avenue from SW Farmington Road to SW Tualatin Valley Highway (“Waterline Work”); and

WHEREAS, TVWD desires to relocate and perform Waterline Work and related improvements in association with the Road Project.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The Major Streets Transportation Improvements Program Intergovernmental Agreement Between Washington County and Tualatin Valley Water District for Construction of Waterline Work on SW 198th Avenue from SW Farmington Road to SW Tualatin Valley Highway, attached hereto as Exhibit 1 and expressly incorporated by reference, is hereby approved.

Section 2: The Chief Executive Officer is authorized to execute the agreement on behalf of the District. The Board recognizes that there may be edits or other corrections to the final agreement and the Chief Executive Officer is authorized to sign on behalf of the District so long as the amendments are not substantial in nature, and the District’s Legal Counsel approves.

Approved and adopted at a regular meeting held on the 16th day of January 2019.

_________________________________________  __________________________________________
Bernice Bagnall, President                  Todd Sanders, Secretary
MAJOR STREETS TRANSPORTATION IMPROVEMENT PROGRAM
INTERGOVERNMENTAL AGREEMENT

BETWEEN

WASHINGTON COUNTY AND TUALATIN VALLEY WATER DISTRICT
FOR CONSTRUCTION OF:

WATERLINE WORK ON SW 198th AVENUE
FROM SW FARMINGTON ROAD TO SW TUALATIN VALLEY HIGHWAY

This Agreement is made and entered into by and between Washington County, a political subdivision of the State of Oregon, acting by and through its Elected Officials, hereinafter referred to as “County”, and the Tualatin Valley Water District, acting by and through its Board of Commissioners, hereinafter referred to as “TVWD”.

W I T N E S S E T H

RECITALS

WHEREAS, ORS 190.003 - 190.010 authorizes County and TVWD to enter into intergovernmental agreements for the performance of any or all functions and activities that a party to the agreement has the authority to perform; and,

WHEREAS, County has an approved project under the Major Streets Transportation Improvement Program (MSTIP) for the construction of improvements to SW 198th Avenue, a County collector road, from SW Farmington Road to SW Tualatin Valley Highway, which is subject to County jurisdiction, hereinafter referred to as the “Road Project,” as shown generally on the attached Exhibit A; and,

WHEREAS, the TVWD desires to relocate an existing 8-inch and 16-in waterlines, valves, and associated appurtenances on SW 198th Avenue from Sta 376+50 to Sta 381+50 within the limits of the County’s Project, and said new waterline and associated improvements are hereinafter referred to as “Waterline Work,” and

WHEREAS, the TVWD has requested that the construction of the Waterline Work be incorporated into the County’s Road Project, and TVWD agrees to pay for such requested work; and,

WHEREAS, under the cited authority, it is the mutual desire of County and TVWD to enter into this Agreement to cooperate in the construction and inspection of Waterline Work and Road Work, which are hereinafter collectively referred to as the “Project”, with the allocation of responsibilities as detailed below; and,
AGREEMENT

NOW, THEREFORE, the premises being in general as stated in the foregoing recitals and in consideration of the terms, conditions and covenants set forth below, the parties hereto agree as follows:

ARTICLE 1 COUNTY OBLIGATIONS

1.1 County shall enter into and execute this Agreement during a duly authorized session of its Board of County Commissioners.

1.2 County shall, upon execution of this Agreement, assign a liaison person to be responsible for coordination of the Project with TVWD.

1.3 County shall perform, or cause to be performed, all actions necessary for the construction of Project, including contract administration, construction engineering, and project management. County shall administer the construction contract for the Project.

1.4 County will incorporate the Waterline Work design plans, bid items, quantities and technical specifications provided by TVWD, into the Project bid documents. The County reserves the right to require alignment or other design modifications to Waterline Work plans provided by TVWD as necessary to minimize impacts to the Project.

1.5 County will, following the opening of bids, notify TVWD of the amount of the proposed construction cost of the Waterline Work as contained in the bid and provide TVWD with the opportunity for review of the contract bid proposal prior to contract award.

1.6 County will, following written approval and acceptance from TVWD of the contract bid proposal for Waterline Work, prepare a staff agenda for award of the Project.

1.7 County shall provide inspection services for Waterline work trench excavation and backfill only (TVWD shall provide inspection services for Waterline Work including pipe and valve installation, system testing, and related improvements).

1.8 County shall perform actions regarding compensation as set forth in Article 3 - Compensation

ARTICLE 2 TVWD OBLIGATIONS
2.1 TVWD shall, upon execution of this Agreement, assign a liaison person to be responsible for coordination of Project with County.

2.2 TVWD shall prepare and provide, at its expense, a complete design for the Waterline Work, including design drawings, construction specifications, and an itemized bid schedule. TVWD will coordinate design of the Waterline Work with the overall design of the Project. TVWD will provide a complete design package for construction of the Waterline Work that will be incorporated into the County’s Project bid package.

2.3 Upon notification of the submitted bid proposal by the County, TVWD will have five (5) calendar days to review and evaluate the submitted prices for the Waterline Work at which time they will notify the County in writing as to their decision to either move forward with the contract work or to have their own crews perform the work.

2.4 TVWD shall provide all inspection and monitoring of the District Water in coordination with the County, including preparation of quantity documentation, extra work, field changes (red-lines) made to the construction drawings (County shall provide inspection on trench excavation and backfill only). TVWD shall monitor all “acceptance testing” conducted by the contractor as specified in the Waterline Work construction documents, which includes pressure testing, disinfection, and valve box installations. These and any additional testing or services related to the Waterline Work shall be at the TVWD’s sole expense and discretion.

2.5 TVWD shall perform actions regarding compensation as set forth in Article 3 – Compensation.

ARTICLE 3 COMPENSATION

3.1 TVWD shall pay to the County the Waterline Work construction cost, and the non-construction cost associated with the Waterline Work. The Waterline Work construction includes contract bid items used for the Waterline Work, including all directly related costs (e.g. flagging), an allocated share of the cost of applicable lump sum contract items (e.g. mobilization and erosion control) if not specifically broken out in the quotation, and the cost for any extra work required for the Waterline Work, including field changes, permits fees, and system development charges. The non-construction cost includes the cost for County services including project management and coordination, surveying, inspection, and contract administration, which shall be calculated at a flat rate of 15% of the total Waterline Work construction costs.

3.2 Estimated construction cost of the Waterline Work is $620,000.00. Estimated non-construction cost of the District Water is $93,000.00 for a total estimate of
$713,000.00. Within thirty (30) days of execution of this Agreement, TVWD shall pay to County the sum of $106,950.00 (15 percent of the Waterline Work improvements). Thereafter, County shall send TVWD quarterly statements during Project construction indicating the amount incurred for the Waterline Work and the amount due, if any. Upon depletion of the $106,950.00 deposited under 3.2, the quarterly statement shall include the amount due from the TVWD for Waterline Work. TVWD shall pay County the amount due within thirty (30) days of its receipt of the billing.

3.3 TVWD and County understand that the estimated costs are used to determine project budget and deposit amounts used within this Agreement. Final costs will be based on the actual contract amount of the schedule of prices and quantities used and installed, including field change orders. Final payments made by TVWD to the County related to this Project shall be based on actual bids and construction and non-construction (15% of construction) costs.

3.4 County shall provide TVWD with a final statement of Waterline Work expenses within ninety (90) days of the completion of the construction contract, and bill TVWD for any remaining costs to be paid by TVWD in excess of deposits made, or refund any excess to TVWD.

ARTICLE 4 GENERAL PROVISIONS

4.1 Laws of Oregon

The parties agree to abide by all applicable laws and regulations regarding the handling and expenditure of public funds. This Agreement shall be governed by the laws of the State of Oregon. All provisions required by ORS Chapter 279A and 279C to be included in public contracts are hereby incorporated by reference and made a part of this Agreement as if fully set forth herein.

4.2 Default

Either party shall be deemed to be in default if it fails to comply with any provision of this Agreement. TVWD and County agree time is of the essence in the performance of any of the obligations within this Agreement. The complaining party shall provide the other party with written notice of default and allow thirty (30) days within which to cure the defect. TVWD shall pay the County for costs incurred for satisfactorily completed and authorized work up to the time of default. Each party shall be liable for all costs and damages arising from default by the other party.

4.3 Indemnification

This Agreement is for the benefit of the parties only. Each party agrees to indemnify and hold the other harmless, to include their respective officers, employees, agents and representatives, from and against all claims, demands and causes of actions and suits
of any kind or nature for personal injury, death or damage to property on account of or arising out of services performed, the omission of services or in any way resulting from the acts or omissions of the parties so indemnifying and/or its officers, employees, agents or representatives. Indemnification is subject to and shall not exceed the limits of liability of the Oregon Tort Claims Act (ORS 30.260 through 30.300). In addition, each party shall be responsible for any contract claims, delay damages or similar items caused by the action or inaction of the party.

4.4 Documents are Public Records

All records, reports, data, documents, systems, and concepts, whether in the form of writings, figures, graphs, or models which are prepared or developed in connection with this Project shall become public records pursuant to Oregon Law.

4.5 Modification of Agreement

No waiver, consent, modification or change of terms of this Agreement shall bind a party unless in writing, signed by all parties. Such waiver, consent, modification or change, if made, shall be effective only in specific instances and for the specific purpose given.

4.6 Dispute Resolution

The parties shall attempt to informally resolve any dispute concerning any party’s performance or decision under this Agreement, or regarding the terms, conditions or meaning of this Agreement. A neutral third party may be used if the parties agree to facilitate these negotiations. In the event of an impasse in the resolution of any dispute, the issue shall be submitted to the governing bodies of both parties for a recommendation or resolution.

4.7 Remedies

Subject to the provision in paragraph 4.6, any party may institute legal action to cure, correct, or remedy any default, to enforce any covenant or agreement herein, or to enjoin any threatened or attempted violation of this Agreement. All legal actions shall be initiated in Washington County Circuit Court. The parties, by signature of their authorized representatives below, consent to the personal jurisdiction of that court.

4.8 Severability

If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent, be determined by a court of valid jurisdiction to be invalid or unenforceable, the remainder of this Agreement and the application of the remaining terms and provisions shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

4.9 Nondiscrimination
Exhibit 1

No person shall be denied or subjected to discrimination in receipt of the benefits of any services or activities made possible by or resulting from this Agreement on the grounds of race, color, religion, gender, sexual orientation, national origin, disability, age or marital status. Any violation of this provision shall be considered a material defect and shall be grounds for cancellation, termination or suspension in whole or in part by the County.

4.10 Integration

This Agreement includes the entire agreement of the parties and supersedes any prior discussions or agreements regarding the same subject. There are not understandings, agreements, or representations, oral or written, not specified herein regarding this contract.

4.11 Standards

TVWD standards shall apply to District Water. County standards apply to all other work. In case of conflict as to which standards apply, County standards shall prevail.

ARTICLE 5 - TERM OF AGREEMENT

5.1 The term of this Agreement shall be from the date of execution for three (3) years or until completion of all obligations, whichever is sooner.

5.2 This Agreement may be amended or extended for periods of up to one year by consent of the parties, subject to provisions of this Agreement. Except for breach, it may be canceled or terminated for any reason by either party. Termination or cancellation shall be effective thirty (30) days after written notice to the other party, or at such time as the parties may otherwise agree. The parties shall, in good faith, agree to such reasonable provision for winding up the Project and paying any additional costs as necessary.

IN WITNESS WHEREOF, the parties hereto have set their hands and affixed their seals as of the day and year hereinafter written.

DONE AND DATED this _____ day of ______________________, 2018.

TUALATIN VALLEY WATER DISTRICT

Date: ______________________

________________________
CEO

APPROVED AS TO FORM
WASHINGTON COUNTY, OREGON

TVWD General Counsel

__________________________________________
Chair, Board of Commissioners

__________________________________________
Recording Secretary

Date: ________________________________

APPROVED AS TO FORM

__________________________________________
Cortney Duke-Driessen
Assistant County Counsel
RESOLUTION NO. 04-19

A RESOLUTION APPROVING A PROJECT MANAGEMENT SERVICES AGREEMENT FOR WILLAMETTE WATER SUPPLY SYSTEM IMPROVEMENTS BETWEEN TUALATIN VALLEY WATER DISTRICT AND THE WILLAMETTE WATER SUPPLY PROGRAM FOR METZGER PIPELINE EAST (MPE_1.0).

WHEREAS, Tualatin Valley Water District (TVWD) and the City of Hillsboro (Hillsboro) entered into the Agreement for Design and Construction of the Willamette Water Supply Program dated June 16, 2015 (WWSP IGA) whereby TVWD and Hillsboro agreed to permit, fund, design and construct the Willamette Water Supply System (WWSS) consisting of Willamette River supply, treatment, transmission, pumping and storage; and

WHEREAS, WWSP initially planned a construction package identified as Pipeline East (PLE_1.0) as part of the WWSS to provide transmission from the WWSS pipeline at SW Roy Rogers Road and SW Scholls Ferry Road to the TVWD Metzger Service Area and has now designated it as Metzger Pipeline East (MPE_1.0); and

WHEREAS, TVWD and Hillsboro entered into a Professional Services Agreement with Brown and Caldwell (Brown and Caldwell Contract) dated November 20, 2017, for the design of MPE_1.0 (aka PLE_1.0) as part of the Willamette Water Supply System (WWSS); and

WHEREAS, Willamette Water Supply Program staff has worked with Brown and Caldwell, TVWD and Hillsboro to determine the turnout point on the WWSS system and the connection point to the TVWD system; and

WHEREAS, TVWD and Hillsboro agree that the primary benefit of MPE_1.0 accrues to TVWD as it will provide water exclusively to the TVWD service area so that allocation and responsibility of the costs of permitting, design and construction are borne by TVWD and costs incurred to date have been tracked in this manner and will be in the future; and

WHEREAS, TVWD and Hillsboro have fully assigned and transferred Hillsboro's interest in the Brown and Caldwell contract to TVWD; and

WHEREAS, TVWD and WWSP, acting by and through TVWD and Hillsboro, agree that WWSP shall manage the MPE_1.0 for the benefit of WWSS and TVWD, and TVWD shall pay all costs incurred by WWSP staff for TVWD's portion of the work and other covenants as set forth in the Project Management Services Agreement for Willamette Water Supply System Improvements Between Tualatin Valley Water District and Willamette Water Supply Program (Agreement), attached hereto as Exhibit 1 and incorporated by reference and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The Project Management Services Agreement for Willamette Water Supply System Improvements Between Tualatin Valley Water District and the Willamette Water Supply
Program (Agreement), acting by and through TVWD and Hillsboro, attached hereto as Exhibit 1 and incorporated by reference, is hereby approved.

Section 2: The Chief Executive Officer is authorized to execute this Agreement on behalf of TVWD. The Board recognizes that there may be edits and corrections to the Agreement, and the Chief Executive Officer is authorized to accept amendments and sign on behalf of the District so long as the amendments do not substantially change the Agreement and such amendments are approved by General Counsel.

Approved and adopted at a regular meeting held on the 16th day of January 2019.

_______________________________       ________________________________
Bernice Bagnall, President              Todd Sanders, Secretary
PROJECT MANAGEMENT SERVICES AGREEMENT

FOR WILLAMETTE WATER SUPPLY SYSTEM IMPROVEMENTS

BETWEEN

TUALATIN VALLEY WATER DISTRICT

AND

WILLAMETTE WATER SUPPLY PROGRAM

This Project Management Services Agreement ("Agreement") is made this ______ day of January 2019
by and between Tualatin Valley Water District, a domestic water supply district organized under ORS
Chapter 264 ("TVWD") and the Willamette Water Supply Program ("WWSP"), acting by and through
TVWD and the City of Hillsboro, a municipal corporation ("CITY"). All parties to this Agreement are
herein referred to individually as a “Party” and collectively as the “Parties”.

RECITALS

A. TVWD and CITY each provide municipal water service to their respective system users within
their service area boundaries.

B. Pursuant to an Intergovernmental Agreement styled Agreement for Design and Construction of
Willamette Water Supply Program dated June 15, 2015 ("WWSP IGA"), TVWD and CITY have
agreed to construct the Willamette Water Supply System ("WWSS") which consists of
permitting, funding, design, and construction of facilities for pumping, storing, transmitting, and
treating water.

C. WWSP initially planned a construction package identified as Pipeline East ("PLE_1.0") as part of
the WWSS administered by the WWSP. PLE_1.0 has since been refined and renamed as the
Metzger Pipeline East ("MPE_1.0").

D. TVWD and the CITY have previously determined that MPE_1.0 will be owned primarily by TVWD
and have tracked and charged the costs of MPE 1.0 in a manner reflecting that fact.

E. TVWD and the CITY previously entered into an agreement with Brown and Caldwell to provide
engineering related services for the design of MPE_1.0, and the CITY has assigned its rights and
obligations in that agreement to TVWD.

F. TVWD and the CITY, as partners in the WWSP, have agreed that the WWSP should continue to
administer and deliver MPE_1.0 as a service to TVWD.

G. The Parties desire to memorialize the specific deal points between TVWD and the WWSP for the
continued administration and delivery of MPE_1.0 by the WWSP.

AGREEMENT

1. Recitals. The Recitals set forth above are incorporated by reference and made a part of this Agreement.
2. **Project Description.**

2.1. The preliminary concept for MPE_1.0 includes 48-inch and 24-inch welded steel pipe. The MPE_1.0 alignment of 48-inch steel pipe begins at the Scholls Ferry turnout, extending from SW Roy Rogers Road to connect at the Washington County Supply Line in SW Beaverton-Hillsdale Highway. The 24-inch steel pipeline will tee from the 48-inch pipe and connect to the existing Metzger service area. MPE_1.0 includes two Pressure/Flow Control Facilities, chlorination facilities and other necessary appurtenances. This project is further described in the Statement of Work (SOW) Willamette Water Supply Program - MPE_1.0 Design, Bidding Phase, and Services During Construction. The project is subject to change as further evaluation occurs.

2.2. A minor portion of the MPE_1.0 project pipeline will remain part of the assets owned by WWSS (“WWSS Portion”). This section begins at a SW Scholls Ferry Road turnout at SW Roy Rogers Road and extends through a WWSS Flow Meter vault. The remainder of MPE_1.0 shall be owned by TVWD (“TVWD Portion”). The approximate station based on the MPE_1.0 Preliminary Design (dated July 2018) for the delineation between the WWSS Portion and the TVWD Portion is at STA 3+00.

3. **Project Delivery.**

3.1. TVWD will have primary responsibility for permitting, real estate acquisition, public outreach, cost and schedule management, safety and security management, procurement, design, construction, and project management for the TVWD Portion of MPE_1.0.

3.1.1. TVWD will execute all new contracts and agreements in its name, and TVWD will name WWSP as its owner’s representative in such contracts.

3.1.2. WWSP is hereby authorized to perform the work contemplated by this Agreement through existing contracts executed by the WWSP for development of the WWSS, provided that TVWD shall be responsible for all payments and other obligations under such contracts as set forth in this Agreement.

3.2. WWSP will have primary responsibility for permitting, real estate acquisition, public outreach, cost and schedule management, safety and security management, procurement, design, construction, and project management for the WWSS Portion of MPE_1.0 as set forth in the documents establishing the WWSP.

4. **Coordination.**

4.1. TVWD identifies Carrie Pak as the primary contact for coordination between the Parties.

4.2. WWSP identifies David Kraska as the primary contact for coordination between the Parties.

4.3. Either Party may appoint another person or persons to represent the Party upon written notice to the other.
5. **Compensation.**

5.1. WWSP will track time and materials when working on MPE_1.0 in the same manner as WWSP tracks time and materials for the design and construction of other WWSP work packages. Work performed on the WWSS Portion of MPE_1.0 will be tracked and/or allocated separately from work performed on the TVWD Portion to the extent practicable.

5.2. WWSP will invoice the Parties at the same rates it charges the Parties for other design and construction work packages, provided:

   5.2.1. Only TVWD shall be billed for the TVWD Portion of MPE_1.0; and

   5.2.2. TVWD, the CITY, and any future parties will be billed for the WWSS Portion of MPE_1.0 on the same shared basis as other construction work packages of the WWSP.

5.3. Notwithstanding the provisions of Section 6.1, the Parties agree that costs WWSP has already incurred for the implementation of MPE_1.0 shall be compensated pursuant to the provisions of this Section 5.

6. **Term and Termination.**

6.1. This Agreement shall become effective on the Effective Date, which date shall be the date all Parties have executed the Agreement. Except as provided below, this Agreement shall terminate following completion of MPE_1.0.

6.2. Either Party may terminate the agreement at any time, provided:

   6.2.1. The terminating Party shall provide the other Party at least thirty (30) days written notice prior to when the termination takes effect; and

   6.2.2. All costs WWSP incurs through the Termination Date shall be due and owing as required by Section 5.

6.3. Upon early termination of this Agreement, WWSP will continue to have primary responsibility for the WWSP Portion of MPE_1.0 and the Parties shall enter into a new coordination agreement to accommodate the TVWD Potion.

6.4. **Replacing Representatives.** Either party may appoint another person or persons (but no more than two persons) to represent them upon written notice to the other.

6.5. **Representation Responsibilities.** WWSP, through a Project Manager identified in writing, will provide TVWD’s Project Representative with updated schedules, other information as reasonably requested, and opportunities for site inspections during performance of the work. TVWD will in no way direct WWSP’s contractor in any aspect of the Work.

7. **Indemnity.** To the extent allowed under the Oregon Tort Claims Act and the Oregon Constitution, each Party shall defend, indemnify, and hold harmless the other Party from and against any and all claims, losses, liabilities, costs, expenses, damages, causes of action, demands, and proceedings (including without limitation attorney fees and costs) (“Claims”),
arising out of, or directly or indirectly related to: (i) the proportional extent to which the indemnifying Party’s negligent act or omission is determined to be the cause of the Claims; and (ii) any breach or default in the performance of any obligation on the part of the indemnifying Party to be performed under the terms of this Agreement.

8. **Default.** If a Party fails to perform an obligation of the Agreement, the other Party may give notice of default, specifying the default, and state the date by which the default must be cured, which date shall be not less than 30 days from the notice. If the default is not cured within 30 days or such other date as specified in the notice, then the non-defaulting Party may pursue all remedies available.

9. **Severability.** In case any one or more of the provisions contained in this Agreement shall be invalid, illegal, or unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

10. **Counterparts.** This Agreement may be executed by the Parties in any number of counterparts, which together shall constitute one instrument. In addition, properly executed authorized signatures, including digital or electronic signatures, may be transmitted via facsimile or PDF via email and upon receipt shall constitute original signatures.

11. **Amendment.** This Agreement may be amended only if all Parties concur in the proposed amendment by a written agreement, signed by authorized representatives of each Party.

12. **Waiver.** The failure of a Party to insist on the strict performance of any provision of this Agreement or to exercise any right, power, or remedy upon a breach of any provision of this Agreement shall not constitute a waiver of any provision of this Agreement or limit the Party’s right thereafter to enforce any provision or exercise any right.

13. **Implied Covenants.** The Parties agree that in construing this Agreement, no covenants shall be implied between the Parties except the covenants of good faith and fair dealing.

14. **Survival of Terms and Conditions.** The provisions of this Agreement shall survive its termination to the full extent necessary for their enforcement and the protection of the Party in whose favor they run.

15. **Relationship to WWSP IGA.** Except where the terms of this Agreement are more specific or in conflict with the terms of the WWSP IGA, this agreement shall be subject to the terms of the WWSP IGA until that agreement is terminated or superseded by the WWSS IGA and then this provision shall apply to the WWSS IGA.

IN WITNESS WHEREOF, the Parties hereto have set their hands as of the day and year hereinafter written.

[Signatures on following page]
Tualatin Valley Water District

By: ________________________________
Name & Title: Mark Knudson
CEO
Date: ________________________________

Approved as to Form: ________________

City of Hillsboro

By: ________________________________
Name & Title: Kevin Hanway
Water Department Director
Date: ________________________________

Tualatin Valley Water District

By: ________________________________
Name & Title: Mark Knudson
CEO
Date: ________________________________

Approved as to Form: ________________
RESOLUTION NO. 05-19

A RESOLUTION AMENDING SYSTEM DEVELOPMENT CHARGES FOR THE TUALATIN VALLEY WATER DISTRICT AND DECLARING AN EFFECTIVE DATE.

WHEREAS, on July 18, 2012, the Board of Commissioners adopted Ordinance 01-12 “System Development Charge Ordinance” to impose system development charges (SDCs) and other related procedures to comply with ORS 223.297 to ORS 223.314, inclusive, to provide revenues necessary for capital improvements constructed and to be constructed; and

WHEREAS, in accordance with the methodology identified in Section 4 of Ordinance 01-12, the administrative staff of the District calculated the amount of the SDC to be imposed by the Board of Commissioners to collect the statutorily authorized, necessary revenues; and

WHEREAS, Section 9 B of Ordinance 01-12 requires the District to review its SDCs annually in relation to the Engineering News Record (ENR) Construction Cost Index (CCI) (Seattle); and

WHEREAS, construction costs have increased 0.83% between December 2017 and December 2018 as evidenced by the ENR CCI (Seattle); and

WHEREAS, pursuant to Section 9 of Ordinance 01-12, the Board of Commissioners by this resolution amends the SDC for the District as set forth below.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: Resolution 03-18 is hereby repealed and superseded by this resolution effective at 7:00 A.M., Pacific Standard Time on March 1, 2019.

Section 2: Prior to making a connection of non-District water facilities to the District’s water system, the applicant for such a connection shall pay in full the SDC to the District, except that there shall be no SDC for a fireline.

Section 3: Further, the Board directs staff, for any calendar year, during which the Board has not adjusted SDCs based on a revised capital improvements or facilities plan, to adjust SDCs March 1 for each the ensuing year thereafter, as calculated by staff based on the change, from December of the prior year to December of the current year, in the Engineering News Record (ENR) Construction Cost Index (CCI) (Seattle).

Section 4 (a): Pursuant to Section 3 above, the SDC is calculated for a 5/8 x 3/4-inch meter by a weighting factor. The weighting factors adopted by the Board are the American Water Works Association safe operating capacities for displacement type meters.
The SDC for meter sizes up to 1-1/2 inches is:

<table>
<thead>
<tr>
<th>Reimbursement Fee</th>
<th>Improvement Fee</th>
<th>Administration</th>
<th>Total SDC</th>
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<tr>
<td>$1,299/ERU</td>
<td>5,998/ERU</td>
<td>122/ERU</td>
<td>$7,419/ERU</td>
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<table>
<thead>
<tr>
<th>Meter Size</th>
<th>Weighting Factors (ERUs)</th>
<th>Charge</th>
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</thead>
<tbody>
<tr>
<td>5/8 x 3/4-inch</td>
<td>1.0</td>
<td>$7,419</td>
</tr>
<tr>
<td>¾ x 3/4-inch</td>
<td>1.5</td>
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<tr>
<td>1-inch</td>
<td>2.5</td>
<td>18,548</td>
</tr>
<tr>
<td>1.5-inch</td>
<td>5.0</td>
<td>37,095</td>
</tr>
</tbody>
</table>

Section 4 (b): Pursuant to Sections 4 above, for meters over 1.5-inch, the SDC shall be determined based on the customer’s anticipated water usage. Anticipated peak-day water usage will be divided by the peak-day system design flow of 844 gallons per day per equivalent residential unit (ERU) to determine peak-day ERUs. Anticipated average daily water usage will be divided by 358 gallons per day per ERU to determine average-day ERUs (storage ERUs).

Peak-Day SDC cost is:

- Reimbursement Fee: $853 per peak-day ERU
- Improvement Fee: 5,248 per peak-day ERU
- Peak-Day SDC cost: $6,101 per peak-day ERU

Storage SDC cost is:

- Reimbursement Fee: $568 per storage ERU
- Improvement Fee: 750 per storage ERU
- Storage SDC cost: $1,318 per storage ERU

The SDC shall be the sum of the peak-day SDC cost per ERU multiplied by the peak-day ERUs and the storage SDC cost per ERU multiplied by the storage ERUs.

Section 4 (c): The SDC paid for meters larger than 1-1/2 inches as of the effective date of this resolution may be adjusted upward based on actual usage pursuant to an SDC agreement to be executed with the District. If during the term of the SDC agreement, the usage is greater than 110% of anticipated volume during a 12-month period, an additional SDC may be charged, using the same techniques for calculating peak-day and storage ERUs and multiplying the peak-day SDC cost per ERU and the storage cost per ERU then in effect.

Section 4 (d): The SDC paid for a residential ¾-inch or 1-inch water meter, in the circumstance where a larger meter is required only for the purpose of meeting a residential multi-purpose fire sprinkler system requirement, will consist of the SDC for the appropriate size meter that would be required without the multi-purpose fire sprinkler system plus 18% of the difference between the price of the SDC for the meter size meeting the domestic water requirements and the SDC for the meter size meeting the fire sprinkler requirement. The 18% factor represents the approximate storage cost component of the SDC. Should the customer regularly use the capacity of the ¾-inch or 1-inch meter to
meet its domestic needs, the customer will be required to pay the remainder of the SDC at the current rate then in effect.

Section 4 (e): If the customer has been charged by the District for an illegal connection and requests a contract for payment of the SDC, the District may withhold the option of providing a contract for said payment of SDC.

Section 4 (f): If the SDC is financed as permitted by ORS 223.208, the financing charge established by the District is 9.0% as authorized in ORS 82.010 Legal Rate of Interest and for a maximum term of 10 years.

Approved and adopted at a regular meeting held on the 16th day of January 2019.

____________________________________  ______________________________________
Bernice Bagnall, President               Todd Sanders, Secretary
RESOLUTION NO. 06-19

A RESOLUTION ADOPTING DEFINITIONS AND GUIDANCE FOR TUALATIN VALLEY WATER DISTRICT IN THE ANALYSIS AND IMPLEMENTATION OF PUBLIC IMPROVEMENT AND OTHER PROJECTS.

WHEREAS, Oregon law requires Tualatin Valley Water District to follow different contracting procedures depending upon whether a project is a public improvement, minor alteration, ordinary repair and maintenance or emergency; and

WHEREAS, while Oregon law contains some definitions of the various work categories, the Board of Commissioners believes that further definition and guidance is necessary to guide District staff in determining the category of the proposed work and the method of contracting with outside entities or performance by District forces; and

WHEREAS, if the category of work is for a public improvement with an estimated cost in excess of $200,000, then analysis of whether the District performs this work with its own forces requires compliance with the least-cost policy provisions of ORS 279C.305; and

WHEREAS, the District has developed the definitions and guidance for public improvement, minor alteration, ordinary repair and maintenance and emergency work as set forth on Exhibit 1, attached hereto and incorporated by reference; and

WHEREAS, the District has developed the guidance for the least-cost policy and methodology for use by District staff when making the least-cost analysis required by ORS 279C.305 for public improvement projects estimated to be in excess of $200,000, as set forth on Exhibit 2, attached hereto and incorporated by reference, and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The definitions and guidance for public improvement, minor alteration, ordinary repair and maintenance and emergency work set forth on Exhibit 1, attached hereto and incorporated by reference, are adopted.

Section 2: The guidance and methodology to be applied by District staff to make the least-cost analysis required by ORS 279C.305 for public improvement projects estimated to be in excess of $200,000, proposed to be performed by District forces, attached hereto as Exhibit 2 and incorporated by reference, is adopted.

Section 3: District staff is authorized to apply the provisions of this resolution upon adoption.

Section 4: The Chief Executive Officer is authorized to make reasonable interpretations of this resolution and Exhibits 1 and 2 to comply with ORS 279C.305 on a case-by-case basis.
Approved and adopted at a regular meeting held on the 20th day of February 2019.

_______________________________  _____________________________  
Bernice Bagnall, President  Todd Sanders, Secretary
Construction of Public Improvement Projects: Definitions and Guidance of Project Categories

A. Public Improvement Work

ORS 279.A.010 (1)(cc) defines public improvement as a “...a project for construction, reconstruction or major renovation on real property by or for a contracting agency.” Public improvement does not include:

1. Projects for which no funds of a contracting agency are directly or indirectly used, except for participation that is incidental or related primarily to project design or inspection; or
2. Emergency work, minor alteration, ordinary repair or maintenance necessary to preserve a public improvement.

Projects generally contracted by the District with outside entities under the definition of public improvement include:

1. Projects identified in the Water Master Plan
2. Projects identified in the Capital Improvement Program
3. Projects that do not meet the objective of self-performing the work at least cost in Exhibit 2 to this resolution
4. Projects that do not meet the self-performance criteria as defined below

B. Emergency, Minor Alteration, Ordinary Repair or Maintenance.

The District may contract this work with outside entities or choose to self-perform with District forces without consideration of cost for following:

1. Emergency Work:
   • Repair or replacement of existing infrastructure during an emergency event as defined in ORS 279A.010(1)(f); or
   • The immediate replacement of infrastructure when:
     o The cost of the repair is economically wasteful in comparison to the cost of replacement, or
     o The integrity of the asset has been compromised to the point where it cannot be successfully returned to service after repair, or
     o The repaired infrastructure would have an unacceptable level of reliability for the District’s customers.

2. Minor Alteration:
   • A modification to infrastructure that improves its performance, safety or water quality. Common examples include but are not limited to:
     o Installation of air-release valves
     o Installation of blow-off valves
     o Installation of hydrants
     o Installation of in-line valves
• A modification to infrastructure where the modification can be self-performed during the District’s normal course of business.

3. Ordinary Repair or Maintenance:
   • Ordinary repair and maintenance are planned projects. These projects fall within identified “programs” in the District’s biennial budget.
   • Repair or replacement of existing infrastructure during planned maintenance. The immediate replacement of an asset is justified when:
     o The cost of the repair would be economically wasteful in comparison to the cost of replacement, or
     o The integrity of the infrastructure has been compromised to the point where it cannot be successfully returned to service after repair, or
     o The repaired infrastructure would have an unacceptable level of reliability for the District’s customers.
ORS 279C.305 requires a least-cost analysis be performed by the District for public improvement projects the District intends to self-perform that have an estimated construction cost greater than $200,000. The least-cost analysis shall include:

- An estimate of the total cost of placing the public improvement in service for its intended use with a private contractor.
- An estimate of the total cost of placing the public improvement in service for its intended use with the agency’s own equipment or personnel.

Pursuant to these requirements, the District has formulated a least-cost methodology when determining whether to self-perform the construction of public improvements. The least-cost methodology follows these steps:

1. Identify the project.
2. Develop the project scope.
3. Determine if the project is a public improvement as defined in Exhibit 1 of this resolution.
4. If the project is a public improvement, determine if the District desires to self-perform the work.
5. If the District desires to self-perform the work, determine if the construction cost is greater than $200,000.
6. If the construction costs are greater than $200,000, document the findings of the least-cost analysis consistent with the District’s Least-Cost Requirement as adopted in the District’s Financial Management Policies.

The project cost estimates created as part of the least-cost analysis will be compared and refined based on historical cost data. The results of the least-cost analysis will be submitted to the Bureau of Labor and Industries (BOLI) via BOLI form WH-119.
RESOLUTION NO. 07-19

A RESOLUTION ADOPTING REVISED POLICIES OF THE BOARD OF COMMISSIONERS.

WHEREAS, by Resolution 08-17, dated February 15, 2017, the Board of Commissioners adopted Board policies applicable to the Board in the conduct of District matters; and

WHEREAS, at the January 29, 2019 work session, the Board agreed with the staff recommendation to revise the approval process for routine, joint improvement intergovernmental agreements that cost at or below $500,000; and

WHEREAS, the Board policies will be amended as indicated in Exhibit 1 to allow the Chief Executive Officer to execute such agreements, and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The Board hereby adopts the Board policies attached hereto as Exhibit 1 and incorporated by reference, effective immediately.

Section 2: The Chief Executive Officer is directed to take all action necessary to publish the Board policies with the amendments as set forth in Exhibit 1.

Approved and adopted at a regular meeting held on the 20th day of February 2019.

_________________________________  ________________________________
Bernice Bagnall, President                  Dick Schmidt, Secretary
Board Policies

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Chapter 1 – Vision, Mission and Values

**Vision**

Delivering the best
Water • Service • Value

**Mission Statement**

To provide our community quality water and
customer service

**Values**

Reliability
Integrity
Stewardship
Excellence
Safety
Chapter 2 - Powers, Responsibilities and Conduct

The fundamental powers of the Board are set forth in Oregon Revised Statutes. The Board functions as a body, and individual Commissioners have no authority to act on the Board’s behalf unless authorized by the majority of the Board.

1. District Oversight

a. The Board will establish policy, organizational goals and objectives and provide the financial means to implement each.

b. The Board will select a Chief Executive Officer, reserving all authority and responsibility not otherwise assigned to the CEO or others. The Board delegates to the CEO the responsibility of management of District operations and personnel as well as implementing Board policies. No Commissioner may direct the actions of individual staff members.

c. The Board acts as the Local Contract Review Board for the District.

d. The Board, along with five citizen members, serves on the Budget Committee for the District.

e. The Board approves the selection of the independent external auditor, as determined through a request for proposals issued by the CEO.

2. Actions

a. The Board establishes law by adopting ordinances. The majority of the ordinances adopted by the Board concern the District’s Rules and Regulations, but the Board may adopt other ordinances regarding District operations.

b. The Board exercises its administrative authority by adopting resolutions. Resolutions generally deal with matters of a special or temporary nature and can include establishing policies, setting fees, entering into intergovernmental agreements or considering real property transactions.
   
   • Real estate transactions greater than $50,000 shall be subject to approval by the Board. The CEO has approval authority equal to or less than $50,000.
   
   • All non-routine intergovernmental agreements and intergovernmental agreements related to routine joint improvement projects that cost greater than $500,000 shall be subject to approval by the Board. The CEO has approval authority equal to or less
than $500,000 unless the joint improvement project generates multiple agreements that taken together cost more than $500,000.

c. The Board can take action by motion or consensus without adopting an ordinance or a resolution. Such actions are in conformance with previously adopted ordinances and resolutions or operate within existing rules and policies and can include approving programs or making appointments.

3. Committees

a. The Board may approve the creation of advisory committees as needed, outlining the purpose, duties and responsibilities of each committee at the time of creation.

b. The Board will approve the appointments of all Commissioner or citizen members of each committee.

c. All quorums of the Board and Board-appointed citizen advisory committees for the purpose of discussing District business will be considered public meetings, unless designated as executive sessions under public meetings law, and written minutes or meeting summaries will be considered public records.

4. Conduct

The Board recognizes that the manner in which Commissioners conduct themselves at all times has an impact on the community, the District and its employees. Commissioners are expected to:

- Maintain and cultivate positive relationships with the community, staff and agency partners;
- Set an example of ethical conduct;
- Distinguish between personal views and those of the District to avoid misrepresentation of the District;
- Refrain from disseminating or disclosing confidential, proprietary or sensitive information received in a Commissioner's official capacity; and
- Practice civility, professionalism and decorum in all discussions and debate.

5. Attendance

Commissioners are expected to attend all public Board-related meetings where District business is conducted having reviewed all meeting materials in advance. Following an absence, Commissioners are encouraged to contact the Board President and/or CEO to obtain a briefing.
on meeting topics. Absence from meetings without prior notice, except in cases of emergency or illness, may result in censure.

6. Censure

a. If a Commissioner substantially violates Board policy or state law, the Board may take action to protect Board integrity and may discipline the Commissioner with a public reprimand. Before issuing a reprimand, the Board must plainly state any concerns in writing or in an open public meeting, and the Commissioner must have a reasonable opportunity to respond. The Board may then investigate the actions of any Commissioner and meet in executive session to discuss any finding that reasonable grounds exist that a substantial violation has occurred. Under ORS 192.660(2)(b), the Commissioner under investigation may request an open hearing.

b. Potential sanctions that may be imposed by the Board include:
   - Curtailment of District-paid conference or event attendance
   - Limitation on serving as a District representative on committees or other intergovernmental agencies or community groups
   - Removal from the office of Board President
   - Ineligibility to serve as Board President for a designated period of time
Chapter 3 – Officers

New Commissioners will have the opportunity to participate in a comprehensive orientation program led by the Chief Executive Officer.

The Board will approve annual appointments to the following positions at the first regular meeting of July.

1. President

   a. The President will review Board meeting agendas with the CEO prior to their finalization. The President will preside at all meetings and have the right to make motions, contribute to discussions and vote on any item. The President has the ability to call special meetings. The President serves as the Budget Committee chair pro tem until another committee member is selected as chair.

   b. The President will make committee appointments, subject to the approval of the majority of the Board.

   c. The President will sign ordinances, resolutions, minutes and other official and ceremonial Board documents on behalf of the Board. The CEO will sign all other Board-authorized documents.

   d. The President will represent the Board in deliberations with other boards, districts or agencies or assign an alternate Commissioner if necessary.

   e. No Commissioner may serve more than three consecutive one-year terms as President. If officer assignments change midyear, any period served in excess of six months will be considered a term.

2. Vice President

   In the absence of the President, the Vice President will perform the duties and have the rights and obligations of the President.

3. Treasurer

   The Treasurer will serve as Board liaison with staff on questions regarding financial policies. In the absence of both the President and Vice President, the Treasurer will perform the duties and have the rights and obligations of the President.
4. Secretary

The Secretary will countersign all ordinances, resolutions, minutes and other applicable official and ceremonial Board documents signed by the President.

5. Acting Secretary

In the absence of the Secretary, the Acting Secretary will countersign all ordinances, resolutions, minutes and other applicable official and ceremonial Board documents signed by the President.
Chapter 4 – Policy Creation, Amendment and Suspension

Proposals to create, amend or suspend a policy may be proposed by any Commissioner and will be reviewed by the Chief Executive Officer prior to Board consideration for action. All policy-related Board actions will be made by resolution.

The CEO must clearly state any known policy and budget implications when requesting Board action on an item.

1. Creation

   a. The Board will adopt written policies both to govern Board and District operations.

   b. The Board delegates the responsibility of approving administrative and personnel policies to the CEO. In the absence of written Board policy, the CEO will make decisions necessary for District operations.

   c. The Board may authorize reports and studies deemed necessary to monitor the execution of policies.

2. Amendment

The Board will review the policies governing Board operations on an annual basis. Any proposed amendments to Board policy will take place at a regular meeting.

3. Suspension

The Board may suspend or terminate any policy upon approval by a majority of the Board. Any policy found to be in conflict with state or federal law or the rules and regulations of a higher authority is automatically null and void without Board action. Staff will advise the Board of any such nullification.
Chapter 5 – Chief Executive Officer

The Board delegates to the CEO the responsibility of management of District operations and personnel as well as implementing Board policies. The Board reserves sole policy-making authority and exclusive control over entering into the majority of intergovernmental agreements as well as governing fiscal policy, budget and financial matters.

The CEO shall be bound by and administer the affairs of the District in accordance with state law and all the rules, regulations and policies now in existence or hereafter adopted by the Board.

1. Authority

The authority of the CEO shall include, but not be limited to:

a. Functioning as the District’s registered agent

b. Overall management, administration and direction of District operations, functions, activities and programs

c. The hiring, supervising, disciplining and discharging of District employees and volunteers necessary to carry out the business of the District

d. The administration of employee retirement and benefits, including serving as trustee and overseeing the investment of funds

e. The supervision of acquisition, maintenance, upkeep and sale of any facilities and equipment owned or maintained by the District

f. The keeping and maintaining of proper fiscal records for the District and overseeing all banking and financial matters, investments, payments of obligations and debt

g. Functioning as the District’s public contracting officer

h. The execution and administration of District policies within budget appropriations according to District policy and pursuant to ordinance or resolution

i. The awarding of contracts according to the District Local Contract Review Board Rules

j. The execution of memoranda of understanding
k. The giving of policy advice to the Board and open communication with the community so as to foster responsive and courteous public service

l. The encouragement, but not requirement, to provide assistance or services to other units of government when within the District’s purposes and objectives to the extent reasonable and practical

m. Approving real estate transactions equal to or less than $50,000

m. Approving routine joint improvement intergovernmental agreements that cost equal to or less than $500,000

2. Selection

The Board will facilitate the transfer of CEO command at least six months in advance, when possible, of a planned vacancy. The Board will consider the following:

a. The timeline for the selection process

b. The process for recruitment and selection

c. The desired management skills, leadership characteristics, education and experience

d. An analysis of internal and external compensation factors

e. Obtaining input from stakeholders

3. Evaluation

The Board will conduct an annual performance evaluation of the CEO according to the employment agreement.
Chapter 6 – Communication

All written and electronic communications related to District business are public records. Commissioners will use District-provided email addresses for all District-related electronic communications. If a Commissioner receives an email at a private email address, the Commissioner will forward the email to their District-provided email address.

1. Staff Communication to Board
   a. Staff, through the Chief Executive Officer, will keep Commissioners informed on all relevant information relative to District operations as well as applicable conferences, meetings and publications. The CEO will coordinate subscriptions to applicable trade publications for the Board.
   b. All written and electronic informational materials requested by Commissioners will be made available to the entire Board with a note stating who requested the information.

2. Board Communication to Staff
   a. Commissioners will not attempt to direct employees, including the CEO, regarding administrative matters; however, the sharing of ideas on such matters is appropriate.
   b. Commissioner communication with, and information requests of, staff will be directed to the CEO to allow coordination of workloads, work plans and resource requirements.

3. Board Communication with External Legal Counsel

External legal counsel will advise the Board and staff on specific legal problems submitted by the CEO. The CEO is authorized to seek external legal counsel. Commissioners are not authorized to seek external legal counsel, but in situations where the interests of the Board and CEO are adverse or potentially adverse, external legal counsel will at all times represent the Board.

4. Board Communication with Public/Press

Commissioners may publicly represent Board positions once a decision has been reached by the Board. Commissioners will not make statements on behalf of the District or Board without prior approval by the Board, unless the statement is already published and attributable to the District. In all other circumstances, Commissioners must be clear that statements are the individual position of the Commissioner and not the Board or the District.
5. Political Endorsement

The Board will comply with Oregon Revised Statute 260.432. Any District position regarding election measures will be made by resolution adopted by the Board. Staff involvement in such resolutions will be limited to reformatting and including the resolution in the Board meeting packet for consideration by the Board.
Chapter 7 – Education, Events and Reimbursement

1. Education

   a. The District will maintain active memberships in the American Water Works Association (AWWA) and Special Districts Association of Oregon (SDAO) for the Board. Commissioners are encouraged to attend the annual conferences of AWWA, the Pacific Northwest Section of AWWA and SDAO. Commissioners will obtain Board approval prior to attending any other conferences and meetings that require an overnight stay.

   b. Commissioners will be compensated by the District for the actual and reasonable expenses incurred by Commissioners in performing official duties as provided in the District’s travel policy. If the District reimburses a Commissioner for the expenses and costs of traveling, the time spent traveling will not be considered a meeting or event for which compensation for services can be claimed under the reimbursement process outlined below.

   c. Commissioners traveling on District-related business may receive traveler loyalty program accruals, including for flights, hotels and rental cars, as a benefit that is part of Board compensation. Commissioners are responsible for determining any personal income tax implications arising from their use of such benefits.

2. Reimbursement

   a. Commissioners will be compensated at the rate of $50 per meeting or event with a maximum reimbursement of $50 per day. Reimbursements processed are considered public records.

   b. Meetings or events are defined as:

      - Public meetings of the District as defined in public meetings law
      - Public meetings of other public bodies as defined in public meetings law where the Commissioner is requested or designated to attend by the Board
      - Meetings with staff to consider issues affecting the District
      - Meetings or events specifically approved by the Board
      - Meetings with groups or entities of which the District is a member and the Commissioner has been requested to attend by the Board or is consistent with duties of Board committees and assignments, provided the meetings do not include issues on a current or upcoming election ballot or the host or sponsor does not advocate for candidates or measures.
c. Events where a Commissioner has not been designated to officially represent the Board are not eligible for reimbursement.

d. At each regular Board meeting, Commissioners will provide a brief summary of meeting topics for meetings for which the Commissioner is requesting reimbursement unless the meeting is a District meeting or another Commissioner has already provided a meeting summary.
Chapter 8 – Board Meeting Agenda and Preparation

The dates of monthly Board meetings will be adopted by resolution at the end of each calendar year for the subsequent year.

1. Agenda

   a. The Chief Executive Officer will prepare the agenda after conferring with the Board President. The Board President may place any item on the agenda for Board consideration.

   b. A Commissioner may propose an agenda item for consideration by submitting a proposed Commissioner Topic in writing to the Board President prior to or at a Board meeting. The request should include the issue, the reason the issue is of concern to the District and what specific information is requested. After notifying the full Board, the Board President will forward the request to the CEO. Staff will prepare and distribute to the Board an abbreviated report prior to the next regular Board meeting. At that meeting, if a majority of the Board believes the matter should be considered as an action item, the request will be added to the agenda of a future meeting after allowing staff enough time to provide a comprehensive report to allow the Board to make an informed decision.

   c. The general order of regular meeting agendas are as follows:
      - Call to Order
      - Public Hearings (if needed)
      - Reports by Management Staff
      - Commissioner Communications
      - Report of Meetings Attended
      - Commissioner Topics
      - Public Comment (for items not on the agenda)
      - Consent Agenda
      - Business Agenda
      - Informational Presentations (if needed)
      - Adjournment

   d. The Board meeting packet, including the agenda and all explanatory materials, will be distributed to the Board at least four calendar days prior to the meeting. Commissioners will review and evaluate the information prior to the meeting. Commissioners are encouraged to contact the CEO prior to the meeting with any questions on agenda items
to allow the CEO to provide a comprehensive answer to questions either before or during the meeting.

e. Upon Commissioner request, a short recess may be taken during a Board meeting at the discretion of the Board President so as not to interrupt the flow of business.

2. Minutes

a. Staff will prepare minutes with sufficient detail to meet their intended use. Verbatim minutes are not required.

b. The Board may amend the minutes to more accurately reflect what transpired at a meeting. Additions or corrections will be submitted to the CEO prior to the Board meeting where the minutes are scheduled for approval. Under no circumstances may the minutes be changed following approval by the Board, unless the Board authorizes such change.

c. A Commissioner may vote to approve minutes for a meeting at which he or she was not in attendance.

3. Executive Sessions

a. Executive sessions will be scheduled as needed.

b. Only news-gathering representatives of established institutional media who ordinarily report activities of the District will be allowed to attend Board executive sessions. The definition of institutional news media is limited to entities that are formally organized for the purpose of gathering and disseminating news. Media representatives include individuals who gather news and who have a formal affiliation, whether through employment, by contract or some other agency authorization from or with an institutional news media entity. A representative will be asked to provide appropriate credentialing prior to the executive session.

c. Commissioners will keep all discussions and written materials provided to them on matters of confidentiality under law in complete confidence to ensure the District's position is not compromised. Failure to do so may lead to censure.
Chapter 9 – Board Meeting Procedures

1. Parliamentary Procedures

   a. Board meetings will be governed by the District’s parliamentary procedures, which constitute a standing rule. Matters not covered by these procedures will be governed by Robert’s Rules of Order Newly Revised. Rules may be amended and the order of business may be suspended at any meeting by majority vote. The Board President or presiding officer has the inherent authority to keep order and to impose any reasonable restrictions necessary for the efficient and orderly conduct of meetings.

   b. When considering an action item, the following order applies:
      - Staff presentation
      - Public comment, if any
      - Additional staff comments, if needed
      - Board discussion
      - Motion and any final Board comments
      - Vote

2. Public Comment

   a. In general, Commissioners are not expected or obligated to respond to comments made during the public comment time, except to ask clarifying questions.

   b. Any public requests for Board action will be referred to the Chief Executive Officer for review and coordination with the Board President before being placed on a future agenda.

3. Voting

   a. The President may call for a voice vote or a roll call vote at his or her discretion. The Commissioners may also request a roll call vote.

   b. All Commissioners are expected to vote on each motion unless a Commissioner is disqualified for a specific reason. Commissioners will declare a potential conflict of interest and may abstain from voting. Commissioners will declare an actual conflict of interest and will abstain from voting. A Commissioner who does not vote must state the basis for any conflict of interest or other disqualification.
c. If only three Commissioners are present, a unanimous vote with no abstentions is required to approve a motion.

d. A motion that receives a tie vote fails.

e. Votes will be recorded.

f. Any Commissioner may request a vote be changed if such request is made prior to consideration of the next order of business.
Chapter 10 – Board Communication Devices

Each Commissioner will be issued a communication device (such as a laptop computer or tablet), including necessary related equipment and hardware, peripherals and software to conduct District business, if requested by the Commissioner.

1. Ownership and Use

   a. The device remains the property of the District and information stored on the device is District property. Commissioners have no right or expectation of privacy on the device. Information on the device may be considered public records. The District reserves the right to access and audit any and all District business-related records, including content sent, received or stored on the device, and such records may be subject to public disclosure.

   b. Software applications, music, video files or other content will not be downloaded without consent of the Chief Executive Officer.

   c. The device will not be used for personal use except for emergencies and therefore such use is restricted to being brief and infrequent.

2. Training and Support

Staff will provide Commissioners basic training on the use of the device, and will provide technical support for the care and maintenance of the hardware and software. Additional training classes may be made available through external sources and will be paid for by the District.

3. Costs

   a. The District will be responsible for the cost of the maintenance or replacement of any defective equipment or software. If the device is damaged because of a negligent or intentional act, or other act for which the Commissioner is responsible, the Commissioner will be responsible for replacement costs.

   b. Each Commissioner is responsible for costs associated with home and local internet access. Upon Commissioner travel outside the Portland metropolitan area, the District will pay the reasonable cost of connection to the internet for the Commissioner to conduct District business. Commissioners will pay any internet usage costs for personal use for emergencies.
4. Device Decommissioning

At the end of a Commissioner's term, or when the device is deemed by the CEO to no longer be useful to the District, the Commissioner may either purchase the device or return it to the District within 30 days. If the Commissioner elects to purchase the device, it will be sold at the District's depreciated cost of purchase. The District has adopted a four-year straight line depreciation schedule for the device. The purchase will be 100% in year one and decrease to 25% in year four. In years five and beyond, the price will be set by the CEO, serving as the public contracting officer, based on the market value of comparable devices in the Portland metropolitan area.
Chapter 11 – Annexation, Merger and Consolidation

1. Annexation

a. Each proposed annexation will be individually reviewed and examined for economic, customer and operational impact.

b. Unless addressed in an urban services agreement, the Board will oppose annexation by another governmental entity where the annexing entity proposes to withdraw the territory annexed and District infrastructure. The Board will not oppose annexation where the annexing entity negotiates with the District for continuation of District services within the territory proposed for annexation on terms acceptable to the Board.

2. Merger or Consolidation

The Board supports the concept of merger or consolidation with neighboring governmental entities providing water service if the action provides economic and efficient delivery of public services.
RESOLUTION NO. 08-19

A RESOLUTION ADOPTING FINANCIAL MANAGEMENT POLICIES FOR THE TUALATIN VALLEY WATER DISTRICT.

WHEREAS, the Board of Commissioners of the Tualatin Valley Water District (Board) is committed to the sound management of the District’s financial affairs; and

WHEREAS, the Board and its Finance Committee have actively participated in the review and drafting of the District’s Financial Management Policies; and

WHEREAS, formally adopted Financial Management Policies are an effective way for the Board’s policy direction to guide the technical work undertaken by staff; and

WHEREAS, Financial Management Policies are an important component of financial governance and accountability by identifying important risks to the District’s financial condition; and

WHEREAS, formally adopted Financial Management Policies and the commitment to sound financial management provided by these policies supports the District’s goal of maintaining favorable credit ratings from national rating agencies; and

WHEREAS, formally adopted Financial Management Policies promote long-term strategic planning within the District; and

WHEREAS, the Government Finance Officers Associations and the National Advisory Council on State and Local Budgeting recognize financial policies as an essential part of public financial management.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The Financial Management Policies attached as Exhibit A are hereby adopted by the Board of Commissioners of the Tualatin Valley Water District.

Section 2: The District’s Chief Financial Officer shall cause these policies to be reviewed at least every two years and shall bring recommendations for any revisions to the Financial Management Policies to the Board of Commissioners.

Approved and adopted at a regular meeting held on the 20th day of March 2019.

_______________________________           _____________________________ 
Bernice Bagnall, President                Todd Sanders, Secretary
PROPOSED FINANCIAL MANAGEMENT POLICIES
Tualatin Valley Water District

March 20, 2019
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INTRODUCTION

1.1 PURPOSE
The purpose of these Financial Management Policies (“Policies and/or Policy”) is to guide the Tualatin Valley Water District’s (District’s) financial management efforts, including policies related to financial planning, budgeting, debt management, accounting and reporting, business case evaluations, and related matters. These policies affirm the commitment of the District’s Board of Commissioners (the “Board”) to the practices of sound financial management.

The Government Finance Officers Association (GFOA) recommends adopting financial management policies as a best practice. The GFOA states:

Financial policies are central to a strategic, long-term approach to financial management. Some of the most powerful arguments in favor of adopting formal, written financial policies include their ability to help governments:

1. Institutionalize good financial management practices. Formal policies usually outlive their creators, and, thus, promote stability and continuity. They also prevent the need to re-invent responses to recurring issues.

2. Clarify and crystallize strategic intent for financial management. Financial policies define a shared understanding of how the organization will develop its financial practices and manage its resources to provide the best value to the community.

3. Define boundaries. Financial policies define limits on the actions staff may take. The policy framework provides the boundaries within which staff can innovate in order to realize the organization’s strategic intent.

4. Support good bond ratings and thereby reduce the cost of borrowing.

5. Promote long-term and strategic thinking. The strategic intent articulated by many financial policies necessarily demands a long-term perspective from the organization.

6. Manage risks to financial condition. A key component of governance accountability is not to incur excessive risk in the pursuit of public goals. Financial policies identify important risks to financial condition.


1.2 GOALS AND OBJECTIVES
These Policies sets forth the guidelines for the management of the District’s financial affairs. These Policies establish requirements that recognize the District’s specific financial, capital, and
accounting requirements, its ability to fulfil its financial obligations, and the existing legal, economic, and financial conditions. Specifically, the Policies are intended to assist the District in the following:

a) Establishing accounting procedures;
b) Making business decisions for operations and capital expenditures;
c) Evaluating available debt issuance options;
d) Protecting the District’s financial resources;
e) Maintaining appropriate capital assets for present and future needs;
f) Promoting sound financial management through accurate and timely information on financial conditions;
g) Protecting and enhancing the District’s credit rating(s);
h) Controlling appropriations processes by developing budgets consistent with Oregon local budget law; and
i) Protecting the legal use of the District’s financing authority through an effective system of internal controls.

The District’s investment policy is maintained separately and approved separately by the Board as required by Oregon law.

1.3 ROLES AND RESPONSIBILITIES
The Chief Financial Officer (CFO) is the designated administrator of these Policies. The CFO shall have the day-to-day responsibility and authority for implementing and managing the District’s accounting, debt, and finance programs.

The Board acknowledges that changes in the accounting standards, capital markets and other events may create situations and opportunities that are not contemplated by these Policies. These unexpected events may require adjustments or exceptions to the guidelines of these Policies. In such circumstances, the ability of the District to be flexible is important; however, any authorization granted by the Board to proceed with using a debt instrument not expressly permitted by the Policies must be approved by the Board before the action is taken by the District.

The Board shall review and adopt these Policies at least biennially.

2 LONG-RANGE FINANCIAL PLAN

2.1 PURPOSE
This Policy provides guidance on conducting the District’s long-range financial plan (Financial Plan). The Policy includes specific limits and requirements to guide the District’s long-range financial plan.

Long-term financial planning combines financial forecasting with strategic planning. The process of developing a long-range financial plan is highly collaborative and considers future scenarios and helps the District navigate challenges. Long-term financial planning works best as part of an overall strategic plan.
Financial forecasting is the process of projecting revenues and expenditures over a long period, using assumptions about economic conditions, future spending scenarios, and other important variables. Long-term financial planning is the process of aligning financial capacity with long-term service objectives. Financial planning uses forecasts to provide insight into future financial capacity so that strategies can be developed to achieve long-term sustainability considering the District’s service objectives and financial challenges.

2.2 GOALS
The District’s long-term financial planning process is intended to stimulate discussion and create a long-range perspective for the Board and other decision makers. The Financial Plan assists in avoiding financial challenges; stimulating long-term and strategic thinking; creating a consensus on long-term financial direction; and communicating with internal and external stakeholders.

This Policy sets forth the guidelines for the development and maintenance of the District’s Financial Plan. The Policy establishes parameters which recognize the District’s specific financial situation and long-term goals. Specifically, the Policy is intended to assist the District in the following:

1. Setting water rates over the long term, thereby avoiding unnecessary and/or unexpected large increases in rates and customer bills.
2. Providing the Board, customers, and the debt market insight into the District’s long-term financial needs.
3. Promoting sound financial management through long-range planning.
4. Contributing to the preservation or enhancement of the District’s credit rating(s).
5. Informing the biennial operating and capital budget development process by identifying current budgetary needs and considering the phasing of changes to service levels, particularly capital improvement projects.

2.3 REQUIREMENTS
2.3.1 Biennial Preparation of Financial Plan
At least biennially, the CFO shall work with the District’s Chief Executive Officer (CEO), Chief Engineer, and other managers to update the District’s Financial Plan that forecasts the District’s financial needs and financial results for no fewer than 10 years. Once prepared, the CFO shall present the proposed Financial Plan to the Board for its consideration and approval. Once approved, the CFO shall update Appendix A of this document to reflect the financial planning assumptions contained in the Board-approved Financial Plan.

The Financial Plan should consider new and updated information contained in other planning documents such as the District’s Water Master Plan, Capital Improvement Plan, and biennial Budget as described further under section 3.4.6 below.
2.3.2 **Required Components of Financial Plan**

At a minimum, the Financial Plan shall include:

1. Forecast of sources and uses of funds.
2. Forecast of operating expenses.
3. Forecast of capital expenditures.
4. Forecast the use of cash ("pay as you go") and debt issuance for capital needs.
5. Forecast of debt service requirements for existing debt and planned debt.
6. Project the impact of new capital projects on the District’s debt.
7. Designated levels of cash reserves and/or assumptions regarding external credit facilities (e.g., bank lines of credit) in lieu of (or in addition to) cash reserves.
8. Forecast compliance with debt covenants (e.g., additional bonds tests, debt service coverage ratios).
10. Forecast of future rate increases and revenues.

2.3.3 **Financial Planning Assumptions**

Appendix A presents the assumed values to be used in the District’s Financial Plan until another Board-approved financial plan results in its revision. This Appendix will be updated as described in Section 2.3.1 above.

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**3 DISTRICT BUDGET**

**3.1 PURPOSE**

The District makes program and service decisions to allocate scarce resources for operational and capital needs through its budget process. As a result, the budget process is one of the most important activities undertaken by the District. The quality of decisions resulting from the budget process and the level of their acceptance depends on the budget process that is used.

**3.2 GOALS**

The District’s budget is intended to help decision makers (including the Board and Budget Committee) make informed choices about the provision of services and capital projects and to promote participation by the District’s stakeholders in the process. The District’s budget provides guidance to the management of the District by:

1. Establishing priorities for work during the budget period.
2. Establishing the legal spending limits for achieving those priorities.

**3.3 RESPONSIBILITIES**

The Board shall appoint the District’s Budget Officer by resolution. The Budget Officer is responsible for the preparation of the District’s budget in compliance with Oregon local budget law.
3.4 REQUIREMENTS

3.4.1 Biennial Budget Process
The District shall adopt a biennial budget (Budget) consistent with Oregon law. The Budget provides a short-term financial expenditure plan and promote efficiencies. The Budget shall be prepared and adopted in accordance with State legal requirements and conform to standards consistent with nationally recognized practices.

3.4.2 Citizens Budget Committee
Oregon law requires the District to have a citizens’ budget committee (Budget Committee). The Budget Committee consists of 10 members: Five citizen members appointed by the Board of Commissioners, and the five commissioners.

The citizen members of the Budget Committee shall be appointed for a term of 4 years. The appointments will be offset by two years so that at most three committee positions will have their terms end at once.

As required by Oregon law, the citizen members of the Budget Committee must be electors of the District. Should a citizen member of the Budget Committee resign, or otherwise become ineligible to serve as a citizen member, the Budget Officer shall notify the Board President of such vacancy. The Board may direct the Budget Officer, the CEO, or the CFO to undertake an effort to fill the vacant position. Vacancies in citizen member positions of the Budget Committee shall be filled by vote of the Board.

Citizen members of the Budget Committee whose term is expiring may elect to reapply to the Budget Committee. The Budget Officer shall advise the Board President of such elections and the Board shall direct the Budget Officer, the CEO, or the CFO to undertake an effort to find candidates for expiring positions. Consistent with Oregon law, the appointment of the citizen members of the Budget Committee is by official action of the Board.

3.4.3 Balanced Budget
The Budget proposed by the Budget Officer to the Budget Committee must present a balance of resources and requirements as required by Oregon law.

3.4.4 Basis of Budgeting
The District prepares its budget on a modified accrual basis. For budget purposes, the District recognizes revenues when they are both measurable and available. Measurable means the amount of the transaction can be determined and revenues are considered available when they are collected within the current period or expected to be collected soon enough thereafter to be used to pay liabilities of the current period. Expenses are recognized when the liability is incurred. An exception to this rule on recognizing expenses is debt service. The payment of debt service is recognized when payments are due. Other accounting treatments under generally accepted accounting principles (GAAP) such as depreciation, are not considered expenses under the District’s budgetary basis.
3.4.5 **Sufficiency of Operating Revenues**
The District’s budget shall require that operating revenues be sufficient to cover operating expenses (excluding depreciation), and that net revenues are sufficient to comply with bond covenant requirements each year. Sufficiency of operating revenues shall be included in determining water rates, fees, and charges, as described in Sections 4.3.2, 4.3.4, and 4.3.5 below.

3.4.6 **Capital Planning**
The District shall periodically review and update its Water System Master Plan and Water Management and Conservation Plan to satisfy the requirements for these plans under Oregon administrative rules and statutes. The review and update should consider information contained in other planning documents and provide the District with a coordinated capital plan for system development and an overview of source options to meet growth needs.

Each biennium, the District shall develop and adopt a six-year Capital Improvement Plan (CIP) that details capital projects and fixed asset acquisitions for the District consistent with its current Water System Master Plan, Financial Plan (as described in Section 2 above), fleet and facility plans, asset management plan (as described in Section 10.3.2 below) and capital plans prepared by other agencies with whom the District has contractual or other legal obligations (e.g., the District’s joint ventures). The District's Chief Engineer will prioritize proposed projects based on criteria reflecting the direction and policies established by the Board and needs of the District. The District’s Chief Engineer will identify significant operating expenses associated with each project that will be required when the asset is placed into service.

Where practical and in the District’s best interest, the District may use a blend of cash and debt funding for capital infrastructure. Normal repair and maintenance will be funded only with cash from operations. Debt will be considered as an optional financing mechanism for long-lived improvements and expansions or one-time major system component replacements. As part of the CIP process, the CFO will analyze the proposed capital projects so that each project is funded from an appropriate revenue source.

3.4.7 **Supplemental Budgets**
When necessary, the Budget Officer may notify the Board of the need to consider a supplemental budget. Supplemental budgets will be prepared and propose action shall be noticed as required by Oregon local budget law.

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### 4 WATER RATES, FEES, AND CHARGES

#### 4.1 PURPOSE
This Policy provides guidance on setting the District’s water rates, fees, and charges. The Policy describes the Board’s general rate-setting goals and directives.

#### 4.2 GOALS
The District recovers its costs from water sales and other fees and charges assessed on customers. Setting rates, fees, and charges includes a combination of technical analysis and
policy implementation. The goal of this Policy is to provide the District’s management guidance in setting rates, fees, and charges consistent with the Board’s Policy direction.

4.3 REQUIREMENTS

4.3.1 Cost-of-Service Framework
The District’s water rates, fees, and charges should reflect the costs of providing the various services to the District’s customers, following generally accepted ratemaking methodologies. The cost of service should include operating and capacity costs and send appropriate price signals to customers to encourage the wise use of water.

4.3.2 Water Rates
Water rates should be adjusted annually, with those annual adjustments adopted on a biennial or annual basis depending on financial planning needs (e.g., projected revenue requirements) or specific direction from the Board. The proposed water rate increases will be consistent with the Board-approved Financial Plan discussed in Section 2.3.1 above.

To the extent possible, the District should use the financial planning process to anticipate increases in costs for future years to avoid sudden and/or unexpected rate increases. The District should use the Financial Plan described in Section 2 above to inform its rate-setting process.

Consistent with Oregon law, the District will set its rates by resolution or ordinance after conducting a public hearing, if required.

4.3.3 System Development Charges
System development charges (SDCs) are intended to implement the cost-of-service framework for new and existing customers. SDCs are one-time charges made to new connections to the District’s water system to recover growth-related capital costs. Revenue from SDCs will not fund operations and will only be spent consistent with Oregon law.

SDCs may be updated consistent with Oregon law. SDCs will generally be updated each year during the Board’s regular meeting in February with an effective date of March 1st. Unless increased pursuant to a formal SDC study, the District may increase the SDC as allowed under Oregon law based on changes to the Engineering News Record Construction Cost Index for Seattle (ENR CCI) as published for the December prior to the SDC adoption. If SDCs are adopted to have an effective date other than March 1, the ENR CCI for another more appropriate month may be used.

4.3.4 Services Provided to Other Utilities
When in the interest of the District’s customers, the District may provide services, including the provision of wholesale water, utility billing, meter reading or other water-related services, to other utilities, including joint ventures. In such cases, the rates and fees charged to the other utilities should, at a minimum, recover the estimated cost of providing those services. The provision of services to other utilities requires Board approval, normally through approving the intergovernmental agreement.
4.3.5 Miscellaneous Fees and Charges
The District assesses many fees and charges for miscellaneous services to customers and meter and service installations. In addition, the District may assess fees for development plan review and inspection, fire hydrant use permits, and penalty fees for non-payment of utility bills and unauthorized use of water or firelines. These charges should be reviewed at least biennially to reflect the cost of providing the services. When the costs of service have changed a material amount, the CFO shall propose changes to the miscellaneous fees and charges to the Board for its consideration. Fees and charges shall be set by the Board by resolution or ordinance.

4.3.6 Forgiveness of Fees and Charges
The CEO or designee may waive all or a portion of Other Service Charges & Penalties, as adopted by the Board, if the CEO or designee determines that it is in the equitable and best interest of the District considering the particular circumstances involved in each case.

5 MINIMUM FUND BALANCES AND RESERVES

5.1 PURPOSE
Maintaining fund balances is an important function for the District to operate efficiently over the long run. This policy guides the development of minimum cash balances that directly affect the District’s Financial Plan (See Section 2 above), rates and charges (see Section 4 above), and budget (see Section 3 above). The accumulation or use of fund balances and reserves is one mechanism that financial decision in one year can affect future years. This policy provides guidance on making those decisions.

5.2 GOALS
The decision to retain financial resources in fund balance or reserves directly affects:

1. Financial risks to the District from unexpected disruptions to revenue or unexpected expenditures.
2. Water rates required in the current and future years.
3. The District’s credit rating(s).
4. Other financial related matters.

Because of the nature of these effects, these Policies provide management guidance from the District’s Board in developing the various plans proposed to the Board.

5.3 REQUIREMENTS
5.3.1 Working Capital
As an enterprise fund, the District separately measures its current and non-current assets and liabilities. The District can use this distinction to calculate working capital (i.e., current assets less current liabilities). The measure of working capital indicates the relatively liquid portion of the District’s capital, which constitutes a margin or buffer for meeting obligations.
The District should maintain an adequate level of working capital to mitigate current and future risks (e.g., revenue shortfalls and unanticipated expenses) and to provide stable services and fees. Working capital is a crucial consideration, too, in the Financial Plan (See Section 2 above.) Credit rating agencies consider the availability of working capital in their evaluations of the District’s creditworthiness.

The District shall maintain working capital consistent with the levels of working capital presented in Appendix A, as revised in the future. Working capital shall be at least equal to the two months’ operations and maintenance expense (i.e., 60 days cash on hand).

5.3.2 Capital Reserves
The District’s rate setting goals include a preference to avoid sudden and/or unexpected rate increases for customers. Capital reserves are one mechanism the District can use to lower the overall costs of acquiring capital assets by saving money early in the planning process.

Capital reserve levels shall be determined through the financial planning process and identified in the District’s Financial Plan (see Section 2.3.1 above).

5.3.3 Debt Service Reserves
Debt Service Reserves shall be treated as described in Section 6.3.4.5 below.

6 DEBT FINANCING

6.1 PURPOSE
These Policies provide guidance on the issuance, structure, and management of the District’s long- and short-term debt.

6.2 GOALS
The Policy sets forth the guidelines for the issuance of debt and the management of outstanding debt. The Policy establishes certain limits which recognize the District’s capital requirements, its ability to repay financial obligations, and the existing legal, economic, financial, and debt market conditions. Specifically, the Policy is intended to assist the District in the following:

1. Evaluating available debt issuance options;
2. Maintaining appropriate capital assets for present and future needs;
3. Promoting sound financial management through accurate and timely information on financial conditions;
4. Protecting and enhancing the District’s credit rating(s); and
5. Safeguarding the legal use of the District’s financing authority through an effective system of internal controls.

6.3 REQUIREMENTS
6.3.1 Type and Use of Debt
The District shall comply with all debt limitations imposed by the Oregon constitution, Oregon Revised Statutes (ORS), and Oregon Administrative Rules (OAR). The District will further
comply with Security and Exchange Commission (SEC) and Municipal Securities Rulemaking Board (MSRB) rules regarding debt issuance, and with IRS regulations for tax-exempt or tax-advantaged debt.

Long-term obligations will not be used to fund operations of the District. The scope, requirements, and demands of the budget, reserve levels, the Financial Plan, and the ability or need to expedite or maintain the programmed schedule of approved capital projects, will also be considered when deciding to issue long-term debt. All borrowings will be authorized by the District’s Board.

The District is authorized to issue general obligation bonds and revenue bonds. Except in unique circumstances, the District will primarily rely on revenue bonds to fulfill its debt issuance needs.

6.3.1.1 Revenue Bonds
Revenue bonds are obligations payable from the net revenues of the District’s operations. As users of the District facilities will benefit from long-term capital investments in future years, it is appropriate that future revenues pay a share of the costs and more closely match the term of repayment to the expected economic useful life of the project being financed.

Long-term revenue bonds issued by the District shall only be used to finance and refurbish capital facilities, projects and certain equipment where it is determined to be cost effective and fiscally prudent. Revenue bonds will be structured to achieve the lowest possible net cost to the District considering market conditions, terms that are advantageous to the District, risks, the Financial Plan, and the nature and type of security to be provided.

Although revenue bonds are not subject to constitutional or statutory debt limits, the District’s debt will not exceed legal or contractual limitations, such as rate covenants or additional bonds tests imposed by then-existing financing covenants. Prior to the issuance of any new revenue bonds, the CFO will cause the impact of future debt service payments on total annual fixed costs to be analyzed.

In addition to the legal and/or contractual requirements associated with revenue bonds, the District will strive to maintain a minimum annual debt service coverage ratio of 2.0 times average annual debt service or another ratio when included in Appendix A.

6.3.1.2 General Obligation Bonds
General obligation bonds are payable from a dedicated tax levy and subject to voter approval. The District shall not generally use general obligation bonds to finance projects, other than projects of a general public nature. In no case shall the District’s outstanding general obligation debt exceed the statutory debt limit. General obligation bonds will mature no later than 30 years from their issue date.

6.3.1.3 Variable Rate Obligations
The District will generally seek to obtain financing through fixed rate obligations. When appropriate, however, the District may choose to issue variable rate obligations. Such variable
rate obligations may pay a rate of interest that varies according to a predetermined formula or a
rate of interest that is based on a periodic remarketing of securities.

Types of variable rate obligations may include variable rate demand obligations, commercial
paper, and floating-rate notes. Each type of variable rate obligation carries its own risks and
considerations. Prior to issuing any variable rate debt, the CFO will consult with the District’s
Municipal Advisor to evaluate the risks and benefits of a particular type of debt. The Municipal
Advisor will also provide a formal recommendation to the Board.

The maximum level of net variable rate obligations incurred shall not exceed the lessor of the
District’s unrestricted reserves or 20% of outstanding debt. In calculating “net” variable rate
debt, the District will consider interest-rate swaps. Prior to considering any interest rate swaps,
the District will establish a separate swaps policy.

6.3.1.4  Anticipation Notes
The District may issue short-term notes to be repaid with the proceeds of state or federal
grants/loans or other anticipated one-time revenue sources if appropriate for the project and in
the best interest of the District. Generally, such grant or revenue anticipation notes (“GANs” or
“RANs”) will only be issued if there is no other viable source of up-front cash for the project,
although the District may elect to use such notes if the notes provide a financial benefit under
the Financial Plan. Anticipation notes may be secured by a revenue pledge on parity with or
subordinate to the District’s long-term revenue bonds. Prior to selling anticipation notes the
District must identify a secondary source of repayment for the notes if expected grant/loan
funding does not occur.

6.3.1.5  Lease Financings
Lease obligations are routine and can be an appropriate means of financing certain types of
equipment. Generally, however, leases are not appropriate for long-term financing of capital
assets such as land or facilities. The CFO should consider leases where lease financing will be
more beneficial than funding from reserves or current revenues. The useful life of capital
equipment, the term and conditions of the lease, the direct impact on debt capacity and budget
flexibility will be evaluated prior to the implementation of a lease program. Cash flow
sufficiency, capital program requirements, lease program structures and cost, and market
factors will be considered by the CFO in conjunction with “pay-as-you-go” strategies in lieu of
lease financing.

6.3.2  Federal, State, or Other Loan Programs
To the extent it benefits the District, the District may participate in federal, state, or other loan
programs. The CFO shall evaluate the requirements of these programs to determine if the
District is well served by employing them.

For purposes of this Policy, the District shall treat and report these obligations in a manner
consistent with other similar debt instruments. To the extent required by the loans or other
outstanding debt agreements, the District shall include the financial requirements of these
obligations when determining additional bonds test, coverage requirements, etc.
6.3.3 Debt Refinancing
Refunding obligations may be issued to retire all or a portion of an outstanding debt issue. Economic refundings may refinance high-coupon debt at lower interest rates to achieve debt service savings. Alternatively, the District may conduct a refunding for reasons other than cost savings, such as to restructure debt service payments, to change the type of debt instruments, to release restricted revenues, to ease administrative requirements, or to remove undesirable covenants.

The District will target current refundings (refundings within 90 days of the call date) that produce net present value savings of at least 3% of the refunded par amount of each maturity being refunded. Refundings producing less than 3% net present value savings for each maturity being refunded will be considered for other purposes, such as to restructure debt service payments, to change the type of debt instruments, to release restricted revenues, to ease administrative requirements, or to remove undesirable covenants.

The District will target advance refundings (refundings that occur more than 90 days prior to the call date of the refunded bonds) that produce net present value savings (including cash contributions and foregone interest earnings) of at least 5% of the refunded par amount of each maturity being refunded, and achieve at least 50% escrow efficiency (where escrow efficiency is defined such that negative arbitrage does not exceed 50% of net present value savings). Refundings producing less than 5% net present value savings for each maturity being refunded may be considered for other purposes, such as to restructure debt service payments, to change the type of debt instruments, to release restricted revenues, to ease administrative requirements, or to remove undesirable covenants. (As of January 2018, advance refundings may no longer be issued on a tax-exempt basis.)

The District may also consider alternatives to current and advance refundings (e.g., delayed-delivery refundings) in consultation with its Municipal Advisor and bond counsel. In evaluating such alternatives, the CFO will consider the proposed structure, and establish a required threshold of interest rate savings.

The CFO will monitor refunding opportunities for all outstanding debt obligations on a periodic basis applying established criteria in determining when to issue refunding debt and bring forth the recommended opportunities with appropriate Board actions and related documentation.

6.3.4 Debt Structure Considerations
6.3.4.1 Maturity of Debt
The final maturity of the debt shall not exceed, and preferably be less than, the remaining useful life of the assets being financed, and to comply with Federal tax regulations, the average life of a financing shall not exceed 120% of the average life of the assets being financed.

6.3.4.2 Debt Service Structure
Debt service payments for any new money debt issue will generally be structured to create approximately level debt service payments over the life of the debt. Exceptions are permitted for refunding debt that will have varying principal repayments structured to fill in the gaps created by refunding specific principal maturities. The CFO may also structure the amortization
of principal to wrap around existing obligations or to achieve other financial planning goals. Deferring the repayment of principal should be avoided except in select instances where it will take time before project revenues are sufficient to pay debt service.

6.3.4.3 Lien Structure
Senior and subordinate liens may be used to maximize the most critical constraint, either cost or capacity, thus allowing for the most beneficial leverage of revenues.

6.3.4.4 Capitalized Interest
The District may elect to fund capitalized interest in connection with the construction of certain projects, if revenue from such projects is not initially available to pay debt service on related debt. Additionally, the District may consider funding capitalized interest if such a strategy will minimize the financial impact to of such borrowing on District ratepayers.

6.3.4.5 Reserve Funds
A reserve fund for a debt issuance may be required for credit rating or marketing reasons. If required, such reserve fund can be funded with:

1. The proceeds of a debt issue,
2. The reserves of the District, or
3. A surety policy.

A cash reserve fund will be invested pursuant to the investment restrictions associated with the respective financing documents and the District’s separate investment policy. For each debt issue, the CFO will evaluate whether a reserve fund is required for credit rating or marketing purposes and the benefits of funding or maintaining the reserve requirement with cash or a surety policy, in addition to determining the benefits of borrowing the necessary funds or using cash reserves.

6.3.4.6 Redemption Provisions
In general, the District will have the right to optionally redeem debt at par no later than 10 1/2 years after issuance. Redemption provisions will be established on a case-by-case basis, taking into consideration market conditions and the results of a call option analysis prior to the time of sale. Because the issuance of non-callable debt may restrict future financial flexibility, cost will not be the sole determinant in the decision to issue non-callable debt.

6.3.4.7 Credit Enhancement
Credit enhancement (e.g., bond insurance or letters of credit) on District financings will only be used when net debt service is reduced by more than the cost of the enhancement. The District will evaluate the availability and cost/benefit of credit enhanced debt versus unenhanced debt prior to issuing any debt.

6.3.5 Method of Sale
The District will select a method of sale that is the most appropriate when considering the financial market, transaction-specific and District-specific conditions, and advantages. There are three basic methods of sale: Competitive Sale, Negotiated Sale, and Direct Placement. Each type
of debt sale has the potential to provide the lowest cost given the right conditions. The CFO will select the most appropriate method of sale considering the prevailing financial market and transaction-specific conditions. If a negotiated sale is expected to provide overall benefits, the senior managing underwriters and co-managers shall be selected through the process described in Section 6.3.11.4 below.

6.3.6 Investment of Proceeds
Investment of proceeds are subject to the District’s separately adopted Investment Policy. The District shall competitively bid the purchase of securities, investment agreements, float contracts, forward purchase contracts and any other investment products used to invest proceeds of a financing. The District shall comply with all applicable Federal, State, and contractual restrictions regarding the use and investment of finance-related funds. The primary investment objectives are safety, liquidity, and yield. The District’s independent investment advisor must be a registered Investment Advisor. The District shall diversify invested proceeds to reduce risk exposure to providers, types of investment products and types of securities held. The District will require that all fees resulting from investment services or sale of products to the District be fully disclosed to the District (including fees paid by third parties) to avoid actual or perceived conflicts of interest on whether the investments are being purchase at a fair market price, consistent with the District’s Investment Policy.

6.3.7 Credit/Ratings Objectives
The District’s objective is to maintain an appropriate credit rating (or ratings) considering the District’s financial condition as a way of balancing financing costs and cash flow. The CFO shall be responsible for implementing and managing the District’s credit rating agencies relations program. This effort shall include providing the rating agencies with the District’s annual budget, financial statements and other information they may request. Full disclosure of operations will be made to the credit rating agencies. The CFO shall also coordinate periodic meetings with the rating agencies and communicate with them prior to each debt issuance. The District will evaluate the benefits of a higher rating at lower debt cost versus a lower rating that provides more debt capacity and flexibility.

6.3.8 Investor Relations
The CFO shall be responsible for implementing and managing the District’s investor relations program. The CFO will also be responsible for responding to inquiries from institutional and retail investors, and for proactively communicating with such investors if necessary. Such communication shall be made only as permitted under applicable federal securities laws, in consultation with the District’s bond counsel.

6.3.9 Tax and Arbitrage Rebate Compliance
The District will comply with all financing covenants to maintain the validity of the issuance of debt, including, but not limited to tax-exemption, Arbitrage Rebate compliance, insurance provisions, reporting and monitoring requirements. Any instance of noncompliance will be reported to the Board.
6.3.9.1 Post Issuance Tax Compliance

6.3.9.1.1 External Advisors and Documentation
The District shall consult with bond counsel and other legal counsel and advisors, as needed, throughout the debt issuance process to identify requirements and to establish procedures necessary or appropriate so that the bonds or other obligations will continue to qualify for tax-exempt status, if applicable. Those requirements and procedures shall be documented in the tax certificate and agreement (“Tax Certificate”) and/or other documents finalized at or before issuance of the bonds. Those requirements and procedures shall include future compliance with applicable arbitrage rebate requirements and certain other applicable post-issuance requirements of federal tax law throughout (and, in some cases, beyond) the term of the bonds. This shall include, without limitation, consultation in connection with any potential changes in use of bond-financed or refinanced assets.

The District may engage expert advisors (each a “Rebate Service Provider”) to assist in the calculation of arbitrage rebate payable in respect of the investment of bond proceeds, unless the Tax Certificate documents that arbitrage rebate will not be applicable to an issue of bonds. Unless otherwise provided by the transaction documentation relating to the bonds, unexpended bond proceeds shall be segregated from other funds of the District, and the investment of bond proceeds shall be managed by the District. The District shall prepare (or cause to be prepared) regular, periodic statements regarding the investments and transactions involving bond proceeds.

6.3.9.1.2 Arbitrage Rebate and Yield
Unless the Tax Certificate documents that arbitrage rebate will not be applicable to an issue of bonds, the CFO, or persons reporting to the CFO, shall be responsible for:

1. Either (1) engaging the services of a Rebate Service Provider and, prior to each rebate calculation date, causing the trustee or other financial institution to deliver periodic statements concerning the investment of bond proceeds to the Rebate Service Provider, or (2) undertaking rebate calculations themselves and retaining and obtaining periodic statements concerning the investment of bond proceeds;

2. Providing to the Rebate Service Provider additional documents and information reasonably requested;

3. Monitoring efforts of the Rebate Service Provider;

4. Assuring payment of required rebate amounts, if any, no later than 60 days after each five-year anniversary of the issue date of the bonds, and no later than 60 days after the last bond of each issue is redeemed;

5. During the construction period of each capital project financed in whole or in part by bonds, monitoring the investment and expenditure of bond proceeds and consulting with the Rebate Service Provider to determine compliance with any exceptions from the arbitrage rebate requirements during each 6-month spending period up to 6 months, 18 months, or two years, as applicable, following the issue date of the bonds; and
6. Retaining copies of all arbitrage reports, investment records, and trustee statements.

6.3.9.1.3 Use of Bond Proceeds and Bond-Financed or Refinanced Assets
The CFO, or persons under the supervision of the CFO, shall be responsible for:

1. Monitoring the use of bond proceeds (including investment earnings and reimbursement of expenditures made before bond issuance) and the use of the financed asset throughout the term of the bonds to ensure compliance with covenants and restrictions set forth in the Tax Certificate relating to the bonds;

2. Maintaining records identifying the assets or portion of assets that are financed or refinanced with proceeds of each issue of bonds (including investment earnings and reimbursement of expenditures made before bond issuance), including a final allocation of the bond proceeds documented on or before the later of 18 months after an expenditure is paid or the related project is placed in service, and in any event before the fifth anniversary of the bond issuance;

3. Consulting with bond counsel, other legal counsel, and other advisors in the review of any change in use or transfer of bond-financed or refinanced assets to ensure compliance with all covenants and restrictions set forth in the Tax Certificate relating to the bonds;

4. To the extent the District discovers that any applicable tax restrictions regarding use of bond proceeds and bond-financed or refinanced assets will or may be violated, consulting promptly with bond counsel, other legal counsel, and other advisors to determine a course of action to preserve the tax-exempt status of the bonds (if applicable).

6.3.10 Disclosure Documents
The District is required to provide disclosure, generally in the form of an official statement, relating to each public offering of debt. The District is responsible for providing complete and accurate information to be included in the official statement and is responsible for the overall content of the document, although it may rely on an external party (e.g., bond counsel or disclosure counsel) to assist in the creation of the document.

6.3.10.1 Primary Disclosure Policies
The CFO is responsible for information requests relating to official statements to be used in the initial offering of the District’s borrowings. The CFO will request information required for disclosure to investors and rating agencies from relevant departments and will sign a statement attesting to the accuracy and completeness of the information therein. The Board will be provided with a copy of the official statement for each issue of debt.

6.3.10.2 Continuing Disclosure Policies
Under Rule 15c2-12 of the Securities and Exchange Commission, adopted under the Securities Exchange Act of 1934, the District is required to enter into a contract to provide “secondary
market disclosure” relating to each publicly offered bond issue (referred to as an “undertaking”). The CFO shall review any proposed undertaking to provide secondary market disclosure and negotiate any commitments therein. Additionally, bonds sold via the direct placement method may have specific disclosure requirements required by the purchaser.

The District will ensure compliance with all continuing disclosure requirements as part of its ongoing debt program. The CFO, or persons under the supervision of the CFO, shall have a clear understanding of the continuing disclosure requirements for each bond transaction.

Internal procedures shall be developed that identify the information that is obligated to be submitted in an annual filing, the dates on which filings are to be made, list the events required to be disclosed, and identify the person responsible for making the filings.

The Comprehensive Annual Financial Report (CAFR) may fulfill annual financial information filing obligations. The information provided in a CAFR does not have to be replicated when filing with the Electronic Municipal Market Access (EMMA) portal. If the District agrees to furnish information that is outside the scope of its CAFR, that information may be included as a supplement to the CAFR when filing with EMMA. On its completion, the CAFR should be immediately submitted to EMMA.

Each time the District issues new bonds, the CFO (in consultation with bond counsel and the municipal advisor) will review the District’s compliance with prior continuing disclosure undertakings and make any necessary corrective filings.

In addition to continuing disclosure undertakings associated with public bond offerings as required by SEC Rule 15c2-12, the District may also be subject to ongoing reporting requirements associated with other debt obligations, such as bank loans. The CFO shall also be responsible for ensuring compliance with such reporting requirements.

**6.3.11 Consultants and Advisors**

6.3.11.1 Municipal Advisor

The District will retain an independent registered municipal advisor (MA) through a competitive process administered by the CFO consistent with the rules adopted by the District’s Local Contract Review Board (LCRB). Selection of the District’s MA should be based on the following:

1. Experience in providing consulting services to issuers similar to the District;

2. Ability to meet all regulatory requirements;

3. Knowledge and experience in structuring and analyzing large complex debt issues;

4. Ability to conduct competitive selection processes to obtain related financial services (including underwriters and other service providers);

5. Experience and reputation of assigned personnel; and
6. Fees and expenses.

The District expects that its MA will provide objective advice and analysis, maintain confidentiality of District financial plans, and fully disclose any potential conflicts of interest.

6.3.11.2 Bond Counsel
For all debt issues, the District will engage and retain an external bond counsel through a competitive process administered by the CFO consistent with the rules adopted by the District’s LCRB. Where required by the lender and/or investors, debt issued by the District will include a written opinion by a nationally recognized bond counsel affirming that the District is legally authorized to issue the debt, stating that the District has met all state constitutional and statutory requirements necessary for issuance, and determining the debt’s federal income tax status. Bond Counsel may also draft the Official Statement in lieu of having a separate disclosure counsel.

6.3.11.3 Disclosure Counsel
The District may engage and retain, when appropriate, Disclosure Counsel through a competitive process administered by the CFO consistent with the rules adopted by the District’s LCRB, to prepare official statements for debt issues. Disclosure Counsel will be responsible for providing that the official statement complies with all applicable rules, regulations, and guidelines. Disclosure Counsel will be a nationally recognized firm with extensive experience in public finance.

6.3.11.4 Underwriters
For negotiated sales, underwriters will be required to demonstrate sufficient capitalization and experience related to the debt issuance. The CFO will establish a pool of qualified underwriters through a competitive process consistent with the rules adopted by the District’s LCRB and may designate one or more firms as eligible to be senior managers and one or more firms as eligible to be co-managers. Criteria to be used in the appointment of qualified underwriters will include:

1. Quality and applicability of financing ideas;
2. Demonstrated ability to manage complex financial transactions;
3. Demonstrated ability to structure debt issues efficiently and effectively;
4. Demonstrated ability to sell debt to institutional and retail investors;
5. Demonstrated willingness to put capital at risk;
6. Experience and reputation of assigned personnel;
7. Past performance and references; and
8. Fees and expenses.
If an underwriting pool is established, the CFO will regularly monitor the performance of the members of the underwriting pool and recommend changes as appropriate.

### 6.3.12 Reporting Requirements

The CFO will report to the Board on a quarterly basis the following information:

1. A summary of outstanding debt obligations to include the series name, original amount of issuance, outstanding principal amount, issue date, maturity dates, interest rates, and annual debt service;

2. The amount of the net variable rate obligation and percentage as compared to outstanding debt, if applicable;

3. Other considerations if applicable, including (but not limited to): refunding opportunities, performance of variable rate obligations, and/or proposed new debt issuances.

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### 7 ACCOUNTING STANDARDS AND FINANCIAL REPORTING

#### 7.1 PURPOSE

This Policy provides guidance to management on the accounting standards to be used by the District and the expectations for financial reporting.

#### 7.2 GOALS

Providing accurate, transparent, and reliable accounting of the District’s financial performance is important to the public, investors, and other District stakeholders. Furthermore, the timely disclosure of the District’s financial performance helps those stakeholders better assess the District’s financial condition. These policies will provide management guidance it needs to produce and disseminate timely financial statements that meet those needs.

#### 7.3 REQUIREMENTS

##### 7.3.1 Basis of Accounting

The District’s financial statements are maintained on the flow of economic resources measurement focus using the accrual basis of accounting and accounting principles applicable to governmental enterprise funds. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recognized when liabilities are incurred.

The District shall prepare its financial statements using the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (generally accepted accounting principles or “GAAP”) issued by the Governmental Accounting Standards Board (GASB) applicable to governmental entities that use proprietary fund accounting.
7.3.2 **Reporting Entity**
GAAP require that the reporting entity include: (1) the primary government, (2) organizations for which the primary government is financially accountable, and (3) other organizations for which the nature and significance of their relationship with the primary government are such that exclusion would cause the reporting entity’s financial statements to be misleading or incomplete.

The District is governed by its Board of Commissioners whose members are elected directly by the citizens residing within the District. As such, the District is, by definition, a primary government.

7.3.3 **Capitalization Standards**
The District capitalizes expenditures on assets that have a useful life exceeding one year and an original cost of $7,500 or more. To be capitalized, an expenditure must meet the other capital-asset requirements under GAAP.

7.3.4 **Depreciable Lives and Depreciation Rates**
The District shall determine depreciation rates for classes of assets and, when appropriate, individual assets, based on the expected useful lives of the assets considering local conditions within the District. Estimates of the depreciable lives shall be based on engineering assumptions for the District and operational experience. Unless otherwise more appropriate, the depreciation rates shall be calculated to recover the original costs using a straight-line basis over the depreciable life of an asset.

7.3.5 **Accounting for Joint Ventures**
The District participates in various joint ventures with neighboring local governments. In some cases, the District acts as the managing agency for joint ventures. When acting as the managing agency and authorized by the intergovernmental agreement (IGA) that forms the joint venture, the District will prepare separate financial statements for the joint venture. When appointed as the managing agency and required by the IGA that forms the joint venture, the District’s Board and Budget Committee will also serve as the local budget law authority for the joint venture. In those cases, the Board will adopt budgets consistent with the requirements of the joint venture(s) to enable the District to fulfill its duties and the managing agency.

7.3.6 **Valuation of Inventory**
Inventory of materials and supplies is stated at cost using average cost and is charged against operations as used.

7.3.7 **Indirect Cost Allocation Plan**
The CFO will cause the District to maintain an indirect cost allocation plan suitable for allocating overhead costs to the various joint ventures and contracts the District manages and the capital projects it undertakes. The CFO may engage the services of professional consultants from time-to-time to review and update the indirect cost allocation plan.
7.3.8 **Financial Reports**

7.3.8.1 **Monthly Financial Reports**
The CFO shall provide the Board with unaudited reports on the District’s financial performance each month. These reports shall be available to the Board within 30 days of the close of the month. Subsequent adjustments to prior months financial reports are expected to account for routine month-end and year-end closing activities.

7.3.8.2 **Comprehensive Annual Financial Report**
Although not required by law, the District embraces the recommendation of the Government Finance Officers Association recommendation to issue its financial reports in the form of a Comprehensive Annual Financial Report (CAFR) within 180 days of the close of the fiscal year.

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**8 INTERNAL CONTROLS**

**8.1 PURPOSE**
Internal controls are those management means used to mitigate the risk that the District’s economic resources are not properly used. Internal controls focus on operational effectiveness and efficiency, fraud preventions, reliable financial reporting, and compliance with laws, regulations, and policies. Policies on internal controls are important to managing the District’s risks.

**8.2 GOALS**
The goals of these Policies are to:

1. Manage the risk that financial transactions bring to the District.
2. Establish the legal authority of the procurement function within the District.
3. Simplify, clarify, and reflect the District’s approach to maintaining internal controls.
4. Enable uniform internal controls throughout the District.
5. Build public confidence in the District’s stewardship of its economic resources and management of its risks.
6. Safeguard the integrity of the District’s procurement and accounting systems and protect against corruption, fraud, waste, and abuse.

**8.3 REQUIREMENTS**

8.3.1 **Purchasing Goods and Services for the District**
The District purchases various goods and services from many vendors with differing business models. The District’s internal controls are intended to govern those procurement matters
subject to the District’s Local Contract Review Board (LCRB) Rules. The procurement rules and
the internal controls that assess compliance with those rules are intended to:

1. Provide for the fair and equitable treatment of everyone who deals with procurement.
2. Increase efficiency, economy, and flexibility in the District’s internal controls activities
   and maximize the District’s purchasing power.
3. Foster effective broad-based competition from the District’s suppliers.

There are three requirements to procure goods or services for the District. These requirements are:

1. Compliance with formal procurement rules. To achieve compliance with state law and
   the LCRB Rules, all purchases must follow District procurement rules.
2. Proper authorization for the purchase. The District has established dollar limits that
   provide varying levels of authorization for employees to purchase on behalf of the
   District. This Policy formalizes the requirements for receiving and/or confirming the
   authorization for purchase.
3. Approval requirements for payments. These policies set forth the approval
   requirements.

The CFO shall maintain and publish guidelines and rules to facilitate the above-listed objectives.

8.3.1.1 Purchasing Limits

8.3.1.1.1 Authorization for Purchases
In consultation with the CEO, the CFO shall periodically establish and publish purchasing limits
for employees within the District. The purchasing limits will include the limits for purchases by
contract, procurement card, petty cash, and all other payment methods.

8.3.1.1.2 Approval of Purchases
All purchases are to be approved by the supervisor or manager of the purchaser, including petty
cash reimbursements, unless the purchase is being charged to the budget of another
department. In that case, the supervisor or department manager that is responsible for the
budget shall approve the request.

Supervisors and managers have approval authority to the limits as published by the CFO. If the
supervisor is unavailable, another supervisor in the department can approve. If the department
manager or another supervisor within the department is unavailable, another department
manager can approve the purchase request. Any transaction exceeding the approval authority
of the department manager must be approved by the CEO or by the manager acting in capacity
(AIC) for the CEO. The CFO will serve as the approval authority for all purchases of the CEO.
Master service agreements, task-order agreements, indefinite delivery/indefinite quantity agreements, and other similar agreements that do not have a specific dollar amount must be approved by the CEO. Approval authority for task orders issued based on these agreements are established by the purchasing limits published by the CFO.

**8.3.1.2 Purchase Orders**

Purchase orders are required for all purchases more than $1,000 unless otherwise authorized in advance by the CFO or CEO.

**8.3.1.3 Splitting of Purchases**

Purchases may not be split into multiple transactions to avoid the application of these Policies. Splitting a purchase is the act of creating two purchases that have one purpose with the intent or effect of avoiding requirements of these Policies and the associated management controls. Intentionally splitting a purchase to defeat the internal controls can be gross misconduct and subject the offender to sanctions up to, and including, termination for dishonesty.

**8.3.2 Obligations (Contracts, Leases, Etc.)**

The District is required to track its contracts, leases, and other obligations as part of its financial reporting requirements. The CFO shall develop and maintain a process of recording these obligations with sufficient detail to report the District’s obligations.

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**9 BUSINESS CASE EVALUATIONS**

**9.1 PURPOSE**

The District strives to reduce costs and improve service quality. A proper evaluation of how to commit the District’s resources in an alternative manner has the potential to both reduce costs and improve service quality.

Often there are multiple options for delivering a service. The business case evaluation for service delivery alternatives should be done thoroughly and objectively with the goal of acting as a steward for the public financial resources.

A business case evaluation captures the rationale for undertaking a specific project or task. It should be presented in a well-structured written document but may also be a short verbal agreement or presentation. Business case evaluations are used to guide the expenditure of resources, so that the expenditures are known or expected to support a commensurate business need of the District.

**9.2 GOALS**

The goal of these Policies is to promote efficient resource allocation through well-informed decision-making by the District. These Policies shall provide guidance for conducting benefit-cost and cost-effectiveness analyses. These Policies shall also provide specific guidance on the discount rates to be used in evaluating alternative programs at the District whose benefits and costs are distributed over time.

The economic resource available to the District are public resources that require prudent management. The Policies on business case evaluations are intended to:
1. Protect the District’s economic resources by forecasting the expected returns from the District’s efforts and investments.

2. Provide a common framework for evaluating business decisions throughout the District consistent with the District’s fundamental economic and financial circumstances.

9.3 REQUIREMENTS

9.3.1 Business Case Evaluation Guidelines
The CFO shall periodically publish guidelines for the conduct of business case evaluations at the District. These guidelines shall provide a framework for the consistent evaluation of alternatives throughout the District and require the use of appropriate financial and economic techniques.

9.3.2 Least-Cost Requirement
As part of its business case evaluation, the District shall evaluate alternatives to identify the alternative that meets the service level at the least cost. In cases where the service level can vary, the District shall consider both the costs and the benefits in its evaluation.

The guidelines published by the CFO described in Section 9.3.1 above may exclude certain fixed costs of the District from the evaluation when including those fixed costs would result in an improper business decision based on the District’s least-cost requirement Policy.

9.3.3 Discount Rates
The CFO shall periodically publish appropriate Discount rates to be used in conducting business case evaluations. The Discount rates shall reflect the CFO’s best estimate of the District’s cost of capital for varying terms.

10 OTHER BOARD FINANCIAL GOALS AND OBJECTIVES

10.1 PURPOSE
The Board has adopted other financial goals and objectives that do not fall within one of the categories listed above. The Policies related to those goals and objectives are included in this section.

10.2 GOALS
These Policies provide additional guidance to management on other Board financial goals and objectives.

10.3 REQUIREMENTS

10.3.1 Water Supply
10.3.1.1 Purchased Water
The District shall purchase water for distribution in a manner that balances the need to minimize cost and maximize water quality and reliability for its customers.
10.3.1.2 Multiple Sources of Water Supply
The District is committed to resiliency and reliability of service. In achieving that goal, the District will have access to multiple sources of supply with the goal to provide redundant supplies to all customers.

10.3.2 Asset Management Plan
Renewing and replacing the District’s infrastructure is an ongoing task. The District shall maintain an Asset Management Plan that protects the value of the District’s infrastructure and maximizes the value of the District’s expenditures on operations and maintenance.

The District’s Asset Management Plan shall make sure that planned maintenance can be conducted and capital assets (pumps, motors, pipes, fleet vehicle, information technology equipment, etc.) can be repaired, replaced, or upgraded on time. The District’s Asset Management Plan should address the:

1. Current state of the District’s assets.
2. District’s required “sustainable” level of service.
3. Assets that are critical to sustained performance.
4. District’s minimum life-cycle costs

The Asset Management Plan should provide the District critical information on capital assets and timing of investments. The Asset Management Plan should include an inventory of critical assets, evaluation of their condition and performance, and strategies to maintain, repair, and replace assets and to fund these activities.

The Asset Management Plan should result in the management of infrastructure capital assets to optimize the total cost of owning and operating these assets while prudently managing risks and delivering the desired service levels. The District shall use the Asset Management Plan to pursue and achieve sustainable infrastructure. The Asset Management Plan shall be used in the District’s Capital Planning (see Section 3.4.6 above).
APPENDIX A

Financial Plan Assumptions

DEBT CAPACITY
The Financial Plan shall rely on no more than $600 million in net debt proceeds to fund the District’s capital expenditures through 2030.

ISSUANCE COSTS
Issuance costs for revenue bonds shall be estimated at 1.5% of the par amount of the bond issue.

TERM
The term assumed for future revenue bond issues shall be 30 years. The term for federal or state loan programs shall be the maximum allowed within the program unless a shorter duration is in the financial interest of the District.

INTEREST RATES
Presented below are the assumed interest rates to be included in the financial plan:

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<th>Description</th>
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<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
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<td>5.00%</td>
<td>5.00%</td>
<td>5.50%</td>
<td>5.50%</td>
</tr>
<tr>
<td>Earnings</td>
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<td>2.70%</td>
<td>3.00%</td>
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<tr>
<td>Earnings</td>
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</table>

DEBT SERVICE RESERVE FUND
Depending on market conditions, a debt service reserve may not be required. However, the Financial Plan shall assume a debt service reserve as the minimum of:

1. The maximum annual debt service for a future revenue bond
2. 125% of the average annual debt service for a future revenue bond issue
3. 10% of the par amount of a future revenue bond issue.

DEBT SERVICE COVERAGE RATIOS
The target for the debt service coverage ratios used in the Financial Plan shall be:
1. 2.0x by including SDCs in gross revenues.
2. 1.5x by excluding SDCs in gross revenues.

ADDITIONAL BONDS TEST
The Financial Plan shall use an additional bonds test ratio of 1.3x by including SDCs in gross revenues and 1.15x by excluding SDCs from gross revenues.

MINIMUM CASH BALANCES
The Financial Plan shall include 250 days of forecast operations and maintenance expense as the minimum cash balances. The minimum is in addition to any balances in a debt service reserve account.
RESOLUTION NO. 09-19

A RESOLUTION AMENDING THE LOCAL CONTRACT REVIEW BOARD RULES.

WHEREAS, this matter comes before the Board of Commissioners acting in its capacity as the Local Contract Review Board for Tualatin Valley Water District pursuant to ORS 279A.060 and Resolution 14-84; and

WHEREAS, the Local Contract Review Board adopted Local Contract Review Board Rules (Rules) by Resolution 12-12 on May 20, 2012 and has made amendments by various resolutions since; and

WHEREAS, District staff has recommended amendments to the Rules as set forth below and on Exhibit A, attached hereto and incorporated by reference, and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: Division 120-010 Classes of Procurements is amended to provide that Municipal Advisor Services, sometimes referred to as Financial Advisor Services, including debt management, debt issuance and services related thereto, and Insurance Agent of Record services shall be a Class Special Procurement as set forth on Exhibit A, attached hereto and incorporated by reference.

Section 2: Division 160 Contract Amendments for Goods and Service Contracts (Including Change Orders and Extra Work) is amended to remove the five-year term limitation and leave the original term or any renewal to the business judgment of the Public Contracting Officer.

Section 3: The Chief Executive Officer, as the designated Public Contracting Officer under the Rules, is authorized to incorporate these amendments into the Rules.

Approved and adopted at a regular meeting held on the 20th day of March 2019.

_____________________________  ____________________________ ___
Bernice Bagnall, President          Todd Sanders, Secretary
Local Contract Review Board Rules Amendment

Article 1.20.10
Approved by the TVWD Board of Commissioners with Resolution 13-15 on September 16, 2015 - with Addition of item xiii) to Div. 120, 120-010, (1) F)
Adopted by the TVWD Board of Commissioners with Resolution 11-13 on November 20, 2013
Previously Adopted by the TVWD Board of Commissioners with Resolution 12-12 on November 20, 2012

Author/Position: Wendy Burns, Purchasing Agent/Contracts Coordinator

DIVISION 120 - PROCUREMENT CLASSIFICATIONS
120-010 - Classes of Procurements

(1) Special Procurements

(A) Special procurements cover two procedures where competitive bidding is not required: “Class-Special Procurements” and “Contract-Specific Procurements”.

i) Class-Special Procurements consist of entering into a series of contracts over time for the acquisition of a specified class of goods or services.

ii) Contract-Specific Procurements consist of entering into a single contract or a number of related contracts for the acquisition of specified goods or services on a one-time basis or for a single project.

(B) To seek approval of a Special Procurement, a written request must be submitted to the Board that describes the proposed contracting procedure, the goods or services to be acquired, and the circumstances that justify the use of a special procurement whereby:

i) The special procurement is unlikely to encourage favoritism in the awarding of a Public Contract or substantially diminishes competition for Public Contracts, and

ii) Results in substantial cost savings to the District or to the public, or

iii) Substantially promotes the public interest in a manner that could not be realized through competitive bidding methods.

(C) When the Board approves a Class-Special Procurement, the District may award contracts to acquire goods or services within that class without making a subsequent request to the Board.

(D) Examples of Board approved Class-Special Procurements (formerly Exemptions) are:

i) Equipment repair and overhaul under $75,000.

ii) Contracts for price regulated items.

iii) Laboratory and medical supplies.

iv) Documents, goods and services protected by intellectual property law, including but not limited to computer software, computer software maintenance, copyrighted materials and periodicals.

v) Purchases of used personal property under $75,000.

vi) Advertising contracts.
vii) Investment contracts - The District invests public funds pursuant to the Investment Policy Guidelines reviewed and adopted by the Board of Commissioners in January of each calendar year.

viii) Telecommunication systems and service contracts.

ix) Personal Service Contracts where the value is estimated to be under $150,000, and where services are performed by an independent contractor in a professional capacity such as special legal services, medical or therapeutic services, occupational health and safety consultant, information technology consultants and other professional consultants, consultants with expertise in financial, occupational, architectural, engineering, photogrammetric mapping, transportation planning or land surveying services. Personal services also include artistic services or services of a specialized, creative and research oriented nature, or educational training. The determination to use this exemption shall be made by the PCO or his designee.

x) District Legal Counsel.

xi) A Public Improvement Project where:

a) A private contractor working for another public agency or on a private development project and is required to make improvements, which impact the District’s water system.

This may include alterations to the District’s system that would not otherwise occur at that time but for this project. In these cases, the schedule does not permit time to put the project out to bid and the District cannot provide the work force to complete the work. For example, the site may involve new construction where another government entity would not allow street cuts for the next five years once the paving is complete, or the addition of a District contractor would impair the public agency or private entity’s ability to complete the job; or

b) It is more economical and efficient to perform the District’s portion of the work by inclusion of the public agency’s or private entity’s contractor.

xii) Maintenance, repair and operations goods and services needed during the course of the day and purchased against annual purchase orders.

xiii) The term length of Willamette Water Supply Program (“WWSP”) contracts for professional and personal service contracts may extend beyond the five year term limitation outlined in these Rules to 2026 or other such date required to complete the WWSP. (Approved by Resolution 13-15 on September 16, 2015.)

xiv) Municipal Advisor Services, including debt management, debt issuance, and financial advisory services.

xv) Insurance Agent of Record
DIVISION 150 - PERSONAL SERVICE CONTRACTS AND INSURANCE AGENT OF RECORD CONTRACTS

Personal Service Contracts whose value is under $150,000 are exempt from going out for request for informal competitive proposals. Personal Service Contracts whose value is estimated to be greater than $150,000 must use the Competitive Sealed proposal process outlined in Rule 120-050, unless the type of service in question qualifies as another exempted procurement, such as those listed in Section 120-010, Paragraph (5).

(1) **The following are Personal Service Contracts:**
   
   (A) Contracts for services performed as an independent contractor in a professional capacity, including but not limited to the services of: an accountant, attorney providing special legal services, physician or dentist, therapist, psychologist, passenger aircraft pilot, aerial photographer, timber cruiser, communication or telemetry consultant or information technology consultant, a consultant for the services listed in Division 300 of these Rules, financial consultant, occupational health and safety consultant.
   
   (B) Contracts for services requiring special skills, such as an artist in the performing of fine arts, including but not limited to persons identified as photographer, filmmaker, painter, weaver, or sculptor.
   
   (C) Contracts for services of a specialized, creative and research-oriented noncommercial nature.
   
   (D) Contracts for educational training or informational resource referral services.
   
   (E) Personal Service Contracts provided by Consultants for services listed in Division 300 of these Rules where the contract dollar value is estimated to be below $250,000.

(2) **The following examples are not Personal Service Contracts:**

   (A) Contracts, even though in a professional capacity, if predominately for a product, e.g., a contract with a landscape architect to design a garden is for personal services, but a contract to design a garden and supply all the shrubs and trees is predominately for a tangible product.

   (B) A service contract to supply labor which is of a type that can generally be done by any competent worker, e.g., janitorial, security guard, crop spraying, laundry and landscape maintenance service contracts.

   (C) Contracts for trade-related activities considered to be labor and material contracts.

   (D) Contracts for services of a trade-related activity, even though a specific license is required to engage in the activity. Examples are repair and/or maintenance of all types of equipment or structures.

(3) **Insurance Agent of Record Contracts**

   Contracts for insurance agent of record contracts must be let by formal competitive proposal as outlined in these rules and the term for the award contract may not exceed five (5) years, including all extensions.
DIVISION 160 - CONTRACT AMENDMENTS FOR GOODS AND SERVICE CONTRACTS (INCLUDING CHANGE ORDERS AND EXTRA WORK)

Any Public Contract amendment for additional work or product, including change orders, extra work, field orders, or other change in the original specifications that increases the original contract dollar value may be made without competitive bidding subject to the following conditions:

(1) The original contract was let by (i) competitive bidding or alternative procurement process; or (ii) unit prices or additive alternates were provided which established the cost for additional work; or

(2) For small procurements under $10,000; the amount of the aggregate costs resulting from all amendments shall not exceed $1,000, unless the amendment is approved by the department manager.

(3) For intermediate procurements from $10,000 to $150,000, the amount of the aggregate costs from all amendments shall not exceed 25% of the original contract value, unless the amendment is approved by the department manager.

(4) The amendment is within the scope of the services contemplated under the RFP and that amendment will not materially impact the field of competition for the services described in the RFP.

(5) With respect to the rules on amendments, Public Contract amendments do not include amendments to intergovernmental agreements, and contracts with other state agencies or the federal government.

(6) Renegotiated Contracts. The District may renegotiate the terms and conditions, including the contract price and/or contract term of a contract without additional competition and amend a contract if it is advantageous to the District subject to the following conditions:

(A) The amended contract is within the scope of the Solicitation Document, or if there was no Solicitation, the amended contract is within the scope of the original contract, or the purchase was approved as a special procurement; and

(B) A determination by the District that the renegotiated contract is at least as favorable as the original contract, and

(C) The renegotiated contract will not have a total term greater than five (5) years from original contract execution.

(C) (Clerical correction) If a contractor offers a lower price in exchange for a change in terms or conditions that was expressly rejected in the original solicitation, the amended contract may be structured with this requested changed term as an optional, but not as a mandatory contract term. If the amendment is the result of a cooperative procurement, the amended contract may not materially change the terms, conditions or pricing of the original contract.

(D) If the amendment is the result of a cooperative procurement, the amended contract may not materially change the terms, conditions or pricing of the original contract.
RESOLUTION NO. 10-19

A RESOLUTION APPROVING AND RATIFYING A SETTLEMENT AGREEMENT WITH GREGORY TOYE FOR ACQUISITION OF REAL PROPERTY IN FEE SIMPLE (1S236 TAX LOT 200) FOR THE WILLAMETTE WATER SUPPLY SYSTEM.

WHEREAS, by Resolutions 12-17 and 13-18, the Board of Commissioners declared that acquisition of title in fee simple for real property, known as Washington County Tax Assessor’s Map 1S236 Tax Lot 200 (the Property), owned by Gregory Toye, was necessary for construction of terminal storage reservoirs and related water system facilities for the Willamette Water Supply System; and

WHEREAS, those resolutions made findings in compliance with Oregon law and authorized the District to commence condemnation proceedings known as Tualatin Valley Water District v Gregory L. Toye, et al, Washington County Circuit Court Case No. 18CV19860 pursuant to ORS 264.240 and ORS Chapter 35; and

WHEREAS, a settlement agreement has been reached with the property owner to vest fee simple title to the Property in the District upon payment by the District of $2,700,000 in full, final and complete settlement of all matters, including but not limited to, land value, relocation assistance as required by statute, attorney fees, expert witness fees and all other costs; and

WHEREAS, the Board wishes to approve and ratify the settlement agreement and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1. The settlement agreement with Gregory Toye for acquisition in fee simple title of the Property for $2,700,000 is approved and ratified.

Section 2. The Chief Executive Officer and District Legal Counsel are authorized to execute all documents and take all actions necessary to complete acquisition of the Property.

Section 3. The Chief Executive Officer and District Legal Counsel are authorized to transfer title for the Property as necessary to comply with the terms of the Agreement for Design and Construction of the Willamette Water Supply Program dated June 16, 2015 and the Willamette Water Supply System intergovernmental agreement following its effective date of July 1, 2019.

Approved and adopted at a regular meeting held on the 17th day of April 2019.

_______________________________    _____________________________
Bernice Bagnall, President           Todd Sanders, Secretary
RESOLUTION NO. 11-19

A RESOLUTION APPROVING AN INTERGOVERNMENTAL AGREEMENT BETWEEN THE CITY OF WILSONVILLE, TUALATIN VALLEY WATER DISTRICT AND THE CITY OF HILLSBORO FOR JOINT DESIGN AND CONSTRUCTION OF GARDEN ACRES ROAD AND PROJECT PLM_1.2 GARDEN ACRES TO SW 124TH AVENUE PIPELINE PROJECTS.

WHEREAS, by Resolution 14-17, dated on or about March 21, 2017, the Board of Commissioners entered into a Ground Lease with the City of Wilsonville and the City of Hillsboro for the use of public right-of-way in the City of Wilsonville for the Willamette Water Supply System waterline; and

WHEREAS, the Willamette Water Supply Program staff has identified Project PLM_1.2 – SW Garden Acres to SW 124th Pipeline Projects, consisting of approximately seven-tenths of a mile of large diameter pipeline and appurtenances (water system facilities), to be constructed mostly within City of Wilsonville right-of-way along and under SW Garden Acres Road; and

WHEREAS, the City of Wilsonville has determined that it wishes to improve SW Garden Acres Road and the roadway project, and the WWSS waterline Project PLM_1.2 overlaps in location and timing such that the provisions of the Ground Lease require a joint project agreement to provide mutual benefit from coordinated delivery of the two projects; and

WHEREAS, the Board has considered the terms of the intergovernmental agreement, attached hereto as Exhibit A and incorporated by reference, and finds that it is necessary to approve and authorize the Chief Executive Officer to execute on behalf of TVWD, and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1. The Intergovernmental Agreement between the City of Wilsonville and Tualatin Valley Water District and the City of Hillsboro for the Willamette Water Supply Program Joint Design and Construction of Garden Acres Road and PLM_1.2 Garden Acres to 124th Pipeline Projects attached hereto as Exhibit A and incorporated by reference is hereby approved.

Section 2. The Chief Executive Officer is authorized to execute the agreement. The Board recognizes that there may be edits and corrections to the final agreement, and the Chief Executive Officer is authorized to accept amendments and sign on behalf of the District so long as the amendments do not substantially change the agreement and such amendments are approved by General Counsel.

Approved and adopted at a regular meeting held on the 17th day of April 2019.

Bernice Bagnall, President

Todd Sanders, Secretary
INTERGOVERNMENTAL AGREEMENT

BETWEEN

THE CITY OF WILSONVILLE AND
TUALATIN VALLEY WATER DISTRICT AND THE CITY OF HILLSBORO
FOR THE WILLAMETTE WATER SUPPLY PROGRAM

JOINT DESIGN AND CONSTRUCTION OF

GARDEN ACRES ROAD AND
PLM_1.2 GARDEN ACRES TO 124TH
PIPELINE PROJECTS

THIS INTERGOVERNMENTAL Agreement ("Agreement") is made and entered into between the City of Wilsonville, a political subdivision of the State of Oregon, acting by and through its City Council, hereinafter referred to as "WILSONVILLE"; the Tualatin Valley Water District, a domestic water supply district organized under ORS Chapter 264, acting by and through its Board of Commissioners, hereinafter referred to as "TVWD"; and the City of Hillsboro, a municipal corporation, acting by and through its City Council, hereinafter referred to as "CITY"; TVWD and CITY joined together in the Willamette Water Supply Program, hereinafter referred to as "WWSP"; WILSONVILLE and WWSP are jointly referred to hereinafter as the "Parties."

RECITALS

A. WHEREAS, ORS 190.003 - 190.010 authorizes agencies to enter into intergovernmental agreements for the performance of any or all activities and functions that a Party to the agreement has the authority to perform; and

B. WHEREAS, WILSONVILLE has jurisdiction over a network of roads and streets serving Wilsonville-wide travel needs, including Garden Acres Road; and

C. WHEREAS, WILSONVILLE’s Transportation System Plan, adopted by the Wilsonville City Council, identifies the Garden Acres Road Urban Upgrade (UU-08) as a high priority transportation improvement, hereafter referred to as "Road Work," and as shown generally on the attached project map in Exhibit 1, Project Map (Exhibit 1), attached hereto and incorporated by reference; and

D. WHEREAS, TVWD, as WWSP Lead Agency, and CITY, as a WWSP Partner, along with other municipal water supply agencies, are participating in the WWSP and have entered into intergovernmental agreements to establish responsibilities and obligations for the planning and design of proposed water system improvements; and

E. WHEREAS, WWSP desires to construct a large diameter water supply transmission line and related improvements in coordination and association with the Road Work, and such WWSP improvements are hereinafter referred to as "Waterline Work," which is generally coincident with the Road Work; and

F. WHEREAS, WILSONVILLE and WWSP have entered into a separate Ground Lease for Raw Water Pipeline, dated March 21, 2018, hereinafter referred to as "Ground Lease," which includes, among other things, the goal and objective to complete the design and construction of the Waterline Work; and
G. WHEREAS, Section 7.33 of the Ground Lease, Joint Construction Projects between Lessee and Lessor, stipulates the development of a separate agreement for construction or maintenance projects that are to be jointly undertaken between WILSONVILLE (Lessor) and WWSP (Lessee); and

H. WHEREAS, it is the mutual understanding of the Parties that incorporation of the design and construction of the Waterline Work into the design and construction of the Road Work is mutually beneficial to WWSP and WILSONVILLE, and WWSP agrees to pay for the Waterline Work and a proportionate share of other Road Work costs as provided herein; and

I. WHEREAS, the terms of this Agreement are to be interpreted to be consistent with the requirements of the Ground Lease, with the exception of the following agreed upon modification to the referenced Ground Lease term(s) made specifically for this Project as follows: Section 2.1 defines the Lease Area to be a minimum of eight feet below ground surface. Section 3.3 provides that in Garden Acres Road, the depth may need to be greater and that Lessee may be required to modify the installed depth as needed by Lessor and as determined by Lessor. Finally, Section 3.3 also allows that Lessor, in its sole discretion, may elect to allow portions of the pipe to be located less than eight feet below the surface but that determination will be made during Lessor’s design and Plan review, as described in Section 7.5; and

J. WHEREAS, for a portion of the segment of Waterline Work covered by this Agreement, Lessor has agreed to allow for a lesser depth than is required in the Ground Lease, as outlined in Exhibit 4, Construction Costs (Exhibit 4). In consideration of this allowance, WWSP agrees to pay WILSONVILLE for its increased costs associated with accommodating this lesser depth and allowing a portion of the water transmission pipeline to go over utilities WILSONVILLE will be placing in the road, or has placed in the road; and

K. WHEREAS, it is the mutual desire of the Parties to enter into this Agreement to cooperate in the design and construction of the Waterline Work in conjunction with the Road Work, with the allocation of responsibilities as described below.

AGREEMENT

NOW, THEREFORE, in consideration of the terms, conditions, and covenants set forth below, and the recitals set forth above, which are incorporated into this Agreement as if fully set forth herein, the Parties agree as follows:

ARTICLE I - PROJECT GOALS

1.1 The Parties are coordinating the design and construction of the Road Work and Waterline Work to maximize the benefits to their constituents and the community at large. Road Work and Waterline Work shall hereinafter be referred to jointly as the “Project.” The Parties desire to work in collaboration and as integrated work groups where possible to achieve Project goals and timelines. Pursuant to Section 7.32 of the Ground Lease, the Project timeline is defined by the design and construction milestones set forth in Exhibit 2, Milestones (Exhibit 2).

1.2 The Project is intended to achieve the following goals:

1.2.1 WILSONVILLE: To design and construct Road Work to upgrade the existing roadway to an urban street cross-section in support of future
development within the Coffee Creek Industrial Areas, part of WILSONVILLE's ongoing capital program.

1.2.2 WWSP: To design and have portions of the water transmission pipeline constructed to further the objectives of WWSP in increasing water supply, reliability, redundancy, and resiliency to its member service areas. The Waterline Work under this Agreement is part of that effort.

1.3 The Parties understand that the Road Work and the Waterline Work must be completed according to the key milestones identified in Exhibit 2 and agree to work collaboratively to meet the established milestones. Further, the Parties understand that if either Party is unable to proceed with or construct the Project in accordance with the aforementioned milestones, the Party who is ready to move forward retains the right to independently move forward with the design and construction of that Party's part of the Project and the other Party will have to move forward at a later date or in a way that does not impede or interfere with the work of the Party who has already begun construction.

ARTICLE II - PROJECT DESCRIPTION

2.1 WILSONVILLE Road Work consists of design and construction of the road improvements on Garden Acres Road, including the design, construction, and responsibility for permits, utilities, and appurtenances, as depicted in Exhibit 1.

2.2 The WWSP Waterline Work consists of design and construction of a large diameter water transmission line and appurtenances according to design, plans, and technical specifications within the Road Work limits and beyond the Road Work limits, crossing Day Road and connecting to the WWSP PLM_3.0 (124th Pipeline) pipeline, as depicted in Exhibit 1.

2.3 The Project consists of one Contract Document inclusive of two schedules of work: Schedule A Garden Acres Road and Schedule B WWSP PLM_1.2 Waterline Work covering work within the Project Area, as depicted on Exhibit 1.

ARTICLE III - WILSONVILLE OBLIGATIONS FOR DESIGN

3.1 WILSONVILLE hereby designates Zach Weigel, P.E. as WILSONVILLE Project Manager for the Road Work and the WILSONVILLE representative responsible for coordination of the Waterline Work with WWSP pursuant to this Agreement. Patty Nelson, P.E. is WILSONVILLE's Principal Engineer for the Project.

3.2 WILSONVILLE will perform or cause to be performed all tasks needed to design and construct the Road Work and temporary access to Cahalin Road, including all permitting, real estate acquisition, public outreach, and developing construction documents suitable for bidding the Road Work.

3.3 WILSONVILLE will make all Road Work design and construction plans and information available to WWSP, as needed to coordinate the Waterline Work with the Road Work. Such information will include: Project milestones; permitting; specifications; opinions of probable construction costs; plans, applications, and permit documents; ROW and easement acquisition plans;
utility relocation plans and agreements; health and safety plans; stakeholder input; and other information as required for successful coordination and collaboration. The documentation will be available electronically and hosted by WILSONVILLE.

3.4 WILSONVILLE will prepare design plans and technical specifications for the Road Work. WILSONVILLE will provide the design topographical survey and Road Work base maps to WWSP. WILSONVILLE will provide WWSP the opportunity to review and comment on the Road Work design prior to final design documents. Design documents include plans/drawings, specifications, standard details, engineer’s opinion of probable construction costs, and other documents that are required for each milestone shown in Exhibit 2. WILSONVILLE will incorporate WWSP comments that do not unreasonably impact the Road Work, including, but not limited to, cost, scope, or configuration, or interfere with the WILSONVILLE design standards and performance goals. In the event WWSP requests any changes that increase the cost of the Road Work, WILSONVILLE will advise WWSP if the changes are acceptable and, if so, of the estimated cost increase and will require that WWSP agree, in writing, to pay the additional costs before the changes are agreed to.

3.5 WILSONVILLE will prepare the Project bid package inclusive of the ‘front-end’ documents, including Bidding Information, Bid Forms, Contract Forms, Standard General Conditions, Special Provisions, Technical Specifications, design plans and others as required for successful bidding and construction of the Road Work and the Waterline Work (collectively, “Contract Documents”). The Contract Documents will have two schedules of work: Schedule A Road Work and Schedule B Waterline Work.

3.6 WILSONVILLE will prepare the draft Contract Documents and provide them to WWSP for review and comment. WILSONVILLE will incorporate or address/respond to review comments in a manner acceptable to both Parties’ Project Managers.

3.7 WILSONVILLE will administer the Project bidding and solicit bids in compliance with all public contracting laws. Prequalification requirements for the Project will be included in the bid documents and will be a requirement of award of the bid. Minimum insurance requirements for the construction contractor shall be set in accordance with WILSONVILLE’s standard minimum requirements but may be increased by mutual agreement of the Parties prior to bid solicitation and will be included in the Contract Documents. A minimum four-week bid period will be provided. A mandatory pre-bid meeting will be held with representatives of both the Road Work and Waterline Work. Bidder questions will be responded to by the WILSONVILLE Project Manager, incorporating technical responses from the representative technical leads. Bidder questions relating to Waterline Work will be directed to the WWSP Project Manager for response back to the WILSONVILLE Project Manager, who will issue the final response. Final responses will be copied to the WWSP Project Manager.

3.8 WILSONVILLE will administer all addenda to the Contract Documents and related bidding activities, subject to the Administrative Charge, as identified in
3.9 WILSONVILLE will be responsible for right-of-way and easement acquisition; regulatory and land use permits and approvals, permit compliance, mitigation measures, and permit enforcement; and public information for the Road Work. WWSP will be responsible for obtaining any permits and right-of-way over and above those required for the Road Work for the Waterline Work.

ARTICLE IV - WWSP OBLIGATIONS FOR DESIGN

4.1 WWSP hereby designates Eric Ward, P.E. as WWSP Project Manager for the Waterline Work and the WWSP representative responsible for coordination of the Waterline Work with WILSONVILLE pursuant to this Agreement. Mike Britch, P.E. will be the WWSP Principal Engineer for the Waterline Work.

4.2 WWSP will perform or cause to be performed all tasks needed to design and construct the Waterline Work, including preparation of plans/drawings, standard details, technical specifications, engineer’s estimate, and other documents required for completion of the Contract Documents and design milestones described in Exhibit 2. WWSP will provide WILSONVILLE a minimum of fourteen (14) Business Days to complete a design review of the Waterline Work at each significant milestone: 90-, and 100-percent design documents. Design documents include plans/drawings, specifications, standard details, engineer’s estimate, and other documents that are required for each milestone. Documents will be prepared in a format agreeable to WILSONVILLE. As provided in Section 3.3 of the Ground Lease, WWSP must work with WILSONVILLE to coordinate the pipeline design to be consistent with WILSONVILLE’S planned utilities and must either modify pipe depth in those areas of the right-of-way, as required by WILSONVILLE, as needed or adjust the location within those segments of the right-of-way that may conflict with WILSONVILLE utilities which take priority.

4.3 WWSP will coordinate and will cause its consultants to coordinate with WILSONVILLE and its consultants, including attendance at all design team meetings, permit team meetings, real estate meetings, public information/outreach meetings, and other scheduled meetings. WILSONVILLE and WWSP Project Managers will mutually determine the type, frequency, and timing of meetings in order to meet the needs of a well-coordinated Project.

4.4 WWSP will share and coordinate updates on the Waterline Work schedule with the WILSONVILLE Project Manager.

4.5 WWSP will provide necessary design coordination to advance the design and construction of the Project to achieve the key milestones described in Exhibit 2. This coordination includes timely review of Road Work design plans, additional geotechnical studies, survey, and other available documents as required and as described herein. As the design plans and studies are prepared, WWSP will propose any requested revisions to the Road Work design and/or Waterline Work design, plans, and specifications and consult with WILSONVILLE to resolve differences to the mutual benefit of WWSP and WILSONVILLE. The Principal Engineers from each agency will meet as needed to consult and resolve the differences.
4.6 WWSP will make its Waterline Work information available to WILSONVILLE and its consultants for the Project.

4.7 WWSP will provide the design and design coordination for all Waterline Work, including impacts to the existing roadway, utilities, and adjacent properties for the portion of the pipeline outside of the Road Work area, as shown in Exhibit 1.

4.8 WWSP will provide to WILSONVILLE a prequalified pipeline construction contractor list, developed in accordance with Oregon public contracting laws, for inclusion in the Project. WWSP will provide WILSONVILLE, upon request, supporting documentation demonstrating the creation of the prequalified pipeline construction contractor list has been developed in accordance with Oregon public contracting laws.

4.9 Ten business days prior to the bid advertisement date set by WILSONVILLE, WWSP will provide to WILSONVILLE a complete design for the Waterline Work previously approved by WILSONVILLE, including design drawings, plans, bid items, quantities, and technical specifications in a format acceptable to WILSONVILLE to be incorporated in the Contract Documents as a separate bid schedule. WWSP will participate in the mandatory pre-bid meeting and provide timely responses to bidder's questions about the Waterline Work during the advertisement period.

4.10 For Waterline Work outside the right of way acquired by WILSONVILLE for the Road Work portion of the Project, as shown in Exhibit 1, WWSP is responsible for any other additional land and permits it may need for its Waterline Work, including but not limited to, permanent easement and temporary construction easement acquisition; regulatory and land use permits and approvals, permit compliance, mitigation measures, and permit enforcement; public information; and contract administration. WWSP will provide secured right-of-way and permits for WILSONVILLE and its agents and contractors to perform work for the Project. WILSONVILLE must review and approve the form of easements to ensure WILSONVILLE has the ability to enter to perform any required work within any easement area of the Project.

ARTICLE V - JOINT OBLIGATIONS FOR DESIGN

5.1 To minimize Project delays or cost increases, the Parties agree to work together diligently to identify and jointly resolve any design or constructability issues with the Road Work and Waterline Work at the earliest possible stage of the design process. When such issues arise, the Parties agree to work together to find mutually acceptable solutions in furtherance of the stated Project Goals.

5.2 The Parties will hold a public information strategy meeting in accordance with Exhibit 2 to jointly develop and agree on the approach to be used for public information communications, publications, presentations, events, or signage.

5.3 The Parties will coordinate and identify those technical specifications that apply to both the Road Work and the Waterline Work. Project Managers will agree on how to coordinate the specifications. The author of the technical specifications will be responsible for updating to reflect agreed upon updates.
for coordination of the specifications. WILSONVILLE is the author of the Road Work technical specifications and WWSP is the author of the Waterline Work technical specifications. Both Parties will have adequate opportunity to review and revise the specifications as needed to meet both Parties' requirements and objectives.

5.4 The Parties agree that performance of the work by a prequalified contractor is imperative. As such, the Parties agree that the basis of award for the bid will require confirmation that the contractor performing the work is prequalified for the work, as identified in the sealed bids.

5.5 The Parties agree to jointly develop and maintain a Project schedule and Project Managers shall work collaboratively to achieve Project milestones. These schedule milestones are included in Exhibit 2.

5.6 The location of the pipeline and pipeline appurtenances related to the Waterline Work shall be mutually agreed to by both Parties during the design of the Project. If mutual agreement cannot be reached, WILSONVILLE shall have final determination of the pipeline and pipeline appurtenances.

5.7 The Parties will jointly perform a constructability review of the Contract Documents at 90-percent design completion of the Project and incorporate comments into final Contract Documents.

5.8 The Parties will coordinate and attend regular design coordination meetings, regular permit team meetings, public information and outreach team meetings, and other meetings as required for successful coordination and completion of the Project. The Parties' Project Managers will determine the anticipated frequency and timing of meetings depending on the needs of the Project.

5.9 The Parties will work collaboratively in developing Project schedules, milestones, reviews, health and safety plans, Project performance metrics, and other activities as required for the successful coordination and completion of the Project. WILSONVILLE will manage Road Work and WWSP will manage Waterline Work to achieve the design milestones described in Exhibit 2.

ARTICLE VI - COMPENSATION FOR DESIGN

6.1 The Parties agree WWSP will reimburse WILSONVILLE for Administrative Costs, as defined in Exhibit 3, attached, for work related to the design, coordination, and incorporation of the Waterline Work.

6.2 The Parties agree WWSP will reimburse WILSONVILLE for costs associated with coordination of the Road Work and incorporation of the Waterline Work in the Project design documents and creation of the Contract Documents. Costs for this effort shall include WILSONVILLE’s staff and consultant team.

6.3 The Parties will each be solely responsible for the fully burdened labor costs of their individual staff on their respective portions of work: WILSONVILLE for Road Work and WWSP for the Waterline Work.

6.4 The Parties agree WILSONVILLE will be responsible for overall administration of the Project but will receive financial contribution from WWSP for its share of
actual costs related to the Waterline Work as provided in Exhibit 3. WWSP will also reimburse WILSONVILLE for the cost of coordinating and incorporating the Waterline Work to ensure a cohesive contract document for the Project.

ARTICLE VII - WILSONVILLE OBLIGATIONS FOR CONSTRUCTION PHASE

7.1 WILSONVILLE hereby designates Zach Weigel, P.E. as WILSONVILLE Project Manager and Construction Manager for the Road Work and WILSONVILLE representative responsible for coordination of the Waterline Work with WWSP pursuant to this Agreement. Patty Nelson, P.E., is WILSONVILLE’s Principal Engineer for the Project to handle dispute resolution.

7.2 WILSONVILLE will be responsible for the overall management and administration of the construction contract for the Project.

7.3 WILSONVILLE is responsible for engineering, inspection, construction management, and administration for the Road Work.

7.4 WILSONVILLE will include the WWSP in regular construction coordination meetings, public information and outreach meetings, and other meetings as required for successful coordination and completion of the Project.

7.5 WILSONVILLE is solely responsible for managing the Project schedule, including established milestones. WILSONVILLE will provide construction contractors’ baseline schedule and monthly schedule updates for WWSP review and comments. WILSONVILLE will consider and incorporate WWSP review comments that do not significantly impact Road Work costs or Project schedule.

7.6 WILSONVILLE will provide WWSP a minimum of ten (10) calendar days to evaluate the bid results for the Waterline Work and shared costs prior to issuing notice of intent to award for the Project.

7.7 WILSONVILLE will receive, catalog, and route to WWSP requests for information (RFIs), requests for substitutions, submittals, and any other documents pertaining to the Waterline Work for review and comment using eBuilder as administered by the WWSP for the Parties. WILSONVILLE will defer to WWSP for the disposition and/or response for all RFIs, substitutions, and submittals related to the Waterline Work. Access to all Project documents, including, but not limited to, submittals, RFIs, contract correspondence, QA/QC, daily reports, and photos will be available to the Parties through eBuilder.

7.8 WILSONVILLE will cause the construction contractor to name and endorse WILSONVILLE and WWSP (or TVWD and CITY if no legal entity between them has been formed), their elected or appointed officials, staff, employees, consultants, and agents as additional insureds on all policies provided by the construction contractor under the contract. The endorsements to policies shall provide for not less than thirty (30) days’ written notice of cancellation. WILSONVILLE will provide WWSP a copy of the certificates for its records. WILSONVILLE will cause the construction contractor to extend indemnity and hold harmless provisions given to WILSONVILLE to WWSP (or to TVWD and
CITY if no legal entity between them has been formed), its members, officers, boards, agents, employees, and consultants.

7.9 WILSONVILLE will have overall responsibility for Project administration and inspection of Road Work and at all times be responsible to monitor and manage the construction contractor's work as provided in the construction contract documents. With respect to the Waterline Work and subject to the provisions of the Ground Lease providing the Waterline Work cannot negatively impact the Road Work, WILSONVILLE will defer to the Waterline Construction Manager for decisions, recommendations, and interpretations regarding the construction of the Waterline Work to meet the quality, timelines, and performance of the water system design as long as such decisions do not negatively impact the Road Work or cost. WILSONVILLE will communicate and direct the contractor performing the Waterline Work consistently with the decisions of the Waterline Construction Manager. WILSONVILLE will have sole and total decision-making authority on Road Work.

7.10 WILSONVILLE agrees and will provide in the construction contract that the Waterline Construction Manager or designated onsite inspectors may also stop the construction contractor's work if they observe, in their sole judgment, a situation involving safety issues that threaten life or bodily harm. Further, the Waterline Construction Manager shall notify the WILSONVILLE Project Manager of the need to stop the Waterline Work based on observations that the Waterline Work is not being performed according to the Contract Documents. The WILSONVILLE Project Manager will stop the Waterline Work at the request of the Waterline Construction Manager. WILSONVILLE's Construction Manager shall also have the authority to issue a stop work order at any time and will notify WWSP's Construction Manager or designated onsite supervisor as soon thereafter as reasonably possible.

7.11 WILSONVILLE will review the monthly estimate of Waterline Work performed by the construction contractor prepared by the Waterline Construction Manager and onsite inspectors based on their inspection of the work performed to date, the method of payment and schedule of values specified in the contract, and other matters deemed appropriate for payment. The monthly estimate shall be provided to WILSONVILLE for WILSONVILLE to meet its requirements to maintain the schedule and for periodic pay request process under the construction contract.

7.12 WILSONVILLE will provide a final cost accounting for the Waterline Work and WWSP's proportion of shared cost items, including all internal and external costs, to WWSP within forty-five (45) days of Final Completion of the Project and payment to the construction contractor.

7.13 WILSONVILLE will require the construction contractor to complete and submit Exhibit 5, Quarterly Net Spend Report. This report shall include, at a minimum, the following information:

7.13.1 Total amount spent by the construction contractor and each subcontractor, vendor, and supplier for the quarter;

7.13.2 Subcontractor/subconsultant name, address, and type of service(s) provided; and
7.13.3 Other business attributes that may be required by WWSP.

WILSONVILLE will require the construction contractor to submit the Quarterly Net Spend Report to WILSONVILLE by the fifteenth (15th) day of the last month for each calendar quarter for the entire duration of its contract. WILSONVILLE will forward the construction contractor's Quarterly Spend Report to WWSP when it receives it from the construction contractor. WWSP may change the content and frequency of spend reporting and would incur the cost of such changes.

7.14 WILSONVILLE will submit to WWSP all contract construction Change Order, Work Change Directive, or other proposed revisions to the Project for review to determine if the change impacts the Waterline Work. WILSONVILLE will endeavor to provide notice of potential Project Change Orders, claims, or disputes at the earliest possible time. If it is determined by the Parties that the change is related to or impacts the Waterline Work, then written approval from the WWSP Construction Manager must be received prior to approval of a written Change Order or Work Change Directive.

7.15 WILSONVILLE will coordinate with WWSP on any disagreements, disputes, delays, or claims with the construction contractor related to or as a result of the Waterline Work as provided by Section 11.6.

7.16 WILSONVILLE will perform actions regarding compensation as set forth in Article X, Compensation for Construction.

7.17 WILSONVILLE will provide a potable water source for use by the WWSP during construction for testing of the Waterline Work as well as use of storm drain or sanitary sewer infrastructure, as directed by the WILSONVILLE Project Manager, for disposal of water following testing.

7.18 Upon completion of the Waterline Work and acceptance of the Project, WWSP, as Lessee as defined in the Ground Lease, shall operate, inspect, maintain, replace, and access the Waterline as provided in the Ground Lease for the duration of the Ground Lease.

7.19 WILSONVILLE and the construction contractor shall participate in WWSP monthly health and safety meetings.

7.20 WILSONVILLE will not authorize or consent to the construction contractor's changes to Waterline Work key milestones, as shown in Exhibit 2, without written approval by WWSP, except in the case of a force majeure as defined in the Contract Documents.

7.21 Claims

7.21.1 WILSONVILLE will promptly notify WWSP of any construction contractor claim or request for Change Order. If a claim or request for Change Order would increase the proportionate share of shared costs, or if it affects the WWSP-only cost for Waterline Work, WWSP will respond to WILSONVILLE within ten (10) business days regarding whether it approves or disapproves of the claim or request for Change Order. WILSONVILLE will not resolve or settle a claim for extra
compensation or schedule adjustment for such claims without WWSP approval in writing. If WILSONVILLE proceeds to resolve the claim or issue a Change Order without WWSP written approval, WWSP reserves all rights to contest responsibility for payment and to seek indemnity for all costs and impacts resulting from WILSONVILLE's action.

7.21.2 In the case of a claim or Change Order related to the proportionate share of shared costs, WILSONVILLE, as the contract holder, may need advice from WILSONVILLE legal counsel. WILSONVILLE will notify WWSP that it is seeking advice of legal counsel. WWSP will reimburse WILSONVILLE for reasonable attorneys' fees incurred by WILSONVILLE for counsel advice based on the proportionate share of the responsibility.

7.22 Bonds and Warranties

WILSONVILLE agrees to assign all rights under performance and payment bonds, warranties, and claims arising out of the construction contract related to the Waterline Work to WWSP so that WWSP has a direct cause of action against the construction contractor.

7.23 Litigation with Contractor

In the event of a dispute with any contractor or consultant that results in litigation, WWSP will reimburse WILSONVILLE for all costs and attorney fees associated with all claims based on the Waterline Work, including but not limited to any claims for delay damages or Change Orders. If the claim is based on a contract term not specifically relating to either the Waterline Work or the Road Work, the Parties will share the cost equally (example a weather-related delay damage force majeure claim). WILSONVILLE will pay all costs and attorney fees for all claims based on the Road Work that do not involve the Water Work, including but not limited to claims for delay damages or Change Orders.

ARTICLE VIII - WWSP OBLIGATIONS FOR CONSTRUCTION

8.1 WWSP will designate a WWSP Construction Manager, ______________. The WWSP Construction Manager shall be the designated point of contact with the WILSONVILLE Project Manager. The WILSONVILLE Project Manager shall have authority to accept and act upon the written directions and decisions of the WWSP Construction Manager relating to the Waterline Work during solicitation and construction and to instruct the construction contractor and incur costs based on those decisions. Mike Britch, P.E., will be the WWSP Principal Engineer and the WWSP representative to handle dispute resolution for this Project.

8.2 WILSONVILLE and WWSP will establish an account and Irrevocable Limited Power of Attorney Agreement with the Local Government Investment Pool ("Account") which will authorize WILSONVILLE's Director of Finance to make monthly withdrawals from an account established by WWSP for WWSP's monthly share of each invoice submitted by the construction contractor for the Project. The Power of Attorney Agreement will be signed, an account will be opened, and the amount of the WWSP deposit will be agreed upon when Bids
are opened. The account will be fully funded by WWSP, including a contingency as shown in Exhibit 4, on or before the date the bids are opened by WILSONVILLE. The Account funding amount reflected in Exhibit 4 shall be modified to reflect actual bid amounts prior to Notice to Proceed. If Change Orders for which WWSP is fully or partially responsible cause there to be insufficient funds remaining to pay for all of WWSP’s share of the work in the Account, WWSP will deposit additional funds, as required, within thirty (30) days of written notice and supporting documentation thereof from WILSONVILLE.

8.3 WWSP will monitor permit compliance and coordinate with WILSONVILLE for compliance with the requirements of the Ground Lease and this Agreement related to the Waterline Work.

8.4 WWSP will provide review of shop drawings, submittals, RFIs, and other requested clarifications related to the Waterline Work. WWSP shall provide a response to WILSONVILLE within the timeframe required by the Contract Documents.

8.5 WWSP will reimburse WILSONVILLE for construction contractor mobilization based on bid amounts of the value of the Waterline Work and shared items. Mobilization for the Project shall not exceed eight percent (8%). WWSP will provide materials testing, independent of construction contractor testing requirements of the Contract Documents, and construction inspection for Waterline Work. WWSP may require additional or corrective work to be completed for the Waterline Work if, in the sole judgment of WWSP, the work is not complete in accordance with the Contract Documents, or it is in the public interest to do so. If WWSP determines the Waterline Work is not in compliance with the Contract Documents, the Waterline Construction Manager shall inform WILSONVILLE at the earliest opportunity following discovery, and WILSONVILLE will require construction contractor to perform corrective actions as necessary. The method of enforcement will be agreed upon and the cost of enforcement will be reimbursed in full by WWSP. If WWSP believes litigation is required, WILSONVILLE will assign its rights to litigate the claim to WWSP. Further, if a change is required not because of a breach of contract, but for some other reason, WWSP will be fully responsible for any additional charge incurred as a result thereof. The provisions of this Section are independent of the authority granted to WWSP set forth in Section 7.9 above.

8.6 WWSP will provide WILSONVILLE with the following Waterline Work construction documentation:

8.6.1 Daily progress reports;

8.6.2 Quantity documentation used for monthly payment estimates;

8.6.3 Quality documentation and test results as specified in the construction contract; and

8.6.4 Any other documentation reasonably requested by WILSONVILLE to administer the contract.
8.7 WWSP will promptly review invoices from WILSONVILLE. WWSP will provide notice of any disputed amount within seven (7) business days from the day WILSONVILLE provides the invoice to WWSP. The Parties will then meet to resolve the disputed amounts. Undisputed amounts shall be paid as provided in Article X, Compensation for Construction, and disputed amounts shall be resolved as provided therein. Payment from the Account will be made unless the payment is disputed by WWSP within seven (7) business days.

8.8 WWSP will determine, in its reasonable discretion, when Waterline Work has achieved Substantial Completion and Final Completion. The Waterline Construction Manager shall provide a construction punch list to WILSONVILLE upon Substantial Completion of the Project and participate with the WILSONVILLE Project Manager for inspection and Final Completion of the Waterline Work.

8.9 WWSP must review and approve any Change Orders and/or Work Change Directives relating to the Waterline Work prior to issuance to the construction contractor. Within five (5) business days of receiving the proposed Change Order or Work Change Directive, WWSP will notify WILSONVILLE in writing of any concerns or disputes with a proposed Change Order or Work Change Directive. WILSONVILLE may proceed to direct its construction contractor to perform work only if it deems an emergency or other circumstance requires immediate action to prevent adverse health and safety conditions. In such a case, WWSP reserves all rights to dispute responsibility for payment of the Change Order or Work Change or to modify a Change Order or Work Change Directive for consistency with the Waterline Work scope and design. In no event shall WILSONVILLE authorize any change in the Waterline Work that affects the quality, integrity, or operational attributes of the Waterline Work. WILSONVILLE will have no liability to WWSP for any contract delays as a result thereof or for any other damages or claims by WWSP. WWSP will only be entitled to seek relief from the construction contractor. WILSONVILLE will assign all contractual rights necessary for WWSP to seek relief from the construction contractor.

8.10 WWSP will coordinate and meet with WILSONVILLE to resolve any disagreements, disputes, delays, or claims related to, or as a result of, the Waterline Work or WWSP’s share of shared costs of the Waterline Work as provided by Section 11.6.

8.11 WWSP will perform actions regarding compensation as set forth in Article X, Compensation for Construction.

8.12 WWSP, its consultants, and its construction contractors shall coordinate with WILSONVILLE and its consultants, including jointly attending regular construction coordination meetings, regular permitting and environmental meetings, real estate meetings, public information and outreach meetings, and other meetings as required for successful coordination and completion of the Project. The WILSONVILLE Project Manager and WWSP Construction Manager shall mutually determine the anticipated frequency and timing of meetings depending on the needs of the Project.

8.13 The Ground Lease requires that unless otherwise agreed to, in writing, by WILSONVILLE, all WWSP pipe must be located below all WILSONVILLE utility
pipes, including in Garden Acres Road. WILSONVILLE has agreed to allow the WWSP pipe to be above WILSONVILLE pipe in Garden Acres Road and shallower than the required 8 feet, as shown on the approved Construction Documents. In consideration of this Agreement and the challenges and expense WWSP would face if it were required to go below all of WILSONVILLE utility work in Garden Acres Road and maintain a minimum 8-foot depth, WWSP agrees to payment of the sum and other requirements, as set forth in Exhibit 4.

ARTICLE IX - JOINT OBLIGATIONS FOR CONSTRUCTION

9.1 The Parties' Project Managers shall mutually determine the anticipated frequency and timing of meetings depending on the needs of the Project.

9.2 The Parties will coordinate and work collaboratively in developing Project milestones, constraints, work sequences, construction administration requirements, quality control and assurance requirements, and other activities as required for successful coordination and completion of the Project.

9.3 The Parties will coordinate and work collaboratively in coordination of the construction work, including work sequences, construction administration requirements, quality control and assurance requirements, and other activities as required for successful coordination and completion of the Project.

9.4 To minimize potential Project schedule delays, construction contractor cost increases, or other Project issues, the Parties agree to work together diligently to identify and jointly resolve any construction issues with the Road Work and Waterline Work at the earliest possible stage, including those issues that involve the construction contractor. When such issues arise, the Parties agree to work together to find mutually acceptable solutions in furtherance of the stated Project goals. WILSONVILLE will lead the resolution with the construction contractor as mutually agreed by the Parties.

9.5 The Parties agree to include health and safety requirements in the Contract Documents that meet the objectives of both Parties for their portions of the Project.

9.6 The Parties agree that the construction contractor shall be required to develop and maintain a Project baseline schedule on which the WILSONVILLE Project Manager and WWSP Construction Manager shall collaboratively review and comment. The construction contractor shall provide monthly schedule updates electronically (in PDF and native format) using Primavera P6 or Microsoft Project. The schedule shall be Critical Path Method and have Type C requirements as defined by the Oregon Department of Transportation. These schedule obligations shall include milestones as jointly agreed upon by the Parties. Each Party shall allow the other Party to comment on schedule revisions.

9.7 The Parties agree to co-manage complaints, including, but not limited to, general public complaints and complaints related to environmental and/or land use permitting.
9.8 The Parties agree to the following guidelines for handling public/media interactions:

9.8.1 Social media includes all means of communicating or posting information or content of any sort on the Internet, including to one's own or someone else's web log or blog, journal or diary, personal website, social networking or affinity website, web bulletin board, chat room, whether or not associated or affiliated with WWSP or WILSONVILLE, or any other form of electronic communication.

9.8.2 Posting of social media content related to Waterline Work by WWSP or WILSONVILLE staff, consultants, or construction contractors is prohibited unless approved, in writing, by WWSP.

9.8.3 Posting of social media content related to Road Work by WWSP or WILSONVILLE staff, consultants, or construction contractors is prohibited unless approved, in writing, by WILSONVILLE.

9.9 The Parties agree to coordinate on outreach efforts such as signage, groundbreaking, and ribbon cutting.

ARTICLE X - COMPENSATION FOR CONSTRUCTION

10.1 Exhibit 4 summarizes the construction cost sharing for the Project. The Parties will proportion actual cost for construction as shown in Exhibit 4 and as described below:

10.1.1 Construction management - WWSP responsible for actual cost of Road Work consultant for coordination between Waterline Work during construction. Costs will be tracked separately by WILSONVILLE's Road Work consultant. WWSP will be allowed to review and comment on the Road Work consultant fee prior to the Road Work consultant contracting with WILSONVILLE.

10.1.2 Construction administration - WWSP responsible for WILSONVILLE actual costs plus Administrative Charge as shown in Exhibit 4.

10.1.3 Mobilization (Schedule A) - WWSP is responsible for the proportionate share between cost of the Waterline Work (Schedule B) and the total cost for construction plus WWSP portion of the Road Work (Schedule A) identified below. Mobilization for the Project shall be limited to a maximum of 8 percent.

10.1.4 Cahalin Temporary Road Bid Item (Schedule A) – WWSP is responsible for the costs of construction, demolition, and restoration of a temporary access road during construction of the Waterline Work, limited to and as detailed in the following sheets of the Road Work 95% Design drawing set: DM-07, EC-09, EC-16, SP-05, RD-13, and LA-08.

10.1.5 Road Work (Schedule A) – WWSP is responsible for the fixed percentage Road Work share as shown in Exhibit 4. The amount of the Road Work share shall be determined based on the Road Work bid amount and applying the fixed percentage Road Work share. The
responsibility includes payment for the increased depth of city utilities due to the WWSP pipeline being less than that prescribed in the Ground Lease per Section 8.13 of this Agreement.

10.1.6 Waterline Work (Schedule B) - WWSP is responsible for 100 percent.

10.2 Subject to WWSP's requirements to pay WILSONVILLE Administrative Costs, the Parties will otherwise each bear the fully burdened labor costs of their individual staffs on the Road Work and the Waterline Work. The Parties agree WWSP will pay to WILSONVILLE actual costs of overall administration of the Project related to the Waterline Work an administration charge to administer the construction contract, as shown in Exhibit 4. Aside from the Administrative Charge, there shall be no markup on construction contractor payment amounts, Road Work consultant actual costs, or other costs outside those incurred by WILSONVILLE's staff. The costs to invoice WWSP shall be included as part of WILSONVILLE's Administrative Charge.

10.3 WILSONVILLE will submit invoices monthly as described below:

10.3.1 Account withdrawals shall follow issuance of invoices.

10.3.2 Prior to issuance of each invoice, the Parties will agree on construction contractor pay request amounts, design consultant Road Work fees, and other compensable costs.

10.3.3 Each invoice shall be accompanied with documentation supporting all requested costs for compensation or reimbursement.

10.3.4 Prior to withdrawal from the Account, the above activities shall be completed. WILSONVILLE's invoice shall show the actual cost and percentage allocation between WWSP and WILSONVILLE for the shared costs.

10.4 WILSONVILLE will submit a final billing statement within forty-five (45) days of the completion of the work authorized herein.

10.5 WWSP will pay WILSONVILLE the amount due within thirty (30) days of its receipt of billing statement for costs not withdrawn from the Account.

10.6 Work Change Directives and Change Orders shall use the following protocol:

10.6.1 Work Change Directives will be defined in the construction agreement between WILSONVILLE and the construction contractor. WILSONVILLE can direct work that is considered minor that does not impact, delay, or affect Waterline Work. Work Change Directives shall not affect administrative or shared costs and shall be paid according to Exhibit 4. WWSP will have sole responsibility to prepare Work Change Directives related to Waterline Work. All Work Change Directives shall be issued through WILSONVILLE.

10.6.2 All modifications to the construction contract that will change shared costs or impact the schedule will not be effective until approved by a
written Change Order, signed by the Parties. The Party causing the change in shared costs shall be responsible for those costs.

10.6.3 Change Orders to the Project that do not affect the Waterline Work or Waterline Work Schedule will be managed and approved by WILSONVILLE. If WWSP or WILSONVILLE dispute a shared cost Change Order, WILSONVILLE may still elect to proceed with the Change Order and the Parties reserve all rights to contest and determine responsibility for payment under the dispute resolution and remedy provisions below. The Party causing the change in any costs shall be responsible to pay those costs.

10.6.4 As provided in Section 8.9, Change Orders that affect the cost, schedule, quality of performance, workmanship, or material of the Waterline Work must be approved in writing by both Parties. Except as provided in Section 10.6.6, WWSP will respond with approval or disapproval for Waterline Work Change Orders to WILSONVILLE within five (5) business days following receipt of the proposed Change Order. WILSONVILLE may direct the construction contractor to perform the Waterline Work if it deems emergency conditions exist or action is necessary to prevent adverse health or safety issues. In emergency circumstances, WILSONVILLE will provide notice reasonable under the circumstances, and WWSP will respond in a timely manner reasonable under the circumstances.

10.6.5 WWSP may initiate Change Orders for the Waterline Work by providing WILSONVILLE a requested Change Order with supporting documents to negotiate the cost and time impact with the construction contractor, which shall be paid by WWSP. WILSONVILLE will participate in discussions with the WWSP and the construction contractor to negotiate an agreeable Change Order.

10.6.6 Any Change Order that increases the combined value of all prior Change Orders to a cost to WWSP of $875,000 or more shall require approval by the CITY Utilities Commission. No Change Order shall be binding upon WWSP while approval is pending, subject to WILSONVILLE’s power under Section 10.6.4.

10.7 Within forty-five (45) days after the Final Completion of the Project, WILSONVILLE will provide WWSP a final statement of Waterline Work to be withdrawn from the Account. If insufficient funds remain, WWSP will pay the difference within thirty (30) days of receipt of the invoice and supporting documentation. Upon the completion of the construction and completion of record drawings, WILSONVILLE will deliver one set of redline as-built drawings for Waterline Work. WWSP will be responsible for producing record drawings and will provide electronic copies (PDF and native format) related to the Waterline Work to WILSONVILLE. WILSONVILLE will be responsible for producing record drawings for the Road Work. The record drawings provided by WILSONVILLE will satisfy the requirements of Section 7.24, As-Built Survey, of the Ground Lease. The record drawing information will be relied upon by WWSP to provide a portion of the metes and bounds description of the Lease Area to WILSONVILLE as described in Section 2.4 of the Ground Lease. Upon Final Acceptance of the Project by WILSONVILLE and verification that all
contractors and suppliers have been paid, WILSONVILLE will release any remaining Account funds to the WWSP within forty-five (45) days.

ARTICLE XI - GENERAL PROVISIONS

11.1 Laws of Oregon

Parties agree to abide by all applicable laws and regulations regarding the handling and expenditure of public funds. This Agreement shall be governed by the laws of the State of Oregon. The construction contract shall contain all required public contract provisions of ORS Chapter 279A and 279C.

11.2 Default

Either Party will be deemed to be in default if it fails to comply with any term, condition, or covenant in this Agreement. The Parties agree time is of the essence in the performance of this Agreement. The non-defaulting Party will provide the defaulting Party with written notice of default and allow thirty (30) days within which to cure or diligently commence to cure the defect within a reasonable time. If a defaulting Party fails to cure or fails to diligently commence to cure the default, the non-defaulting Party may elect to terminate this Agreement. In the event this Agreement is terminated, the Parties will pay for costs incurred for satisfactorily completed and authorized work up to the time of termination. Each Party will be liable for all costs and damages arising from its individual default.

11.3 Indemnification

This Agreement is for the benefit of the Parties only and there are no third-party beneficiaries. Subject to the limitations related to government agencies under the Oregon Constitution, each Party agrees to indemnify and hold the other harmless, including their respective officers, employees, agents, and representatives, from and against all claims, demands, causes of action, and suits of any kind or nature for personal injury, death, or damage to persons or property on account of any acts or omissions arising out of this Agreement. Indemnification is subject to and shall not exceed the limits of liability of the Oregon Tort Claims Act (ORS 30.260 through 30.300). In addition, each Party shall be solely responsible for any contract claims, delay damages, permit compliance, permit violations, or similar items arising from or caused by the action or inaction of the Party.

11.4 Documents Are Public Records

All records, reports, data, documents, systems, and concepts, whether in the form of writings, figures, graphs, or models, that are prepared or developed in connection with this Project shall be subject to the applicable provisions of the Oregon public records law.

11.5 Modification of Agreement

No waiver, consent, modification, or change of terms of this Agreement shall bind either Party unless in writing, signed by both Parties. Such waiver,
consent, modification, or change, if made, shall be effective only in specific instances and for the specific purpose given.

11.6 Dispute Resolution

The Parties will attempt to informally resolve any dispute concerning any Party's performance, acts, omissions or decisions under this Agreement, or regarding the terms, conditions, or meaning of this Agreement. Dispute resolution will conform to the requirements of Section 15, Dispute Resolution, of the Ground Lease, which are incorporated herein as if fully set forth in this Agreement.

11.7 Remedies

Subject to the provisions of Article X - Compensation for Construction, and the dispute resolution process set forth in Section 11.6, any Party may institute legal action to cure, correct, or remedy any default, to enforce any covenant or agreement, or to enjoin any threatened or attempted violation of this Agreement. All legal actions shall be initiated in Clackamas County Circuit Court. The Parties, by signature of their authorized representative below, consent to the personal jurisdiction of that court.

11.8 Severability

If any term(s) or provision(s) of this Agreement or the application thereof to any person or circumstance shall, to any extent, be determined by a court to be invalid or unenforceable, the remainder of this Agreement and the application of those terms and provisions shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

11.9 Nondiscrimination

No person shall be denied or subjected to discrimination in receipt of the benefits of any services or activities made possible by or resulting from this Agreement on the grounds of race, color, religion, gender, sexual orientation, national origin, disability, age, or marital status. Any violation of this provision shall be considered a material defect and shall be grounds for cancellation, termination, or suspension in whole or in part by WILSONVILLE or WWSP.

11.10 Excused Performance

In addition to the specific provisions of this Agreement, no default shall be deemed to have occurred where delay or default is due to war, insurrection, strikes, walkouts, riots, floods, drought, earthquakes, fires, casualties, acts of God, governmental restrictions imposed or mandated by governmental entities other than the Parties, enactment of conflicting state or federal laws or regulations, new or supplementary environmental regulation, litigation, or similar bases for excused performance that are not within the reasonable control of the Party to be excused.
11.11 Integration

Except for the Ground Lease, which remains the controlling document, this Agreement supersedes any prior discussions or agreements regarding the Project.

11.12 Assignment/Additional Parties

This Agreement may be assigned in accordance with the assignment provision of the Ground Lease (Section 20.2).

11.13 Access to Books, Records, and Accounting

WILSONVILLE will maintain books, records, and reports of the Road Work and Waterline Work showing all income, receipts, expenses, and costs. These records shall be maintained for a period of three (3) years following Final Completion. All such books, records, and reports may be examined, and copies made by WWSP at reasonable times upon reasonable notice.

ARTICLE XII - TERM OF AGREEMENT

12.1 The term of this Agreement shall be from the date of execution through the end of the Project warranty period, two (2) years following Final Acceptance of the Project, unless mutually agreed to by both Parties in writing.

12.2 This Agreement may be amended or extended for periods of up to one (1) year at a time by mutual written consent of the Parties, subject to provisions of this Agreement. In the event of default of this Agreement, the non-defaulting Party may terminate this Agreement after giving thirty (30) days' written notice specifying the nature of the default with reasonable particularity and the defaulting Party fails to cure within that 30-day period. If the default is of such a nature that it cannot be completely remedied within the 30-day cure period, this provision shall be complied with if the defaulting Party begins correction of the default within the 30-day period and thereafter proceeds with reasonable diligence and in good faith to effect the remedy as soon as practicable. In the event of termination or cancellation, the Parties will pay all costs due and owing for work performed prior to termination or cancellation. The Parties will, in good faith, agree to such reasonable provisions for completing the Project and paying for any additional costs as necessary.

(signatures on following page)
IN WITNESS WHEREOF, the Parties hereto have set their hands as of the day and year hereinafter written.

CITY OF WILSONVILLE, OREGON

By: ____________________________
Print Name: ____________________________
As Its: ____________________________
Date ____________________________

Approved as to Form:

______________________________

CITY OF HILLSBORO, OREGON

By: ____________________________
Print Name: ____________________________
As Its: ____________________________
Date ____________________________

TUALATIN VALLEY WATER DISTRICT

By: ____________________________
Print Name: ____________________________
As Its: Chief Executive Officer
Date ____________________________

Approved as to Form:

______________________________
RESOLUTION NO. 13-19

A RESOLUTION APPROVING THE CHIEF EXECUTIVE OFFICER EMPLOYMENT AGREEMENT AND THE CHIEF EXECUTIVE OFFICER TRANSITION AND RELOCATION AGREEMENT BETWEEN TUALATIN VALLEY WATER DISTRICT AND TOM HICKMANN AND AUTHORIZING THE BOARD PRESIDENT TO EXECUTE THE AGREEMENTS.

WHEREAS, with the pending retirement of Mark Knudson, effective March 31, 2019, the Board of Commissioners commenced a recruitment for the Chief Executive Officer position; and

WHEREAS, after consideration of the candidates and deliberations by the Board of Commissioners, Tom Hickmann was selected and offered the position of Chief Executive Officer, which he accepted; and

WHEREAS, the Chief Executive Officer Employment Agreement, attached hereto as Exhibit 1 and incorporated by reference, sets forth the mutually agreed terms and conditions of employment of the CEO; and

WHEREAS, the Chief Executive Officer Transition and Relocation Agreement, attached hereto as Exhibit 2 and incorporated by reference, sets forth the mutually agreed terms and conditions for transition to the CEO position, and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The Chief Executive Officer Employment Agreement, attached hereto as Exhibit 1 and incorporated by reference, and the Chief Executive Officer Transition and Relocation Agreement, attached hereto as Exhibit 2 and incorporated by reference, are hereby approved.

Section 2: The Board President is authorized to execute these agreements on behalf of the District.

Approved and adopted at a regular meeting held on the 15th day of May 2019.

_____________________________  ______________________________
Bernice Bagnall, President                     Todd Sanders, Secretary
CHIEF EXECUTIVE OFFICER EMPLOYMENT AGREEMENT

PARTIES:

Tualatin Valley Water District (a public body) (hereinafter "District")

and

Tom Hickmann, Chief Executive Officer (hereinafter "CEO" or "Employee")

RECITALS:

1. The District desires to employ Tom Hickmann as CEO and to establish by this Agreement the terms and conditions of employment of the District's CEO.

2. Tom Hickmann desires to accept employment as CEO.

3. The parties desire an agreement which provides an inducement for the CEO to remain in employment, to establish regular process for evaluating performance, and to provide a just means for ending the employment relationship at such time as the CEO should become unable to discharge duties due to an intervening event or condition or because the District desires to end the employment relationship for any reason.

IT IS AGREED:

1. Duties. The District employs Tom Hickmann as CEO, to perform the functions and duties of CEO as specified in the policies and procedures, rules and regulations of the District, and as hereinafter set forth, and as prescribed or assigned by the Board of Commissioners of the District periodically. The Board of Commissioners vests in the CEO the day-to-day operational control of District operations, and reserves to the Board of Commissioners sole policy making authority and exclusive control over fiscal policy, budget and financial matters.

The authority of the CEO, consistent with state law, shall include, but not be limited to, overall management, administration and direction of District operations; the hiring, supervising, disciplining and discharging of District employees and volunteers; the execution and administration of District policies within budget appropriations according to District policy and pursuant to ordinance or resolution; policy advice to the Board of Commissioners and open communication with the community so as to foster responsive and courteous public service. The CEO will:

A. Initiate, administer and supervise the functions, activities and programs of the District;

B. Supervise the maintenance and upkeep of any facilities and equipment owned or maintained by the District, and to recommend to the Board the acquisition of new or sale of used equipment and facilities;

C. Keep and maintain proper fiscal records for the District;
D. Hire, supervise and fire all personnel necessary to carry out the business of the District subject to the limitations of Oregon law, District policies, and any applicable contract; 

E. Do and perform all things necessary to be done to completely and fully administer said District and/or as otherwise directed by the Board of Commissioners of the District; and 

F. Provide assistance or services to other units of government when within the District's purposes and objectives to the extent reasonable and practical, which is encouraged but not required.

In doing so, the CEO shall be bound by all the rules, regulations and policies now in existence or hereafter adopted by the Board of Commissioners of the District and shall administer the affairs of the District in accordance therewith and pursuant to the laws of the State of Oregon.

The Board of Commissioners agrees to the principle that effective and efficient administration of District policy established by the Board of Commissioners is best achieved by the CEO and the CEO's exercise of judgment as to implementation and that ordinarily the authority of Commissioners is exercised in meetings of the Board as a whole. The Board agrees that when individual Commissioner questions or suggestions related to services or operations arise outside of meetings of the Board, in order avoid misunderstandings of the role and responsibility of the CEO in relation to elected Commissioners and District employees, Commissioners ordinarily will refrain from communicating desires, suggestions or requests except to and through the CEO or during a meeting of the Board of Commissioners. When Commissioners do communicate with District employees, for example to convey compliments and appreciation or to direct an information question to the employee with the expertise or responsibility, a copy of such communications will be directed to the CEO or the Commissioner will keep the CEO contemporaneously and fully apprised.

2. Term of Agreement. The term of this Agreement is indefinite. Unless the District notifies the CEO to the contrary in writing at least thirty (30) days before the start of the next agreement year, it shall be deemed that the District has renewed this Agreement for one (1) additional year. Unless the CEO notifies the District to the contrary in writing at least thirty (30) days before the start of the next agreement year, the CEO agrees to accept renewal of this Agreement. If the term of the Agreement has not been extended in a particular year, it shall be allowed to reach its existing effective ending date.

a. The terms of this Agreement shall apply to the CEO’s employment on and become fully effective on August 1, 2019, based on the parties’ desired date for the CEO appointment and shall be considered to be applicable to the “second half” of the January 1 to December 31, 2019 agreement year. The “agreement year” as used herein refers to a calendar year. The initial term of this Agreement shall extend through the succeeding agreement year, January 1 to December 31, 2020. Absent notice as provided above to the contrary, this Agreement shall automatically renew annually for the succeeding agreement year, which shall extend from January 1 to December 31, 2021, and during like period each year thereafter.

Tom Hickman, CEO
Employment Agreement 4-25-2019
b. Nothing in this Agreement shall grant the CEO a property right in the position, nor prevent, limit, or otherwise interfere with the right of the District to terminate the services of the CEO at any time, with or without cause, subject only to the provisions of this Agreement pertaining to termination and severance pay.

c. The CEO may resign at any time, subject only to the provisions of this Agreement relating to Notice.

d. In the event the CEO is incapacitated or otherwise unable to perform his duties for a period which extends beyond protected leave periods that apply, the CEO will provide a written medical opinion by a physician of the CEO’s choosing evaluating the CEO’s ability to perform his assigned duties. If, in the opinion of the physician, the CEO will be able to resume his duties following a period of convalescence, or in the event reasonable accommodations are identified in an interactive process, the District may suspend some terms of this Agreement or the Agreement in toto until the CEO is able to return to work. If, in the opinion of the physician, the CEO is permanently incapacitated or will be unable to return to his assigned duties, the District may terminate this Agreement; however, the District shall not do so in a manner which deprives the CEO of the value of earned leave entitlements or rights protected by Oregon or federal law.

3. **Outside Employment.** As a general rule or expectation, the CEO ordinarily will devote at least forty (40) hours per week to administrative and executive work for the District. Other compensated employment shall not interfere with the CEO’s ability to effectively discharge the assigned duties and responsibilities. The CEO is a salaried employee with discretion to set his hours of work. The CEO will seek approval by the Board of any compensated outside employment prior to accepting such employment and will keep the Board informed at least annually of any continuing compensated employment.

4. **Termination and Severance.**

a. **Termination Without Cause.** This Agreement may be terminated either by the District or the CEO for any reason whatsoever upon the giving of thirty (30) days written notice to the other party.

b. **Termination For Cause.** This Agreement may be terminated immediately in the sole discretion of the District upon the occurrence of any one of the following events:

1. CEO willfully and continuously fails or refuses to comply with the policies or Board established standards and expectations as may be established and communicated formally by the Board as written policy, resolution, ordinance or other communication periodicaly;

2. CEO has committed acts of fraud, dishonesty, misappropriation of funds, intentional deception of the Board or other authority, embezzlement, or other crimes or misconduct which reflect poorly on the CEO or the District in relation to the rendering of District services as a public body;
3. CEO shall fail or refuse to perform faithfully or diligently any of the duties provided for in this Agreement.

c. Severance Upon Termination Without Cause. In the event the CEO is involuntarily terminated without cause by the District during such time as the CEO is willing and able to perform the duties of CEO, then in that event the District agrees to pay the CEO a lump sum of the value of six (6) months of salary at the rate computed based upon current annual base salary in effect on the date of termination. If the CEO is terminated for cause under paragraph 4(b) of this Agreement, then the District shall have no obligation to provide for or pay any severance payment.

d. Severance Under Other Circumstances. If the District reduces the salary or financial benefits of the CEO, or if the District refuses a written request that the District comply with any terms of this Agreement benefiting the CEO, or if the CEO resigns following public suggestion that he do so, whether formal or informal by a majority of the Board of Commissioners, then the CEO may, at the CEO’s option, declare the Agreement to be involuntarily terminated and the severance pay provision under subparagraph (c) of this section shall apply from the date of such declaration.

e. Voluntary Resignation. If the CEO voluntarily resigns employment and thereby terminates this Agreement before the expiration of the agreement year, then in order to resign in good standing, the CEO shall give the District at least 30 days’ notice in advance. If the CEO resigns voluntarily and not under circumstances described in subsection (d) of this section of this Agreement, then he shall not be entitled to severance as defined in 4(c).

f. Vacation Payoff. Upon termination of this Agreement, the CEO shall be entitled to a lump sum payment equivalent to the value of CEO’s accrued vacation balance, computed at CEO’s then current rate of pay.

5. Salary. Commencing on the effective date, the District shall pay the CEO for services rendered an annual salary of two-hundred fifteen thousand dollars ($215,000.00). The District will review the base salary, and other benefits of the CEO, at the CEO’s annual performance review. The first annual review of performance and salary will be conducted in December, 2020, and annually thereafter in December of each year. The District’s ability to increase compensation is limited by availability of budgeted funds for that purpose and constrained by internal, external and labor market considerations as determined by the Board of Commissioners and/or as fixed by the Board as District policy.

6. Hours of Work. The parties recognize that the CEO must devote a great deal of time outside of normal office hours to District administration when required. The CEO shall determine CEO’s hours of work so as to be available to the public, employees and the Commissioners on a predictable and regular basis and so as to accomplish the goals and tasks directed by the Board of Commissioners. The CEO is entitled to take accrued management time off, in accordance with District policy, to such an extent as the CEO deems appropriate and proper during business hours, provided that absences due to such time off do not interfere with the performance of the CEO’s duties and important needs of the District. The CEO is salaried, shall not be entitled to overtime compensation, and is subject to the District’s uniformly applied
earned leave and work/time off/compensation accountability policies associated with fringe benefits hereinafter described.

7. **Automobile.** The CEO shall receive a taxable automobile allowance of six hundred dollars ($600.00) per month in lieu of mileage reimbursement for automobile travel within the state of Oregon and Southwest Washington, including Pacific, Wahkiakum, Cowlitz, Clark, Skamania and Klickitat counties. Automobile travel to destinations outside of the state of Oregon and Southwest Washington shall be reimbursed for the entire distance of the trip and shall be paid at the published IRS rate in effect at the time of the trip, or at the lowest published fare for available commercial air travel, whichever is less.

8. **General Expenses.** The District shall reimburse the CEO for reasonable expenses of a non-personal and generally job-related nature which are incurred, upon receipt of expense vouchers, receipts, statements or a personally written justification or request. The CEO is authorized to expend District funds in the execution of District business and in representing the District at conferences and otherwise, to purchase materials for recognition of employees or volunteers, and to incur travel and lodging expenses in the conduct of District business. The CEO is exempt from per diem expense limits established by District policy applicable to other employees; provided however that the CEO shall remain accountable to the Board of Commissioners for the prudent expenditure of public funds, and shall fully account to the Board for travel, conferences and related expenses which he shall report periodically.

9. **Dues and Subscriptions.** The District will reimburse the CEO for professional dues and subscriptions appropriate for full participation in appropriate associations and organizations necessary and desirable for professional participation, growth and advancement, and to improve performance of duties as CEO. The CEO shall report to the Board of Commissioners on each professional organization for which the District pays dues and subscription services.

10. **Professional Development.** In accordance with District policy, the District shall budget and pay registration, travel and subsistence expenses of the CEO for professional and official travel, meetings, and occasions deemed necessary or desirable to continue the executive development of the CEO and to pursue official functions of the District. The CEO shall make periodic reports to the Board of Commissioners on such activities.

11. **Fringe Benefits.** The CEO shall receive the fringe benefits which the District provides and may hereafter provide to regular fulltime District employees. These include holiday and sick time off and accrual and caps to the same extent as provided for in District policies, health, dental, vision, disability, HRA and life insurance benefit plans and plan documents/descriptions, VEBA, 401(k) and PERS retirement benefit plan documents as provided and as revised periodically. The CEO will be granted three (3) weeks of vacation and eighty (80) hours of management leave per calendar year. The CEO will be subject to the accrual caps and carry over rights and restrictions as defined in the District policy. CEO will accrue three (3) weeks of vacation per year and eighty (80) hours of management leave per year. The District will contribute an amount equal to that paid for insurance for the benefit of other fulltime District employees and their dependents toward insurance for the CEO and his eligible dependents. The CEO will pay by payroll deduction the portion of insurance benefit premium(s) uniformly required to be paid by other fulltime District employees.
CEOs benefits shall be governed by the District policies which establish them.

12. **Cell Phone/Computer.** CEO responsibilities, essential functions and necessary responsiveness require immediate access to elected officials, managers and key individuals identified by the District. The CEO must use a cellular phone for work related communication, and may use it for personal communication without restriction, and as part of CEO’s total compensation. The District will pay the CEO the maximum amount afforded to other District employees to enable the CEO to purchase and maintain cellular equipment and phone service and communicate by cellular voice and text. The CEO will be responsible for tax consequences, if any, of the District cellular stipend, and must sign and submit the District’s stipend request form. Cellular equipment and service accounts are solely the CEO’s property and responsibility.

The District will furnish the CEO a District-owned laptop computer for use in connection with his employment, which the CEO may use for both District and incidental personal uses not inconsistent with the District computer and internet policies. Upon cessation of employment, the laptop computer shall be returned to the District.

13. **Annual Goal Settings and Performance Evaluation.** The Board of Commissioners will periodically identify its concerns, if any, to the CEO either by informal discussions with the CEO or by more formal means during executive sessions. The Board of Commissioners shall meet with the CEO at least semi-annually for the purpose of setting District goals and priorities starting in December 2019. Commencing in December 2020, the Board of Commissioners and the CEO shall meet at least annually to evaluate and assess the performance of the CEO in meeting or progressing toward the goals formally adopted by the Board of Commissioners.

In the event the District determines that the performance of the CEO is unsatisfactory in any respect or needs significant improvement in any area, the Board of Commissioners will endeavor to describe these concerns in writing and in reasonable detail or with specific examples as to be objective and helpful to CEO’s diligent and good faith efforts to meet or exceed the Board’s expectations. However, this section 13 relating to annual goal setting and performance evaluation shall not be construed or applied as a limitation or condition for Board action terminating the CEO’s employment either for cause or without cause. As provided in section 5 of this Agreement relating to salary, the CEO’s salary shall be reviewed at least annually after the performance evaluation has been communicated by the Board or its sub-committee or designated Board-member representative. The evaluation shall be based on the CEO’s performance of duties as described in paragraph 1, any adopted position description or Board stated expectation(s) and the following:

- A. Ability to cooperate with the Board, staff, community citizens and leaders, peer organizations and neighboring towns, districts, and the County;
- B. Ability to effectively communicate;
- C. Effective leadership attributes in leading District employees;
- D. Good work habits as an example to employees;

Tom Hickman, CEO
Employment Agreement 4.25.2019

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E. Full and efficient use of all District services;

F. Management skills necessary to maximize the services to be made available to the District and minimize the cost to the rate payers; and

G. Performance measured against the strategic plan as developed by the Board and revised periodically.

14. Amendments. Amendment to this Agreement shall be in writing and signed by both parties.

15. General Provisions. This Agreement shall be binding upon and inure to the benefit of the heirs-at-law and executors of the CEO. If any provision of this Agreement is held to be invalid or unenforceable, the remainder of this Agreement shall be deemed severable and shall not be affected but shall remain in full force and effect.

16. Effective Date. This Agreement shall be effective from and after August 1, 2019, and shall continue in full force and effect according to its terms.

DATED this ___ day of April, 2019.

TUALATIN VALLEY WATER DISTRICT

Tom Hickmann, CEO

Bernice Bagnall, Board President

APPROVED AS TO FORM:

Akin Blitz
Bullard Law, Of Attorneys for Tualatin Valley Water District

ATTEST:

Todd Sanders, Secretary
CHIEF EXECUTIVE OFFICER TRANSITION AND RELOCATION AGREEMENT

PARTIES: Tualatin Valley Water District (a public body) (hereinafter "District")

and

Tom Hickmann, Chief Executive Officer (hereinafter "CEO" or "Employee")

RECITALS:

1. The District desires to employ Tom Hickmann ("CEO" or "Employee") as CEO in accordance with the terms and conditions of a separate employment agreement.

2. The parties desire to provide by the terms of this Transition and Relocation Agreement for reimbursement of the expenses described herein.

IT IS AGREED:

1. Moving Expenses. The District will reimburse the CEO for moving expenses up to ten thousand dollars ($10,000.00) for costs associated with his household relocation from Bend, Oregon to the Portland metropolitan area, provided that the costs are incurred prior to December 1, 2019. Reimbursable moving expenses include cost of professional household pack/unpack by movers, lodging in conjunction with Portland metro area home search and temporary housing in the Portland metro area after employment commences, and any other expenses directly related to household relocation.

2. Familiarization and Transition. Following the parties’ signing this Agreement and prior to August 1, 2019 when Employee shall commence work as CEO, Employee intends to engage in certain familiarization activities intended to benefit him personally in his transition and introduction to the District. Employee has expressed the desire to do some of the following:

   a. Outreach and inquiries of District personnel concerning operations and District initiatives,
   b. Travel and attendance at District Board meetings, Joint Water Commission meetings, and Pacific Northwest Section – AWWA Regional meetings,
   c. Appropriate inquiries concerning projects, plans, policies and programs, and review of governance, contractual and policy documentation with which CEO must become familiar, and
   d. Appropriate access through a District intranet and email account to employees, Board members and records generally accessible to all District for informational and work related purposes.

The District’s Commissioners have discussed the concept and value to Employee and the District of activities in which he might participate prior to commencement of employment as CEO. The Commissioners truly appreciate Employee’s willingness to start his transition early and to know...
the organization better pending his start date. However, fair compensation would be expensive during a time when the District is compensating the current Acting CEO. The Commissioner’s consensus recognizes:

- The Commissioners did not know how long the CEO recruitment would take. The Commission arranged for Mark Knudson to work back on a 1039 hour basis through October 2019, which will make him available to assist during a two month transition after August 1. The length of time and duties for Knudson after August 1, will be at Employee’s discretion in accordance to the work back language in Knudson’s Agreement signed in October 2018.

- The Commission does not expect Employee to work without compensation, and also wishes to specify the work the Commissioners deem valuable and for which they desire to compensate Employee prior to August 1, 2019.

- The Commission disfavors paying a CEO-level hourly rate of pay for a prolonged period. The finance group expressed issues with hourly pay for a person not yet on the payroll.

- The Commission does not want or expect Employee to attend numerous meetings prior to commencing work on August 1. The Commission prefers that Employee attend only high-value meetings. The Commission envisions that these would include three important meetings which generally require two (2) hours or less each, and contemplates that other meetings may be identified and suggested by the Commission to Employee.

- District will reimburse travel and lodging expenses incurred by Employee in relation to and necessary for attendance at meetings he elects to attend only if Employee obtains concurrence of the Board of Commissioners or the Board President in advance of travel and meeting attendance that Employee’s attendance is appropriate and beneficial and that nights of reimbursable lodging, if any, are necessary, in the Board’s or President’s discretion.

District will compensate CEO a lump sum amount of two thousand dollars ($2000) in recognition of Employee’s initiatives in preparation for assuming the responsibilities of CEO, consistent with the desires and at the direction of or at the request of the Commission or the Commission President, payable during August, 2019.

In anticipation of Employee engaging in activities contemplated by this Agreement, Employee, the Board of Commissioners, and Acting CEO Mark Knudson have reached consensus about their expectations and appropriate boundaries necessary to avoid confusion among subordinate employees within the District organization and to insure that Employee does not interfere in the administration and management of the District, undermine the current management team or express views that could affect choices and actions of District employees prior to the time Employee succeeds Mark Knudson as CEO.

3. District Payment of Expense Reimbursements. Expenses reimbursable under this Agreement will be paid by the District to CEO in a single payment upon submission to

Tom Hickman, CEO Transition & Relocation
Agreement 4 23 2019

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the District Human Resources Director of appropriate receipts and proof of payments by Employee together with other documentation establishing CEO’s entitlement under the terms of this Agreement. All receipts must be submitted on or before December 16, 2019 in order to be reimbursed within the 2019 tax year.

4. Amendments. Amendment to this Agreement shall be in writing and signed by both parties.

5. General Provisions. This Agreement shall be binding upon and inure to the benefit of the heirs-at-law and executors of the CEO. If any provision of this Agreement is held to be invalid or unenforceable, the remainder of this Agreement shall be deemed severable and shall not be affected but shall remain in full force and effect.

6. Effective Date. This Agreement shall be effective upon execution by both parties.

DATED this ___ day of April, 2019.

TUALATIN VALLEY WATER DISTRICT

Tom Hickmann, CEO

Bernice Bagnall, Board President

APPROVED AS TO FORM:

Akin Blitz
Bullard Law, Of Attorneys for
Tualatin Valley Water District

ATTEST:

Todd Sanders, Secretary
RESOLUTION NO. 14-19

A RESOLUTION REAFFIRMING THE DECLARATION OF PUBLIC NECESSITY IN RESOLUTION 36-17 TO ACQUIRE PERMANENT EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS FOR PIPELINE SECTION PLM_1.1 FOR THE WILLAMETTE WATER SUPPLY SYSTEM AND CONTINUATION OF CONDEMNATION PROCEEDINGS.

WHEREAS, on December 20, 2017, the Board of Commissioners of Tualatin Valley Water District approved Resolution 36-17 declaring public necessity to acquire permanent easements and temporary construction easements for pipeline section PLM_1.1 ( “Real Property Interests” ) by the power of eminent domain for the Willamette Water Supply System, and identified the necessary parcels attached hereto as Exhibit 1 and incorporated by reference (“Properties”); and

WHEREAS, Resolution 36-17 directed TVWD staff, counsel, consultants and agents to begin the condemnation process and negotiate for acquisition of the Real Property Interests and to make offers of just compensation in accordance with ORS 35.346; and

WHEREAS, TVWD through staff, consultants and agents have made the required offers of just compensation to the Property owners and the 40-day offer period has expired; and

WHEREAS, the Property owners have rejected TVWD’s offers, and staff and counsel have concluded that negotiations are at an impasse; and

WHEREAS, Resolution 36-17 required TVWD staff and counsel to report back to the Board if negotiations were unsuccessful for authorization to continue condemnation proceedings prior to filing a complaint in Circuit Court as specified in Oregon law; and

WHEREAS, there remains a need to proceed with acquisition of the Real Property Interests as set forth in Resolution 36-17, and the Board reaffirms those findings and conclusions, and being fully advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The Board hereby reaffirms Resolution 36-17, attached hereto as Exhibit 2 and incorporated by reference herein, whereby it declared public necessity to acquire the Real Property Interests in the identified Properties for the Willamette Water Supply System and that the location of the easements achieves the greatest public benefit at the least private injury.

Section 2: TVWD staff and counsel are authorized to continue condemnation proceedings by filing a complaint in condemnation and take all steps as they deem necessary and appropriate to obtain final judgment vesting the appropriate title to the Real Property Interests in TVWD.
Section 3: That upon the trial of any suit or action to acquire the Real Property Interests, TVWD counsel is authorized to make such stipulation, agreement or admission as in their judgment may be in the best interest of TVWD and to take possession of the Real Property Interests at such time as appropriate in their judgment without necessity of further Board approval.

Approved and adopted at a regular meeting held on the 15th day of May 2019.

_______________________________      _____________________________
Bernice Bagnall, President            Todd Sanders, Secretary
Exhibit 1-1
Joe Bernert Towing Company, Inc.
Thomas L. Bernert Revocable Trust
Toni Ardeth Bernert Trust
3 1W 23B 00300
EXHIBIT A

808 sw third avenue, suite 300
portland, oregon 97204
503.287-6825 • fax 503.415-2304
www.otak.com

LEGAL DESCRIPTION
PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES
WILLAMETTE WATER SUPPLY PROGRAM (WWSP) PLM 1.0
3 1W 23B 00300

A parcel of land in the City of Wilsonville, Clackamas County, Oregon, lying in the Northwest Quarter of Section 23, Township 3 South, Range 1 West, W.M., said parcel being a portion of Tax Lot 3 1W 23B 300, which Tax Lot is described as follows: Beginning at a point North 01° 37' 40" East 32.34 feet of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M., said point being the Northwest corner of that Tract described in that Statutory Warranty Deed to the City of Wilsonville, recorded December 2, 2001 as Recorders Fee No. 2001-009218, Film Records of Clackamas County; thence along the north line of said City of Wilsonville Tract South 88° 27' 19" East 256.38 feet, to the West line of Parcel 1, PARTITION PLAT No. 2012-057; thence along the West line of said Parcel 1 North 12° 35' 16" West 106.67 feet; thence parallel with the center line of Wilsonville Road (Market Road No. 6) North 88° 24' 54" West 230.19 feet to the northerly extension of the West line of said D.L.C. No. 45; thence South 01° 37' 40" West 103.60 feet along said northerly extension to the point of beginning.

Said Permanent Easement parcel being that portion of said Tax Lot 30.00 feet in width, lying 15.00 feet on each side of the following described line: Beginning at a point 363.55 feet West and 859.56 feet South of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M.; thence North 03° 29' 39" East 158.76 feet; thence North 48° 25' 58" East 350.90 feet; thence North 26° 14' 31" East 359.64 feet; thence North 01° 32' 11" East 233.78 feet; thence South 88° 27' 19" East 265.81 feet; thence North 77° 59' 31" East 96.98 feet.

The sidelines of said 30.00 foot wide parcel to be extended or shortened to meet at angle points and to terminate at the boundaries of said Tax Lot.

Bearings are based on County Survey No. 2017-241, filed October 26, 2017, Clackamas County, Oregon.

The above described Permanent Easement parcel contains 6,836 square feet, more or less.

The herein described boundary of Tax Lot 3 1W 23B 300 was created solely for the purpose of describing said Tax Lot as a parcel underlying and limiting the herein described Permanent Easement parcel.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 18, 2003
JERRY V. OSGOOD
51671
RENEWAL 12/31/18
EXHIBIT B
SKETCH TO ACCOMPANY LEGAL DESCRIPTION

Permanent Easement – Water Lines, Fixtures & Facilities
WILLAMETTE WATER SUPPLY PROGRAM PLM 1.0
3 IW 23B 00300

Otak
808 SW 3rd Ave., Ste. 300
Portland, OR 97204
Phone: (503) 287-6825

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
JULY 15, 2003
JERRY V. OSGOOD
51671LS
RENEW: 12/31/18
EXHIBIT A

LEGAL DESCRIPTION
TEMPORARY EASEMENT FOR CONSTRUCTION
WILLAMETTE WATER SUPPLY PROGRAM (WWSP) PLM 1.0
3 1W 23B 00300

A parcel of land in the City of Wilsonville, Clackamas County, Oregon, lying in the Northwest Quarter of Section 23, Township 3 South, Range 1 West, W.M., said parcel being a portion of Tax Lot 3 1W 23B 300, which Tax Lot is described as follows: Beginning at a point North 01° 37' 40" East 32.34 feet of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M., said point being the Northwest corner of that Tract described in that Statutory Warranty Deed to the City of Wilsonville, recorded December 2, 2001 as Recorders Fee No. 2001-009218, Film Records of Clackamas County; thence along the north line of said City of Wilsonville Tract South 88° 27' 19" East 256.38 feet, to the West line of Parcel 1, PARTITION PLAT No. 2012-057; thence along the West line of said Parcel 1 North 12° 35' 16" West 106.67 feet; thence parallel with the center line of Wilsonville Road (Market Road No. 6) North 88° 24' 54" West 230.19 feet to the northerly extension of the West line of said D.L.C. No. 45; thence South 01° 37' 40" West 103.60 feet along said northerly extension to the point of beginning.

Said Temporary Easement parcel being that portion of said Tax Lot lying Easterly of a line parallel with and 6.50 feet Easterly of the Westerly line of said Tax Lot.

EXCEPT therefrom that Permanent Easement for Water Lines, Fixtures and Facilities concurrently acquired for this project.

ALSO EXCEPT therefrom the Southerly 7.70 feet of said Tax Lot lying Easterly of said Permanent Easement for Water Lines, Fixtures and Facilities.

Bearings are based on County Survey No. 2017-241, filed October 26, 2017, Clackamas County, Oregon.

The above described parcel of land contains 16,386 square feet, more or less.

The herein described boundary of Tax Lot 3 1W 23B 300 was created solely for the purpose of describing said Tax Lot as a parcel underlying and limiting the herein described Temporary Easement parcel.
Exhibit 1-2
Joe Bernert Towing Company, Inc.
Thomas L. Bernert Revocable Trust
Toni Ardeth Bernert Trust
3 1W 23B 00800
LEGAL DESCRIPTION
PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES
WILLAMETTE WATER SUPPLY PROGRAM (WWSP) PLM 1.0
3 1W 23B 00800

A parcel of land in the City of Wilsonville, Clackamas County, Oregon, lying in the Thomas Bailey Donation Land Claim No. 45, Township 3 South, Range 1 West, W.M., and being a portion of that property designated as Assessor's Parcel No. 00818770 and described in that Statutory Bargain and Sale Deed to Toni Ardeth Bernert and David James Bernert, Trustees, Toni Ardeth Bernert Trust, recorded July 20, 2015 as Recorder's Fee No. 2015-047432, Film Records of Clackamas County; said parcel being that portion of said property 30.00 feet in width, lying 15.00 feet on each side of the following described line:

Beginning at a point 363.55 feet West and 859.56 feet South of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M.; thence North 03° 29' 39" East 158.76 feet; thence North 48° 25' 58" East 350.90 feet; thence North 26° 14' 31" East 359.64 feet; thence North 01° 32' 11" East 233.78 feet; thence South 88° 27' 19" East 265.81 feet; thence North 77° 59' 31" East 96.98 feet.

The sidelines of said 30.00 foot wide parcel to be extended or shortened to meet at angle points and to terminate at the boundaries of said property.

Bearings are based on County Survey No. 2017-241, filed October 26, 2017, Clackamas County, Oregon.

The above described parcel of land contains 9,483 square feet, more or less.

Property Vested in:
Toni Ardeth Bernert and David James Bernert, Trustees,
Toni Ardeth Bernert Trust, et al.
3 1W 23B 00800
Permanent Easement – Water Lines, Fixtures & Facilities
Property Vested in: WILLAMETTE WATER SUPPLY PROGRAM PLM 1.0

Toni Ardeth Bernert and
David James Bernert, Trustees,
Toni Ardeth Bernert Trust, et al.

808 SW 3rd Ave., Ste. 300
Portland, OR 97204
Phone: (503) 287-6825

Otak

OREGON
JULY 15, 2003
JERRY V. OSGOOD
51671LS
RENEWS: 12/31/18
LEGAL DESCRIPTION
TEMPORARY EASEMENT FOR CONSTRUCTION
WILLAMETTE WATER SUPPLY PROGRAM (WWSP) PLM 1.0
3 1W 23B 00800

A parcel of land in the City of Wilsonville, Clackamas County, Oregon, lying in the Thomas Bailey Donation Land Claim No. 45, Township 3 South, Range 1 West, W.M., and being a portion of that property designated as Assessor’s Parcel No. 00818770 and described in that Statutory Bargain and Sale Deed to Toni Ardeth Bernert and David James Bernert, Trustees, Toni Ardeth Bernert Trust, recorded July 20, 2015 as Recorder’s Fee No. 2015-047432, Film Records of Clackamas County; said parcel being that portion of said property described as follows:

Beginning at a point on the North line of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W.M., 6.56 feet Easterly of the Northwest corner of said D.L.C. No. 45; thence Easterly along said North line South 88° 27’ 19” East 80.00 feet; thence South 01° 32’ 11” West 251.07 feet; thence South 12° 00’ 59” West 104.87 feet to the South line of said property; thence along said South line South 48° 25’ 58” West 93.34 feet to the West line of said D.L.C. No. 45; thence Northerly along said West line North 01° 37’ 40” East 153.58 feet; thence leaving said West line of D.L.C. No. 45 North 26° 14’ 31” East 16.70 feet; thence North 01° 32’ 11” East 249.22 feet to the point of beginning.

EXCEPT therefrom that Permanent Easement for Water Lines, Fixtures and Facilities concurrently acquired for this project.

Bearings are based on County Survey No. 2017-241, filed October 26, 2017, Clackamas County, Oregon.

The above described parcel of land contains 20,725 square feet, more or less.

Property Vested in:
Toni Ardeth Bernert and David James Bernert, Trustees,
Toni Ardeth Bernert Trust
3 1W 23B 00800
EXHIBIT B
SKETCH TO ACCOMPANY LEGAL DESCRIPTION

NW CORNER THOMAS BAILEY DLC NO. 45

POINT OF BEGINNING

6.56'
S88'27'19"E 80.00'

3.748 SF±

TOTAL: 20,725 SF±

N26'14'31"E 16.70'

ROBERT V. SHORT
DLC NO. 46

10,979 SF±

THOMAS BAILEY DLC NO. 45

SCALE: 1"=60'

TEMPORARY EASEMENT
FOR CONSTRUCTION

Temporary Easement - Construction
Property Vested in: WILLAMETTE WATER SUPPLY PROGRAM PLM 1.0

Toni Ardeth Bernert and
David James Bernert, Trustees,
Toni Ardeth Bernert Trust, et al.

Otak
808 SW 3rd Ave., Ste. 300
Portland, OR 97204
Phone: (503) 287-6825

OREGON
JULY 15, 2003
JERRY V. OSGOOD
51671LS
RENEW: 12/31/18
Exhibit 1-3
Joe Bernert Towing Company, Inc.
Thomas L. Bernert Revocable Trust
Toni Ardeth Bernert Trust
3 1W 23B 01300
LEGAL DESCRIPTION
PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES
WILLAMETTE WATER SUPPLY PROGRAM (WWSP) PLM 1.0
3 1W 23B 01300

A parcel of land in the City of Wilsonville, Clackamas County, Oregon, lying in the Robert V. Short Donation Land Claim No. 46, Township 3 South, Range 1 West, W.M., and being a portion of that property designated as Tract B and described in that Warranty Deed to Toni Ardeth Bernert and David James Bernert, Trustees, Toni Ardeth Bernert Trust, recorded September 28, 2009 as Recorder's Fee No. 2009-068141, Film Records of Clackamas County; said parcel being that portion of said property 30.00 feet in width, lying 15.00 feet on each side of the following described line:

Beginning at a point 363.55 feet West and 859.56 feet South of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M.; thence North 03° 29' 39" East 158.76 feet; thence North 48° 25' 58" East 350.90 feet; thence North 26° 14' 31" East 359.64 feet; thence North 01° 32' 11" East 233.78 feet; thence South 88° 27' 19" East 265.81 feet; thence North 77° 59' 31" East 96.98 feet.

The sidelines of said 30.00 foot wide parcel to be extended or shortened to meet at angle points and to terminate at the boundaries of said property.

Bearings are based on County Survey No. 2017-241, filed October 26, 2017, Clackamas County, Oregon.

The above described parcel of land contains 3,925 square feet, more or less.

Property Vested in:
Toni Ardeth Bernert and David James Bernert, Trustees,
Toni Ardeth Bernert Trust, et al.
3 1W 23B 01300
EXHIBIT B
SKETCH TO ACCOMPANY LEGAL DESCRIPTION

Toni Ardeth Bernert and
David James Bernert,
Trustees, Toni Ardeth
Bernert Trust, et al.
2009–068141

3,925 SF±

15.00'

30.00'

PROPOSED
KINSMAN ROAD

THOMAS
BAILEY DLC
NO. 45

ROBERT V.
SHORT DLC
NO. 46

SCALE: 1"=40'

POINT OF
BEGINNING

Permanent Easement – Water Lines, Fixtures & Facilities
Property Vested in: WILLAMETTE WATER SUPPLY PROGRAM PLM 1.0

Toni Ardeth and David
James Bernert, Trustees,
Toni Bernert Trust, et al.

Otak
808 SW 3rd Ave., Ste. 300
Portland, OR 97204
Phone: (503) 287-6825

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 15, 2003
JERRY V. OSGOOD
51671LS

RENEW: 12/31/18
EXHIBIT A

LEGAL DESCRIPTION
TEMPORARY EASEMENT FOR CONSTRUCTION
WILLAMETTE WATER SUPPLY PROGRAM (WWSP) PLM 1.0
3 1W 23B 01300

A parcel of land in the City of Wilsonville, Clackamas County, Oregon, lying in the Robert V. Short Donation Land Claim No. 46, Township 3 South, Range 1 West, W.M., and being a portion of that property designated as Tract B and described in that Warranty Deed to Toni Ardeth Bernert and David James Bernert, Trustees, Toni Ardeth Bernert Trust, recorded September 28, 2009 as Recorder’s Fee No. 2009-068141, Film Records of Clackamas County; said parcel being that portion of said property lying Southeasterly of the following described line:

Beginning at a point 403.48 feet West and 857.12 feet South of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M.; thence North 03° 29’ 39” East 210.69 feet; thence North 46° 25’ 58” East 462.03 feet; thence North 26° 14’ 31” East 101.40 feet.

EXCEPT therefrom that Permanent Easement for Water Lines, Fixtures and Facilities concurrently acquired for this project.

Bearings are based on County Survey No. 2017-241, filed October 26, 2017, Clackamas County, Oregon.

The above described parcel of land contains 3,390 square feet, more or less.

Property Vested in:
Toni Ardeth Bernert and David James Bernert, Trustees,
Toni Ardeth Bernert Trust, et al.
3 1W 23B 01300
Temporary Easement - Construction

Property Vested in: WILLAMETTE WATER SUPPLY PROGRAM PLM 1.0

Toni Ardeth and David
James Bernert, Trustees,
Toni Bernert Trust, et al.

Otak

808 SW 3rd Ave., Ste. 300
Portland, OR 97204
Phone: (503) 287-6825

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
JULY 15, 2003
JERRY V. OSGOOD
51671LS
RENEW: 12/31/18
Exhibit 1-4
Joe Bernert Towing Company, Inc.
3 1W 23B 01700
EXHIBIT B

LEGAL DESCRIPTION
PLM 1.1 EASEMENT AREA
3 1W 23B 01700

A parcel of land in the City of Wilsonville, Clackamas County, Oregon, lying in the Robert V. Short Donation Land Claim No. 46, Township 3 South, Range 1 West, W.M., and being a portion of that property designated as Tract D and described in that Quit Claim Deed to Joe Bernert Towing Co., Inc., Recorder’s Fee No. 87-57703, Film Records of Clackamas County; said parcel being that portion of said property 30.00 feet in width, lying 15.00 feet on each side of the following described line:

Beginning at a point 363.55 feet West and 859.56 feet South of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M.; thence North 03° 29’ 39” East 158.76 feet; thence North 48° 25’ 58” East 350.90 feet; thence North 26° 14’ 31” East 359.64 feet; thence North 01° 32’ 11” East 233.78 feet; thence South 88° 27’ 19” East 265.81 feet; thence North 77° 59’ 31” East 96.98 feet.

The sidelines of said 30.00 foot wide parcel to be extended or shortened to meet at angle points and to terminate at the boundaries of said property.

Bearings are based on County Survey No. 2017-241, filed October 26, 2017, Clackamas County, Oregon.

The above described parcel of land contains 12,849 square feet, more or less.
EXHIBIT B
SKETCH TO ACCOMPANY LEGAL DESCRIPTION

Joe Bernert Towing Co., Inc
87-57703, Tract D

12,849 SF±

ROBERT V. SHORT
DLC NO. 46

TVWD / City of Wilsonville

Permanent Easement - Water Lines, Fixtures & Facilities
WILLAMETTE WATER SUPPLY PROGRAM PLM 1.1

Property Vested in:
Joe Bernert Towing Co., Inc.
3 1W 23B 01700

Otak
808 SW 3rd Ave., Ste. 300
Portland, OR 97204
Phone: (503) 287-8825

Registered Professional Land Surveyor
OREGON
JULY 15, 2003
JERRY V. OSGOOD
51671LS
RENEWS: 12/31/18
LEGAL DESCRIPTION
RWF 1.0 EASEMENT AREA
3 1W 23B 01700

A parcel of land in the City of Wilsonville, Clackamas County, Oregon, lying in the Robert V. Short Donation Land Claim No. 46, Township 3 South, Range 1 West, W.M., and being a portion of that property designated as Tract D and described in that Quit Claim Deed to Joe Bernert Towing Co., Inc., Recorder's Fee No. 87-57703, Film Records of Clackamas County; said parcel being that portion of said property 60.00 feet in width, lying 30.00 feet on each side of the following described line:

Beginning at a point 740.27 feet West and 850.28 feet South of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M.; thence North 68° 51' 29" East 500.00 feet.

The sidelines of said 60.00 foot wide parcel to be lengthened or shortened to terminate at the boundaries of said property.

EXCEPT therefrom that 30.00 foot wide Permanent Easement for Water Lines, Fixtures and Facilities concurrently being acquired by the WWSP PLM 1.1 project.

Bearings are based on County Survey No. 2017-241, filed October 26, 2017, Clackamas County, Oregon.

The above described parcel of land contains 10,985 square feet, more or less. 2,014 square feet of this parcel lies within that Temporary Easement for Construction concurrently being acquired by the WWSP PLM 1.1 project.
EXHIBIT C
SKETCH TO ACCOMPANY LEGAL DESCRIPTION

NW CORNER THOMAS
BAILEY DLC NO. 45
WEST 740.27'

CONCURRENTLY ACQUIRED
TEMPORARY EASEMENT FOR
CONSTRUCTION BY WWSP
PLM 1.1. NOT PART OF
THIS ACQUISITION.

ROBERT V.
SHORT DLC
NO. 46

Joe Bernert Towing Co., Inc
87-57703, Tract D

POINT OF
BEGINNING

SCALE: 1"=40'

PERMANENT EASEMENT
FOR WATER LINES
FIXTURES AND FACILITIES

CONCURRENTLY ACQUIRED AND
ADJOINING PERMANENT EASEMENT
FOR WATER LINES, FIXTURES AND
FACILITIES BY WWSP PLM 1.1.
NOT PART OF THIS ACQUISITION.

Permanent Easement — Water Lines, Fixtures & Facilities
WILLAMETTE WATER SUPPLY PROGRAM RWF 1.0
3 IW 23B 01700

Property Vested in:
Joe Bernert Towing Co., Inc.

Otak
808 SW 3rd Ave., Ste. 300
Portland, OR 97204
Phone: (503) 287-6825

Registered Professional
Land Surveyor

OREGON
JULY 15, 2003
JERRY V. OSGOOD
51671LS
RENEW: 12/31/18
LEGAL DESCRIPTION

PLM 1.1 TEMPORARY CONSTRUCTION EASEMENT AREA
3 1W 23B 01700

A parcel of land in the City of Wilsonville, Clackamas County, Oregon, lying in the Robert V. Short Donation Land Claim No. 46, Township 3 South, Range 1 West, W.M., and being a portion of that property designated as Tract D and described in that Quit Claim Deed to Joe Bernert Towing Co., Inc., Recorder’s Fee No. 87-57703, Film Records of Clackamas County; said parcel being that portion of said property lying Southeasterly of the following described line:

Beginning at a point 403.48 feet West and 857.12 feet South of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M.; thence North 03° 29’ 39” East 210.69 feet; thence North 48° 25’ 58” East 462.03 feet.

EXCEPT therefrom that Permanent Easement for Water Lines, Fixtures and Facilities concurrently acquired for this project.

Bearings are based on County Survey No. 2017-241, filed October 26, 2017, Clackamas County, Oregon.

The above described parcel of land contains 21,634 square feet, more or less.
LEGAL DESCRIPTION
RWF 1.0 TEMPORARY CONSTRUCTION EASEMENT
3 1W 238 01700

A parcel of land in the City of Wilsonville, Clackamas County, Oregon, lying in the Robert V. Short Donation Land Claim No. 46, Township 3 South, Range 1 West, W.M., and being a portion of that property designated as Tract D and described in that Quit Claim Deed to Joe Bernert Towing Co., Inc., Recorder's Fee No. 87-57703, Film Records of Clackamas County; said parcel being all that portion of said property lying Southeasterly of a line parallel with and 50.00 feet Northwesterly of the following described line:

Beginning at a point 740.27 feet West and 850.28 feet South of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M.; thence North 68° 51' 29" East 500.00 feet.

EXCEPT therefrom those Permanent Easements for Water Lines, Fixtures and Facilities concurrently being acquired by this project and the WWSP PLM 1.1 project.

ALSO EXCEPT therefrom that Temporary Easement for Construction concurrently being acquired by the WWSP PLM 1.1 project.

Bearings are based on County Survey No. 2017-241, filed October 26, 2017, Clackamas County, Oregon.

The above described parcel of land contains 8,583 square feet, more or less.
EXHIBIT E
SKETCH TO ACCOMPANY LEGAL DESCRIPTION

Temporary Easement – Construction
WILLAMETTE WATER SUPPLY PROGRAM RWF 1.0
3 IW 23B 01700

Property Vested in:
Joe Bernert Towing Co., Inc.

OTAK
808 SW 3rd Ave., Ste. 300
Portland, OR 97204
Phone: (503) 287-6825

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
JULY 15, 2003
JERRY V. OSGOOD
51871LS
RENEWS: 12/31/18
Exhibit 1-5
PNWP LLC #5
(Pacific Northwest Properties LLC #5)
3 1W 23B 00100
EXHIBIT A

LEGAL DESCRIPTION
PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES
WILLAMETTE WATER SUPPLY PROGRAM (WWSP) PLM 1.0
3 1W 23B 00100

A parcel of land in the City of Wilsonville, Clackamas County, Oregon, lying in Parcel 1, Partition Plat No. 2012-057, City of Wilsonville, Clackamas County, Oregon; said parcel being that portion of said property 30.00 feet in width, lying 15.00 feet on each side of the following described line:

Beginning at a point 363.55 feet West and 859.56 feet South of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M.; thence North 03° 29' 39" East 158.76 feet; thence North 48° 25' 58" East 350.90 feet; thence North 26° 14' 31" East 359.64 feet; thence North 01° 32' 11" East 233.78 feet; thence South 88° 27' 19" East 265.81 feet; thence North 77° 59' 31" East 96.98 feet.

The sidelines of said 30.00 foot wide parcel to be extended or shortened to meet at angle points and to terminate at the boundaries of said property.

Bearings are based on County Survey No. 2017-241, filed October 26, 2017, Clackamas County, Oregon.

The above described parcel of land contains 4,858 square feet, more or less.

Property Vested in:
PNWP LLC #5
3 1W 23B 00100
LEGAL DESCRIPTION
TEMPORARY EASEMENT FOR CONSTRUCTION
WILLAMETTE WATER SUPPLY PROGRAM (WWSP) PLM 1.0
3 1W 23B 00100

A parcel of land in the City of Wilsonville, Clackamas County, Oregon, lying in Parcel 1, Partition Plat No. 2012-057, City of Wilsonville, Clackamas County, Oregon; said parcel being that portion of said property 100.00 feet in width, lying 50.00 feet on each side of the following described line:

Beginning at a point 88.00 feet North and 73.95 feet East of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M.; thence South 88° 27' 19" East 367.00 feet.

ALSO that portion of said property lying Northerly of and adjoining the above described 100.00 foot wide parcel and lying between the Westerly line of SW Kinsman Road and the following described line:

Beginning at a point 129.11 feet North and 404.43 feet East of the Northwest corner of the Thomas Bailey D.L.C. No. 45, Township 3 South, Range 1 West, W. M.; thence on a 243.50 foot radius curve left (the long chord of which bears North 24° 58' 09" East 194.94 feet) 200.56 feet; thence North 01° 22' 25" East 50.00 feet.

EXCEPT therefrom that Permanent Easement for Water Lines, Fixtures and Facilities concurrently acquired for this project.

Bearings are based on County Survey No. 2017-241, filed October 26, 2017, Clackamas County, Oregon.

The above described parcel of land contains 15,184 square feet, more or less.

Property Vested in:
PNWP LLC #5
3 1W 23B 00100
EXHIBIT B
SKETCH TO ACCOMPANY LEGAL DESCRIPTION

WILSONVILLE ROAD
(M.R. NO. 6)

PP2012-057
PARCEL 1

N1°22'25"E  50.00'

R=243.50'
\(\Delta=47°11'30"\)
L=200.56'
CB=N24°58'09"E
CH=194.94'

PNWP LLC #5
2012-000097

EAST 404.43'
NORTH 129.11'

NW CORNER THOMAS
BAILEY DLC NO. 45

TOTAL: 15,184 SF

ALSO POINT OF
BEGINNING

11,379 SF

EXISTING
KINSMAN ROAD

SCALE: 1"=60'

PROPOSED

Temporary Easement – Construction

Property Vested in:
WILLAMETTE WATER SUPPLY PROGRAM PLM 1.0
3 1W 23B 00100

PNWP LLC #5

Otak
808 SW 3rd Ave., Ste. 300
Portland, OR 97204
Phone: (503) 287-6825

OREGON
JULY 15, 2003
JERRY V. OSGOOD
51671LS
RENEW: 12/31/18
RESOLUTION NO. 36-17

A RESOLUTION DECLARING PUBLIC NECESSITY TO ACQUIRE PERMANENT UTILITY AND TEMPORARY CONSTRUCTION EASEMENTS FOR PIPELINE SECTION PLM_1.1 FOR THE WILLAMETTE WATER SUPPLY SYSTEM.

WHEREAS, the above-entitled matter came before the Board of Commissioners of the Tualatin Valley Water District (TVWD) at its regular meeting on December 20, 2017; and

WHEREAS, by action of the Board of Commissioners (Board), TVWD has entered into the Agreement for Design and Construction of the Willamette Water Supply Program with the City of Hillsboro dated June 16, 2015 (Agreement). The purpose of the Agreement is to permit, design, finance and construct the Willamette Water Supply System (Willamette Program); and

WHEREAS, the Agreement provides that TVWD is the lead agency and authorized to acquire interests in temporary construction and permanent easements necessary for the Willamette Program; and,

WHEREAS, the Willamette Program includes, but is not limited to, the acquisition of properties to locate, design and construct an expanded and improved water intake on the Willamette River in the City of Wilsonville currently owned by TVWD and the City of Wilsonville, along with a new raw water pipeline, potable water treatment plant, finished water pipelines, pumping and other necessary water system facilities to enable TVWD to utilize existing water rights to provide water system ownership, redundancy and reliability to TVWD water system users; and

WHEREAS, TVWD has authority under ORS 264.240 and ORS Chapter 35 to acquire temporary construction and permanent easements by purchase or through eminent domain proceedings; and

WHEREAS, the Board determines, consistent with the powers and purposes of TVWD, that it is necessary for the economic well-being, public health, safety and welfare of TVWD and its system users to acquire fee title to necessary properties as well as necessary rights-of-way and easements to implement the Willamette Program; and

WHEREAS, after investigation of various alternative pipeline alignments and the consideration of the most effective and economic method of service delivery, the Board has determined that the temporary construction and permanent easements identified on Exhibit 1, attached hereto and incorporated by reference, are best suited and necessary for location of the pipeline for the Willamette Program and that this use is planned and located in a manner which is most compatible with the greatest public benefit and causes the least private injury; and

WHEREAS, the Board finds that declaration by resolution to acquire the temporary construction and permanent easements for the PLM_1.1 South of Wilsonville Road Pipeline project is necessary and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:
Section 1: It is necessary for the preservation of economic well-being, public health, safety and welfare of TVWD and its system users, that TVWD commence the acquisition process for the temporary construction and permanent easements for the Willamette Water Supply Program as shown on Exhibit 1, attached hereto and incorporated by reference, through exercise of the power of eminent domain.

Section 2: That TVWD staff and counsel are authorized to retain real estate appraisers, negotiators and other consultants, with said appraisals to be prepared under the auspices of TVWD counsel, for initiation of proceedings as described below.

Section 3: TVWD shall in good faith attempt to negotiate an agreement to acquire temporary construction and permanent easements with the affected property owners and pay just compensation in accordance with applicable law. TVWD staff and counsel, including consultants and agents, are authorized to engage in and complete negotiations with the property owners.

Section 4: The Board recognizes that formal litigation may be necessary. TVWD staff and counsel shall report back to the Board to obtain authorization to file a complaint in condemnation, and to take other steps as they determine necessary and prosecute to final determination such action to acquire fee title to the identified temporary construction and permanent easement described herein if negotiations fail.

Section 5: That upon the trial of any suit or action instituted to acquire the temporary construction and permanent easements, the attorneys acting for and on behalf of the TVWD are authorized to make such stipulation, agreement or admission as in their judgment may be for the best interest of TVWD and to take possession of the temporary construction and permanent easements at such time as appropriate in their judgment without necessity of further Board approval.

Approved and adopted at a regular meeting held on the 20th day of December 2017.

Richard Burke, President

Dick Schmidt, Secretary
RESOLUTION NO. 15-19

A RESOLUTION OF THE TUALATIN VALLEY WATER DISTRICT APPROVING THE 2019-2020 FINANCIAL PLAN.

WHEREAS, the Board of Commissioners adopted the Tualatin Valley Water District’s Financial Management Policies by Resolution 08-19 (Policies), and the Policies require the District to periodically prepare a Financial Plan for Board approval; and

WHEREAS, the Board, with assistance of staff, has assessed risks and benefits of various capital and operational plans which factor into rates, borrowing needs and levels of financial reserves and provided guidance based upon a balancing of risks, costs and benefits so that staff has prepared the Financial Plan for the 2019-2020 fiscal year, and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The 2019-2020 Financial Plan attached hereto as Exhibit 1 and incorporated by reference, is hereby approved.

Section 2: Staff will prepare updated Financial Plans in accordance with the Financial Management Policies.

Approved and adopted at a regular meeting held on the 15th day of May 2019.

_______________________________     _____________________________
Bernice Bagnall, President          Todd Sanders, Secretary
2019-20 FINANCIAL PLAN
Tualatin Valley Water District

May 2019
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1 Introduction

The Tualatin Valley Water District (TVWD or District) serves about 57,000 accounts in parts of Washington County, Oregon. The District’s service area is about 42 square miles, home to approximately 215,000 people in portions of the cities of Beaverton, Hillsboro, Tigard, and unincorporated Washington County. In the fiscal year ended June 30, 2018 (FY2018), the District supplied an average of 23.3 million gallons of water per day (MGD) to its customers. The daily amounts ranged from a minimum of approximately 14 million gallons (MG) to a peak day of 45 MG.

To provide this service to its customers, the District currently relies on three water sources: the City of Portland Water Bureau (Portland), the Joint Water Commission (JWC)\(^1\), and Grabhorn Aquifer Storage and Recovery (ASR). The District’s capacity from Portland is 42.3 MGD, with another 12.5 MGD available from the JWC. The total of these amounts is well above the average and peak daily flow requirements of the District’s customers.

To deliver water to its customers, the District maintains approximately 750 miles of pipe, ranging in size from 2 to 60 inches. Twelve pumping stations are on-line to move water throughout the District. There are 21 finished water reservoirs with a combined storage capacity of 67 MG. The major pumping stations and the reservoirs have full telemetry control systems. The District’s water system is monitored 24 hours a day, seven days a week. In addition to monitoring water flows and pressure, the District’s state-of-the-art Supervisory Control and Data Acquisition (SCADA) system monitors several water quality parameters and security alarms. If the system identifies anything out of the ordinary, alarms alert an operator to the possible problem and staff are dispatched as needed.

Maintaining a reliable and efficient water system is a major focus at TVWD. Capital improvement projects are planned and constructed throughout the year to meet current and future water needs. At any given time, the District has a variety of these projects underway, including pipe replacement, reservoir construction, and building improvements.

In addition to the types of capital expenditures just mentioned, the District is engaged in a major infrastructure project to develop a new water source on the mid-Willamette River for the Tualatin Valley. This project is commonly referred to as the Willamette Water Supply Program (WWSP), and includes capital improvements that are part of two new regional water entities.

1. Willamette Intake Facilities (WIF) Commission – The WIF is a joint venture of the District and the cities of Beaverton, Hillsboro, Sherwood, Tigard, and Wilsonville to jointly own and operate a raw water intake facility located at the current Willamette River Water Treatment Plant in Wilsonville, Oregon. The District serves as the Managing Agency for the WIF.

2. Willamette Water Supply System (WWSS) Commission – The WWSS will soon be a joint venture of the District and the cities of Hillsboro and Beaverton\(^2\) to construct and operate supply facilities that convey raw water from the WIF, treat the raw water to potable standards, and

\(^1\) The District is a partner in the JWC along with the cities of Beaverton, Forest Grove, and Hillsboro.

\(^2\) The District and the cities are currently in the process of adopting the intergovernmental agreement required to form the WWSS. As currently planned, the new WWSS entity will be established on July 1, 2019.
convey the potable water to each partner’s distribution systems. The District will serve as the Managing Agency for the WWSS.

The WWSP began in FY2014 and will be complete in FY2026. Its total program cost (including inflation) is substantial at approximately $1.3 billion. Until 2018, the District had assumed that it would fund its projected share (approximately $729 million) with cash and revenue bond proceeds. In July 2018, the District and its WWSS partner, the City of Hillsboro (Hillsboro), were selected by the U.S. Environmental Protection Agency (EPA) to apply for up to $616.6 million in long-term, low-cost supplemental loans, administered through EPA’s Water Infrastructure Finance and Innovation Act (WIFIA). The District estimates that its share of WIFIA funding will save its ratepayers over $230 million through 2045, free up financial resources for other purposes, and lower the overall levels of annual revenues required from rates and charges.

To forecast its financial resource requirements, including future revenues from rates and charges, the District maintains a financial forecast model (Forecast) that is used to analyze revenue requirement scenarios under alternative capital improvements plans and cost assumptions.

1.1 The Forecast Model

This Financial Plan summarizes the Forecast results, which are based on the District’s latest data and assumptions. These data and assumptions include capital improvement plan (CIP) costs, operations and maintenance (O&M) costs, rate and non-rate revenues, system development charge (SDC) collections, reserve funds, and various assumptions around interest rates and cost escalation factors for future years of the projection period.

The model examines the impacts of funding capital improvements with a mix of rate revenue, reserves, system development charges, and proceeds from future borrowings. The scenario presented in this Financial Plan is based on the District’s latest CIP projections, budget numbers, and collective estimates of interest rates and escalation factors as of April 24, 2019. The scenario is projected to generate enough revenue to meet the District’s future revenue requirements, maintain prudent reserve fund balances, and achieve target debt service coverage ratios.

The Forecast that this Financial Plan is based on uses the 30-year planning period of FY2019 through FY2048. However, in most instances, this Financial Plan provides summary data from the first 10 years of the forecast period (FY2020-FY2029). Throughout this document, this period may be referred to as the “10-year presentation period” or simply the “presentation period”.

1.2 Financial Plan Section Descriptions and Highlights

Presented here is an overview of each section of the Financial Plan, a document that will be updated periodically to reflect future assumptions and outcomes, and provide guidance for the financial management of the District. In addition to regular updates, the District anticipates that its Financial Plan

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3 The WWSP website (http://www.ourreliablewater.org/) provides additional information including activities-to-date, maps, and other related information for all WIF and WWSS projects.

4 WWSP partner costs will be funded individually by the District’s partners, with payments made through the District as Managing Agency of the WWSP.

5 Revenue requirements include cash-funded capital improvements, debt service, and operational expenditures.
will evolve to provide additional information intended to help the Board and management in the execution of their responsibilities. Therefore, the sections highlighted below may change over time.\textsuperscript{6}

\textbf{SECTION 2 – FINANCIAL MANAGEMENT OBJECTIVES AND POLICIES.} This section describes the objectives that form the basis of the District’s financial management activities, and the key financial planning assumptions and policies used in the Forecast model.

\textbf{SECTION 3 – WATER SALES PROJECTIONS.} This section describes the District’s water sales forecast and the data used in the preparation of this Financial Plan (Figure 1-1).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure1-1.png}
\caption{Water Sales and Meters Forecast by Fiscal Year}
\end{figure}

\textbf{SECTION 4 – CAPITAL IMPROVEMENT PLAN.} This section describes various elements of the District’s CIP, including projected costs by category. Figure 1-2 provides a summary of projected CIP expenditures over the 10-year presentation period. Total expenditures over this period are approximately $957.1 million.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Figure1-2.png}
\caption{Projected CIP Expenditures}
\end{figure}

\textsuperscript{6} As an example, a future version of the Financial Plan may include sections for an Operations Plan and historical financial performance information.
SECTION 5 – CAPITAL FINANCING PLAN. This section provides a detailed overview of the types and anticipated timing of debt required to finance the CIP and the methodology used to optimize the District’s capital financing mix (Figure 1-3). Section 5 also describes the debt assumptions used in the Forecast model and projections of future debt repayments (Figure 1-4).

Figure 1-3: Ten-year Financing Mix (Cash v. Debt through FY2029)

Figure 1-4: Projected Debt Repayments (Total Debt Service on WIFIA and Revenue Bonds)
SECTION 6 – FINANCIAL FORECAST. This section demonstrates the overall feasibility of the District’s capital financing plan. It provides descriptions of the District’s current and projected rates and charges, and descriptions of the projected sources and uses of funds during the presentation period.

Figure 1-5 presents the Forecast rate revenue adjustments (3.9% per year) and typical monthly bill over the presentation period.

![Figure 1-5: Rate Adjustments and Typical Bill Impacts by Fiscal Year](image)

Figure 1-6 below shows that projected debt service coverage (DSC) will be at or above the District’s target of 2.0 times. Note that Figure 1-6 presents ten years of results beginning with FY2025 instead of FY2020. This is to show projected DSC for a period after which the bulk of the District’s near-term debt service requirements will be in place.

![Figure 1-6: Projected Debt Service Coverage Ratio](image)

---

A DSC ratio measures the availability of current financial resources to pay for debt service. It is the ratio of annual revenues (net of operating expenses) to total annual debt service.
SECTION 7 – FUNDS AND RESERVES. This section describes the summary funds used in the Forecast model. The projections in this section, summarized in Figure 1-7, demonstrate that the District will have enough liquidity to meet both its operating and capital investment commitments.

![Figure 1-7: Projected Year-End Cash Balances by Fiscal Year](image)

APPENDICES. Along with a service area map inside the back cover, the Appendices include the following:

- Appendix A – Financial Management Policies
- Appendix B – Capital Improvement Plan
- Appendix C – Ordinance 01-19 – Authorizing the Issuance of Debt
- Appendix D – Draft Master Revenue Bond Declaration
- Appendix E – Forecast Model Summary Results
- Appendix F – Map – Tualatin Valley Water District (Washington County, Oregon)

1.3 Conclusion

It must be noted that many assumptions were employed in the financial planning analysis underlying this document. For this reason, the results presented herein are not concrete in nature and should be considered as planning estimates.

In the future, the actual rate adjustments required to fund revenue requirements may vary from the estimates presented in Section 6 – Financial Forecast. As time passes and projections become reality, future capital requirements, O&M costs, customer demands, and other assumptions will influence the accuracy of these estimates. Therefore, the District will continue to take great care to mitigate risk by following prudent management practices, including reviewing rates and revenues annually (at a minimum) to see if additional adjustments are necessary.
2 Financial Management Objectives and Policies

The District’s Financial Plan incorporates the Board’s financial policies and objectives into an actionable plan that guides the District’s financial activities. To develop the District’s Financial Plan, the Board considers alternative financial outcomes at public meetings and workshops periodically throughout the year. The Forecast is used to inform the Board on the impact that various policy decisions have on the District’s financial outcomes. This includes, for example, changes in water rates, use of long-term debt, etc.

Most of the District’s financial policies are included in its Financial Management Policies document. In addition to the Financial Management Policies, the Board separately adopts the District’s Investment Policy annually as required by Oregon law.

The aim of this section is threefold:

- Provide context for understanding the policies in terms of financial management objectives.
- Describe key District financial policies, including recent enhancements.
- Present background information on credit ratings.

2.1 Financial Management Objectives

This section provides a context for understanding the District’s financial policies in terms of certain financial management objectives –

- Promoting Stability and Continuity
- Providing Best Value to the Community
- Providing a Definitive Policy Framework for District Staff
- Managing Risks to Financial Condition
- Following Established Public Management Best Practices

PROMOTING STABILITY AND CONTINUITY. The long-term, strategic intent articulated by many financial policies necessarily demands a long-term perspective from the organization. These policies promote stability and continuity by institutionalizing good financial management practices. They also prevent the need to re-invent responses to recurring issues.

PROVIDING BEST VALUE TO THE COMMUNITY. By clarifying and crystallizing strategic intent for financial management, financial policies define a shared understanding of how the organization will develop its financial practices and manage its resources to provide the best value to the community.

PROVIDING A DEFINITIVE POLICY FRAMEWORK FOR DISTRICT STAFF. Financial policies define limits on the actions staff may take. The policy framework provides the boundaries within which staff can innovate in order to realize the organization's strategic intent.

8 Appendix A contains the District’s current Financial Management Policies. These policies were adopted by the Board of Commissioners on March 20, 2019 by Resolution 08-19.

9 The District’s current Investment Policy was adopted by the Board of Commissioners on January 16, 2019 by Resolution 01-19.
MANAGING RISKS TO FINANCIAL CONDITION. A key component of governance accountability is not to incur excessive risk in the pursuit of public goals. Financial policies identify important risks to financial condition.

FOLLOWING ESTABLISHED PUBLIC MANAGEMENT BEST PRACTICES. The Government Finance Officers Association (GFOA), through its officially adopted Best Practices endorsement of National Advisory Council on State and Local Budgeting (NACSLB) budget practices and the GFOA Distinguished Budget Presentation Award Program, has recognized financial policies as an essential part of public financial management.

2.2 Key Financial Policies and Assumptions

The District’s financial policies cover a range of diverse activities. However, for long-range financial planning, policies related to capital financing and reserve levels are of particular importance. The following subsection describes each of these key policies in greater detail.

<table>
<thead>
<tr>
<th>Financial Planning Assumptions</th>
<th>Reserve Policies</th>
</tr>
</thead>
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<tr>
<td>• Debt Service Coverage Ratio</td>
<td>• Working Capital</td>
</tr>
<tr>
<td>• Additional Bonds Test</td>
<td>• Capital Reserves</td>
</tr>
<tr>
<td>• Debt Structure Considerations</td>
<td>• Debt Service Reserves</td>
</tr>
</tbody>
</table>

2.2.1 Financial Planning Assumptions

The financial planning assumptions provide guidance for future debt issuance, structure, and management. The assumptions are incorporated into policies that establish certain limits which recognize the District’s capital requirements, its ability to repay financial obligations, and the existing legal, economic, financial, and debt market conditions. Specifically, the policies are intended to assist the District in the following:

1. Evaluating available debt issuance options;
2. Maintaining appropriate capital assets for present and future needs;
3. Promoting sound financial management through accurate and timely information on financial conditions;
4. Protecting and enhancing the District’s credit rating(s); and
5. Safeguarding the legal use of the District’s financing authority through an effective system of internal controls.

The District’s debt financing assumptions and debt structure considerations are discussed in the following two subsections. For more detail and additional information on the District’s policies on Debt Financing, see Appendix A – Financial Management Policies.

---

10 Assumptions used in the Forecast are from the District’s Financial Management Policies, except for the additional WIFIA-related assumptions described in Section 5.3.1 – WIFIA Debt Assumptions.
2.2.1.1 Forecast Model Assumptions for Debt Financing

**DEBT SERVICE COVERAGE (DSC) RATIO.** A DSC ratio measures the availability of current financial resources to pay for debt service. It is the ratio of annual revenues (net of operating expenses) to total annual debt service. For example, a DSC ratio of 1.0x means that after paying all operating expenses\(^\text{11}\), an issuer only has exactly enough funds to pay debt service obligations. Similarly, a DSC ratio of 1.5x means that after paying all operating expenses, an issuer has 50% more than the amount needed to pay debt service obligations. This additional capacity allows the issuer to fund other capital expenditures with cash (thereby resulting in less debt leverage) and providing a buffer should revenue be unexpectedly lower (e.g., due to weather or other unforeseen events), or operating expenses being unexpectedly higher.

DSC is one of the primary metrics used by credit ratings agencies and investors to assess the credit worthiness of an issuer. In this way, it’s like a ratio of monthly income to mortgage payment used in qualifying for a home mortgage. All other things being equal, an issuer with a higher DSC ratio may indicate less borrowing, better credit ratings, and a lower cost of debt. Conversely, a similar utility with a lower DSC ratio may indicate more debt outstanding, lower credit ratings, and more expensive debt.

The District’s master revenue bond declaration (Master Declaration) is the document that will govern debt issuance. In this document, the District commits to set rates at levels to meet rate covenants and additional bonds tests imposed by then-existing financing covenants. In addition to the legal and/or contractual requirements associated with future revenue bonds, the District will strive to maintain a minimum annual debt service coverage ratio of 2.0 times average annual debt service.\(^\text{12}\)

2.2.1.2 Debt Structure Considerations

**MATURITY OF DEBT.** The final maturity of the debt shall not exceed, and preferably be less than, the remaining useful life of the assets being financed, and to comply with Federal tax regulations, the average life of a financing shall not exceed 120% of the average life of the assets being financed.

**DEBT SERVICE STRUCTURE.** Debt service payments for any new money debt issue will generally be structured to create approximately level debt service payments over the life of the debt. Exceptions are permitted for refunding debt that will have varying principal repayments structured to fill in the gaps created by refunding specific principal maturities. The CFO may also structure the amortization of principal to wrap around existing obligations or to achieve other financial planning goals. Deferring the repayment of principal should be avoided except in select instances where it will take time before project revenues are enough to pay debt service.

**LIEN STRUCTURE.** Senior and subordinate liens may be used to maximize the most critical constraint, either cost or capacity, thus allowing for the most beneficial leverage of revenues.

**CAPITALIZED INTEREST.** The District may elect to fund capitalized interest in connection with the construction of certain projects if revenue from such projects is not initially available to pay debt service.

---

\(^{11}\) Excluding depreciation. Although depreciation is an operating expense, it is a non-cash expense and is therefore excluded from the calculation of the DSC ratio.

\(^{12}\) The District sets its minimum DSC ratio target higher than the expected required minimum of 1.25 times debt service. This is a matter of prudent financial policy, in which the District strives to achieve a higher standard than the requirements typically set forth in bond covenants.
on related debt. Additionally, the District may consider funding capitalized interest if it would minimize the financial impact of such borrowing on District ratepayers.

**RESERVE FUNDS.** A reserve fund for a debt issuance may be required for credit rating or marketing reasons. If required, such reserve fund can be funded with:

- The proceeds of a debt issue,
- The reserves of the District, or
- A surety policy.

A cash reserve fund will be invested pursuant to the investment restrictions associated with the respective financing documents and the District’s separate investment policy. For each debt issue, the CFO will evaluate whether a reserve fund is required for credit rating or marketing purposes and the benefits of funding or maintaining the reserve requirement with cash or a surety policy, in addition to determining the benefits of borrowing the necessary funds or using cash reserves.

**REDEMPTION PROVISIONS.** In general, the District will have the right to optionally redeem debt at par no later than 10 1/2 years after issuance. Redemption provisions will be established on a case-by-case basis, taking into consideration market conditions and the results of a call option analysis prior to the time of sale. Because the issuance of non-callable debt may restrict future financial flexibility, cost will not be the sole determinant in the decision to issue non-callable debt.

**CREDIT ENHANCEMENT.** Credit enhancement (e.g., bond insurance or letters of credit) on District financings will only be used when net debt service is reduced by more than the cost of the enhancement. The District will evaluate the availability and cost/benefit of credit enhanced debt versus unenhanced debt prior to issuing any debt.

### 2.2.2 Reserve Policies

Maintaining fund balances is an important function for the District to operate efficiently over the long run. The District’s reserve policies guide the development of minimum cash balances that directly affect this District’s Financial Plan, rates and charges, and budget. The accumulation or use of fund balances and reserves is a practice that may allow financial decisions in one year to affect future years. Because of the nature of these effects, these policies provide guidance to:

- District management in developing the various plans proposed to the Board, and
- The Board in making its financial decisions.

The decision to retain financial resources in fund balance or reserves directly affects:

- Financial risks from unexpected disruptions to revenue or unexpected expenditures.
- Water rates required in the current and future years.
- The District’s credit rating(s).
- Other related financial matters.

The District’s reserves requirements are highlighted in the following three subsections. For more detail and additional information on the District’s policies on *Minimum Fund Balances and Reserves*, see *Appendix A – Financial Management Policies*. 
2.2.2.1 Working Capital

The District separately measures its current and non-current assets and liabilities. The District can use this distinction to calculate working capital (i.e., current assets less current liabilities). The measure of working capital indicates the relatively liquid portion of the District’s capital, which constitutes a margin or buffer for meeting obligations. Additionally, credit ratings agencies consider the availability of working capital in their evaluations of the District’s creditworthiness. Therefore, working capital is a crucial consideration in this Financial Plan.

The District’s Financial Management Policies state that working capital shall be maintained at a level considered adequate to mitigate current and future risks (e.g., revenue shortfalls and unanticipated expenses) and to provide stable services and fees. The policies state that this level will be at least equal to two months of annual operations and maintenance expense (i.e., 60 days cash on hand). However, in the Forecast model, the District targets 250 days of annual O&M for financial planning purposes.

2.2.2.2 Capital Reserves

The District’s rate setting goals include a preference to avoid sudden and/or unexpected rate increases for customers. Capital reserves are one mechanism the District can use to lower the overall costs of acquiring capital assets by saving money early in the planning process. Capital reserve levels are determined through the financial planning process and identified in this Financial Plan.

2.2.2.3 Debt Service Reserves

A reserve fund for a debt issuance may be required for credit rating or marketing reasons. The District fully redeemed its last outstanding revenue bonds in June of 2015 and its Debt Service Fund has not been used since that time. However, when the District issues revenue bonds for future capital expenditures, it assumes that any required debt reserves will be funded from the proceeds of each debt issuance.

This cash reserve fund will be invested pursuant to the investment restrictions associated with the respective financing documents and the District’s separate investment policy. For each debt issue, the CFO will evaluate whether a reserve fund is required for credit rating or marketing purposes and the benefits of funding or maintaining the reserve requirement with cash or a surety policy, in addition to determining the benefits of borrowing the necessary funds or using cash reserves.

2.3 District Credit Ratings

The primary goal of the District’s Financial Plan is to provide the financial foundation on which to build and operate its expanding system infrastructure. As described earlier, financial policies represent a tradeoff among various objectives. Prudent financial management means striking a balance among these objectives in a manner that provides for a sustainable enterprise with the ability to face the risks and capitalize on the opportunities before it.

Though high underlying credit ratings are not an end in-and-of themselves, they are one of the best measures of success in creating a financially sustainable enterprise. The District has worked with its professional advisors to develop a targeted credit rating for its long-term debt. Based on the District’s alignment with the rating criteria of the various rating agencies and considering the effect on the District’s cost of capital, the District intends to target financial performance that would result in a credit
rating of at least AA+/Aa1. For comparison, Table 2-1 provides the scale for investment grade securities for three of the national rating agencies.

Table 2-1: Rating Scales by Agency

<table>
<thead>
<tr>
<th>Standard &amp; Poor's</th>
<th>Fitch Ratings</th>
<th>Moody's Investor's Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>AAA</td>
<td>Aaa</td>
</tr>
<tr>
<td>AA+</td>
<td>AA+</td>
<td>Aa1</td>
</tr>
<tr>
<td>AA</td>
<td>AA</td>
<td>Aa2</td>
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<tr>
<td>A-</td>
<td>A-</td>
<td>A3</td>
</tr>
<tr>
<td>BBB+</td>
<td>BBB+</td>
<td>Baa1</td>
</tr>
<tr>
<td>BBB-</td>
<td>BBB-</td>
<td>Baa3</td>
</tr>
<tr>
<td>BBB+</td>
<td>BBB+</td>
<td>Baa2</td>
</tr>
<tr>
<td>BBB-</td>
<td>BBB-</td>
<td>Baa3</td>
</tr>
</tbody>
</table>

The direct financial value of a strong credit rating is a function of investor perceptions of risk. In terms of basis points savings on long-term debt, the graph below shows the value of ‘AA’-rated credit vs. ‘A’-rated credit since 1999.

Figure 2-1: Spread Between ‘AA’ versus ‘A’ Rated Debt* – The Benefit of Staying ‘AA’ or Better

* 20-year AA vs. A MMD Historical Rate Comparison (1/1/1999-4/24/2019); from PFM Financial Advisors LLC.

The graph makes clear that the value of a strong credit rating varies over time. Over the period presented, the value has ranged from a low of 7 basis points to a high of 115 basis points, while averaging 34 basis points. To put this in perspective, an additional 34 basis points results in an additional $340,000 in interest per year ($10.2 million over 30 years) on every $100 million in outstanding debt.
3 Water Sales Projections

3.1 Water Sources

One of the District’s primary responsibilities is to meet the projected water demands of existing and future customers. No single water source is sufficiently robust to meet this challenge, and the District’s Board has long recognized the need to balance water supplies among multiple sources. Currently, the District purchases most of its water through a wholesale contract with the City of Portland. The remainder of the water needed by the District comes from the Joint Water Commission (JWC) and the District’s aquifer storage and recovery facilities (ASR).

3.1.1 City of Portland Water Bureau

TVWD purchases water from Portland under an existing regional water sales agreement. TVWD has no equity share in the Portland supply and, under the terms of the agreement, is required to pay for a minimum average of 13.16 MGD even if the District uses less. If the District uses more it will pay for the additional costs. Water is billed at a pre-determined rate including a rate of return to Portland, with significant rate increases tied to high usage during summer months. The District can receive up to 42.3 MGD from Portland, however, there are significant incentives to manage the existing supply system to limit the financial impacts of the existing Portland water sales agreement.

3.1.2 Joint Water Commission

The JWC is a partnership of the District and the cities of Hillsboro, Beaverton and Forest Grove. The JWC operates a treatment plant and related storage and transmission facilities. As a member of the Joint Water Commission, the District owns capacity rights in JWC facilities. TVWD’s capacity share of the JWC water treatment plant is 12.5 MGD, and the District owns rights to approximately 7,000 acre-feet of storage at Barney Reservoir, one of the two primary impoundments that provide raw surface water supply to the JWC (the other is Hagg Lake). JWC members share actual operating and maintenance costs in proportion to their water usage and ownership shares.

JWC water is billed to the District at actual water production cost with no rate of return element. In the summer months, purchased water costs from the JWC are significantly lower than the cost of Portland water. Therefore, the District maximizes its purchases from the JWC source while concurrently making the contractually required minimum purchases from Portland during the peak season.

Figure 3-1 (next page) illustrates the comparative volume and costs of the District’s supplies from Portland and the JWC.

---

13 The District currently owns 12.5 MGD of JWC treatment capacity, expanding to 14.5 MGD in FY2020.
14 7,000 acre-feet is equivalent to approximately 12.5 MGD over a 180-day peak-season period.
Figure 3-1: Comparison of Existing Supplies and Related Costs

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Water Volume:</strong> 11.4 million CCF</td>
<td><strong>Total Water Cost:</strong> $9.7 million</td>
</tr>
<tr>
<td>Portland Volume (million CCF), 8.3</td>
<td>Portland Cost (million), $8.2</td>
</tr>
<tr>
<td>JWC Volume (million CCF), 3.0</td>
<td>JWC Cost (million), $1.5</td>
</tr>
</tbody>
</table>

Portland Water was 73.3% of Total Volume

Portland Water was 84.3% of Total Cost

[1] CCF = one hundred cubic feet or 748 gallons.

3.1.3 Grabhorn Aquifer Storage and Recovery

The District also uses its existing Grabhorn ASR well to supplement supply during peak-summer periods. The Grabhorn ASR facility can store up to 300 million gallons of water and deliver up to 3 MGD of supply over a 100-day period.

To reduce the higher costs of purchasing water for peak-summer use, the District forecasts its projected demand on a regular basis. This short-term demand forecasting helps the District meet the minimum purchase requirement of the Portland agreement while efficiently using the JWC and ASR sources to help meet higher demands during summer months.

3.1.4 Willamette Water Supply System

In 2013, the District’s Board decided to expand the District’s portfolio of water sources and develop a new water supply on the Willamette River. With the development of the Willamette Water Supply System (WWSS), the District plans to replace its Portland purchased water with this new source. The WWSS is scheduled to be available by July 1, 2026.

Figure 3-2 (next page) summarizes the District’s current source water capacities and its planned capacities beginning in FY2027.
Developing the new water supply is considered an integral element of the District’s core mission. The planning, design and construction of the WWSS is being done by the Willamette Water Supply Program (WWSP). Once complete, the WWSS will be a seismically hardened water supply system to meet the long-term needs of its residential, commercial, and industrial customers.

The WWSS is a regional effort which will result in long-term regional benefits. It is being implemented as a regional partnership, with TVWD serving as the Managing Agency for two new regional water entities with ownership interest in different parts of the total program:

1. Willamette Intake Facilities (WIF) Commission – The WIF is a joint venture of the District and the cities of Beaverton, Hillsboro, Sherwood, Tigard, and Wilsonville to jointly own and operate a raw water intake facility located at the current Willamette River Water Treatment Plant in Wilsonville, Oregon. The District serves as the Managing Agency for the WIF.

2. Willamette Water Supply System Commission – The WWSS will soon be a joint venture of the District and the cities of Hillsboro and Beaverton\(^\text{15}\) to construct and operate supply facilities that convey raw water from the WIF, treat the raw water to potable standards, and convey the potable water to each partner’s distribution systems.\(^\text{16}\) The District will serve as the Managing Agency for the WWSS.

\(^\text{15}\) The District and the cities are currently in the process of adopting the intergovernmental agreement required to form the WWSS. As currently planned, the new WWSS entity be established on July 1, 2019.

\(^\text{16}\) The WWSP website (http://www.ourreliablewater.org/) provides additional information including activities-to-date, maps, and other related information for all WIF and WWSS projects.
3.2 Water Demand Forecast

In February 2018, the District entered into a service area agreement (Beaverton Service Area Agreement) with the City of Beaverton (Beaverton). This service area agreement provided a framework for the District and Beaverton to plan for serving customers within Beaverton’s corporate jurisdiction in places where it overlaps with the District’s boundaries. The agreement provided Beaverton an opportunity to withdraw a limited number of customers from the District, thereby making them Beaverton customers. Effective July 1, 2018, Beaverton withdrew approximately 4,000 water services from the District.

In the coming years, the District expects Beaverton to withdraw some additional customers. The timing and the ultimate number of customers that will be affected by withdrawal is not now certain. However, the water demand forecast underlying this Financial Plan incorporates Beaverton’s planned withdrawal of an additional 286 services. The District assumed this withdrawal would be effective by the end of FY2019, so the related reductions in the District’s service accounts and associated water consumption are embedded in the projected source water purchases and rate revenue (fixed charges and water sales) included in the Forecast model.

At this time, the District is aware of only one additional area from which Beaverton could withdraw customers in the future.17 Regardless of the ultimate number of services that Beaverton withdraws, the probability is low that future withdrawal(s) would occur all at once. Rather, a series of withdrawals with subsequent transfer activities over multiple years may impact the District’s finances in a gradual way.

Given the staggered timing of customer transfers to wheeling status and then separated status (i.e., served directly by Beaverton), the impact to the District’s finances is projected to be gradual. As the implementation of the agreement proceeds, and transfers are completed, the District will refine the assumed revenue impacts included in the forecast model.

Before factoring in assumed losses to Beaverton, the assumed annual customer growth rate begins at 0.75% in FY2020 through FY2021, and then the growth rate declines by 0.05% annually until it hits zero in FY2036. These reductions in growth recognize the anticipation of slowing of development as the District approaches its build-out capacity. Expansions of the region’s urban growth boundary on the northern edge of the District’s current service area may increase these assumed growth rates for future years.

Water usage per customer has declined more than 20% over the past eight years, from 900 cubic feet (9 CCF) per month to 7 CCF per month.18 Declines in per capita water use have stabilized in recent years. In its Forecast modeling, the District assumes that these past conservation savings are permanent and forecasts sales growth at approximately one-third of a percent (i.e., 0.34%) through FY2029. This assumption is related to a combination of factors including mild weather, a successful conservation program that have depressed summer water demands, and the District’s similar experience to the nation-wide trends towards smaller family sizes and widespread assimilation of water-efficient appliances. After FY2029, the District assumed that sales growth would begin to align with customer growth, ultimately zeroing out in FY2036.

17 Section 3.7 of the Beaverton Service Area Agreement defines the obligations of Beaverton to assume a proportionate share of the District’s the outstanding debt for all withdrawals effective after July 2, 2020.
18 One hundred cubic feet of water (1 CCF) is equal to approximately 748 gallons.
In FY2020, after factoring in past and projected withdrawals to Beaverton, the District expects an internal rate revenue loss of approximately 5.8% from the FY2019 total. In future years, the combination of low customer growth and stagnant sales results in annual internal revenue growth rates that decline from approximately 0.45% in FY2021 to approximately 0.35% in FY2029.

Figure 3-3 summarizes projected water demand and the assumed mix of supply sources used as the basis for purchased water costs in the Forecast model. Note that the impacts of the known Beaverton withdrawals are already included in the FY2020 numbers. Additional future withdrawals by Beaverton would impact the projections shown below, and the District would necessarily adjust its assumptions and Financial Plan.
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4 Capital Improvement Plan

Each biennium the District updates its capital improvement plan, which includes expenditures for the Willamette Water Supply Program, Joint Water Commission, and in-District projects.

- The WWSP was established to develop and deliver the Willamette Intake Facilities (WIF), Willamette Water Supply System (WWSS), and Metzger Pipeline East (MPE) to the District and its partners by July 2026.
- As discussed in Section 3.1.2, the District is a partner in the JWC along with the cities of Beaverton, Forest Grove, and Hillsboro. As a member of the JWC, the District also participates in the development of its capital budget.
- For in-District projects, status updates on current projects and new project requests are prepared by the Engineering & Operations Department.

Table 4-1 summarizes the current biennial CIP budget (FY2020 and FY2021) and forecast expenditures through FY2029. The District’s share of projected WWSP (including WIF & WWSS projects) and JWC capital costs are summarized in the top two rows of the table. The categories listed below JWC are all in-District capital expenditures.

<table>
<thead>
<tr>
<th>Category</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWSP</td>
<td>$47.1</td>
<td>$65.1</td>
<td>$81.7</td>
<td>$148.1</td>
<td>$117.9</td>
<td>$48.5</td>
<td>$33.8</td>
<td>$4.3</td>
<td>$0.0</td>
<td>$0.0</td>
<td>$546.7</td>
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<tr>
<td>JWC</td>
<td>1.3</td>
<td>0.6</td>
<td>0.8</td>
<td>0.5</td>
<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
<td>0.8</td>
<td>0.8</td>
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</tr>
<tr>
<td>TVWD Source</td>
<td>0.1</td>
<td>0.0</td>
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<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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</tr>
<tr>
<td>Storage</td>
<td>0.4</td>
<td>2.1</td>
<td>7.4</td>
<td>0.4</td>
<td>3.0</td>
<td>3.1</td>
<td>1.4</td>
<td>4.8</td>
<td>2.8</td>
<td>2.9</td>
<td>28.2</td>
</tr>
<tr>
<td>Pumping</td>
<td>1.0</td>
<td>4.9</td>
<td>1.1</td>
<td>3.2</td>
<td>3.0</td>
<td>0.1</td>
<td>0.1</td>
<td>0.4</td>
<td>2.8</td>
<td>1.0</td>
<td>19.6</td>
</tr>
<tr>
<td>Pipelines*</td>
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<td>20.0</td>
<td>39.4</td>
<td>58.3</td>
<td>28.1</td>
<td>19.7</td>
<td>18.3</td>
<td>27.8</td>
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<tr>
<td>PRVs/Vaults</td>
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<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
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<tr>
<td>Facilities/Fleet/IT</td>
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<td>4.0</td>
<td>2.5</td>
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<td>0.5</td>
<td>0.6</td>
<td>0.6</td>
<td>0.9</td>
<td>1.0</td>
<td>1.0</td>
<td>14.5</td>
</tr>
<tr>
<td>Meters/Svcs</td>
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<td>1.5</td>
<td>1.6</td>
<td>1.7</td>
<td>1.6</td>
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<td>9.9</td>
<td>10.2</td>
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<td>$156.8</td>
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<td>$53.3</td>
<td>$33.9</td>
<td>$48.0</td>
<td>$957.1</td>
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</table>

Summary

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<th>Category</th>
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<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>WWSP</td>
<td>$47.1</td>
<td>$65.1</td>
<td>$81.7</td>
<td>$148.1</td>
<td>$117.9</td>
<td>$48.5</td>
<td>$33.8</td>
<td>$4.3</td>
<td>$0.0</td>
<td>$0.0</td>
<td>$546.7</td>
</tr>
<tr>
<td>JWC</td>
<td>1.3</td>
<td>0.6</td>
<td>0.8</td>
<td>0.5</td>
<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
<td>0.8</td>
<td>0.8</td>
<td>1.1</td>
<td>7.1</td>
</tr>
<tr>
<td>In-District</td>
<td>27.8</td>
<td>34.2</td>
<td>55.0</td>
<td>66.8</td>
<td>38.5</td>
<td>27.5</td>
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<td>48.2</td>
<td>33.1</td>
<td>46.9</td>
<td>403.3</td>
</tr>
</tbody>
</table>

*Includes Metzger Pipeline East ($112 million, FY2020-25), previously classified as part of the WWSP.

- The largest element of the District’s ten-year CIP is the WWSP at nearly $547 million. This number represents the District’s share of all remaining WWSP project expenditures, including the costs of the raw water facilities, water treatment plant, finished water pipelines, and terminal reservoirs. All WWSP projects will be complete in FY2026, with $4.3 million in program close-out costs projected for FY2027.

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19 Detailed project cost estimates and descriptions from the District’s 2019-2021 requested budget are included in Appendix B – Capital Improvement Plan.
• Pipelines will be another major element of ten-year and future CIP expenditures. Included in the $277 million shown above is the District’s Mains Replacement Program (approximately $80 million) and Metzger Pipeline East ($112 million) which will deliver WWSS water to the District’s Metzger service area.

• Several reservoir replacements and seismic upgrades are included in the $28 million for Storage.

• Similarly, at nearly $20 million for Pumping, the District is planning several major improvements/replacements of pump stations over the next ten years.

Figure 4-1 presents a graphical summary of the projected annual CIP expenditures for the next ten years. As shown in Table 4-1 above, the costs shown below total $957.1 million for the presentation period. This total represents the costs of the in-District CIP and the District’s cost shares of JWC and WWSP capital expenditures. These projected expenditures form the capital funding needs of the District during the Financial Plan period.

As shown, the funding needs decline after completion of the WWSS. However, in FY2027 and beyond, the District is projecting increased spending in its Mains Replacement Program and in additional future improvements/replacements of storage and pump station facilities.

In Figure 4-1 below, note that only the in-District and WWSP costs are labeled. The JWC amounts are not labeled because they are relatively small, and the labels would crowd the larger in-District and WWSP amounts shown.
5 Capital Financing Plan

The capital financing plan for the District’s projected capital expenditures is one of the primary drivers for this Financial Plan. The capital financing plan considers the District’s financial objectives and the mix of current and future funds available for capital investment to determine the optimal funding sources for the projected CIP expenditures. The optimal funding mix will be achieved by balancing the use of cash funding and debt proceeds to fund the CIP while minimizing increases to customers’ rates.

This section provides an overview of the debt instruments the District anticipates using to finance the current CIP, the methodology used to optimize the CIP financing mix, and the fundamental assumptions underlying the projected debt service schedules for new debt.

5.1 Borrowing Options

Certain rules and regulations make clear the types and limits of debt financing available to the District. Some rules exist on the national level, while others are specified by Oregon law. The District shall comply with all debt limitations imposed by the Oregon Constitution, Oregon Revised Statutes (ORS), and Oregon Administrative Rules (OAR). The District will further comply with Security and Exchange Commission (SEC) and Municipal Securities Rulemaking Board (MSRB) rules regarding debt issuance, and with IRS regulations for tax-exempt or tax-advantaged debt.

The following describes the specific debt instruments that the District has selected for its capital financing plan.

5.1.1 Types and Use of Long-Term Debt

REVENUE BONDS. Revenue bonds are obligations payable from the net revenues of the District’s operations. As users of the District facilities will benefit from long-term capital investments in future years, it is appropriate that future revenues pay a share of the costs and more closely match the term of repayment to the expected economic useful life of the project being financed.

Long-term revenue bonds issued by the District will only be used to finance and refurbish capital facilities, projects and certain equipment where it is determined to be cost effective and fiscally prudent. Revenue bonds will be structured to achieve the lowest possible net cost to the District considering market conditions, terms that are advantageous to the District, risks, the Financial Plan, and the nature and type of security to be provided.

Although revenue bonds are not subject to constitutional or statutory debt limits, the District’s debt will not exceed legal or contractual limitations, such as rate covenants or additional bonds tests imposed by then-existing financing covenants. Prior to the issuance of any new revenue bonds, the CFO will cause the impact of future debt service payments on total annual fixed costs to be analyzed.

WIFIA. The Water Infrastructure Finance and Innovation Act (WIFIA) program is a federal loan and guarantee program, administered by the U.S. EPA, that aims to accelerate investment in the nation’s water infrastructure by providing credit assistance for regionally and nationally significant projects. The program received 62 applications in 2018 and selected 39 finalists with projects that will enhance water quality and public health. The District, with its partner the City of Hillsboro, was selected as one of the 39 finalists.
WIFIA is a highly valuable addition to the District’s portfolio of future debt because it will lock in a low interest rate for the length of the program, provide favorable loan terms, and allow for customized disbursement and repayment schedules. The District estimates that its share of WIFIA funding will save its ratepayers over $230 million between 2020 and 2045.

**FEDERAL, STATE, OR OTHER LOAN PROGRAMS.** To the extent it benefits the District, the District may participate in federal, state, or other loan programs. The CFO shall evaluate the requirements of these programs to determine if the District is well served by employing them. For planning purposes and in the event the District employs a federal, state, or other loan program, the District shall treat and report these obligations in a manner consistent with other similar debt instruments. To the extent required by the loans or other outstanding debt agreements, the District shall include the financial requirements of these obligations when determining additional bonds test, coverage requirements, etc.

### 5.1.2 Authority to Issue Debt

The District has authority under state law to enter into financial obligations for the borrowing options described above. Below are descriptions of the actions the District has taken or will take to obtain the authority to issue debt.

**ORDINANCE.** At its April 17, 2019 regular meeting, the Board of Commissioners adopted Ordinance 01-19 (Ordinance) authorizing the issuance of debt. The Ordinance authorizes $600 million in net bond proceeds to fund capital expenditures, identifies an additional $80 million to fund debt service reserves and issuance costs, authorizes the District’s participation in the WIFIA loan program as well as additional revenue bond issuances, and identifies the types of capital expenditures that may be funded by the borrowings.20 The Ordinance also delegates to the District’s Chief Financial Officer, Chief Executive Officer, or other designated employees of the District to issue the revenue bonds authorized by the Ordinance.21

**MASTER DECLARATION.** The District has prepared a draft master revenue bond declaration (Master Declaration) that is scheduled to be approved by the Board at its May 15, 2019 regular meeting. The Master Declaration establishes the terms under which the District’s long-term borrowings are incurred and the terms under which future obligations may be issued on a parity. Under certain circumstances, the Master Declaration may be supplemented or amended by a future Supplemental Declaration.22

### 5.1.3 Other Debt Considerations

**DEBT REFINANCING.** Refunding obligations may be issued to retire all or a portion of an outstanding debt issue. Economic refusdings may refinance high-coupon debt at lower interest rates to realize debt service savings. Alternatively, the District may conduct a refunding for reasons other than cost savings, such as to restructure debt service payments, to change the type of debt instruments, to release restricted revenues, to ease administrative requirements, or to remove undesirable covenants.

**REIMBURSEMENT DECLARATION.** The District’s Board of Commissioners authorized the District’s Chief Executive Officer to declare official intent on behalf of the District to reimburse the District’s cash reserves for capital expenditures with the proceeds from tax-advantaged obligations. This authorization

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20 The authorized capital expenditures include all system improvements of the District, including investments in the District’s joint ventures such as the Willamette Water Supply System.
21 A signed copy of the Ordinance is included as Appendix C – Ordinance 01-19 – Authorizing the Issuance of Debt.
22 A draft copy of the Master Declaration is included as Appendix D – Draft Master Revenue Bond Declaration.
was approved by Resolution No. 08-13, adopted on June 19, 2013. In addition to this reimbursement declaration, the District’s Board further declared its intent as part of the Ordinance.

5.2 Optimizing the Capital Financing Mix

The District’s CIP funding sources include accumulated revenues (fund balances), future revenues allocated towards capital expenditures (cash financing, also known as “pay-as-you-go”), and debt financing which will lead to debt service repayments (sometimes referred to as “pay-as-you-use” financing). All of these funding sources must be integrated into the capital financing plan.

Optimizing the capital financing plan is a complex and iterative process that involves several key steps. These steps are:

1. Determine the CIP funding mix of cash and debt financing for each Forecast year.
2. Determine the types and estimate the amounts of debt financing that will be used.
3. Calculate amortization schedules for the forecasted debt issuances.

The steps and process are discussed in greater detail in the following subsections.

5.2.1 Target Cash and Debt Financing Profile

Like any business, the District must determine the best mix of resources (cash and debt financing) to fund both its operations and its capital program. The cash/debt profile aims to maintain some cash investment into both existing facilities (renewal and replacement) and new system assets, while minimizing rates and achieving intergenerational equity among customers.

Figure 5-1 illustrates the mix of cash and debt planned to finance the CIP over the 10-year presentation period. Note that the ratio of cash-to-debt is projected to vary each year. Ultimately, the mix will vary from the projections shown, depending on future market conditions and input from the District’s financial consultants.
Figure 5-2 illustrates the proportional amounts of CIP funding through the end of FY2029.

![Figure 5-2: Ten-Year CIP Funding Ratios by Source](chart-image)

### 5.2.2 Debt Structure and Principal Amortization

Ultimately, the structuring of the District’s future debt obligations and repayments will depend on market factors and input from professional advisors (municipal advisors, underwriters, etc.) at the time of each issuance. For the purposes of the Forecast model and this Financial Plan, the District used what it considers to be standard, and slightly conservative, assumptions to calculate future debt service requirements. These assumptions are outlined in Section 5.3 below.

### 5.3 Significant Debt Program Assumptions

As mentioned in the Introduction (Section 1), the District will fund a significant portion of its WWSS expenditures with financing from the Water Infrastructure Finance and Innovation Act (WIFIA), with revenue bonds augmenting the remaining WWSS costs and providing outside funding at times when future debt financing will be required.

#### 5.3.1 WIFIA Debt Assumptions

**TERM.** The total WIFIA loan amount will be repaid over 35 years, beginning after “substantial completion” of the project (WWSS). The District assumes that “substantial completion” of the WWSS will be in FY2026 and that WIFIA repayments will begin in FY2027.

**INTEREST RATE.** Currently, the District is using a 3.5% assumed interest rate for the WIFIA financing and capitalized interest calculation. The actual rate will be set by the WIFIA program at the time the WIFIA loan is closed.

**ISSUANCE COSTS.** WIFIA issuance costs are estimated to be $500,000, funded from WIFIA loan proceeds.
**CAPITALIZED INTEREST.** Using the assumed 3.5% WIFIA interest rate and guidance from the WIFIA program, the District calculated compounding interest on each of its projected WIFIA draws from the year each draw is taken to FY2027 (when the total WIFIA loan is sized), at which point the total accumulated amounts would be rolled into the final WIFIA loan. Table 5-1 presents a summary of the capitalized interest calculation and resulting WIFIA loan amount financed.

<table>
<thead>
<tr>
<th>WIFIA Proceeds [1]</th>
<th>Years to Loan</th>
<th>Compound Rate [2]</th>
<th>Total Cap-i</th>
<th>Total Financed</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2020 $5.0</td>
<td>7</td>
<td>27.2%</td>
<td>$1.4</td>
<td>$6.4</td>
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<tr>
<td>FY2021 20.0</td>
<td>6</td>
<td>22.9%</td>
<td>4.6</td>
<td>24.6</td>
</tr>
<tr>
<td>FY2022 100.0</td>
<td>5</td>
<td>18.8%</td>
<td>18.8</td>
<td>118.8</td>
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<tr>
<td>FY2023 125.0</td>
<td>4</td>
<td>14.8%</td>
<td>18.4</td>
<td>143.4</td>
</tr>
<tr>
<td>FY2024 65.0</td>
<td>3</td>
<td>10.9%</td>
<td>7.1</td>
<td>72.1</td>
</tr>
<tr>
<td>FY2025 30.0</td>
<td>2</td>
<td>7.1%</td>
<td>2.1</td>
<td>32.1</td>
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<tr>
<td>FY2026 25.5</td>
<td>1</td>
<td>3.5%</td>
<td>0.9</td>
<td>26.4</td>
</tr>
<tr>
<td><strong>Totals</strong> $370.5</td>
<td></td>
<td></td>
<td><strong>$53.3</strong></td>
<td><strong>$423.8</strong></td>
</tr>
</tbody>
</table>

[1] FY2020 includes $500,000 for issuance costs.
[2] Annual int. rate: 3.5%

**PRINCIPAL AMORTIZATION.** For planning purposes, the principal amount of $423.8 million was amortized over 35 years using levelized annual debt service.

**DEBT SERVICE RESERVE.** Based on current strategies, the District is not forecasting a debt reserve requirement for the WIFIA financing.

### 5.3.2 Revenue Bond Debt Assumptions

**TERM & INTEREST RATE.** All projected bonds are based on a 30-year term and 5.5% interest rate.

**ISSUANCE COSTS.** Revenue bond issuance costs are estimated at 1.5% of each issuance, with the costs included in the total issuance amount.

**PRINCIPAL AMORTIZATION.** For planning purposes, revenue bonds were amortized over 30 years using levelized annual debt service.

**DEBT SERVICE RESERVE.** Revenue bond reserve requirements were calculated based on the maximum annual debt service (MADS) of each issuance.

### 5.4 Schedule of Future Debt Issuance

Projected debt issuances are presented in Table 5-2 on the next page. For WIFIA and each revenue bond issuance, Table 5-2 includes the proceeds available for capital expenditures, estimated issuance costs, reserve requirements (revenue bonds only), capitalized interest (WIFIA loan only), and total issue amounts during the 10-year and 30-year projection periods.
Table 5-2: Projected WIFIA Funding and Revenue Bond Issuances ($ Millions)

<table>
<thead>
<tr>
<th>Debt Issuances through FY2029</th>
<th>Proceeds for CIP</th>
<th>Issuance Costs [1][2]</th>
<th>Reserve Req. [3]</th>
<th>Capitalized Interest</th>
<th>Total Financed</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIFIA</td>
<td>$370.0</td>
<td>$0.5</td>
<td>$0.0</td>
<td>$53.3</td>
<td>$423.8</td>
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<tr>
<td>FY2023 Revenue Bonds</td>
<td>42.8</td>
<td>0.7</td>
<td>3.2</td>
<td>0.0</td>
<td>46.7</td>
</tr>
<tr>
<td>FY2024 Revenue Bonds</td>
<td>51.5</td>
<td>0.8</td>
<td>3.9</td>
<td>0.0</td>
<td>56.2</td>
</tr>
<tr>
<td>FY2029 Revenue Bonds</td>
<td>25.7</td>
<td>0.4</td>
<td>1.9</td>
<td>0.0</td>
<td>28.1</td>
</tr>
<tr>
<td><strong>10-year Totals</strong></td>
<td><strong>$490.0</strong></td>
<td><strong>$2.5</strong></td>
<td><strong>$9.0</strong></td>
<td><strong>$53.3</strong></td>
<td><strong>$554.8</strong></td>
</tr>
</tbody>
</table>

**Future Debt Issuances**

| FY2032 Revenue Bonds         | $12.2            | $0.2                  | $0.9             | 0.0                  | 13.4          |
| FY2033 Revenue Bonds         | 28.9             | 0.5                   | 2.2              | 0.0                  | 31.6          |
| FY2035 Revenue Bonds         | 32.3             | 0.5                   | 2.4              | 0.0                  | 35.2          |
| FY2036 Revenue Bonds         | 34.7             | 0.6                   | 2.6              | 0.0                  | 37.8          |
| FY2037 Revenue Bonds         | 26.4             | 0.4                   | 2.0              | 0.0                  | 28.8          |
| FY2039 Revenue Bonds         | 23.5             | 0.4                   | 1.8              | 0.0                  | 25.6          |
| FY2040 Revenue Bonds         | 55.4             | 0.9                   | 4.2              | 0.0                  | 60.5          |
| FY2043 Revenue Bonds         | 25.2             | 0.4                   | 1.9              | 0.0                  | 27.5          |
| FY2045 Revenue Bonds         | 15.7             | 0.3                   | 1.2              | 0.0                  | 17.1          |
| FY2046 Revenue Bonds         | 47.7             | 0.8                   | 3.6              | 0.0                  | 52.1          |
| FY2047 Revenue Bonds         | 77.4             | 1.3                   | 5.8              | 0.0                  | 84.5          |
| **Future Totals**            | **$379.3**       | **$6.2**              | **$28.5**        | **$0.0**             | **$414.0**    |
| **30-year Totals**           | **$869.3**       | **$8.7**              | **$37.5**        | **$53.3**            | **$968.8**    |

[1] WIFIA issuance costs assumed at $500,000.
[2] Revenue bond issuance costs assumed at 1.5% of total issuance.
[3] Revenue bond reserve requirement assumed at maximum annual debt service (MADS) per issuance.

It should be noted that Table 5-2 is not intended as an outline or planned schedule for future revenue bond issuances, as the District will not likely issue revenue bonds annually over 2- and 3-year periods. Rather, the schedule above is meant to demonstrate the approximate size and timing of needed debt financing. In future years when debt funding is needed, the District may execute a single bond issuance to cover needs for multiple successive years. Conversely, short-term debt instruments may be employed to cover interim capital costs for a given period, with revenue bonds then issued to close-out the interim financing and provide additional funding for then-current and/or future capital expenditures.

Figure 5-3 (next page) shows the resulting debt service based on the projected borrowings in Table 5-2 above and the debt service assumptions described in Section 5.3.
As shown in Figure 5-4, the District expects to meet or exceed its target debt service coverage of 2.0 times total annual debt service (WIFIA and revenue bonds).

Note that Figure 5-4 presents ten years of results beginning with FY2025 instead of FY2020. This is to show projected DSC for a period after which the bulk of the District’s near-term debt service requirements will be in place.
6 Financial Forecast

This section provides a brief description of the District’s rates and charges, forecast financial projections, and a summary of the District’s projected sources and uses of funds over the presentation period. The forecast represents the District’s current projections, which are based on current data and assumptions. It is important to note that these projections are subject to change and should be viewed as estimates.

### 6.1 District Rates and Charges

The District collects revenues from a variety of sources. Some sources are fixed (i.e., not dependent on water sales or the economy), while others are variable being based on the amount of water sold or the local/regional economy (e.g., system development charges). Brief descriptions for each of the District’s rates and charges categories are provided below.

**FIXED CHARGE.** Water rates include two types: fixed and volumetric. The fixed charge is assessed to customers monthly or bi-monthly and varies by meter size.

**VOLUMETRIC WATER RATE.** The volumetric rate is based on the amount of water consumed. TVWD assesses this rate to each unit of water sold, on a $/CCF basis.

**OTHER RATES AND CHARGES (NON-RATE REVENUE).** For planning purposes, non-rate revenue includes meter and service revenue, dispatch fees, backflow program reimbursements, contract reimbursements, miscellaneous income, and some other small dollar items. Together, these line items will be almost $3.4 million in FY2019.

**SYSTEM DEVELOPMENT CHARGES.** Sometimes referred to as improvement fees, impact fees, capacity reserve charges, or infrastructure investment fees, SDCs are contributions of capital to either reimburse existing customers for the available capacity in the existing system or help finance growth-related capacity improvements. For FY2019, the District is projecting approximately $5.5 million from water SDCs.

### 6.2 Projected Rates and Charges

The District developed its financial projections based on its financial objectives and policies (presented in Section 2), water sales projections (Section 3), and projections of future revenue requirements which are based on the following:

- CIP (Section 4)
- Capital financing plans (Section 5)
- Operating cost forecast – discussed later in this section (Section 6)

Using all these inputs and assumptions, District staff uses its Forecast model to determine the level of rate revenue needed to meet the District’s requirements in each year of the model’s forecast period.
Figure 6-1 presents the Forecast rate revenue adjustments (3.9% per year) and typical monthly bill over the presentation period.

![Figure 6-1: Projected Rate Adjustments and Typical Bills by Fiscal Year](image)

### 6.3 Projected Sources of Funds

Figure 6-2 presents a summary of the District’s projected sources of funds over the presentation period. On the next page, Table 6-1 presents the same information in tabular detail with descriptions included below it.

![Figure 6-2: Projected Sources of Funds by Fiscal Year](image)
### Table 6-1: Revenues and Other Funding Sources by Fiscal Year

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Sales</td>
<td>$71.6</td>
<td>$74.7</td>
<td>$77.9</td>
<td>$81.3</td>
<td>$84.8</td>
<td>$88.4</td>
<td>$92.2</td>
<td>$96.2</td>
<td>$100.3</td>
<td>$104.6</td>
<td>$871.9</td>
</tr>
<tr>
<td>SDCs</td>
<td>5.7</td>
<td>5.7</td>
<td>5.7</td>
<td>5.7</td>
<td>5.7</td>
<td>5.7</td>
<td>5.6</td>
<td>5.6</td>
<td>5.5</td>
<td>5.4</td>
<td>56.3</td>
</tr>
<tr>
<td>Other Revenue</td>
<td>8.7</td>
<td>7.6</td>
<td>7.0</td>
<td>7.2</td>
<td>7.4</td>
<td>7.5</td>
<td>7.8</td>
<td>6.4</td>
<td>6.3</td>
<td>6.6</td>
<td>72.4</td>
</tr>
<tr>
<td>WIFIA</td>
<td>5.0</td>
<td>20.0</td>
<td>100.0</td>
<td>125.0</td>
<td>65.0</td>
<td>30.0</td>
<td>25.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>370.5</td>
</tr>
<tr>
<td>Revenue Bonds</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>46.7</td>
<td>56.2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>28.1</td>
<td>131.0</td>
</tr>
<tr>
<td>Reserves</td>
<td>36.6</td>
<td>42.5</td>
<td>-</td>
<td>-</td>
<td>0.7</td>
<td>12.5</td>
<td>2.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>94.3</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>$127.6</td>
<td>$150.5</td>
<td>$190.6</td>
<td>$265.8</td>
<td>$219.1</td>
<td>$131.1</td>
<td>$120.6</td>
<td>$114.1</td>
<td>$144.1</td>
<td>$144.7</td>
<td>$1596.4</td>
</tr>
</tbody>
</table>

**Rate Revenue (Water Sales).** Water rate revenue projections include revenue from both fixed and volumetric charges, as discussed in Section 6.1 – District Rates and Charges. Over the presentation period, increasing rate revenue is due to the projected rate revenue adjustments shown in Figure 6-1 as well as minor annual increases in customers and water sales after net losses due to withdrawals by the City of Beaverton, which were discussed in Section 3.2 – Water Demand Forecast.

**System Development Charges (SDCs).** In FY2020, the District projects that it will receive approximately $5.7 million from water SDCs. For the first 10 years of the forecast, the District assumed that SDC collections would remain steady between $5.7 million and $5.4 million annually, declining slightly over time. These assumptions are important as the overreliance on growth-related fees for rate setting purposes may result in the need for additional rate adjustments to fund capital improvements should growth not occur at the projected levels.

**Non-Rate Revenue (Other Revenue).** As mentioned in Section 6.1 above, non-rate revenue includes meter and service revenue, dispatch fees, backflow program reimbursements, contract reimbursements, miscellaneous income, and some other small dollar items. The District’s proposed 2019-2021 budget has these items totaling almost $3.5 million in FY2020 and $3.6 million in FY2021. From FY2022 forward, non-rate revenue line items were projected to increase at a rate of 3.0% annually.

**Payments from Partners (Other Revenue).** For capital budgeting purposes, District personnel costs directly associated with the development of capital projects are included in the CIP cost projections and ultimately capitalized with the projects. For the WWSP and other partner projects, the District receives payments from its partners for their share of project costs (including District overhead).

Although the Forecast model includes only the District’s share of partner project costs like the WWSP, it recognizes the partners’ share of capitalized overhead as a resource (non-rate revenue) since that portion of the District’s operational costs is included in its budget and Forecast O&M expenses but will be paid by partners. In other words, the Forecast includes the District’s total operational expenses, but offsets a portion of those expenses with the amounts the District will receive from its partners for capitalized overhead.

From FY2020 to FY2026, the Forecast includes between $1.0 and $1.3 million per year from partner reimbursements for capitalized overhead related to WWSP projects. This resource is eliminated after FY2026 as the WWSP will be complete, resulting in the FY2027 decline in Other Revenue in Table 6-1.

**Wheeling Revenue (Other Revenue).** As discussed in Section 3.2 – Water Demand Forecast, the service area agreement with Beaverton affected a portion of the District’s service area subject to withdrawal. Although withdrawn from the District, the District continues to serve these customers until Beaverton undertakes certain “transfer activities” governed by the agreement. Beaverton can transfer...
customers to a wheeling status in which Beaverton will provide water for the District to convey to Beaverton’s customers. The agreement provides a basis for compensation to the District for providing wheeling services to Beaverton. Beaverton can also serve withdrawn customers directly with its own infrastructure.

As Beaverton transfers these customers into a wheeling arrangement, wheeling revenue from Beaverton is projected to increase from approximately $550,000 in FY2019 to a high of $1.7 million in FY2020. As Beaverton separates the withdrawn customers from the District’s service area, the wheeling revenue will decline. The District assumes that a small portion of withdrawn customers will receive wheeled water on a permanent basis. From a low of approximately $213,000 in FY2027, Beaverton wheeling revenue is projected to increase at a rate of 3.0% annually thereafter.

**INTEREST INCOME (OTHER REVENUE).** Interest earnings on the District’s reserve funds were calculated based on assumed interest rates of 2.70% in FY2020, 3.00% in FY2021, 3.25% in FY2022, and 3.50% annually thereafter. Given the substantial level of reserves currently held by the District, the Forecast includes over $2.5 million of interest earnings in FY2020. As the District uses cash reserves for capital expenditures over the next two years, interest earnings are projected to decline to $1.65 million in FY2021 and $1.1 million in FY2022. In FY2023 and beyond, interest earnings are projected to increase slightly each year as the District’s reserve fund balance grows to keep pace with increasing O&M costs.

**WIFIA.** The WIFIA program is described in detail in Section 5 of this Financial Plan.

**REVENUE BONDS.** Along with the WIFIA program, revenue bond issuances are described in detail as part of Section 5 – Capital Financing Plan.

**RESERVES (NET FUND WITHDRAWALS).** Cash fund withdrawals will provide an important source of funds for the District as the WWSP moves into full swing. For the last 5-10 years, the District has been proactive in planning for these future capital investments, which will require sizable capital expenditures. When combined with projected debt proceeds, the reserves that the District has amassed will play an important role in keeping future rate revenue adjustments steady and low.
6.4 Projected Uses of Funds

The following graph and table show the projected uses of funds over the presentation period. The major categories of uses include:

- Operations and Maintenance (O&M) Costs (including PERS Side Account deposits and debt issuance costs)
- Purchased Water Program (including pumping power costs)
- Capital Expenditures
- Net Increases in Reserves
- Debt Service

As shown in Figure 6-3, the largest variability in the projected uses of funds is driven by the District’s planned capital expenditures. Table 6-2 presents a tabular detail of the projected uses of funds, with descriptions below and on following pages.

![Figure 6-3: Projected Uses of Funds by Fiscal Year](image)

**Table 6-2: Annual Expenditures and Increases in Reserves by Fiscal Year**

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>O&amp;M Costs [1]</td>
<td>$38.8</td>
<td>$37.7</td>
<td>$39.8</td>
<td>$31.8</td>
<td>$33.9</td>
<td>$34.1</td>
<td>$35.5</td>
<td>$39.1</td>
<td>$40.8</td>
<td>$43.0</td>
<td>$374.5</td>
</tr>
<tr>
<td>Purchased Water [2]</td>
<td>12.1</td>
<td>12.3</td>
<td>11.9</td>
<td>13.0</td>
<td>13.1</td>
<td>14.2</td>
<td>14.7</td>
<td>9.9</td>
<td>10.4</td>
<td>10.9</td>
<td>122.6</td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>76.6</td>
<td>100.5</td>
<td>138.1</td>
<td>216.0</td>
<td>157.4</td>
<td>77.0</td>
<td>60.3</td>
<td>53.9</td>
<td>34.6</td>
<td>48.7</td>
<td>963.2</td>
</tr>
<tr>
<td>Building Reserves</td>
<td>-</td>
<td>-</td>
<td>0.8</td>
<td>3.4</td>
<td>9.5</td>
<td>-</td>
<td>13.5</td>
<td>-</td>
<td>-</td>
<td>12.7</td>
<td>40.0</td>
</tr>
<tr>
<td>Debt Service</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.6</td>
<td>5.1</td>
<td>7.1</td>
<td>7.1</td>
<td>17.7</td>
<td>28.3</td>
<td>29.2</td>
<td>96.1</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$127.6</strong></td>
<td><strong>$150.5</strong></td>
<td><strong>$190.6</strong></td>
<td><strong>$265.8</strong></td>
<td><strong>$219.1</strong></td>
<td><strong>$132.3</strong></td>
<td><strong>$131.1</strong></td>
<td><strong>$120.6</strong></td>
<td><strong>$114.1</strong></td>
<td><strong>$144.7</strong></td>
<td><strong>$1596.4</strong></td>
</tr>
</tbody>
</table>

[1] O&M costs shown include debt issuance costs and OPERS side account deposits ($10 million/yr in FY2020-22).
[2] Costs shown represent TVWD’s Purchased Water Program, which includes pumping power costs.

**O&M COSTS.** Operations and maintenance costs account for most of the day-to-day expenditures for operating a water utility. O&M costs include labor, benefits, materials and services among other items. Management’s requested 2019-2021 budget served as a starting point for the O&M forecast included in this Financial Plan. Most O&M costs were projected to escalate from FY2021 data at 4.5% annually.
Also included in the O&M Costs row in Table 6-2 are proposed deposits into a side account to offset a portion of the District’s pension liabilities and debt issuance costs which were discussed in Section 5.3 – Significant Debt Program Assumptions.

**PENSION SIDE ACCOUNT DEPOSITS (O&M COSTS).** Employees of the District are provided pensions through the Oregon Public Employees Retirement System (OPERS). OPERS provides a variety of pension plans for public employees based on when an employee first enters public service. These pension plans are commonly referred to as OPERS Tier 1 and Tier 2, and Oregon Public Service Retirement Plan (OPSRP). These plans vary in benefits but include both a defined benefits component and a defined contribution component.

Like many pension plans, the OPERS plans currently have an unfunded actuarial liability (UAL). The OPERS UAL is allocated to employers of the plan. The District estimates it current share of OPERS UAL is approximately $20 million. In addition, District management believes the assumed discount rate currently used by OPERS to value the UAL may be reduced in the future. A reduction in the assumed discount rate, everything else being equal, increases the OPERS UAL and the UAL allocated to the District. Based on analysis conducted by OPERS consultants and actuaries, a change in the assumed discount rate by 1% could add another $10 million to the District’s UAL.

The District’s share of the OPERS UAL is the result of many factors. These factors include changes in actuarial assumptions, earnings on the OPERS investments, and other OPERS policies (e.g., rate collaring). The District’s share of OPERS UAL is a liability of the District and is reported in the District’s financial statements consistent with the requirements of the various Government Accounting Standards Board (GASB) statements on pension reporting.

The District’s management will request $20 million in the 2019-21 biennium to fund an OPERS side account with two deposits of $10 million each. The deposits will be separated in time to mitigate market risks since the OPERS investments of side accounts has greater market risk than the District’s investment portfolio. Funding the side account results in lower OPERS rates and payments by the District and allows the District’s assets to be invested in a manner more consistent with long-term retirement needs.  

The Financial Plan also includes an additional $10 million in FY2022 (the subsequent biennium) to account for the likely change in the assumed discount rate. At that time, the Board and Budget Committee will be asked to consider funding another side account to offset the increased UAL. Alternatively, if no OPERS side account is funded, the $10 million would be available to offset the expected increase in OPERS rates resulting from the change in the assumed discount rate.

---

23 The District’s investment policies restrict investments to have a maturity of no more than five years whereas OPERS funded side accounts are invested consistent with long-term retirement funds.
**PURCHASED WATER PROGRAM.** Following the 2019-2021 requested budget numbers, water purchases are projected to escalate from FY2021 to FY2026 as follows in Table 6-3, listed by source:

<table>
<thead>
<tr>
<th>Source</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate ($/CCF) [1]</td>
<td>$1.367</td>
<td>$1.418</td>
<td>$1.570</td>
<td>$1.562</td>
<td>$1.710</td>
<td>$1.757</td>
</tr>
<tr>
<td>% Change</td>
<td>3.7%</td>
<td>10.7%</td>
<td>(0.5%)</td>
<td>9.5%</td>
<td>2.75%</td>
<td></td>
</tr>
<tr>
<td>Annual Cost ($ million)</td>
<td>$8.8</td>
<td>$9.1</td>
<td>$10.1</td>
<td>$10.0</td>
<td>$11.0</td>
<td>$11.3</td>
</tr>
<tr>
<td>% Change</td>
<td>3.7%</td>
<td>10.7%</td>
<td>(0.5%)</td>
<td>9.5%</td>
<td>2.75%</td>
<td></td>
</tr>
<tr>
<td>JWC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate ($/CCF) [3]</td>
<td>$0.582</td>
<td>$0.608</td>
<td>$0.636</td>
<td>$0.664</td>
<td>$0.694</td>
<td>$0.725</td>
</tr>
<tr>
<td>% Change</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Purchase (MGD) [4]</td>
<td>7.35</td>
<td>7.42</td>
<td>7.49</td>
<td>7.56</td>
<td>7.63</td>
<td>7.70</td>
</tr>
<tr>
<td>Annual Cost ($ million)</td>
<td>$2.1</td>
<td>$2.2</td>
<td>$2.3</td>
<td>$2.5</td>
<td>$2.6</td>
<td>$2.7</td>
</tr>
<tr>
<td>% Change</td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td><strong>Total Annual Cost</strong></td>
<td><strong>$10.9</strong></td>
<td><strong>$11.3</strong></td>
<td><strong>$12.4</strong></td>
<td><strong>$12.5</strong></td>
<td><strong>$13.6</strong></td>
<td><strong>$14.0</strong></td>
</tr>
<tr>
<td>% Change</td>
<td>4.1%</td>
<td>9.7%</td>
<td>0.6%</td>
<td>8.7%</td>
<td>3.3%</td>
<td></td>
</tr>
</tbody>
</table>

[1] Portland rate forecast provided by Portland.
[3] JWC rates escalated from current rate by 4.5% per year.

In FY2027, the melded cost of the District’s water will drop due to the change in source water supplies. As presented in Figure 3-3, the Forecast assumes that the District will purchase more JWC water after switching its other source from Portland to the WWSS. By doing so, overall source water costs decline by $5.8 million (41%) in FY2027.

**PUMPING POWER COSTS (PURCHASED WATER).** Pumping power costs are also included in the District’s Purchased Water Program. Currently, the District incurs these costs for moving water from its 385, 426, and 435 pressure zones to higher elevations in its service area.

Pumping power costs are projected to escalate from the FY2021 requested budget at an annual rate of 4.5% until FY2026. However, when the District switches its gravity-fed water supply (Portland) to a pumped source (WWSS), pumping power costs will increase by more than $1 million, from $616,000 in FY2026 to $1.65 million in FY2027.

When the WWSS pumping costs are added to in-District pumping and combined with the FY2027 reduction in source water costs, the net decrease in Purchased Water shown in Table 6-2 is approximately $4.75 million. After FY2027, Purchased Water Program costs are projected to escalate at approximately 4.95% in FY2028, then slow gradually to 4.5% annual increases in FY2036 and beyond.
CAPITAL EXPENDITURES (CAPITAL OUTLAY). The District’s CIP is described in Section 4 of this Financial Plan, while detailed project cost estimates and descriptions are included in Appendix B – Capital Improvement Plan.

Capital outlays from O&M are also included as Capital Outlay in Table 6-2. These outlays are minor in comparison to the CIP, starting at approximately $550,000 in FY2022 and escalating 4.5% annually.

NET INCREASES IN RESERVES (BUILDING RESERVES). In years when the District will use WIFIA and revenue bond funding for portions of its capital expenditures, revenue from rates and other sources may be available to increase reserve balances, thereby making it available for use in future years.

DEBT SERVICE. Projected debt service is driven by the capital financing mix discussed in Section 5.2.1 – Target Cash and Debt Financing Profile and the debt program assumptions detailed in Section 5.3.

6.5 Detailed Financial Projections

Appendix E – Forecast Model Summary Results includes a copy of detailed projections from the summary version of the District’s Forecast model.
7 Funds and Reserves

Reserves are critical to the prudent financial management of any utility. Adequate reserve levels can provide the necessary funding in low sales years or offset emergency capital projects, both minimizing the impacts to rates in the short-term. This section presents the summary reserves that the District uses in the Forecast model. The projections in this section demonstrate that the District will have enough liquidity to meet both its operating and capital investment commitments.

Before presenting the summary reserves and results from the Forecast model, however, it may help to understand the District’s budgetary fund structure and how the District combines some funds (and ignores others) for financial planning purposes. The District’s budget and accounting systems are structured around the following funds (fund titles italicized):

- On a day-to-day basis, all administration, operations, and maintenance activities are accounted for in the General Fund.
- Construction and capital improvement activities are accounted for in the Capital Improvement Fund.
- The Capital Reserve Fund is used to hold resources available for current and future capital investments for the District.
- Historically, the Revenue Bond Debt Service Fund accounted for the District’s debt service obligations.
- The District is a member of, and provides management services for, the Willamette River Water Coalition (WRWC), and accounts for these activities in a separate fund.
- The Customer Emergency Assistance (CEA) Fund accounts for the resources and requirements used to provide limited emergency assistance to qualified District customers.
- Introduced in a supplemental budget for 2017-2019 Biennial Budget is the Willamette Intake Facilities Fund, which accounts for the activities of the WIF Commission; an intergovernmental agreement among TVWD and six neighboring cities.
- New in the 2019-2021 Biennial Budget is the Willamette Water Supply System Fund, which accounts for the activities of the WWSS Commission; an intergovernmental agreement among TVWD and the cities of Hillsboro and Beaverton.

Each of these funds is described below.

7.1 Description of District Funds

GENERAL FUND (FUND 01). All six of the District’s operating departments and District staff are accounted for in the General Fund. Additionally, the Purchased Water budget is in the General Fund as a non-departmental expenditure. Purchased Water represents the District’s single largest Materials and Services (M&S) expenditure.

CAPITAL IMPROVEMENT FUND (FUND 11). The Capital Improvement Fund does not maintain a fund balance. All reserves for capital investments are held in the Capital Reserve Fund and transferred to the Capital Improvement Fund as needed. The sole resource for the Capital Improvement Fund is to receive transfers from the Capital Reserve Fund and account for capital expenditures.

CAPITAL RESERVE FUND (FUND 18). The Capital Reserve Fund is used to hold resources available for current and future capital investments for the District. The use of the Capital Reserve Fund allows the
flow of funds for current and future uses to be managed in a transparent manner consistent with budgeting best practices. In anticipation of the significant costs associated with WWSP, the District has increased its reserves deliberately. These reserves are easily monitored in a single fund.

**DEBT PROCEEDS FUND (FUND 22).** The Debt Proceeds Fund is used to hold resources from debt issuances that are available to fund capital expenditures of the District. The use of the Debt Proceeds Fund allows the flow of funds for current and future uses to be managed in a transparent manner consistent with budgeting best practices.

**REVENUE BOND DEBT SERVICE FUND (FUND 31).** The Revenue Bond Debt Service Fund accounts for the District’s obligations for principal and interest payments on its outstanding revenue bonds. The District fully redeemed its last outstanding revenue bonds in June of 2015, however, the fund is maintained for future use.

**WILLAMETTE RIVER WATER COALITION (FUND 41).** This partnership fund is used to account for the Willamette River Water Coalition (WRWC), a coalition of four local governments of which the District is a member. The organization’s purpose is to preserve access to the Willamette River as a municipal and industrial water source. The budget is set by the WRWC governing body and administered by the District. Resources for the WRWC Fund come from member agency dues based on a formula agreed to in an intergovernmental agreement.

**CUSTOMER EMERGENCY ASSISTANCE FUND (FUND 43).** The purpose of the Customer Emergency Assistance (CEA) Fund is to account for the resources and requirements used to provide limited emergency assistance to qualified District customers. The resources for the CEA Fund are transferred in from the General Fund and come from voluntary contributions from customers, District staff, and the Board. A third-party administrator reviews and qualifies requests from customers facing temporary financial hardships. Any unspent funds remaining at the end of each budgetary period remain in the CEA Fund to meet future customer assistance needs.

**WILLAMETTE INTAKE FACILITIES (FUND 44).** The WIF Fund accounts for the activities of the WIF Commission; an intergovernmental agreement whose members include the cities of Beaverton, Hillsboro, Sherwood, Tigard, Tualatin, Wilsonville, and TVWD. The WIF owns, operates, and maintains the intake facilities at the Willamette River Water Treatment Plant in Wilsonville for the benefit of its members. As the Managing Agency, TVWD incorporates the budget adopted by the WIF Board of Commissioners into the District’s biennial budget. Resources for the fund include member dues and contributions for capital outlay. The WIF is audited separately and the fund is not included as part of TVWD’s audited financial statements.

**WILLAMETTE WATER SUPPLY SYSTEM (FUND 45).** The WWSS Fund accounts for the activities of the WWSS Commission; an intergovernmental agreement among the cities of Beaverton, Hillsboro, and TVWD. The WWSS Commission was established to design and construct the Willamette Water Supply System by 2026, and will own, operate, and maintain the assets that make up the system for the benefit of the partners. As the Managing Agency, TVWD incorporates the budget adopted by the WWSS Board of Commissioners into the District’s biennial budget. Resources for the fund include member dues and contributions for capital outlay. The WWSS is audited separately and the fund is not included as part of TVWD’s audited financial statements.
7.2 Projected Reserve Balances

The Forecast is a cash flow model designed for financial planning around the District’s future cash requirements. As such, the District uses it to forecast reserves rather than funds. In doing so, some of the Funds described in Section 7.1 above are either combined into a cash reserve, while most are excluded from the Forecast altogether.

For example, some of the Funds listed above were established only for managing partnerships. Funds 41, 44, and 45 exist to account for the activities of various partnerships, where the costs and partner contributions are tracked for budgeting, accounting, and reporting purposes.

In contrast, the Forecast is only concerned with the District’s revenue requirements and how those requirements will be met with available cash (including liquid investments) and future debt. Therefore, partner costs shares are not included, and the District’s costs are tracked as uses of cash reserves and debt proceeds (from debt issued to the District only). For this reason, it is unnecessary to forecast the District’s Funds. Rather, the following Reserves are tracked for financial planning purposes:

- **Cash & Investments**
  - Includes the estimated combined balance of the General Fund (Fund 01) and Capital Reserves Fund (Fund 18).
  - Sources of Funds include all Rate Revenue and Other Revenue described in Section 6.3.
  - Uses of Funds include:
    - All O&M Costs and Purchased Water described in Section 6.4.
    - Capital Outlays from O&M Budget which is mentioned under Capital Expenditures (Capital Outlay) in Section 6.4.
    - Transfers to other Reserves for capital expenditures and debt service.

- **Bond Proceeds Reserve**
  - Sources of Funds are future revenue bond issuances, as outlined in Section 5 – Capital Financing Plan.
  - Uses of Funds include splitting each revenue bond issuance into:
    - Issuance costs,
    - Debt reserve requirement, and
    - Proceeds for capital expenditures.
  - The Forecast assumes that 100% of each revenue bond issuance will be spent or transferred to another Reserve for one of these purposes in the year it is issued. Therefore, this Reserve does not carry a balance.

- **Revenue Bond Debt Service Reserve**
  - Sources of Funds include transfers for debt service and bond reserve requirements.
  - Interest earnings on reserve balances also accumulate in this Reserve.
  - Revenue bond debt service is the only Use of Funds from this Reserve.

- **Reimbursement Fee SDC Account**
  - The reimbursement fee portion of SDC receipts is tracked as the Source of Funds in this Reserve.
  - In each Forecast year, all SDC receipts are used to fund a portion of capital expenditures.
  - This Reserve carries no balance.
• Improvement Fee SDC Account
  o The improvement fee portion of SDC receipts is tracked as the Source of Funds in this Reserve.
  o In each Forecast year, all SDC receipts are used to fund a portion of capital expenditures.
  o This Reserve carries no balance.

• WIFIA Reserve
  o Sources of Funds include:
    ▪ WIFIA proceeds, as outlined in Section 5 – Capital Financing Plan, and
    ▪ Transfers for WIFIA loan repayments.
  o Uses of Funds include:
    ▪ Issuance costs,
    ▪ Proceeds for capital expenditures, and
    ▪ WIFIA loan repayments.
  o The Forecast assumes that 100% of each WIFIA draw will be spent in the year it is issued and future WIFIA loan repayments will be transferred in annually from Cash & Investments. Therefore, this Reserve does not carry a balance.

Figure 7-1 presents the District’s projected cash reserve balances over the 10-year presentation period.

![Figure 7-1: Projected Year-End Cash Balances by Fiscal Year](image)

As shown in Figure 7-2 and Figure 7-3 on the next page, the District is projecting that its Cash & Investments Reserves and Debt Service Reserve will meet their balance targets (250 days of O&M and MADS, respectively) throughout the presentation period.
7.3 Conclusion

As stated in Section 1.3, many assumptions were employed in the financial planning analysis underlying this document. For this reason, the projected results presented are not concrete in nature and should be considered as planning estimates.

In the future, the actual rate adjustments required to fund the District’s revenue requirements may vary from the estimates presented in Section 6, and the resulting reserve balances will vary from the projections shown above. As time passes and projections become reality, future capital requirements, O&M costs, customer demands, and other assumptions will influence the accuracy of these estimates. Therefore, the District will continue to take great care to mitigate risk by following prudent management practices, including reviewing rates and revenues annually (at a minimum) to see if additional adjustments are necessary.
Appendices

The following subsections contain supporting documents and other related materials including:

A – Financial Management Policies
B – Capital Improvement Plan
C – Ordinance 01-19 – Authorizing the Issuance of Debt
D – Draft Master Revenue Bond Declaration
E – Forecast Model Summary Results
F – Map – Tualatin Valley Water District (Washington County, Oregon)
A. Financial Management Policies

FINANCIAL MANAGEMENT POLICIES
Tualatin Valley Water District

Overview

March 20, 2019
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## TVWD Financial Plan

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1 INTRODUCTION

1.1 PURPOSE

The purpose of these Financial Management Policies ("Policies and/or Policy") is to guide the Tualatin Valley Water District's (District's) financial management efforts, including policies related to financial planning, budgeting, debt management, accounting and reporting, business case evaluations, and related matters. These policies affirm the commitment of the District's Board of Commissioners (the "Board") to the practices of sound financial management.

The Government Finance Officers Association (GFOA) recommends adopting financial management policies as a best practice. The GFOA states:

Financial policies are central to a strategic, long-term approach to financial management. Some of the most powerful arguments in favor of adopting formal, written financial policies include their ability to help governments:

1. Institutionalize good financial management practices. Formal policies usually outlive their creators, and, thus, promote stability and continuity. They also prevent the need to re-invent responses to recurring issues.

2. Clarify and crystallize strategic intent for financial management. Financial policies define a shared understanding of how the organization will develop its financial practices and manage its resources to provide the best value to the community.

3. Define boundaries. Financial policies define limits on the actions staff may take. The policy framework provides the boundaries within which staff can innovate in order to realize the organization’s strategic intent.

4. Support good bond ratings and thereby reduce the cost of borrowing.

5. Promote long-term and strategic thinking. The strategic intent articulated by many financial policies necessarily demands a long-term perspective from the organization.

6. Manage risks to financial condition. A key component of governance accountability is not to incur excessive risk in the pursuit of public goals. Financial policies identify important risks to financial condition.


1.2 GOALS AND OBJECTIVES

These Policies sets forth the guidelines for the management of the District’s financial affairs. These Policies establish requirements that recognize the District's specific financial, capital, and
accounting requirements, its ability to fulfill its financial obligations, and the existing legal, economic, financial conditions. Specifically, the Policies are intended to assist the District in the following:

- Establishing accounting procedures;
- Making business decisions for operations and capital expenditures;
- Evaluating available debt issuance options;
- Protecting the District’s financial resources;
- Maintaining appropriate capital assets for present and future needs;
- Promoting sound financial management through accurate and timely information on financial conditions;
- Protecting and enhancing the District’s credit rating(s);
- Controlling appropriations processes by developing budgets consistent with Oregon local budget law; and
- Protecting the legal use of the District’s financing authority through an effective system of internal controls.

The District’s investment policy is maintained separately and approved separately by the Board as required by Oregon law.

1.3 ROLES AND RESPONSIBILITIES

The Chief Financial Officer (CFO) is the designated administrator of these Policies. The CFO shall have the day-to-day responsibility and authority for implementing and managing the District’s accounting, debt, and finance programs.

The Board acknowledges that changes in the accounting standards, capital markets and other events may create situations and opportunities that are not contemplated by these Policies. These unexpected events may require adjustments or exceptions to the guidelines of these Policies. In such circumstances, the ability of the District to be flexible is important; however, any authorization granted by the Board to proceed with using a debt instrument not expressly permitted by the Policies must be approved by the Board before the action is taken by the District.

The Board shall review and adopt these Policies at least biennially.

2 LONG-RANGE FINANCIAL PLAN

2.1 PURPOSE

This Policy provides guidance on conducting the District’s long-range financial plan (Financial Plan). The Policy includes specific limits and requirements to guide the District’s long-range financial plan.

Long-term financial planning combines financial forecasting with strategic planning. The process of developing a long-range financial plan is a highly collaborative and considers future scenarios.
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and helps the District navigate challenges. Long-term financial planning works best as part of an overall strategic plan.

Financial forecasting is the process of projecting revenues and expenditures over a long period, using assumptions about economic conditions, future spending scenarios, and other important variables. Long-term financial planning is the process of aligning financial capacity with long-term service objectives. Financial planning uses forecasts to provide insight into future financial capacity so that strategies can be developed to achieve long-term sustainability considering the District’s service objectives and financial challenges.

2.2 GOALS

The District’s long-term financial planning process is intended to stimulate discussion and create a long-range perspective for the Board and other decision makers. The Financial Plan assists in avoiding financial challenges; stimulating long-term and strategic thinking; creating a consensus on long-term financial direction; and communicating with internal and external stakeholders.

This Policy sets forth the guidelines for the development and maintenance of the District’s Financial Plan. The Policy establishes parameters which recognize the District’s specific financial situation and long-term goals. Specifically, the Policy is intended to assist the District in the following:

1. Setting water rates over the long term, thereby avoiding unnecessary and/or unexpected large increases in rates and customer bills.

2. Providing the Board, customers, and the debt market insight into the District’s long-term financial needs.

3. Promoting sound financial management through long-range planning.

4. Contributing to the preservation or enhancement of the District’s credit rating(s).

5. Informing the biennial operating and capital budget development process by identifying current budgetary needs and considering the phasing of changes to service levels, particularly capital improvement projects.

2.3 REQUIREMENTS

2.3.1 Biennial Preparation of Financial Plan

At least biennially, the CFO shall work with the District’s Chief Executive Officer (CEO), Chief Engineer, and other managers to update the District’s Financial Plan that forecasts the District’s financial needs and financial results for no fewer than 10 years. Once prepared, the CFO shall present the proposed Financial Plan to the Board for its consideration and approval. Once approved, the CFO shall update Appendix A of this document to reflect the financial planning assumptions contained in the Board-approved Financial Plan.
2.3.2 Required Components of Financial Plan

At a minimum, the Financial Plan shall include:

1. Forecast of sources and uses of funds.
2. Forecast of operating expenses.
3. Forecast of capital expenditures.
4. Forecast the use of cash ("pay as you go") and debt issuance for capital needs.
5. Forecast of debt service requirements for existing debt and planned debt.
6. Project the impact of new capital projects on the District’s debt.
7. Designated levels of cash reserves and/or assumptions regarding external credit facilities (e.g., bank lines of credit) in lieu of (or in addition to) cash reserves.
8. Forecast compliance with debt covenants (e.g., additional bonds tests, debt service coverage ratios).
10. Forecast of future rate increases and revenues.

2.3.3 Financial Planning Assumptions

Appendix A presents the assumed values to be used in the District’s Financial Plan until another Board-approved financial plan results in its revision. This Appendix will be updated as described in Section 2.3.1 above.

3 DISTRICT BUDGET

3.1 PURPOSE

The District makes program and service decisions to allocate scarce resources for operational and capital needs through its budget process. As a result, the budget process is one of the most important activities undertaken by the District. The quality of decisions resulting from the budget process and the level of their acceptance depends on the budget process that is used.

3.2 GOALS

The District’s budget is intended to help decision makers (including the Board and Budget Committee) make informed choices about the provision of services and capital projects and to promote participation by the District’s stakeholders in the process. The District’s budget provides guidance to the management of the District by:

1. Establishing priorities for work during the budget period.
2. Establishing the legal spending limits for achieving those priorities.
3.3 RESPONSIBILITIES
The Board shall appoint the District’s Budget Officer by resolution. The Budget Officer is responsible for the preparation of the District’s budget in compliance with Oregon local budget law.

3.4 REQUIREMENTS

3.4.1 Biennial Budget Process
The District shall adopt a biennial budget (Budget) consistent with Oregon law. The Budget provides a short-term financial expenditure plan and promote efficiencies. The Budget shall be prepared and adopted in accordance with State legal requirements and conform to standards consistent with nationally recognized practices.

3.4.2 Citizens Budget Committee
Oregon law requires the District to have a citizens’ budget committee (Budget Committee). The Budget Committee consists of 10 members: Five citizen members appointed by the Board of Commissioners, and the five commissioners.

The citizen members of the Budget Committee shall be appointed for a term of 4 years. The appointments will be offset by two years so that at most three committee positions will have their terms end at once.

As required by Oregon law, the citizen members of the Budget Committee must be electors of the District. Should a citizen member of the Budget Committee resign, or otherwise become ineligible to serve as a citizen member, the Budget Officer shall notify the Board President of such vacancy. The Board may direct the Budget Officer, the CEO, or the CFO to undertake an effort to fill the vacant position. Vacancies in citizen member positions of the Budget Committee shall be filled by vote of the Board.

Citizen members of the Budget Committee whose term is expiring may elect to reapply to the Budget Committee. The Budget Officer shall advise the Board President of such elections and the Board shall direct the Budget Officer, the CEO, or the CFO to undertake an effort to find candidates for expiring positions. Consistent with Oregon law, the appointment of the citizen members of the Budget Committee is by official action of the Board.

3.4.3 Balanced Budget
The Budget proposed by the Budget Officer to the Budget Committee must present a balance of resources and requirements as required by Oregon law.

3.4.4 Basis of Budgeting
The District prepares its budget on a modified accrual basis. For budget purposes, the District recognizes revenues when they are both measurable and available. Measurable means the amount of the transaction can be determined and revenues are considered available when they are collected within the current period or expected to be collected soon enough thereafter to be used to pay liabilities of the current period. Expenses are recognized when the liability is incurred. An exception to this rule on recognizing expenses is debt service. The payment of debt
service is recognized when payments are due. Other accounting treatments under generally accepted accounting principles (GAAP) such as depreciation, are not considered expenses under the District’s budgetary basis.

3.4.5 Sufficiency of Operating Revenues
The District’s budget shall require that operating revenues be sufficient to cover operating expenses (excluding depreciation), and that net revenues are sufficient to comply with bond covenant requirements each year. Sufficiency of operating revenues shall be included in determining water rates, fees, and charges, as described in Sections 4.3.2, 4.3.4, and 4.3.5 below.

3.4.6 Capital Planning
The District shall periodically review and update its Water System Master Plan and Water Management and Conservation Plan to satisfy the requirements for these plans under Oregon administrative rules and statutes. The review and update should consider information contained in other planning documents and provide the District with a coordinated capital plan for system development and an overview of source options to meet growth needs.

Each biennium, the District shall develop and adopt a six-year Capital Improvement Plan (CIP) that details capital projects and fixed asset acquisitions for the District consistent with its current Water System Master Plan, Financial Plan (as described in Section 2 above), fleet and facility plans, asset management plan (as described in Section 10.3.2 below) and capital plans prepared by other agencies with whom the District has contractual or other legal obligations (e.g., the District’s joint ventures). The District’s Chief Engineer will prioritize proposed projects based on criteria reflecting the direction and policies established by the Board and needs of the District. The District’s Chief Engineer will identify significant operating expenses associated with each project that will be required when the asset is placed into service.

Where practical and in the District’s best interest, the District may use a blend of cash and debt funding for capital infrastructure. Normal repair and maintenance will be funded only with cash from operations. Debt will be considered as an optional financing mechanism for long-lived improvements and expansions or one-time major system component replacements. As part of the CIP process, the CFO will analyze the proposed capital projects so that each project is funded from an appropriate revenue source.

3.4.7 Supplemental Budgets
When necessary, the Budget Officer may notify the Board of the need to consider a supplemental budget. Supplemental budgets will be prepared and propose action shall be noticed as required by Oregon local budget law.

4 WATER RATES, FEES, AND CHARGES

4.1 PURPOSE
This Policy provides guidance on setting the District’s water rates, fees, and charges. The Policy describes the Board’s general rate-setting goals and directives.
4.2 GOALS

The District recovers its costs from water sales and other fees and charges assessed on customers. Setting rates, fees, and charges includes a combination of technical analysis and policy implementation. The goal of this Policy is to provide the District’s management guidance in setting rates, fees, and charges consistent with the Board’s Policy direction.

4.3 REQUIREMENTS

4.3.1 Cost-of-Service Framework

The District’s water rates, fees, and charges should reflect the costs of providing the various services to the District’s customers, following generally accepted ratemaking methodologies. The cost of service should include operating and capacity costs and send appropriate price signals to customers to encourage the wise use of water.

4.3.2 Water Rates

Water rates should be adjusted annually, with those annual adjustments adopted on a biennial or annual basis depending on financial planning needs (e.g. projected revenue requirements) or specific direction from the Board. The proposed water rate increases will be consistent with the Board-approved Financial Plan discussed in Section 2.3.1 above.

To the extent possible, the District should use the financial planning process to anticipate increases in costs for future years to avoid sudden and/or unexpected rate increases. The District should use the Financial Plan described in Section 2 above to inform its rate-setting process.

Consistent with Oregon law, the District will set its rates by resolution or ordinance after conducting a public hearing, if required.

4.3.3 System Development Charges

System development charges (SDCs) are intended to implement the cost-of-service framework for new and existing customers. SDCs are one-time charges made to new connections to the District’s water system to recover growth-related costs. Revenue from SDCs will not fund operations and will only be spent consistent with Oregon law.

SDCs may be updated consistent with Oregon law. SDCs will generally be updated each year during the Board’s regular meeting in February with an effective date of March 1st. Unless increased pursuant to a formal SDC study, the District may increase the SDC as allowed under Oregon law based on changes to the Engineering News Record Construction Cost Index for Seattle (ENR CCI) as published for the December prior to the SDC adoption. If SDCs are adopted to have an effective date other than March 1, the ENR CCI for another more appropriate month may be used.

4.3.4 Services Provided to Other Utilities

When in the interest of the District’s customers, the District may provide services, including the provision of wholesale water, utility billing, meter reading or other water-related services, to other utilities, including joint ventures. In such cases, the rates and fees charged to the other
utilities should, at a minimum, recover the estimated cost of providing those services. The provision of services to other utilities will require Board approval, normally through approving the signing of an intergovernmental agreement.

4.3.5 **Miscellaneous Fees and Charges**
The District assesses many fees and charges for miscellaneous services to customers and meter and service installations. In addition, the District may assess fees for development plan review and inspection, fire hydrant use permits, and penalty fees for non-payment of utility bills and unauthorized use of water or firelines. These charges should be reviewed at least biennially to reflect the cost of providing the services. When the costs of service have changed a material amount, the CFO shall propose changes to the miscellaneous fees and charges to the Board for its consideration. Fees and charges shall be set by the Board by resolution or ordinance.

4.3.6 **Forgiveness of Fees and Charges**
The CEO or designee may waive all or a portion of Other Service Charges & Penalties, as adopted by the Board, if the CEO or designee determines that it is in the equitable and best interest of the District considering the particular circumstances involved in each case.

## 5 MINIMUM FUND BALANCES AND RESERVES

### 5.1 PURPOSE
Maintaining fund balances is an important function for the District to operate efficiently over the long run. This policy guides the development of minimum cash balances that directly affect the District’s Financial Plan (See Section 2 above), rates and charges (see Section 4 above), and budget (see Section 3 above). The accumulation or use of fund balances and reserves is one mechanism that financial decision in one year can affect future years. This policy provides guidance on making those decisions.

### 5.2 GOALS
The decision to retain financial resources in fund balance or reserves directly affects:

1. Financial risks to the District from unexpected disruptions to revenue or unexpected expenditures.
2. Water rates required in the current and future years.
3. The District’s credit rating(s).
4. Other financial related matters.

Because of the nature of these effects, these Policies provide management guidance from the District’s Board in developing the various plans proposed to the Board.
5.3 REQUIREMENTS

5.3.1 Working Capital
As an enterprise fund, the District separately measures its current and non-current assets and liabilities. The District can use this distinction to calculate working capital (i.e., current assets less current liabilities). The measure of working capital indicates the relatively liquid portion of the District’s capital, which constitutes a margin or buffer for meeting obligations.

The District should maintain an adequate level of working capital to mitigate current and future risks (e.g., revenue shortfalls and unanticipated expenses) and to provide stable services and fees. Working capital is a crucial consideration, too, in the Financial Plan (See Section 2 above.) Credit rating agencies consider the availability of working capital in their evaluations of the District’s creditworthiness.

The District shall maintain working capital consistent with the levels of working capital presented in Appendix A, as revised in the future. Working capital shall be at least equal to the two months’ operations and maintenance expense (i.e., 60 days cash on hand).

5.3.2 Capital Reserves
The District’s rate setting goals include a preference to avoid sudden and/or unexpected rate increases for customers. Capital reserves are one mechanism the District can use to lower the overall costs of acquiring capital assets by saving money early in the planning process.

Capital reserve levels shall be determined through the financial planning process and identified in the District’s Financial Plan (see Section 2.3.1 above).

5.3.3 Debt Service Reserves
Debt Service Reserves shall be treated as described in Section 6.3.10.5 below.

6 DEBT FINANCING

6.1 PURPOSE
These Policies provide guidance on the issuance, structure, and management of the District’s long- and short-term debt.

6.2 GOALS
The Policy sets forth the guidelines for the issuance of debt and the management of outstanding debt. The Policy establishes certain limits which recognize the District’s capital requirements, its ability to repay financial obligations, and the existing legal, economic, financial, and debt market conditions. Specifically, the Policy is intended to assist the District in the following:

1. Evaluating available debt issuance options;
2. Maintaining appropriate capital assets for present and future needs;
3. Promoting sound financial management through accurate and timely information on financial conditions;
4. Protecting and enhancing the District’s credit rating(s); and
5. Safeguarding the legal use of the District’s financing authority through an effective system of internal controls.

6.3 REQUIREMENTS

6.3.1 Type and Use of Debt
The District shall comply with all debt limitations imposed by the Oregon Constitution, Oregon Revised Statutes (ORS), and Oregon Administrative Rules (OAR). The District will further comply with the Securities and Exchange Commission (SEC) and Municipal Securities Rulemaking Board (MSRB) rules regarding debt issuance, and with IRS regulations for tax-exempt or tax-advantaged debt.

Long-term obligations will not be used to fund operations of the District. The scope, requirements, and demands of the budget, reserve levels, the Financial Plan, and the ability or need to expedite or maintain the programmed schedule of approved capital projects, will also be considered when deciding to issue long-term debt. All borrowings will be authorized by the District’s Board.

The District is authorized to issue general obligation bonds and revenue bonds. Except in unique circumstances, the District will primarily rely on revenue bonds to fulfill its debt issuance needs.

6.3.1.1 Revenue Bonds
Revenue bonds are obligations payable from the net revenues of the District’s operations. As users of the District facilities will benefit from long-term capital investments in future years, it is appropriate that future revenues pay a share of the costs and more closely match the term of repayment to the expected economic useful life of the project being financed.

Long-term revenue bonds issued by the District shall only be used to finance and refurbish capital facilities, projects and certain equipment where it is determined to be cost effective and fiscally prudent. Revenue bonds will be structured to achieve the lowest possible net cost to the District considering market conditions, terms that are advantageous to the District, risks, the Financial Plan, and the nature and type of security to be provided.

Although revenue bonds are not subject to constitutional or statutory debt limits, the District’s debt will not exceed legal or contractual limitations, such as rate covenants or additional bonds tests imposed by then-existing financing covenants. Prior to the issuance of any new revenue bonds, the CFO will cause the impact of future debt service payments on total annual fixed costs to be analyzed.

In addition to the legal and/or contractual requirements associated with revenue bonds, the District will strive to maintain a minimum annual debt service coverage ratio of 2.0 times average annual debt service or another ratio when included in Appendix A.

6.3.1.2 General Obligation Bonds
General obligation bonds are payable from a dedicated tax levy and subject to voter approval. The District shall not generally use general obligation bonds to finance projects, other than
projects of a general public nature. In no cases shall the District’s outstanding general obligation debt exceed the statutory debt limit. General obligation bonds will mature no later than 30 years from their issue date.

6.3.1.3 Variable Rate Obligations
The District will generally seek to obtain financing through fixed rate obligations. When appropriate, however, the District may choose to issue variable rate obligations. Such variable rate obligations may pay a rate of interest that varies according to a predetermined formula or a rate of interest that is based on a periodic remarketing of securities.

Types of variable rate obligations may include variable rate demand obligations, commercial paper, and floating-rate notes. Each type of variable rate obligation carries its own risks and considerations. Prior to issuing any variable rate debt, the CFO will consult with the District’s Municipal Advisor to evaluate the risks and benefits of a particular type of debt. The Municipal Advisor will also provide a formal recommendation to the Board.

The maximum level of net variable rate obligations incurred shall not exceed the lesser of the District’s unrestricted reserves or 20% of outstanding debt. In calculating “net” variable rate debt, the District will consider interest-rate swaps. Prior to considering any interest rate swaps, the District will establish a separate swaps policy.

6.3.1.4 Anticipation Notes
The District may issue short-term notes to be repaid with the proceeds of state or federal grants/loans or other anticipated one-time revenue sources if appropriate for the project and in the best interest of the District. Generally, such grant or revenue anticipation notes (“GANs” or “RANs”) will only be issued if there is no other viable source of up-front cash for the project, although the District may elect to utilize such notes if they provide a financial benefit under the Financial Plan. Anticipation notes may be secured by a revenue pledge on parity with or subordinate to the District’s long-term revenue bonds. Prior to embarking on selling anticipation notes the District must identify a secondary source of repayment for the notes if expected grant/loan funding does not occur.

6.3.1.5 Lease Financings
Lease obligations are routine and can be an appropriate means of financing certain types of equipment. Generally, however, leases are not appropriate for long-term financing of capital assets such as land or facilities. The CFO should consider leases where lease financing will be more beneficial than funding from reserves or current revenues. The useful life of capital equipment, the term and conditions of the lease, the direct impact on debt capacity and budget flexibility will be evaluated prior to the implementation of a lease program. Cash flow sufficiency, capital program requirements, lease program structures and cost, and market factors will be considered by the CFO in conjunction with “pay-as-you-go” strategies in lieu of lease financing.
6.3.2 Federal, State, or Other Loan Programs
To the extent it benefits the District, the District may participate in federal, state, or other loan programs. The CFO shall evaluate the requirements of these programs to determine if the District is well served by employing them.

For purposes of this Policy, the District shall treat and report these obligations in a manner consistent with other similar debt instruments. To the extent required by the loans or other outstanding debt agreements, the District shall include the financial requirements of these obligations when determining additional bonds test, coverage requirements, etc.

6.3.3 Debt Refinancing
Refunding obligations may be issued to retire all or a portion of an outstanding debt issue. Economic refundings may refinance high-coupon debt at lower interest rates to effectuate debt service savings. Alternatively, the District may conduct a refunding for reasons other than cost savings, such as to restructure debt service payments, to change the type of debt instruments, to release restricted revenues, to ease administrative requirements, or to remove undesirable covenants.

The District will target current refundings (refundings within 90 days of the call date) that produce net present value savings of at least 3% of the refunded par amount of each maturity being refunded. Refundings producing less than 3% net present value savings for each maturity being refunded will be considered for other purposes, such as to restructure debt service payments, to change the type of debt instruments, to release restricted revenues, to ease administrative requirements, or to remove undesirable covenants.

The District will target advance refundings (refundings that occur more than 90 days prior to the call date of the refunded bonds) that produce net present value savings (including cash contributions and foregone interest earnings) of at least 5% of the refunded par amount of each maturity being refunded, and achieve at least 50% escrow efficiency (where escrow efficiency is defined such that negative arbitrage does not exceed 50% of net present value savings). Refundings producing less than 5% net present value savings for each maturity being refunded may be considered for other purposes, such as to restructure debt service payments, to change the type of debt instruments, to release restricted revenues, to ease administrative requirements, or to remove undesirable covenants. (As of January 2018, advance refundings may no longer be issued on a tax-exempt basis.)

The District may also consider alternatives to current and advance refundings (e.g., delayed-delivery refundings) in consultation with its Municipal Advisor and bond counsel. In evaluating such alternatives, the CFO will consider the proposed structure, and establish a required threshold of interest rate savings.

The CFO will monitor refunding opportunities for all outstanding debt obligations on a periodic basis applying established criteria in determining when to issue refunding debt and bring forth the recommended opportunities with appropriate Board actions and related documentation.
6.3.4 Debt Structure Considerations

6.3.4.1 Maturity of Debt
The final maturity of the debt shall not exceed, and preferably be less than, the remaining useful life of the assets being financed, and to comply with Federal tax regulations, the average life of a financing shall not exceed 120% of the average life of the assets being financed.

6.3.4.2 Debt Service Structure
Debt service payments for any new money debt issue will generally be structured to create approximately level debt service payments over the life of the debt. Exceptions are permitted for refunding debt that will have varying principal repayments structured to fill in the gaps created by refunding specific principal maturities. The CFO may also structure the amortization of principal to wrap around existing obligations or to achieve other financial planning goals. Deferring the repayment of principal should be avoided except in select instances where it will take time before project revenues are sufficient to pay debt service.

6.3.4.3 Lien Structure
Senior and subordinate liens may be used to maximize the most critical constraint, either cost or capacity, thus allowing for the most beneficial leverage of revenues.

6.3.4.4 Capitalized Interest
The District may elect to fund capitalized interest in connection with the construction of certain projects, if revenue from such projects is not initially available to pay debt service on related debt. Additionally, the District may consider funding capitalized interest if such a strategy will minimize the financial impact to or such borrowing on District ratepayers.

6.3.4.5 Reserve Funds
A reserve fund for a debt issuance may be required for credit rating or marketing reasons. If required, such reserve fund can be funded with:

1. The proceeds of a debt issue,
2. The reserves of the District, or
3. A surety policy.

A cash reserve fund will be invested pursuant to the investment restrictions associated with the respective financing documents and the District’s separate investment policy. For each debt issue, the CFO will evaluate whether a reserve fund is required for credit rating or marketing purposes and the benefits of funding or maintaining the reserve requirement with cash or a surety policy, in addition to determining the benefits of borrowing the necessary funds or using cash reserves.

6.3.4.6 Redemption Provisions
In general, the District will have the right to optionally redeem debt at par no later than 10 1/2 years after issuance. Redemption provisions will be established on a case-by-case basis, taking into consideration market conditions and the results of a call option analysis prior to the time of sale. Because the issuance of non-callable debt may restrict future financial flexibility, cost will not be the sole determinant in the decision to issue non-callable debt.
6.3.4.7 Credit Enhancement
Credit enhancement (e.g., bond insurance or letters of credit) on District financings will only be used when net debt service is reduced by more than the cost of the enhancement. The District will evaluate the availability and cost/benefit of credit enhanced debt versus unenhanced debt prior to issuing any debt.

6.3.5 Method of Sale
The District will select a method of sale that is the most appropriate when considering the financial, market, transaction-specific and District-specific conditions and advantages. There are three basic methods of sale: Competitive Sale, Negotiated Sale, and Direct Placement. Each type of debt sale has the potential to provide the lowest cost given the right conditions. The CFO will select the most appropriate method of sale considering the prevailing financial, market and transaction-specific conditions. If a negotiated sale is expected to provide overall benefits, the senior managing underwriters and co-managers shall be selected through the process described below.

6.3.6 Investment of Proceeds
Investment of proceeds are subject to the District’s separately adopted Investment Policy. The District shall competitively bid the purchase of securities, investment agreements, float contracts, forward purchase contracts and any other investment products used to invest proceeds of a financing. The District shall comply with all applicable Federal, State, and contractual restrictions regarding the use and investment of financing-related funds. The primary investment objectives are safety, liquidity, and yield. The District’s independent investment advisor must be a registered Investment Advisor. The District shall diversify investments to reduce risk exposure to providers, types of investment products and types of securities held. The District will require that all fees resulting from investment services or sale of products to the District be fully disclosed to the District (including fees paid by third parties) to avoid actual or perceived conflicts of interest on whether the investments are being purchased at a fair market price, consistent with the District’s Investment Policy.

6.3.7 Credit/Ratings Objectives
The District’s objective is to maintain an appropriate credit rating (or ratings) considering the District’s financial condition as a way of balancing financing costs and cash flow. The CFO shall be responsible for implementing and managing the District’s credit rating agencies relations program. This effort shall include providing the rating agencies with the District’s annual budget, financial statements and other information they may request. Full disclosure of operations will be made to the credit rating agencies. The CFO shall also coordinate periodic meetings with the rating agencies and communicate with them prior to each debt issuance. The District will evaluate the benefits of a higher rating at lower debt cost versus a lower rating that provides more debt capacity and flexibility.

6.3.8 Investor Relations
The CFO shall be responsible for implementing and managing the District’s investor relations program. The CFO will also be responsible for responding to inquiries from institutional and retail investors, and for proactively communicating with such investors if necessary. Such
communication shall be made only as permitted under applicable federal securities laws, in consultation with the District’s bond counsel.

6.3.9 Tax and Arbitrage Rebate Compliance
The District will comply with all financing covenants to maintain the validity of the issuance of debt, including, but not limited to tax-exemption, Arbitrage Rebate compliance, insurance provisions, reporting and monitoring requirements. Any instance of noncompliance will be reported to the Board.

6.3.9.1 Post Issuance Tax Compliance
6.3.9.1.1 External Advisors and Documentation
The District shall consult with bond counsel and other legal counsel and advisors, as needed, throughout the debt issuance process to identify requirements and to establish procedures necessary or appropriate so that the bonds or other obligations will continue to qualify for tax-exempt status, if applicable. Those requirements and procedures shall be documented in the tax certificate and agreement (“Tax Certificate”) and/or other documents finalized at or before issuance of the bonds. Those requirements and procedures shall include future compliance with applicable arbitrage rebate requirements and certain other applicable post-issuance requirements of federal tax law throughout (and, in some cases, beyond) the term of the bonds. This shall include, without limitation, consultation in connection with any potential changes in use of bond-financed or refinanced assets.

The District may engage expert advisors (each a “Rebate Service Provider”) to assist in the calculation of arbitrage rebate payable in respect of the investment of bond proceeds, unless the Tax Certificate documents that arbitrage rebate will not be applicable to an issue of bonds. Unless otherwise provided by the transaction documentation relating to the bonds, unexpended bond proceeds shall be segregated from other funds of the District, and the investment of bond proceeds shall be managed by the District. The District shall prepare (or cause to be prepared) regular, periodic statements regarding the investments and transactions involving bond proceeds.

6.3.9.1.2 Arbitrage Rebate and Yield
Unless the Tax Certificate documents that arbitrage rebate will not be applicable to an issue of bonds, the CFO, or persons reporting to the CFO, shall be responsible for:

1. Either (1) engaging the services of a Rebate Service Provider and, prior to each rebate calculation date, causing the trustee or other financial institution to deliver periodic statements concerning the investment of bond proceeds to the Rebate Service Provider, or (2) undertaking rebate calculations themselves and retaining and obtaining periodic statements concerning the investment of bond proceeds;

2. Providing to the Rebate Service Provider additional documents and information reasonably requested;

3. Monitoring efforts of the Rebate Service Provider;
4. Assuring payment of required rebate amounts, if any, no later than 60 days after each five-year anniversary of the issue date of the bonds, and no later than 60 days after the last bond of each issue is redeemed;

5. During the construction period of each capital project financed in whole or in part by bonds, monitoring the investment and expenditure of bond proceeds and consulting with the Rebate Service Provider to determine compliance with any exceptions from the arbitrage rebate requirements during each 6-month spending period up to 6 months, 18 months, or two years, as applicable, following the issue date of the bonds; and

6. Retaining copies of all arbitrage reports, investment records, and trustee statements.

6.3.9.1.3 Use of Bond Proceeds and Bond-Financed or Refinanced Assets
The CFO, or persons under the supervision of the CFO, shall be responsible for:

1. Monitoring the use of bond proceeds (including investment earnings and reimbursement of expenditures made before bond issuance) and the use of the financed asset throughout the term of the bonds to ensure compliance with covenants and restrictions set forth in the Tax Certificate relating to the bonds;

2. Maintaining records identifying the assets or portion of assets that are financed or refinanced with proceeds of each issue of bonds (including investment earnings and reimbursement of expenditures made before bond issuance), including a final allocation of the bond proceeds documented on or before the later of 18 months after an expenditure is paid or the related project is placed in service, and in any event before the fifth anniversary of the bond issuance;

3. Consulting with bond counsel, other legal counsel, and other advisors in the review of any change in use or transfer of bond-financed or refinanced assets to ensure compliance with all covenants and restrictions set forth in the Tax Certificate relating to the bonds;

4. To the extent the District discovers that any applicable tax restrictions regarding use of bond proceeds and bond-financed or refinanced assets will or may be violated, consulting promptly with bond counsel, other legal counsel, and other advisors to determine a course of action to preserve the tax-exempt status of the bonds (if applicable).

6.3.10 Disclosure Documents
The District is required to provide disclosure, generally in the form of an official statement, relating to each public offering of debt. The District is responsible for providing complete and accurate information to be included in the official statement and is responsible for the overall content of the document, although it may rely on an external party (e.g., bond counsel or disclosure counsel) to assist in the creation of the document.
6.3.10.1 Primary Disclosure Policies
The CFO will serve as the focal point for information requests relating to official statements to be used in the initial offering of the District’s borrowings. The CFO will request information required for disclosure to investors and rating agencies from relevant departments and will sign a statement attesting to the accuracy and completeness of the information therein. The Board will be provided with a copy of the official statement for each issue of debt.

6.3.10.2 Continuing Disclosure Policies
Under Rule 15c2-12 of the Securities and Exchange Commission, adopted under the Securities Exchange Act of 1934, the District is required to enter into a contract to provide “secondary market disclosure” relating to each publicly offered bond issue (referred to as an “undertaking”). The CFO shall review any proposed undertaking to provide secondary market disclosure and negotiate any commitments therein. Additionally, bonds sold via the direct placement method may have specific disclosure requirements required by the purchaser.

The District will ensure compliance with all continuing disclosure requirements as part of its ongoing debt program. The CFO, or persons under the supervision of the CFO, shall have a clear understanding of the continuing disclosure requirements for each bond transaction.

Internal procedures shall be developed that identify the information that is obligated to be submitted in an annual filing, the dates on which filings are to be made, list the events required to be disclosed, and identify the person responsible for making the filings.

The Comprehensive Annual Financial Report (CAFR) may fulfill annual financial information filing obligations. The information provided in a CAFR does not have to be replicated when filing with the Electronic Municipal Market Access (EMMA) portal. If the District agrees to furnish information that is outside the scope of its CAFR, that information may be included as a supplement to the CAFR when filing with EMMA. On its completion, the CAFR should be immediately submitted to EMMA.

Each time the District issues new bonds, the CFO (in consultation with bond counsel and the municipal advisor) will review the District’s compliance with prior continuing disclosure undertakings and make any necessary corrective filings.

In addition to continuing disclosure undertakings associated with public bond offerings as required by SEC Rule 15c2-12, the District may also be subject to ongoing reporting requirements associated with other debt obligations, such as bank loans. The CFO shall also be responsible for ensuring compliance with such reporting requirements.

6.3.11 Consultants and Advisors
6.3.11.1 Municipal Advisor
The District will retain an independent registered municipal advisor (MA) through a competitive process administered by the CFO at least every five years. Selection of the District’s MA should be based on the following:

1. Experience in providing consulting services to issuers similar to the District;
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2. Meets all regulatory requirements;

3. Knowledge and experience in structuring and analyzing large complex debt issues;

4. Ability to conduct competitive selection processes to obtain related financial services (including underwriters and other service providers);

5. Experience and reputation of assigned personnel; and

6. Fees and expenses.

The District expects that its MA will provide objective advice and analysis, maintain confidentiality of District financial plans, and fully disclose any potential conflicts of interest.

6.3.11.2 Bond Counsel
For all debt issues, the District will engage and retain an external bond counsel through a competitive process administered by the CFO at least every five years. Where required by the lender and/or investors, debt issued by the District will include a written opinion by a nationally recognized bond counsel affirming that the District is legally authorized to issue the debt, stating that the District has met all state constitutional and statutory requirements necessary for issuance, and determining the debt’s federal income tax status. Bond Counsel may also draft the Official Statement in lieu of having a separate disclosure counsel.

6.3.11.3 Disclosure Counsel
The District may engage and retain, when appropriate, Disclosure Counsel through a competitive process administered by the CFO to prepare official statements for debt issues. Disclosure Counsel will be responsible for providing that the official statement complies with all applicable rules, regulations, and guidelines. Disclosure Counsel will be a nationally recognized firm with extensive experience in public finance.

6.3.11.4 Underwriters
For negotiated sales, underwriters will be required to demonstrate sufficient capitalization and experience related to the debt issuance. The CFO will establish a pool of qualified underwriters through a competitive process at least every five years and may designate one or more firms as eligible to be senior managers and one or more firms as eligible to be co-managers. Criteria to be used in the appointment of qualified underwriters will include:

1. Quality and applicability of financing ideas;

2. Demonstrated ability to manage complex financial transactions;

3. Demonstrated ability to structure debt issues efficiently and effectively;

4. Demonstrated ability to sell debt to institutional and retail investors;
5. Demonstrated willingness to put capital at risk;
6. Experience and reputation of assigned personnel;
7. Past performance and references; and
8. Fees and expenses.

If an underwriting pool is established, the CFO will regularly monitor the performance of the members of the underwriting pool and recommend changes as appropriate.

6.3.12 Reporting Requirements
The CFO will report to the Board on a quarterly basis the following information:

1. A summary of outstanding debt obligations to include the series name, original amount of issuance, outstanding principal amount, issue date, maturity dates, interest rates, and annual debt service;
2. The amount of the net variable rate obligation and percentage as compared to outstanding debt, if applicable;
3. Other considerations if applicable, including (but not limited to): refunding opportunities, performance of variable rate obligations, and/or proposed new debt issuances.

7 ACCOUNTING STANDARDS AND FINANCIAL REPORTING

7.1 PURPOSE
This Policy provides guidance to management on the accounting standards to be used by the District and the expectations for financial reporting.

7.2 GOALS
Providing accurate, transparent, and reliable accounting of the District’s financial performance is important to the public, investors, and other District stakeholders. Furthermore, the timely disclosure of the District’s financial performance helps those stakeholders better assess the District’s financial condition. These policies will provide management guidance it needs to produce and disseminate timely financial statements that meet those needs.

7.3 REQUIREMENTS
7.3.1 Basis of Accounting
The District’s financial statements are maintained on the flow of economic resources measurement focus using the accrual basis of accounting and accounting principles applicable to governmental enterprise funds. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recognized when liabilities are incurred.
TVWD Financial Plan

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The District shall prepare its financial statements using the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (generally accepted accounting principles or “GAAP”) issued by the Governmental Accounting Standards Board (GASB) applicable to governmental entities that use proprietary fund accounting.

7.3.2 Reporting Entity
GAAP require that the reporting entity include: (1) the primary government, (2) organizations for which the primary government is financially accountable, and (3) other organizations for which the nature and significance of their relationship with the primary government are such that exclusion would cause the reporting entity’s financial statements to be misleading or incomplete.

The District is governed by its Board of Commissioners whose members are elected directly by the citizens residing within the District. As such, the District is, by definition, a primary government.

7.3.3 Capitalization Standards
The District capitalizes expenditures on assets that have a useful life exceeding one year and an original cost of $7,500 or more. To be capitalized, an expenditure must meet the other capital-asset requirements under GAAP.

7.3.4 Depreciable Lives and Depreciation Rates
The District shall determine depreciation rates for classes of assets and, when appropriate, individual assets, based on the expected useful lives of the assets considering local conditions within the District. Estimates of the depreciable lives shall be based on engineering assumptions for the District and operational experience. Unless otherwise more appropriate, the depreciation rates shall be calculated to recover the original costs using a straight-line basis over the depreciable life of an asset.

7.3.5 Accounting for Joint Ventures
The District participates in various joint ventures with neighboring water providers. In some cases, the District acts as the managing agency for joint ventures. When acting as the managing agency and authorized by the intergovernmental agreement (IGA) that forms the joint venture, the District will prepare separate financial statements for the joint venture. When appointed as the managing agency and required by the IGA that forms the joint venture, the District’s Board and Budget Committee will also serve as the local budget law authority for the joint venture. In those cases, the Board will adopt budgets consistent with the requirements of the joint venture(s) to enable the District to fulfill its duties and the managing agency.

7.3.6 Valuation of Inventory
Inventory of materials and supplies is stated at cost using average cost and is charged against operations as used.
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7.3.7 **Indirect Cost Allocation Plan**
The CFO will cause the District to maintain an indirect cost allocation plan suitable for allocating overhead costs to the various joint ventures and contracts the District manages and the capital projects it undertakes. The CFO may engage the services of professional consultants from time-to-time to review and update the indirect cost allocation plan.

7.3.8 **Financial Reports**

7.3.8.1 **Monthly Financial Reports**
The CFO shall provide the Board with unaudited reports on the District’s financial performance each month. These reports shall be available to the Board within 30 days of the close of the month. Subsequent adjustments to prior months financial reports are expected to account for routine month-end and year-end closing activities.

7.3.8.2 **Comprehensive Annual Financial Report**
Although not required by law, the District embraces the recommendation of the Government Finance Officers Association recommendation to issue its financial reports in the form of a Comprehensive Annual Financial Report (CAFR) within 180 days of the close of the fiscal year.

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8 **INTERNAL CONTROLS**

8.1 **PURPOSE**
Internal controls are those management means used to mitigate the risk that the District’s economic resources are not properly used. Internal controls focus on operational effectiveness and efficiency, fraud prevention, reliable financial reporting, and compliance with laws, regulations, and policies. Policies on internal controls are important to managing the District’s risks.

8.2 **GOALS**
The goals of these Policies are to:

1. Manage the risk that financial transactions bring to the District.

2. Establish the legal authority of the procurement function within the District.

3. Simplify, clarify, and reflect the District’s approach to maintaining internal controls.

4. Enable uniform internal controls throughout the District.

5. Build public confidence in the District’s stewardship of its economic resources and management of its risks.

6. Safeguard the integrity of the District’s procurement and accounting systems and protect against corruption, fraud, waste, and abuse.
8.3 REQUIREMENTS

8.3.1 Purchasing Goods and Services for the District

The District purchases various goods and services from many vendors with differing business models. The District’s internal controls are intended to govern those procurement matters subject to the District’s Local Contract Review Board Rules. The procurement rules and the internal controls that assess compliance with those rules are intended to:

1. Provide for the fair and equitable treatment of everyone who deals with procurement.

2. Increase efficiency, economy, and flexibility in the District’s internal controls activities and maximize the District’s purchasing power.

3. Foster effective broad-based competition from the District’s suppliers.

There are three requirements to procure goods or services for the District. These requirements are:

1. Compliance with formal procurement rules. To achieve compliance with state law and the Local Contract Review Board Rules, all purchases must follow District procurement rules.

2. Proper authorization for the purchase. The District has established dollar limits that provide varying levels of authorization for employees to purchase on behalf of the District. This Policy formalizes the requirements for receiving and/or confirming the authorization for purchase.

3. Approval requirements for payments. These policies set forth the approval requirements.

The CFO shall maintain and publish guidelines and rules to facilitate the above-listed objectives.

8.3.1.1 Purchasing Limits

8.3.1.1 Authorization for Purchases

In consultation with the CEO, the CFO shall periodically establish and publish purchasing limits for employees within the District. The purchasing limits will include the limits for purchases by contract, purchasing card, petty cash, and all other payment methods.

8.3.1.2 Approval of Purchases

All purchases are to be approved by the supervisor or manager of the purchaser, including petty cash reimbursements, unless the purchase is being charged to the budget of another department. In that case, the supervisor or department manager that is responsible for the budget shall approve the request.

Supervisors and managers have approval authority to the limits as published by the CFO. If the supervisor is unavailable, another supervisor in the department can approve. If the department
manager or another supervisor within the department is unavailable, another department manager can approve the purchase request. Any transaction exceeding the approval authority of the department manager must be approved by the CEO or by the manager acting in capacity (AIC) for the CEO. The CFO will serve as the approval authority for all purchases of the CEO.

Master service agreements, task-order agreements, indefinite delivery/indefinite quantity agreements, and other similar agreements that do not have a specific dollar amount must be approved by the CEO. Approval authority for task orders issued based on these agreements are established by the purchasing limits published by the CFO.

8.3.1.2 Purchase Orders
Purchase orders are required for all purchases more than $1,000 unless otherwise authorized in advance by the CFO or CEO.

8.3.1.3 Splitting of Purchases
Purchases may not be split into multiple transactions to avoid the application of these Policies. Splitting a purchase is the act of creating two purchases that have one purpose with the intent of avoiding requirements of these Policies and the associated management controls. Intentionally splitting a purchase to defeat the internal controls can be gross misconduct and subject the offender to sanctions up to, and including, termination for dishonesty.

8.3.2 Obligations (Contracts, Leases, Etc.)
The District is required to track its contracts, leases, and other obligations as part of its financial reporting requirements. The CFO shall develop and maintain a process of recording these obligations with sufficient detail to report the District’s obligations.

9 BUSINESS CASE EVALUATIONS

9.1 PURPOSE
The District strives to reduce costs and improve service quality. A proper evaluation of how to commit the District’s resources in an alternative manner has the potential to both reduce costs and improve service quality.

Often there are multiple options for delivering a service. The business case evaluation for service delivery alternatives should be done thoroughly and objectively with the goal of acting as a steward for the public financial resources.

A business case evaluation captures the rationale for undertaking a specific project or task. It should be presented in a well-structured written document but may also be a short verbal agreement or presentation. Business case evaluations are used to guide the expenditure of resources, so that the expenditures are known or expected to support a commensurate business need of the District.
9.2 GOALS

The goal of these Policies is to promote efficient resource allocation through well-informed decision-making by the District. These Policies shall provide guidance for conducting benefit-cost and cost-effectiveness analyses. These Policies shall also provide specific guidance on the discount rates to be used in evaluating alternative programs at the District whose benefits and costs are distributed over time.

The economic resource available to the District are public resources that require prudent management. The Policies on business case evaluations are intended to:

1. Protect the District’s economic resources by forecasting the expected returns from the District’s efforts and investments.

2. Provide a common framework for evaluating business decisions throughout the District consistent with the District’s fundamental economic and financial circumstances.

9.3 REQUIREMENTS

9.3.1 Business Case Evaluation Guidelines

The CFO shall periodically publish guidelines for the conduct of business case evaluations at the District. These guidelines shall provide a framework for the consistent evaluation of alternatives throughout the District and require the use of appropriate financial and economic techniques.

9.3.2 Least-Cost Requirement

As part of its business case evaluation, the District shall evaluate alternatives to identify the alternative that meets the service level at the least cost. In cases where the service level can vary, the District shall consider both the costs and the benefits in its evaluation.

The guidelines published by the CFO described in Section 9.3.1 above may exclude certain fixed costs of the District from the evaluation when including those fixed costs would result in an improper business decision based on the District’s least-cost requirement Policy.

9.3.3 Discount Rates

The CFO shall periodically publish appropriate Discount rates to be used in conducting business case evaluations. The Discount rates shall reflect the CFO’s best estimate of the District’s cost of capital for varying terms.

10 OTHER BOARD FINANCIAL GOALS AND OBJECTIVES

10.1 PURPOSE

The Board has adopted other financial goals and objectives that do not fall within one of the categories listed above. The Policies related to those goals and objectives are included in this section.
10.2 GOALS

These Policies provide additional guidance to management on other Board financial goals and objectives.

10.3 REQUIREMENTS

10.3.1 Water Supply
   10.3.1.1 Purchased Water
   The District shall purchase water for distribution in a manner that balances the need to minimize cost and maximize water quality and reliability for its customers.

   10.3.1.2 Multiple Sources of Water Supply
   The District is committed to resiliency and reliability of service. In achieving that goal, the District will have access to multiple sources of supply with the goal to provide redundant supplies to all customers.

10.3.2 Asset Management Plan

Renewing and replacing the District's infrastructure is an ongoing task. The District shall maintain an Asset Management Plan that protects the value of the District's infrastructure and maximizes the value of the District's expenditures on operations and maintenance.

The District's Asset Management Plan shall make sure that planned maintenance can be conducted and capital assets (pumps, motors, pipes, fleet, information technology equipment, etc.) can be repaired, replaced, or upgraded on time. The District's Asset Management Plan should address the:

1. Current state of the District's assets.
2. District's required "sustainable" level of service.
3. Assets that are critical to sustained performance.
4. District's minimum life-cycle costs.

The Asset Management Plan should provide the District critical information on capital assets and timing of investments. The Asset Management Plan should include an inventory of critical assets, evaluation of their condition and performance, and strategies to maintain, repair, and replace assets and to fund these activities.

The Asset Management Plan should result in the management of infrastructure capital assets to optimize the total cost of owning and operating these assets while prudently managing risks and delivering the desired service levels. The District shall use the Asset Management Plan to pursue and achieve sustainable infrastructure. The Asset Management Plan shall be used in the District's Capital Planning (see Section 3.4.6 above).
APPENDIX A

Financial Plan Assumptions

DEBT CAPACITY
The Financial Plan shall rely on no more than $600 million in debt to fund the District’s capital expenditures through 2030.

ISSUANCE COSTS
Issuance costs for revenue bonds shall be estimated at 1.5% of the par amount of the bond issue.

TERM
The term assumed for future revenue bond issues shall be 30 years. The term for federal or state loan programs shall be the maximum allowed within the program unless a shorter duration is in the financial interest of the District.

INTEREST RATES
Presented below are the assumed interest rates to be included in the financial plan:

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
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<tbody>
<tr>
<td>Future Revenue Bond Issues</td>
<td>5.00%</td>
<td>5.00%</td>
<td>5.00%</td>
<td>5.50%</td>
<td>5.50%</td>
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<tr>
<td>Earnings</td>
<td>2.35%</td>
<td>2.70%</td>
<td>3.00%</td>
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<table>
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<tr>
<th>FY2024</th>
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<th>FY2026</th>
<th>FY2027</th>
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<td>Future Revenue Bond Issues</td>
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<td>5.50%</td>
<td>5.50%</td>
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<tr>
<td>Earnings</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
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</table>

DEBT SERVICE RESERVE FUND
Depending on market conditions, a debt service reserve may not be required. However, the Financial Plan shall assume a debt service reserve as the minimum of:

1. The maximum annual debt service for a future revenue bond
2. 125% of the average annual debt service for a future revenue bond issue
3. 10% of the par amount of a future revenue bond issue.

DEBT SERVICE COVERAGE RATIOS
The target for the debt service coverage ratios used in the Financial Plan shall be:

1. 2.0x by including SDCs in gross revenues.
2. 1.5x by excluding SDCs in gross revenues.
ADDITIONAL BONDS TEST
The Financial Plan shall use an additional bonds test ratio of 1.3x by including SDCs in gross revenues and 1.15x by excluding SDCs from gross revenues.

MINIMUM CASH BALANCES
The Financial Plan shall include 250 days of forecast operations and maintenance expense as the minimum cash balances. The minimum is in addition to any balances in a debt service reserve account.
### Tuatulitine Water District Six-Year CIP Planned Expenditures (FY2020-25)

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Source</th>
<th>FY2020 Requested</th>
<th>FY2021 Requested</th>
<th>FY2022 Requested</th>
<th>FY2023 Requested</th>
<th>FY2024 Requested</th>
<th>FY2025 Requested</th>
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<td>Metcalf Supply Improvements for WASS</td>
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<td>$108,500</td>
<td>$119,000</td>
<td>$119,000</td>
<td>$203,500</td>
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<td>Miller Hill Reservoir</td>
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<td>$108,500</td>
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### Storage

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<th>FY2024 Requested</th>
<th>FY2025 Requested</th>
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<td>ST-8 Reservoir Isolation Valve Program</td>
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<td>Dead Reservoir Gates &amp; Dumpsheets</td>
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### Pipeline

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<th>FY2023 Requested</th>
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<td>P-4 Gates Replacement Program</td>
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<td>Pettigrove &amp; 13th Ave Main Replacement &amp; Rehobby</td>
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<td>WSS 115th Ave Main Replacement</td>
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<td>SW Greensboro - Oak to Prospect</td>
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<td>Todd St &amp; Linda Ln - Mainline replacement &amp; upgrade</td>
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<td>Pipeline Upgrades and Renewals - Agency Driven</td>
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<td>Agency Driven Pipeline Upgrades &amp; Renewal Projects</td>
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<tr>
<td>SW 115th - Farmington Rd to TVW Pipeline Relocation</td>
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<tr>
<td>SW 11th Ave - Florence Lane &amp; Taylor Ferry Rd Pipeline Relocation</td>
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<tr>
<td>SW Reservoir - Stone Bridge Pipeline Relocation</td>
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<tr>
<td>Waller Rd 12 - Replacement - 12th to 14th</td>
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<td><strong>TOTAL Pipeline</strong></td>
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<td>$1,660,000</td>
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### Development Opportunity & Reinvestment Projects

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Source</th>
<th>FY2020 Requested</th>
<th>FY2021 Requested</th>
<th>FY2022 Requested</th>
<th>FY2023 Requested</th>
<th>FY2024 Requested</th>
<th>FY2025 Requested</th>
<th>Six-Year Total</th>
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<tbody>
<tr>
<td>Unidentified Development Opportunity &amp; Reinvestment Projects</td>
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</table>
## Tualatin Valley Water District Six-Year CIP Planned Expenditures (FY2020-25)

<table>
<thead>
<tr>
<th>Project Title</th>
<th>2019-2021 Biennial Budget 6-Year CIP</th>
<th>Future Years</th>
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<tbody>
<tr>
<td>Transmission Improvement</td>
<td>$1,600,000</td>
<td>$3,200,000</td>
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<tr>
<td>Fire Flow Improvements</td>
<td>$400,000</td>
<td>$400,000</td>
</tr>
<tr>
<td>P-366 - Metzger 16-S 882 Zone Improvements</td>
<td>$400,000</td>
<td>$400,000</td>
</tr>
<tr>
<td>P-386 - High St from Sixth Ave to Sixth Ave</td>
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<td>$550,000</td>
</tr>
<tr>
<td>P-384 - 50th Ave from Newport Ave to Atlantic Ave</td>
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</tr>
<tr>
<td>P-382 - Pacific Hwy from 217th to 71st Ave</td>
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<tr>
<td>P-404 - Viewmont Dr from South of Barnes</td>
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<tr>
<td>P-355 - 51st Ave from Cherry St to Huron Dr</td>
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<tr>
<td>P-46 - Pollax Rd / Hardscapes Dr / to Sonora Dr</td>
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<td>Future Fire Flow Improvements</td>
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<td>P-590 - Farmington Rd BPS 16-in Discharge Main</td>
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<td>North Road Pipeline Leadable Repair</td>
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<td>Miner System Improvements</td>
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<td><strong>FACILITIES</strong></td>
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<td>Engineering/Operations Space Reorganization</td>
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<tr>
<td>Headquarters Lobby Improvements</td>
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<tr>
<td>Safety and Security Improvements</td>
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<tr>
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<tr>
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<td>Safety and Security Improvements</td>
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<td>Board Room Audio Visual Improvements</td>
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<td>Headquarters Lighting Improvements</td>
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<td><strong>TOTAL METERS AND SERVICES</strong></td>
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### Tualatin Valley Water District Six-Year CIP Planned Expenditures (FY2020-25)

<table>
<thead>
<tr>
<th>PROJECT TITLE</th>
<th>FY2020 Requested</th>
<th>FY2021 Requested</th>
<th>FY2022 Projected</th>
<th>FY2023 Projected</th>
<th>FY2024 Projected</th>
<th>FY2025 Projected</th>
<th>Six-Year Projected</th>
<th>Future Years</th>
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<td>Joint Venture WWF</td>
<td>$356,763</td>
<td>$3,271,701</td>
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<td>AWC Elt. Capital Projects, Repairs, &amp; Replacements</td>
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<td>211,000</td>
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<td>$55,906,048</td>
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CIP 2019-21 Proposed 6-year summary
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Metzger Supply Improvements for WWSS

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency: Associated improvements required to take water from the Willamette Water Supply System, and required to be done by 2026.


3. Reliability: The WWSS will be designed and constructed to current seismic resiliency standards.

PROJECT DESCRIPTION:
The project improvements will include operational and any other changes necessary to operate the new supply from the Willamette. The goal of this project is to move water from the WWSS turnouts at Hall Bird & Ditson Road to the Florence Lane tanks with the goal of maintaining low water zips. The above ground flow control facility, meter vault, and valving will be budgeted and designed by the WWSP.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>Source:</th>
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</thead>
<tbody>
<tr>
<td>Water Rates:</td>
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</tr>
<tr>
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<tr>
<td>Project Manager:</td>
<td>Nick Augustus</td>
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<td>Outside Contract</td>
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<td>Total Priority Score:</td>
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</table>

FUNDING SOURCES

<table>
<thead>
<tr>
<th>FUTURE OPERATING COST IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>There will be some minor increases to District operating costs for added infrastructure.</td>
</tr>
</tbody>
</table>

BUDGET INFORMATION & PROJECTED COSTS:

<table>
<thead>
<tr>
<th></th>
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CIP 2019-21 Proposed: GP-1
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: WCSI valve & Center St Seismic & Piping Improvements

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   - Associated improvements required to take water from the Willamette Water Supply System, and required to be done by 2026.

2. Growth/Future Demands
   - Allows / supports additional growth and offsets reduction in Portland water.

3. Reliability
   - The WSSI will be designed and constructed to current seismic resiliency standards.

PROJECT DESCRIPTION

These improvements include potentially installing a valve on the WCSI near the Inglewood connection to the 54” supply. It will also include seismic and other improvements at the Edgerton Small generator facility to allow full utilization of the WSSI.

PROJECT INFORMATION

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<thead>
<tr>
<th>Project Category</th>
<th>Source</th>
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<th>Future Operating Cost Impact</th>
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<tbody>
<tr>
<td>Service Fees</td>
<td>Yes</td>
<td>No</td>
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</tbody>
</table>

| Project Manager  | Nick Augustin | SDG Improvements, Fire Equip. |
| Work Performed By| Outside Contract | 62% |

Total Priority Score: 26

BUDGET INFORMATION & PROJECTED COSTS

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<thead>
<tr>
<th>FY 21-22</th>
<th>FY 22-23</th>
<th>FY 23-24</th>
<th>FY 24-25</th>
<th>Six-Year (FY26-28)</th>
<th>Future Years (FY29-48)</th>
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</table>
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Miller Hill ASR

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   On-going project to make the ASR functional.

2. Growth/Future Demands
   The original design of the ASR was to account for additional growth and water demand in the Cooper Mountain area.

3. Reliability
   The new facility is designed to meet seismic standards.

PROJECT DESCRIPTION

This project includes a new two million gallons per day (MGD) ASR facility located on Cooper Mountain to provide additional storage and supply to meet peak summer demands. It is the second TVWD ASR facility, joining the Grabhorn ASR that has been in operation for 11 years. The project is expected to be placed in service this biennium.

PROJECT INFORMATION

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<thead>
<tr>
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<th>Total Priority Score</th>
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<tr>
<td>Project Manager</td>
<td>Pete Boone</td>
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<td>Work Performed By</td>
<td>Outside Contract</td>
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FUNDING SOURCES

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<th>Operating Cost Impact</th>
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<tbody>
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<td>Water Rates:</td>
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<td>SDC Improvement Fee:</td>
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<tr>
<td>Partner Cost Percentage:</td>
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</table>

FUTURE OPERATING COST IMPACT

Operating costs will increase if this project is completed and placed into service.

BUDGET INFORMATION & PROJECTED COSTS

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</tbody>
</table>
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Water Quality Integration Projects

Tualatin Valley Water District Service Area

KEY DRIVERS FOR CIP PROJECT

1. Water Quality
   This project is to address water quality considerations prior to the WWSS being tested and implemented as a source of supply.

2. Growth/Future Demands
   Projects associated with the WWSS allows / supports additional growth and offsets reduction in Portland water.

3. Project Urgency
   This work is necessary to be done prior to 2026.

PROJECT DESCRIPTION

These projects will be done in collaboration with the water system integration study and recommendations proposed as part of the WWSS. A Water Quality Integration firm has been hired as part of the WWSS and will be developing recommendations in collaboration with District personnel. Projects identified as part of that study will be implemented under this line item. These projects could include removing existing piping and other activities to study the future impact of changing water sources.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category</th>
<th>Source</th>
<th>FUTURE OPERATING COST IMPACT</th>
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<td></td>
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<td>Service Fees: No</td>
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BUDGET INFORMATION & PROJECTED COSTS

GIP 2019-21 Proposed
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: ST-9 Grabhorn Reservoir Replacement - Tank 1 (5 MG)

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   This project is on-going and nearing completion. The budget accounts for items associated with final completion of the project.

2. Asset Condition
   The existing reservoir was in disrepair and at the end of its useful life.

3. Reliability
   Improvements required to maintain reliable and seismically resilient facilities.

PROJECT DESCRIPTION
This project involves the demolition of the existing 5 MG concrete reservoir, then design and construction of a 5 MG pre-stressed concrete reservoir within the footprint of the existing reservoir. Onsite piping and valves will also be replaced.

PROJECT INFORMATION

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<thead>
<tr>
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<tbody>
<tr>
<td>Project Manager</td>
<td>Andrew Barrett</td>
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FUNDING SOURCES

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<td></td>
<td>Partake Cost Percentage: 0%</td>
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FUTURE OPERATING COST IMPACT
No anticipated impact on District operating costs. This project replaces existing infrastructure. Near-term operating costs are anticipated to be reduced.

BUDGET INFORMATION & PROJECTED COSTS

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GWP 2019-21 Prepared
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: ST-3 Goyak Reservoir Seismic Upgrades

KEY DRIVERS FOR CIP PROJECT
1. Project Urgency
   The existing facility is in need of roof maintenance and seismic improvements. The reservoir cannot be completed until a second source of supply to the Cooper Mountain area is complete.

2. Asset Condition
   The facility was constructed in 1979 and is in need of maintenance in order to keep the reservoir functioning as intended.

3. Reliability
   This will bring the reservoir into compliance with seismic standards.

PROJECT DESCRIPTION
Structural upgrades are recommended for the Goyak Reservoir to improve seismic resilience at the facility. These upgrades were first recommended in the Concrete Water Reservoir Seismic Rehabilitation Project (2005, CH2MILL) with a construction cost of $340,000. In addition, the updated project includes repairs to fix leaking in the reservoir floor, which was estimated at $20/square-foot. Farmington Road BPS and discharge main are necessary prior to performing those upgrades to reduce risk.

PROJECT INFORMATION

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FUNDING SOURCES

| Water Rates: | Yes |
| Service Fees: | No |
| SDC Improvement, Fee Elig.: | 0% |
| Partner Cost Percentage: | 0% |

FUTURE OPERATING COST IMPACT

This project will reduce immediate maintenance costs, and will bring the tank up to current seismic standards. On-going maintenance is anticipated.

BUDGET INFORMATION & PROJECTED COSTS

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CIP 2019-21 Prepared
CF - 6
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

**PROJECT TITLE:** ST-4 Cooper Mountain 3 Reservoir

---

**KEY DRIVERS FOR CIP PROJECT**

1. **Project Urgency:** There are increasing time sensitivities to complete this project due to growth in the area.
2. **Growth/Future Demand:** The project is being done to address storage deficiencies related to fire flow in the Cooper Mountain area.
3. **Reliability:** This reservoir will establish seriously resilient storage in the Cooper Mountain upper pressure zones.

---

**PROJECT DESCRIPTION**
The Cooper Mountain 3 Reservoir project is recommended to address storage deficiencies in the 30B Zone and to provide seriously resilient storage. It is assumed that the 25-MGD reservoir will be constructed at a District-owned property adjacent to the existing Cooper Mountain Pump Station and Reservoir.

---

**PROJECT INFORMATION**

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<th>Project Category</th>
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<td>Project Manager</td>
<td>Andrew Barrett</td>
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<td>Work Performed By</td>
<td>Outside Contract</td>
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**FUNDING SOURCES**

- Water Rates: Yes
- Service Fees: 100%
- SDW Improvement, Fire: 80%
- Partner Cost Percentage: 20%

**FUTURE OPERATING COST IMPACT**

This replacement reservoir will result in a net 2.5 million gallon increase in storage with only a minor increase in operating costs for the first several years.

---

**BUDGET INFORMATION & PROJECTED COSTS**

<table>
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- CIP 2020-21 Proposed: 0
- CIP - 7

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TVWD Financial Plan
Appendix B – Capital Improvement Plan

Page 90

May 2019
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Taylors Ferry Reservoir Replacement & Seismic Upgrades

KEY DRIVERS FOR CIP PROJECT

1. Asset Condition
   The existing concrete reservoir is approaching the end of its useful life. The concrete walls are cracked and an internal liner is being used to maintain a leak-free reservoir. The steel tank is not seismically resilient, and the roof is in poor condition.

2. Growth/Future Demands
   Will provide additional storage required to accommodate projected growth in the Metzger service area.

3. Reliability
   Improvements required to provide a seismically resilient, reliable supply to the Metzger 4WH pressure zone.

PROJECT DESCRIPTION

It is recommended that the District replace the existing 1.0 MG Taylors Ferry South Reservoir with a new 2.0 MG prestressed concrete reservoir in the same location, and that seismic upgrades and rehabilitation of the existing 2.8 MG steel tank be completed. Those recommendations were first made in the Taylors Ferry Site Assessment (MIA, 2013) and are reiterated here to improve the resiliency of storage in the Metzger service area. In the 2013 study, it was recommended that the northern 2.3 MG tank be rehabilitated and seismic upgrades be performed on that tank prior to replacing the southern tank due to the poor condition of the steel roof. A study is currently being done to further refine the scope and plan the site usage for this project. Potential FEMA funding for pre-disaster mitigation is being evaluated as a potential funding source for the northern steel tank. As part of this project, the existing office space is also being evaluated to provide more usable space of the site.

PROJECT INFORMATION

<table>
<thead>
<tr>
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<th>Storage</th>
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<tbody>
<tr>
<td>Project Manager</td>
<td>Andrew Barrett</td>
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<table>
<thead>
<tr>
<th>Water Rates</th>
<th>Service Fees</th>
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<table>
<thead>
<tr>
<th>Partner Cost Percentage</th>
<th>0%</th>
</tr>
</thead>
</table>

FUTURE OPERATING COST IMPACT

Operating costs will be reduced in the short term by removing the existing reservoir and constructing a new one in its place, and by maintaining the roof of the steel tank.

BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
<tr>
<th>FY 20-21 Budget</th>
<th>FY 20-21 Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000</td>
<td>1,080,000</td>
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<tr>
<td>0.950,000</td>
<td>7,900,000</td>
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CIP 2019-21 Proposed

TVWD Financial Plan
Appendix B – Capital Improvement Plan
Page 91
May 2019
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

ST-1 Rosander 2 Reservoir

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   This project will add additional storage to the S75 pressure zone and is expected to be completed mid-fall.

2. Growth / Future Demands
   The reservoir will address storage deficiencies due to increased growth in the S75 pressure zone.

3. Reliability
   The new facility will be designed to meet current seismic standards.

PROJECT DESCRIPTION:
The Rosander 2 Reservoir project is recommended to address long-term storage deficiencies in the West NIU S75 Zone and to provide operationally efficient storage. It is assumed that the existing reservoir will remain in service while a new 3.0 MGD reservoir is constructed along with the Rosander Pump station (Project B F).

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Category</th>
<th>Storage</th>
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<tbody>
<tr>
<td>Manager</td>
<td>Andrew Barrett</td>
</tr>
<tr>
<td>Work Performed By</td>
<td>Outside Contractor</td>
</tr>
<tr>
<td>Priority Score</td>
<td>21</td>
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FUNDING SOURCES

<table>
<thead>
<tr>
<th>Source</th>
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<tbody>
<tr>
<td>Service Fees</td>
<td>No</td>
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<tr>
<td>Inside Impr. Fee</td>
<td>10%</td>
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FUTURE OPERATING COST IMPACT

There will be a minor increase in operating expenses by adding a new facility.

BUDGET INFORMATION & PROJECTED COSTS

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CIP 2019-21 Proposed: CF - 9

May 2019
Tualatin Valley Water District
Requested Capital Improvement Plan
2013-21
(Six-Year Projection)

PROJECT TITLE: ST-8 Reservoir Isolation Valve Program

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   The valve isolation program could be required at any time due to seismic hazards in the area.

2. Customer Criticality
   This project could help maintain vital water resources for a large customer base.

3. Reliability
   The new valves will address seismic concerns for select facilities.

PROJECT DESCRIPTION
Seismically-activated isolation valves are recommended where one or more storage facilities are available in a pressure zone or operating area. Facilities with the valves are assumed to be isolated following a seismic event, thereby preventing water from draining into a leaking system. Seismically-activated isolation valves are recommended for 11 of the District’s 26 planned reservoirs for 2004. Each isolation valve will require an electronically actuated valve with control box, flow monitoring, and transmission equipment for SCADA. The District is currently evaluating the ShakeAlert system being implemented by the USGS. The District anticipates upgrading existing seismic valves to a ShakeAlert system in the near-term and evaluating other locations for installation in the future.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category</th>
<th>Storage</th>
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<table>
<thead>
<tr>
<th>Project Manager</th>
<th>Nick Augustos</th>
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<th>Outside Contract</th>
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| Total Priority Score | 20 |

FUNDING SOURCES

<table>
<thead>
<tr>
<th>Water Rates</th>
<th>Yes</th>
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</table>

| Service Fees | No |

| SDI Improvement, Fee Elig. | 0% |

| Partner Cost Percentage | 0% |

| Future Operating Cost Impact |

| There will be a minor increase to operating expenses to incorporate and maintain the seismic isolation valves including power and an internet connection. Other operating expenses for the shakealert system are covered under the program. |

BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
<tr>
<th>FY 17-19 Budget</th>
<th>FY 17-19 Projected</th>
<th>FY 19-20 Budget</th>
<th>FY 19-20 Projected</th>
<th>FY 20-21 Budget</th>
<th>FY 20-21 Projected</th>
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<th>Six-Year (FY2020-25)</th>
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<td>51,800</td>
<td>2,119,200</td>
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Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Florence Lane Reservoir Coatings & Cathodic Improvements

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   - This maintenance project should be completed near-term.

2. Asset Condition
   - The existing reservoir roof is corroding and in need of repair. This project is anticipated to extend the life of the asset.

3. Reliability
   - This project is necessary to maintain reliable service. No seismic improvements are anticipated with this project.

PROJECT DESCRIPTION

The reservoir coatings are in poor condition and are in need of replacement. In addition, gutters and downspouts will reduce algae growth that is common on exterior tank walls, and will extend the life of the new coatings. This project involves sandblasting and recoating areas of coating failures. Containment is required to reduce impact to surrounding properties.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category</th>
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<tbody>
<tr>
<td>Project Manager</td>
<td>Pete Boone</td>
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<tr>
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<td>Outside Contract</td>
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<tr>
<td>Total Priority Score</td>
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</table>

FUNDING SOURCES

| | Water Rates: Yes | Service Fees: No |
| | SDI Improvement Fee Elig. | 0% |
| | Partner Cost Percentage: 0% |

FUTURE OPERATING COST IMPACT

- No anticipated impact on District operating costs.

BUDGET INFORMATION & PROJECTED COSTS

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CIP 2019-21 Prepared | CIP - 11
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Steel Reservoir Gutters and Downspouts

Tualatin Valley Water District Service Area

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   This maintenance project should be completed near-term.

2. Asset Condition
   The existing reservoir roof experiences algae growth and issues associated with that growth, reducing the life expectancy of coatings. This project is anticipated to extend the life of the asset.

3. Reliability
   This project is necessary to maintain reliable service.

PROJECT DESCRIPTION

This project would add gutters and downspouts to steel tanks. This will reduce the algae growth that is common on exterior tank walls which will extend the life of the coatings.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>Storage</th>
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<tbody>
<tr>
<td>Project Manager:</td>
<td>Pete Boone</td>
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<td>Work Performed By:</td>
<td>Outside Contract</td>
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<tr>
<td>Total Priority Score:</td>
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</table>

FUNDING SOURCES

| Water Rates:   | Yes |
| Service Fees:  | No  |
| SOI Improvement Fees (%): | 0% |
| Partner Cost Percentage: | 0% |

FUTURE OPERATING COST IMPACT

No anticipated impact on District operating costs.

BUDGET INFORMATION & PROJECTED COSTS

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</table>

GIP 2019-21 Proposed CP - 22
PROJECT TITLE: Somerset Reservoir Modifications

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency: This maintenance project should be completed near-term.
2. Asset Condition: The existing reservoir is showing signs of corrosion and is in need of repair. This project is anticipated to extend the life of the asset.
3. Safety / Security: The project will reduce risks associated with the outdated entry and access points.

PROJECT DESCRIPTION

This project will install gutters and downspouts on the tank. It also includes replacing the existing hatch, renewing the ladder/sage to comply with OSHA standards, and fit exterior coatings on the reservoir.

PROJECT INFORMATION

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<thead>
<tr>
<th>Project Category:</th>
<th>Storage</th>
<th>Water Rates:</th>
<th>Yes</th>
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<tbody>
<tr>
<td>Project Manager:</td>
<td>Pete Boone</td>
<td>Service Fees:</td>
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<td>Work Performed By:</td>
<td>Outside Contract</td>
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FUNDING SOURCES

<table>
<thead>
<tr>
<th>FUTURE OPERATING COST IMPACT</th>
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</thead>
<tbody>
<tr>
<td>No anticipated impact on District operating costs.</td>
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BUDGET INFORMATION & PROJECTED COSTS

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CIP 2019-21 Proposed: CIP 12
### Project Title: Catlin Crest / Viewmont Pump Station Replacement/Relocation

**Combined Pump Station Location**

**Catlin Crest Project Site**

**Viewmont Project Site**

### Key Drivers for CIP Project

1. **Safety/Security**: This project will help offset fire flow deficiencies in the pressure zones served by the Catlin Crest and Viewmont pump stations, and it will improve safety for operators.

2. **Asset Condition**: The Catlin Crest and Viewmont pump stations are nearing the end of their useful lives. Several failures have occurred and maintenance and repair costs have been increasing.

3. **Customers Served**: These pump stations pump directly to service in pressure zones without storage or redundant supply, so their reliable operation is critical to providing water service to the areas that they serve.

### Project Description

The Catlin Crest and Viewmont pump stations provide water service to a portion of the West Hills. The pump stations are nearing end of life, they require additional fire flow capacity, and are located in vaults with difficult access. The project includes piping improvements, combines the two previously separate pressure zones, and will include backup power connections through the Tauselt Pump Station. It also assumes that a “pullies” pump station will be constructed.

### Project Information

<table>
<thead>
<tr>
<th>Project Category</th>
<th>Pump Station</th>
<th>Water Rates: Yes</th>
<th>Future Operating Cost Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>Ryan Smith</td>
<td>Service Fees: No</td>
<td>The new combined pump station will lower the District's maintenance costs due to replacing aging infrastructure.</td>
</tr>
<tr>
<td>Work Performed By</td>
<td>Contract &amp; District Staff</td>
<td>SDC Improvement Fee %: 0%</td>
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<tr>
<td>Total Priority Score</td>
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<td>Partner Cost Percentage: 0%</td>
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### Budget Information & Projected Costs

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<td>750,000</td>
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<td>207,000</td>
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</tr>
</tbody>
</table>
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: BP-1 Cooper Mountain Booster Pump Station Expansion

KEY DRIVERS FOR CIP PROJECT

1. Safety & Security
   This project will help offset fire flow deficiencies in the pressure zones served by the Cooper Mountain Pump Station. The 2015 Master Plan recommended a full replacement of the existing pump station. This project will improve the fire flow capacity in this area until funding is available for pump station replacement or rehabilitation.

2. Customer Criticality
   The Cooper Mountain Pump Station serves a significant portion of the District.

3. Growth/Future Demands
   This project will provide additional capacity to accommodate growth and future demands.

PROJECT DESCRIPTION

The Zone Supply Analysis determined that the existing Cooper Mountain Booster Pump Station (BPS) is deficient under firm and peak supply criteria. It is recommended that the District construct a new pump station or expand the existing Cooper Mountain BPS to provide an additional 3.5 mgd of firm capacity and 4 mgd of peak capacity for the 920 Operating Area. The District anticipates replacing 1 pump in order to delay the construction of a new pump station for two years.

PROJECT INFORMATION

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<thead>
<tr>
<th>Project Category</th>
<th>Pump Station</th>
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<tbody>
<tr>
<td>Project Manager</td>
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<td>Work Performed By</td>
<td>Contract &amp; District Staff</td>
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<tr>
<td>Total Priority Score</td>
<td>25</td>
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</table>

FUNDING SOURCES

| Water Rates | Yes |
| Service Fees | No |
| SDC Improvement, Fee & Gr. | 100% |

FUTURE OPERATING COST IMPACT

This new pump station would replace the existing Cooper Mountain Pump Station resulting in no material impact to operating costs. Power costs may decrease slightly due to increased pumping efficiency.

BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
<tr>
<th>FY 17-19 Budget</th>
<th>FY 17-19 Projected</th>
<th>FY 19-20 Budget</th>
<th>FY 20-21 Budget</th>
<th>FY 21-22 Projected</th>
<th>FY 22-23 Projected</th>
<th>FY 23-24 Projected</th>
<th>FY 24-25 Projected</th>
<th>Six-Year (FY2025-26)</th>
<th>Future Years (FY2026-48)</th>
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</thead>
<tbody>
<tr>
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<td>332,500</td>
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<td>3,097,500</td>
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</tbody>
</table>

GIP 2019-21 Proposed
PROJECT TITLE: BP-4 Farmington Road BPS

PROJECT DESCRIPTION

It is recommended that the District provide supply redundancy to the Cooper Mesa Area, which currently has one supply source from the 385 Zone via the 189th and Coyote Pump Stations. This project includes constructing a new pump station at Farmington Road to lift water from both the 385 Zone and the incoming Willamette Supply pressure to the 800 Zone with a 10-feet capacity of 4 mgd and a peak capacity of 7.5 mgd. The site selected is at the District owned property at SW Farmington Road & SW 209th Avenue.

KEY DRIVERS FOR CIP PROJECT

1. Reliability
   This project is necessary to provide a seismically resilient and redundant feed to the 800 pressure zone on Cooper Mountain.

2. Project Urgency
   The urgency of this project is driven by the necessity to maintain and improve the single feed to the top of Cooper Mountain. The Coyote Reservoir and Pump Station requires repair which cannot be done without a second feed to the upper pressure zone.

3. Growth / Future Demand
   This project will incorporate receiving water from the WWS and pumping the water up the hill to the 800 pressure zone. It will address growth / future demands in the Cooper Mountain area.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>Pump Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager:</td>
<td>Andrew Barrett</td>
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<tr>
<td>Work Performed By:</td>
<td>Contract &amp; District Staff</td>
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<tr>
<td>Total Priority Score:</td>
<td>29</td>
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</table>

FUNDING SOURCES

| Water Rates: | Yes |
| Service Fees: | 4% |
| SDC Improvement: Fee Cap: | 77% |
| Partner Cost Percentage: | 7% |

FUTURE OPERATING COST IMPACT

It is assumed that approximately $60,000/yr will be required for pumping from this new pump station, though these costs will be offset by reductions at the other parallel facilities. It will also add costs as a turnout and flowline facility for the WWS. This additional facility will require additional operator support to properly maintain. Approximately 0.5 FTE is anticipated.

BUDGET INFORMATION & PROJECTED COSTS

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<thead>
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</table>
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: BP-6 Rosander Booster Pump Station

KEY DRIVERS FOR CIP PROJECT:
1. Project Urgency
   Adds redundancy to the West Hills pumping system.
2. Growth/Future Demands
   Provides pumping capacity to meet the demands of the projected growth in the West Hills area.
3. Safety/Security
   Pump Station will have secured access and by a seismically resilient facility.

PROJECT DESCRIPTION:
Design, and construction of new Rosander Pump Station and 2,400 ft. of 24" discharge line to connect to existing 12" and 24" transmission lines near SW 64th. This project has been postponed until after 2024. It is intended to be constructed at the same time as the 2nd Rosander Reservoir.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category</th>
<th>Pump Station</th>
<th>FUTURE OPERATING COST IMPACT</th>
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<tbody>
<tr>
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<td>Service Fees:</td>
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<td>Project Manager:</td>
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<tr>
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<td>Contract &amp; District Staff</td>
<td>IBC Improvement Fee Only</td>
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<td>Partner Cost Percentage:</td>
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BUDGET INFORMATION & PROJECTED COSTS:

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CP 2019-21 Proposed: CP - 17
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Florence Lane Booster Pump Station Improvements

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   These improvements need to be done prior to 2026 in order to receive water from the WWSS.

2. Reliability
   These improvements will allow for reliable, operationally resilient supply.

3. Customer Criticality
   This project serves a large customer base.

PROJECT DESCRIPTION

This project provides improvements to the existing pump station and is necessary to provide a resilient supply from the WWSS which enters the 426 zone, to the 486 zone. Valving may be required to pump out of the reservoirs to allow for turnover of the reservoirs, thus reducing water age in the reservoirs.

PROJECT INFORMATION

<table>
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<tr>
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<tr>
<td>Project Manager:</td>
<td>Zach Lemberg</td>
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<td>Work Performed By:</td>
<td>Contract &amp; District Staff</td>
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<td>Total Priority Score:</td>
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FUNDING SOURCES

| Water Rates: | Yes |
| Service Fees: | No |
| SDC Improvement Fee Elig.: | 0% |
| Partner Cost Percentage: | 0% |

FUTURE OPERATING COST IMPACT

No anticipated impact on District operating costs.

BUDGET INFORMATION & PROJECTED COSTS

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CIP 2019-21 Prepared
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Taylors Ferry Booster Pump Station

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   These improvements need to be done prior to 2025 in order to receive water from the WWSS.

2. Reliability
   The improvements will allow for reliable, seismically resilient supply.

3. Customer Criticality
   This project serves a small customer base in the 643 pressure zone.

PROJECT DESCRIPTION

Pump station and improvements on the Taylor's Ferry site to pump from the 408 zone to the 643 zone. This will allow the entire Metiquer system to be served from the WWSS in 2026.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>Pump Station</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Project Manager:</th>
<th>Andrew Barrett</th>
</tr>
</thead>
</table>

| Work Performed By: | Contract & District Staff |

| Total Priority Score: | 21 |

FUNDING SOURCES:

<table>
<thead>
<tr>
<th>Water Rates:</th>
<th>Yes</th>
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<tbody>
<tr>
<td>Service Fees:</td>
<td>No</td>
</tr>
<tr>
<td>SDC Improvement Fee Eq.:</td>
<td>0%</td>
</tr>
<tr>
<td>Partner Cost Percentage:</td>
<td>0%</td>
</tr>
</tbody>
</table>

FUTURE OPERATING COST IMPACT

Operating costs for pumping to the 643 pressure zone will increase.

BUDGET INFORMATION & PROJECTED COSTS

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</table>

CIP 2019-21 Proposed
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Pump Replacement Program

KEY DRIVERS FOR CIP PROJECT

1. Asset Condition: The District has pumps that are in need of replacement due to their deteriorating condition.

2. Cost Effectiveness / Community Benefit: These replacements will allow the District to maintain the pump stations in proper working order.

3. Reliability: This will allow for reliable service.

PROJECT DESCRIPTION
This program is intended to replace aging existing pumps as they approach the end of their useful life. The budget assumes replacing 2 pumps per year and an average asset life of 30 years.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category</th>
<th>Pump Station</th>
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<tr>
<td>Project Manager</td>
<td>Ryan Smith</td>
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<td>Work Performed By</td>
<td>Contract &amp; District Staff</td>
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<td>Total Priority Score</td>
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<td>Service Fees</td>
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<tr>
<td>SDC Improvement, Fee Elig.</td>
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<tr>
<td>Partner Cost Percentage</td>
<td>0%</td>
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</table>

FUTURE OPERATING COST IMPACT
Potential for a slight decrease in operating costs due to newer, more efficient pumps.

BUDGET INFORMATION & PROJECTED COSTS

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<td>137,500</td>
<td>142,500</td>
<td>147,500</td>
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<td>5,261,000</td>
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CIP 2019-21 Proposed
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: P-4 Mains Replacement Program

Tualatin Valley Water District Service Area

KEY DRIVERS FOR CIP PROJECT

1. Asset Condition
   Replacement of aging infrastructure to provide new resilient pipelines capable of providing long-term, reliable service.

2. Reliability
   Improvements required to maintain reliable and seismically resilient facilities.

3. Safety / Security
   Enhances safety by improving level of service for customers and providing safe, reliable drinking water.

PROJECT DESCRIPTION

This work includes projects that are completed as part of the District’s Mains Replacement Program. This program is a focused effort to identify, prioritize, design and replace pipelines based on asset management priorities and recommendations to replace existing failing infrastructure. These projects will be water main replacements that are required due to corrosion, or other identified aging condition of the existing water mains. Improvements will result in improved reliability and water quality as well as reduced liability associated with premature pipe failures and leaks.

PROJECT INFORMATION

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<th>Project Category:</th>
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<td>Project Manager:</td>
<td>Various</td>
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<td>Work Performed By:</td>
<td>Contract &amp; District Staff</td>
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<tr>
<td>Total Priority Score:</td>
<td>26</td>
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</table>

FUNDING SOURCES

| Water Rates: | Yes |
| Service Fees: | No |
| SOC Improvement Fee: | 0% |
| Partner Cost Percentage: | 0% |

FUTURE OPERATING COST IMPACT

There may be a slight reduction in operating costs due to reduced main breaks. New installations are designed for site specific corrosion conditions resulting in longer expected design life of pipeline and reduced leakage for system.

BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
<tr>
<th>FY 17-18</th>
<th>FY 19-20</th>
<th>FY 20-21</th>
<th>FY 21-22</th>
<th>FY 22-23</th>
<th>FY 23-24</th>
<th>FY 24-25</th>
<th>Six-Year (FY2026-28)</th>
<th>Future Years</th>
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GIP 2019-21 Proposed
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Pettygrove & 135th Ave Main Replacement & Fire Flow

KEY DRIVERS FOR CIP PROJECT

1. Asset Condition
   Replacement of aging infrastructure to provide new resilient pipelines capable of providing long-term, reliable service. This project was identified through leak history and by performing a condition assessment which revealed corrosion.

2. Reliability
   Improvements required to maintain reliable and seismically resilient facilities.

3. Safety / Security
   Enhances safety by improving level of service for customers and providing safe, reliable drinking water. This project also addresses fire flow deficiencies.

PROJECT DESCRIPTION

This project is being done to replace existing piping that is in poor condition as identified as part of the 135th Replacement Program. In addition, the existing main is undersized according to master plan recommendations for fire flow. Thus the pipe along Pettygrove is being upgraded from 6 inch to 12 inch to support the proper fire flow. The project consists of approximately 2,100 LF of 12-inch water main, 1,100 LF of 4 and 8-inch water main.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category: Pipeline</th>
<th>Project Manager: Zach Lemburg</th>
<th>Work Performed By: Contract &amp; District Staff</th>
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<table>
<thead>
<tr>
<th>Water Rates: Yes</th>
<th>Service Fees: Yes</th>
<th>SDI Improvement: Yes</th>
<th>0%</th>
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<tr>
<td>Future Operating Cost Impact</td>
<td>No material impact. New installations designed for site specific corrosion conditions resulting in longer expected design life of pipeline and reduced leakage for systems.</td>
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</tr>
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BUDGET INFORMATION & PROJECTED COSTS

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CIP 2019-21 Proposed
CIP 22
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: NW 119th Ave Main Replacement

KEY DRIVERS FOR CIP PROJECT

1. Asset Condition
   Replacement of aging infrastructure to provide new resilient pipeline capable of providing long-term, reliable service. This project was identified through leak history and by performing a condition assessment of the pipeline.

2. Reliability
   Improvements required to maintain reliable and seismically resilient facilities.

3. Safety / Security
   Enhances safety by improving level of service for customers and providing safe, reliable drinking water.

PROJECT DESCRIPTION:
This project is being done to replace existing piping that is in poor condition as identified as part of the Main Replacement Program. The existing main has failed at least 2 locations and has resulted in large damages due to the size and pressure of this portion of the water main. The project involves replacement of approximately 2,400 LF of existing 12-inch diameter water main including services and other connections.

PROJECT INFORMATION

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<tr>
<th>Project Category</th>
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<tbody>
<tr>
<td>Project Manager</td>
<td>Andrew Barrent</td>
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<tr>
<td>Work Performed By</td>
<td>Contract &amp; Direct Staff</td>
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<tr>
<td>Total Priority Score</td>
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FUNDING SOURCES

| Water Rates | Yes |
| Service Fees | No |
| IDC Improvement & GMP | 0% |
| Partner Cost Percentage | 0% |

FUTURE OPERATING COST IMPACT
No material impact. New installations designed for site specific corrosion conditions resulting in longer expected design life of pipeline and reduced leakage for system.

BUDGET INFORMATION & PROJECTED COSTS:

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CP 2019-21 Proposed CP - 11
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

**PROJECT TITLE:** SW Greenberg - Oak to Prospect

**KEY DRIVERS FOR CIP PROJECT**

1. Asset Condition: Replacement of aging infrastructure to provide new resilient pipelines capable of providing long-term, reliable service.
2. Reliability: Improvements required to maintain reliable and seismically resilient facilities.

**PROJECT DESCRIPTION**
The main is noted as being in poor condition and in need of replacement. This involves replacement of approximately 2,600 LF of existing main along SW Greenberg Road. Approximately 2,000 LF is being upgraded from 6-inch to 12-inch as well as to account for fire flow deficiencies.

**PROJECT INFORMATION**

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>Pipeline</th>
<th>FUTURE OPERATING COST IMPACT</th>
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<tr>
<td>Project Manager:</td>
<td>Nick Augustin</td>
<td>No material impact. New installations designed for site specific corrosion conditions resulting in longer expected design life of pipeline and reduced leakage for system.</td>
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<tr>
<td>Service Fees:</td>
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<td>No</td>
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<td>No</td>
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<tr>
<td>Partner Cost Percentage:</td>
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CIP 2019-21 Prepared

CIP - 24
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: SW Tualatin Valley Hwy

1. Asset Condition
   Replacement of aging infrastructure to provide new resilient pipelines capable of providing long-term, reliable service.

2. Reliability
   Improvements required to maintain reliable and seismically resilient facilities.

3. Safety / Security
   Enhances safety by improving level of service for customers and providing safe, reliable drinking water.

PROJECT DESCRIPTION

There have been leaks in the area, and after installing new services on the main, it has been noted to be in poor condition. The existing pipe was installed in 1955. The project consists of replacement of approximately 3,850 LF of 8-inch pipe.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category</th>
<th>Pipeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>Nick Augusto</td>
</tr>
<tr>
<td>Work Performed By</td>
<td>Contract &amp; District Staff</td>
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<tr>
<td>Total Priority Score</td>
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<table>
<thead>
<tr>
<th>Funding Sources</th>
<th>Future Operating Cost Impact</th>
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</thead>
<tbody>
<tr>
<td>Water Rates: Yes</td>
<td>No material impact. New installations designed for site specific corrosion conditions resulting in longer expected design life of pipeline and reduced leakage for system.</td>
</tr>
<tr>
<td>Service Fees: No</td>
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<table>
<thead>
<tr>
<th>BUDGET INFORMATION &amp; PROJECTED COSTS</th>
</tr>
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<tbody>
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<td>-----------------</td>
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<tr>
<td>-</td>
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<tr>
<td>988,500</td>
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<td></td>
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</tbody>
</table>

CIP 2019-21 Prepared
## KEY DRIVERS FOR CIP PROJECT:

1. **Asset Condition**
   Pipelines in the area have had multiple leaks. Although the majority have been slow breaks, the main is also old, and requires some additional capacity due to fire flow.

2. **Reliability**
   Lead joints are not a good restraint for seismic events. They need to be replaced with pipelines which account for the seismic vulnerabilities.

3. **Water Quality**
   Areas with lead joints have been identified as potential replacement projects. Further research is being done to determine if the lead joints have potential to be a water quality concern.

## PROJECT DESCRIPTION:
The existing pipe is lead jointed, has had several breaks, and is deficient for fire flow. This project consists of a total of approximately 4,400 LF of 6 inch main, 1,000 of which is being upgraded from 4 inch, and the remaining 3,400 being upgraded from 6 inch.

## PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category</th>
<th>Pipeline</th>
<th>Funding Sources</th>
<th>Future Operating Cost Impact</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Water Rates: Yes, Service Fees: No</td>
<td>No external impact. Perhaps a slight decrease in operating expenses due to reduced main breaks.</td>
</tr>
<tr>
<td>Project Manager</td>
<td>Nick Augus</td>
<td>DDC Improvement, Fire Dep.</td>
<td></td>
</tr>
<tr>
<td>Work Performed By</td>
<td>Contract &amp; District Staff</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Total Priority Score</td>
<td>25</td>
<td>Partner Cost Percentage</td>
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## BUDGET INFORMATION & PROJECTED COSTS

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<tr>
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</table>
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Agency-Driven Pipeline Upgrade & Renewal Projects

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   Upgrades or renewal work to the District's system that develop in response to new projects by Washington County, developers, or based on other needs.

2. Asset Condition
   Replacement of aging infrastructure to provide new resilient structures capable of providing long-term, reliable service.

3. Reliability
   Improvements required to maintain reliable and seismically resilient facilities.

PROJECT DESCRIPTION
This is a general category that allows for various pipeline upgrades and replacements typically associated with miscellaneous Washington County projects, projects related to development or other needs.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>Pipeline</th>
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</thead>
<tbody>
<tr>
<td>Project Manager:</td>
<td>Kevin Schmittler</td>
</tr>
<tr>
<td>Work Performed By:</td>
<td>Contract &amp; District Staff</td>
</tr>
<tr>
<td>Total Priority Score:</td>
<td>27</td>
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</table>

FUNDING SOURCES

| Water Rates:       | Yes |
| Service Fees:      | No  |
| SDC Improvmt. Fee Elg.: | 0% |
| Partner Cost Percentage: | 0% |

FUTURE OPERATING COST IMPACT

No material impact. New installations designed for site specific corrosion conditions resulting in longer expected design life of pipeline and reduced leakage for system.

BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
<tr>
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</thead>
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<tr>
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<td>611,800</td>
<td>760,500</td>
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<td>1,315,000</td>
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<td>46,915,000</td>
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CIP 2019-21 Proposed
TVWD Financial Plan
Appendix B – Capital Improvement Plan

Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: SW 198th - Farmington Rd to TV Hwy Pipeline Relocation

Pipeline Project

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   The county is performing road work requiring relocations be done by the District to avoid conflicts with the road design.

2. Asset Condition
   Replacement of aging infrastructure will provide new resilient structures capable of providing long-term, reliable service.

3. Reliability
   Relocations will be designed to maintain reliable and seismically resilient facilities.

PROJECT DESCRIPTION

This project is driven by a road widening project done by Washington County along SW 198th from Farmington Road to TV Hwy. The project will require water relocations as well as watermain lowering and relocations near bridges. Approximately 500 LF of 16-inch and 8-inch pipe will be relocated near the bridges. The District is partnering with the county to have the relocations around the bridges done by the county’s contractor to avoid potential coordination issues.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>Pipeline</th>
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</thead>
<tbody>
<tr>
<td>Project Manager:</td>
<td>Kevin Schmeltzer</td>
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<tr>
<td>Work Performed By:</td>
<td>Contract &amp; District Staff</td>
</tr>
<tr>
<td>Total Priority Score:</td>
<td>27</td>
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</tbody>
</table>

FUNDING SOURCES

| Water Rates: | Yes |
| Service Fees: | No |
| SDC Improvement Fee Eligible: | 0% |
| Partner Cost Percentage: | 0% |

FUTURE OPERATING COST IMPACT

No material impact. New installations designed for site specific corrosion conditions resulting in longer expected design life of pipeline and reduced leakage for system.

BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
<tr>
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</table>

CIP 2019-21 Proposed: QIP 26
**TVWD Financial Plan**

**Appendix B – Capital Improvement Plan**

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**TVWD Financial Plan**

**Appendix B – Capital Improvement Plan**

---

**Tualatin Valley Water District**

Requested Capital Improvement Plan

2019-21

(Six-Year Projection)

**PROJECT TITLE:** 80th Ave at Florence Lane & Taylors Ferry Rd Pipeline Relocation

---

**KEY DRIVERS FOR CIP PROJECT**

1. **Project Urgency:** The county is performing road work requiring relocations be done by the District to avoid conflicts with the road design.

2. **Asset Condition:** Replacement of aging infrastructure will provide new resilient structures capable of providing long-term, reliable service.

3. **Reliability:** Relocations will be designed to maintain reliable and seamlessly resilient facilities.

---

**PROJECT DESCRIPTION:**

This project is driven by two separate replacement projects being done by Washington County. The projects are located at 80th Ave and Florence Lane and 80th Ave and Taylors Ferry Road. The project will require relocation of a 16-inch waterline at Florence Lane, and an 8 inch and 24-inch waterline relocation at the Taylors Ferry intersection. The County has recently combined these two projects into a single larger project with construction anticipated for Summer 2019.

---

**PROJECT INFORMATION**

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<thead>
<tr>
<th>Project Category</th>
<th>Pipeline</th>
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<td>Work performed by</td>
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<td>Total Priority Score</td>
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**FUNDING SOURCES**

- Water Rates: Yes
- Service Fees: No
- IDC Improvement Fee (Off)
- Other: 0%

---

**FUTURE OPERATING COST IMPACT**

- No material impact. New installations designed for site specific corrosion conditions resulting in longer expected design life of pipeline and reduced leakage for system.

---

**BUDGET INFORMATION & PROJECTED COSTS**

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CIP 2019-21 Proposed
PROJECT TITLE: Jenkins Road Bridge Pipeline Relocation

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency: The county’s performing road work requiring relocations be done by the District to avoid conflicts with the road design.

2. Asset Condition: Replacement of aging infrastructure will provide new resilient structures capable of providing long term, reliable service.

3. Reliability: Relocations will be designed to maintain reliable and seismically resilient facilities.

PROJECT DESCRIPTION

This is a Washington County project to widen and improve this stretch of roadway. The waterline relocation is being done as part of the overall road project and consists of relocating a 12-inch watermain across the new bridge.

PROJECT INFORMATION

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<th>FUNDING SOURCES</th>
<th>FUTURE OPERATING COST IMPACT</th>
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<td>Project Manager</td>
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<td>Service Fees: No</td>
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BUDGET INFORMATION & PROJECTED COSTS

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<th>Future Years (FY2026-48)</th>
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</table>
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Walker Rd 12" Replacement - 185th to 174th

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   The county is performing road work requiring relocations be done by the District to avoid conflicts with the road design.

2. Asset Condition
   Replacement of aging infrastructure will provide new resilient structures capable of providing long term, reliable service.

3. Reliability
   Relocations will be designed to maintain reliable and seismically resilient facilities.

PROJECT DESCRIPTION

This is a Washington County project to widen and improve this stretch of roadway. The waterline relocation is being done as part of the overall road project.

PROJECT INFORMATION

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<tbody>
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FUNDING SOURCES

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FUTURE OPERATING COST IMPACT

No material impact. New installations designed for site specific conditions, resulting in longer expected design life of pipeline and required pipeline for system.

BUDGET INFORMATION & PROJECTED COSTS

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CIP 2019-21 Proposed

CIP 31
Appendix B – Capital Improvement Plan

Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Unidentified Development Opportunity & Reimbursement Projects

Tualatin Valley Water District Service Area

KEY DRIVERS FOR CIP PROJECT

1. Cost Effectiveness / Community Benefit
   - The District has benefited from significant cost savings by partnering with development projects to upgrade, replace, or install new pipelines that have been identified as recommended improvements in the 2018 Master Plan Update.

2. Reliability
   - Having funding available to participate in opportunity projects will allow the District to construct resilient backbone pipelines and other recommended improvements.

3. Asset Condition
   - Having funding available to participate in opportunity projects will allow the District to replace failing pipelines.

PROJECT DESCRIPTION

This is a general project category to implement the 2018 Water Master Plan Update. Specifically, the project will be used to partner with other agencies and developers to install or replace pipelines and other infrastructure as identified in the 2018 Water Master Plan Update or other planning studies to provide fire flow improvements, replace aging infrastructure, or provide resilient backbone piping. By partnering with other projects, significant cost savings can be realized.

PROJECT INFORMATION

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<td>SOC Improvement Fee</td>
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<td>Partner Percentage</td>
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BUDGET INFORMATION & PROJECTED COSTS

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### Tualatin Valley Water District

#### Requested Capital Improvement Plan

**2019-21**

(Six-Year Projection)

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**PROJECT TITLE:** Transmission Improvement Program

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**Tualatin Valley Water District Service Area**

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**KEY DRIVERS FOR CIP PROJECT**

1. **Asset Condition**
   - Transmission mains require further condition assessment to determine current conditions. The majority of the improvements are driven by seismic resiliency.

2. **Reliability**
   - Transmission mains are very important to delivering water. These projects will evaluate and provide seismically resilient supply transmission within the TVWD system.

3. **Customer Criticality**
   - Transmission mains impact large customer bases and other critical customers.

---

**PROJECT DESCRIPTION**

The Transmission Improvement Program includes currently planned and recommended pipe improvements that increase transmission capacity to accommodate future demands and improve seismic resiliency in the District’s backbone piping. For specific backbone piping, cost estimates for this Program reflect the need for higher seismic resiliency in transmission piping. The program includes new and replacement of existing transmission piping. Appendix B of the 2018 Master Plan Update provides a detailed list for these projects. The program will begin in the mid-term time horizon to allow for completion of the WWSP. Transmission improvements have been allocated into Tiers 1 to 3 based on criticality. Phases 1 through 3 of Tier 1 are assumed to be constructed in the mid-term. The remaining transmission projects (including Tier 1, Phase 4, Tier 2, and Tier 3 projects) are assumed to be constructed in the long-term planning horizon at an annual cost of approximately $5,140,000.

---

**PROJECT INFORMATION**

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<td>Outside Contract</td>
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<td>Total Priority Score:</td>
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</table>

**FUNDING SOURCES**

- Water Rates: Yes
- Service Fees: No
- SOC Improvement Fee Filing
- TBO
- Partner Cost Percentage: 0%

**FUTURE OPERATING COST IMPACT**

No material impact anticipated.

---

**BUDGET INFORMATION & PROJECTED COSTS**

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**CIP 2019-21 Proposed**

**CP - 33**
Project Title: P-156 - Metzger N-S 498 Zone Improvements

Key Drivers for CIP Project:
1. Safety and Security: These improvements in the Metzger service area address fire flow deficiencies that have been identified through the Master Planning process.
2. Project Urgency: These were prioritized during the Master Planning process and need to be completed in a timely manner. The project is also being done ahead of the wastewater rail project.
3. Growth / Future Demands: Fire flow projects will address both current and anticipated fire flow demands.

Project Description:
This project addresses fire flow deficiencies in the southeast side of the Metzger area. It consists of approximately 10,200 LF of 18 inch diameter piping from the Tualatin Ferry Reservoir to Atlanta and 69th Ave (South of Pacific Hwy). The project is currently in the design phase, with the bulk of the design and construction expected to occur in FY 2020.

Project Information:
- Project Category: Pipeline
- Project Manager: Andrew Barrett
- Work Performed By: Outside Contract
- Total Priority Score: 26
- Partner Cost Percentage: 2%

Funding Sources:
- Water Rates: Yes
- Service Fees: No

Future Operating Cost Impact:
As improvements for deficiencies, operating cost impacts are not anticipated. For new pipes and extensions, the District estimates additional operating costs at approx. 0.00% of total capital cost (i.e., $600 per $1 million in new pipe segments/extension) for overhead and materials for valve maintenance. Maintenance costs for mapping and locating new pipes may also be expected.

Budget Information & Projected Costs:

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<tr>
<th>Fiscal Year</th>
<th>FY 17-18 Budget</th>
<th>FY 17-19 Projected</th>
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Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

**PROJECT TITLE:** P-166 - Hampton St from 68th Ave to 66th Ave

**KEY DRIVERS FOR CIP PROJECT**

1. **Safety and Security**
   These improvements in the Metzger service area address fire flow deficiencies that have been identified through the Master Planning process.

2. **Project Urgency**
   These were prioritized during the Master Planning process and need to be completed in a timely manner.

3. **Growth / Future Demands**
   Fire flow projects will address both current and anticipated fire flow demands.

**PROJECT DESCRIPTION**

This project addresses fire flow deficiencies as identified in the master plan in the Metzger area from Hampton St, south along 64th 66th Ave to the south end of the District. It consists of approximately 2,400 LF of 12-inch diameter pipe, upgrading both 6-inch and 8-inch existing pipe.

**PROJECT INFORMATION**

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<thead>
<tr>
<th>Project Category</th>
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<tbody>
<tr>
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<td>Total Priority Score</td>
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**FUNDING SOURCES**

- Water Rates: Yes
- Service Fees: No
- SDC Improvement Fee Elig. : 39%
- Permit Cost Percentage: 0%

**FUTURE OPERATING COST IMPACT**

As improvements for deficiencies, operating cost impacts are not anticipated. For new pipes and extensions, the District estimates additional operating costs as approx. 0.06% of total capital cost (i.e., $600 per $1 million in new pipe segments/extensions) for exercising valves and materials for valve maintenance. Marginal costs for mapping and locating new pipes may also be expected.

**BUDGET INFORMATION & PROJECTED COSTS**

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<thead>
<tr>
<th>Year</th>
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<th>FY 17-19 Projected</th>
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Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: P-184 - 69th Ave from Dartmouth St to Atlanta St

KEY DRIVERS FOR CIP PROJECT

1. Safety and Security
   These improvements in the Metzger service area address fire flow deficiencies that have been identified through the Master Planning process.

2. Project Urgency
   These were prioritized during the Master Planning process and need to be completed in a timely manner.

3. Growth / Future Demands
   Fire flow projects will address both current and anticipated fire flow demands.

PROJECT DESCRIPTION

This project addresses fire flow deficiencies as identified in the master plan in the Metzger area on 69th Ave from Dartmouth St to Atlanta St. It consists of upgrading (approximately 1,400 LF of 4 inch to 8 inch pipe).

PROJECT INFORMATION

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<tr>
<td>Zach Lomborg</td>
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</table>

| Total Priority Score | 26 |

FUTURE OPERATING COST IMPACT

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Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: P-161 - Pacific Hwy from Hwy 217 to 71st Ave

KEY DRIVERS FOR CIP PROJECT
1. Safety and Security
   These improvements address fire flow deficiencies that have been identified through the Master Planning process.
2. Project Urgency
   These were prioritized during the Master Planning process and need to be completed in a timely manner.
3. Growth / Future Demands
   Fire flow projects will address both current and anticipated fire flow demands.

PROJECT DESCRIPTION
This project addresses fire flow deficiencies as identified in the master plan in the Metzger area mainly along Pacific Hwy from Hwy 217-Pacific Ramp to 71st Ave and including connecting streets on Pfüller and 79th Ave. The project consists of approximately 7,200 LF of 8-inch and 6-inch piping being upgraded to 12-inch, and 1,300 LF of 4-inch being upgraded to 8-inch.

PROJECT INFORMATION

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FUNDING SOURCES

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FUTURE OPERATING COST IMPACT

As improvements for deficiencies, operating cost impacts are not anticipated. For new pipes and extensions, the District estimates additional operating costs at 2-9% of total capital cost (i.e., $500 per $1 million in new pipe segments/extensions) for exercising valves and materials for valve maintenance. Marginal costs for mapping and locating new pipes may also be expected.

BUDGET INFORMATION & PROJECTED COSTS

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<td>FY 24-25</td>
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<td>Six-Year (FY2020-25)</td>
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<td>Future Years (FY2026-48)</td>
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CIP 2019-21 Prepared

CP - 37
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: P-80 - Viewmont Dr south of Barnes

KEY DRIVERS FOR CIP PROJECT

1. Safety and Security
   These improvements address fire flow deficiencies that have been identified through the Master Planning process.

2. Project Urgency
   These were prioritized during the Master Planning process and need to be completed in a timely manner.

3. Growth / Future Demands
   Fire flow projects will address both current and anticipated fire flow demands.

PROJECT DESCRIPTION

This project consists of replacing existing pipe at Viewmont Dr just south of Barnes Rd for fire flow only. This includes approximately 330 LF of 6-inch upgraded to 8-inch piping.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category</th>
<th>Pipeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>Zach Lemberg</td>
</tr>
<tr>
<td>Work Performed By</td>
<td>Outside Contract</td>
</tr>
<tr>
<td>Total Priority Score</td>
<td>25</td>
</tr>
</tbody>
</table>

FUNDING SOURCES

| Water Rates: Yes | Service Fee: No |

FUTURE OPERATING COST IMPACT

As improvements for deficiencies, operating cost impacts are not anticipated. For new pipes and extensions, the District estimates additional operating costs at around 0.01% of total capital cost (i.e., $600 per $1 million in new pipe segments/extensions) for exercising valves and materials for valve maintenance. Marginal costs for mapping and locating new pipes may also be expected.

BUDGET INFORMATION & PROJECTED COSTS

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CIP 2019-21 Prepared  CIP - 36
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: P-185 - 72nd Ave from Cherry Dr to Hunsiker

KEY DRIVERS FOR CIP PROJECT

1. Safety and Security
   These improvements address fire flow deficiencies that have been identified through the Master Planning process.

2. Project Urgency
   These were prioritized during the Master Planning process and need to be completed in a timely manner.

3. Growth/Future Demands
   Fire flow projects will address both current and anticipated fire flow demands.

PROJECT DESCRIPTION

This project consists of replacing existing piping on 72nd Ave from Cherry Dr to Hunsiker Rd and side streets for fire flow only. This includes approximately 1,100 LF of 12-inch pipe, and 2,800 LF of 8-inch pipe.

PROJECT INFORMATION

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<thead>
<tr>
<th>Project Category</th>
<th>Pipeline</th>
<th>Water Assets:</th>
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<tbody>
<tr>
<td>Project Manager</td>
<td>Zach Bohn</td>
<td>SDC Improvement, Fire Div.</td>
<td>99%</td>
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<td>Work Performed By</td>
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<tr>
<td>Total Priority Score</td>
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FUNDING SOURCES

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</table>

FUTURE OPERATING COST IMPACT

As improvements for deficiencies, operating cost impacts are not anticipated. For new pipes and extensions, the District estimates additional operating costs at approx. 0.06% of total capital cost (i.e., $600 per $1 million in new pipe segments/extensions) for exercising valves and materials for valve maintenance. Marginal costs for mapping and locating new pipes may also be expected.

BUDGET INFORMATION & PROJECTED COSTS

CIP 2019-21 Proposed
### Tualatin Valley Water District

**Request Capital Improvement Plan**

**2019-21**

(Six-Year Projection)

### Key Drivers for CIP Project

1. **Safety and Security**
   - These improvements address fire flow deficiencies that have been identified through the Master Planning process.

2. **Project Urgency**
   - These were prioritized during the Master Planning process and need to be completed in a timely manner. In addition, the existing piping was constructed in 1945 and is at the end of its useful life.

3. **Growth / Future Demands**
   - Fire flow projects will address both current and anticipated fire flow demands.

### Project Description

This project addresses the fire flow deficiencies as identified in the master plan and consists of replacing existing pipe at Polsky Rd/110th Ave. to 107th Ave., north to Hawthorne Ln., and to SW Scenic Dr for fire flow only. This includes approximately 1,100 LF of 8 and 12-inch piping.

### Project Information

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<thead>
<tr>
<th>Project Category</th>
<th>Pipeline</th>
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<table>
<thead>
<tr>
<th>Project Manager</th>
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<table>
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<th>Work Performed By</th>
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### Funding Sources

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<th>Service Fees</th>
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<th>Partial Cost Percentage</th>
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<td>0%</td>
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### Future Operating Cost Impact

- As improvements for deficiencies, operating cost savings are not anticipated. For new pipe and extensions, the District estimates additional operating costs at approx. 0.06% of total capital cost (i.e., $600 per $1 million in new pipe segments/extensions) for exercising valves and materials for valve maintenance. Migrated costs for mapping and locating new pipes may also be expected.

### Budget Information & Projected Costs

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Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Future Fire Flow Improvements

Tualatin Valley Water District Service Area

KEY DRIVERS FOR CIP PROJECT

1. Safety and Security
   These improvements address fire flow deficiencies that have been identified through the Master Planning process.

2. Project Urgency
   These were prioritized during the Master Planning process and need to be completed in a timely manner.

3. Growth / Future Demands
   Fire flow projects will address both current and anticipated fire flow demands.

PROJECT DESCRIPTION

The Fire Flow Improvement Program includes recommended pipe improvements that are recommended to address specific fire flow criteria deficiencies. Appendix M of the District’s Master Plan (Corolla 2018) provides a detailed list for these projects. The projects in this item are planned for completion in the mid-term timeframe.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>Pipeline</th>
<th>FUNDING SOURCES</th>
<th>FUTURE OPERATING COST IMPACT</th>
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</thead>
<tbody>
<tr>
<td>Project Manager:</td>
<td>Nick Augustus</td>
<td>Water Rates: Yes</td>
<td>As improvements for deficiencies, operating cost impacts are not anticipated. For new pipes and extensions, the District estimates additional operating costs at approx. 0.06% of total capital cost (i.e., $600 per $1 million in new pipe segments/extensions) for exercising valves and materials for valve maintenance. Minimal costs for mapping and locating new pipes may also be expected.</td>
</tr>
<tr>
<td>Work Performed By:</td>
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<td>Service Fees: No</td>
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<td>SOCs Improvmt. Fee Resp.: Various</td>
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FUTURE OPERATING COST IMPACT

<table>
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<th>FY 17-19 Budget</th>
<th>FY 17-19 Projected</th>
<th>FY 19-20 Budget</th>
<th>FY 20-21 Projected</th>
<th>FY 21-22 Projected</th>
<th>FY 22-23 Projected</th>
<th>FY 23-24 Projected</th>
<th>FY 24-25 Projected</th>
<th>Six-Year (FY2016-24)</th>
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CP: 2019-20 Proposed CP: 41
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: P-5 Farmington Rd BPS 16-inch Discharge Main

KEY DRIVERS FOR CIP PROJECT

1. Reliability
   Currently there is no redundant, systemically resilient supply to the Cooper Mountain area. This project addresses those concerns.

2. Customer Criticality
   This project will serve a large customer base.

3. Project Urgency
   This project is required to be done soon to allow for other critical maintenance activities for the Cooper Mountain area.

PROJECT DESCRIPTION

The Farmington Road BPS 16-inch Discharge line is essential to providing a reliable connection to the Cooper Mountain Reservoir from the Farmington Road BPS. This provides a redundant feed to the 800 pressure zone, and will allow the District to remove the 18th and Goyak pump stations from service while necessary repairs are made to the Goyak Reservoir and pump station. This could also replace the 12-inch line (140th to the reservoir) scheduled for long-term horizon: high velocity by 2026 ($3,153,000 add).

PROJECT INFORMATION

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<th>Project Category</th>
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<tbody>
<tr>
<td>Project Manager</td>
<td>Andrew Barrett</td>
</tr>
<tr>
<td>Work Performed By</td>
<td>Outside Contract</td>
</tr>
<tr>
<td>Total Priority Score</td>
<td>28</td>
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</table>

FUNDING SOURCES

| Water Rates: Yes | Service Fees: No |
| SDC Improvement Fee Elig. | 77% |
| Partner Cost Percentage | 0% |

FUTURE OPERATING COST IMPACT

There will be added operating costs to maintain and operate the new pipeline. The District estimates additional operating costs at approx. 0.068% of total capital cost (i.e., $560 per $1 million of capital). This includes valves & materials for valve maintenance only; marginal costs for mapping and locating may also be expected.

BUDGET INFORMATION & PROJECTED COSTS

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Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE:       North Road Pipeline Landslide Repair

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   The project is currently being designed with construction anticipated in the coming months.

2. Safety and Security
   The landslide is immediately adjacent to TVWD’s 24-inch waterline which serves the North Road Reservoir. This project is important to protect the waterline and homeowners which could be impacted by a failure of the waterline if the landslide were to continue.

3. Cost Effectiveness / Community Benefit
   This project is being done to avoid potential cost to replace the 24-inch waterline if the slope were to completely fail.

PROJECT DESCRIPTION
The existing slope on North Road has failed resulting in a landslide that is dangerously close to the District’s existing large diameter pipeline that connects the North Road T.M.G. Reservoir to the 800 pressure zone. This project will add a retaining wall to prevent the road from sliding further and damaging the pipe. Once the wall is constructed, the county will assume maintenance responsibilities for the wall.

PROJECT INFORMATION

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<tr>
<th>Project Category</th>
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<tbody>
<tr>
<td>Project Manager</td>
<td>Andrew Barrett</td>
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<td>Work Performed By</td>
<td>Outside Contract</td>
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<td>Total Priority Score</td>
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FUNDING SOURCES

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<th>FY 19-20 Budget</th>
<th>FY 20-21 Projected</th>
<th>FY 21-22 Projected</th>
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<td>400,000</td>
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FUTURE OPERATING COST IMPACT
No on-going operating cost. The new retaining wall is anticipated to be transferred to Multnomah County for ownership and maintenance.

BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
<tr>
<th>FY 21-22 Projected</th>
<th>FY 22-23 Projected</th>
<th>FY 23-24 Projected</th>
<th>FY 24-25 Projected</th>
<th>Six-Year (FY2020-25)</th>
<th>Future Years (FY2020-48)</th>
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<td>400,000</td>
<td>400,000</td>
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</tbody>
</table>
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Minor System Improvements

Tualatin Valley Water District Service Area

KEY DRIVERS FOR CIP PROJECT

1. Reliability
   These minor projects will increase the reliability of the system.

2. Asset Condition
   As piping and other components of the water system age, they need to be replaced. These improvements will improve the longevity of the system.

3. Project Urgency
   As development or other assessments are done, these projects will need to be done on a short timeline.

PROJECT DESCRIPTION

Minor system improvements are necessary to maintain and improve the operations of the system as development and other projects occur. The projects in this line item could include installing new connections (jumpers), cutting in new valves, or other realignments of pipelines. This work has historically been done as part of General System Maintenance; however, where new infrastructure is being added, it will be tracked as a capital project.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category</th>
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<tbody>
<tr>
<td>Project Manager</td>
<td>Pete Boone</td>
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<td>Work Performed By</td>
<td>Outside Contract</td>
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<tr>
<td>Total Priority Score</td>
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</table>

FUNDING SOURCES

| Water Rates: | Yes |
| Service Fees: | No |

FUTURE OPERATING COST IMPACT

Operational costs are negligible with this line item, though there may be some slight decrease as aging components are replaced.

BUDGET INFORMATION & PROJECTED COSTS

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GIP 2019-21 Proposed CP - 44
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Metzger Pipeline East

KEY DRIVERS FOR CIP PROJECT

1. Customer Criticality
   This pipeline will deliver water to the entire District, and will serve as the main source of supply for both the Metzger and Wolf Creek areas.

2. Project Urgency
   The project must be complete prior to the WWSS coming online in 2026.

3. Reliability
   The new pipeline will be a reliable, seismically resilient source of supply.

PROJECT DESCRIPTION

This project referred to as MPE_1 consists of approximately 35,560 LF of 48-inch diameter welded steel pipeline and 2,800 LF of 24-inch diameter pipe to deliver water from the WWSS turnout at Roy Rogers Road and Scholls Ferry Road to both the Metzger and Wolf Creek areas of TVWD. This project is expected to be complete prior to the WWSS coming online.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category: Pipeline</th>
<th>Water Rates: Yes</th>
<th>Future Operating Cost Impact: There will be added operating costs to maintain and operate the new pipeline. These costs include mapping, locating, and operating valves associated with the new pipeline. As part of a WWSS operations cost forecast completed in 2018, District staff estimated that the annual cost of exercising valves plus materials for valve maintenance would be approximately $45,000 in today's dollars.</th>
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<tbody>
<tr>
<td>Project Manager: WWSS</td>
<td>Service Fees:</td>
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<td>Work Performed By: Outside Contract</td>
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FUNDING SOURCES

BUDGET INFORMATION & PROJECTED COSTS

FY 20-21 Budget | FY 21-22 Projected | FY 22-23 Projected | FY 23-24 Projected | FY 24-25 Projected | Six-Year (FY2020-25) | Future Years (FY2026-48) |
----------------|-------------------|-------------------|-------------------|-------------------|----------------------|--------------------------|
CIP 2019-21 Proposed |                |                  |                  |                   |                      |                          |
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Metzger Pipeline East Real Estate

KEY DRIVERS FOR CIP PROJECT

1. Customer Criticality
   This pipeline will deliver water to the entire District, and will serve as the main source of supply for both the Metzger and Wolf Creek areas.

2. Project Urgency
   The project must be complete prior to the WWSS coming online in 2026.

3. Reliability
   The new pipeline will be a reliable, seismically resilient source of supply.

PROJECT DESCRIPTION
The costs shown below represent the current projections for real estate related to Metzger Pipeline East.

PROJECT INFORMATION

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<thead>
<tr>
<th>Project Category:</th>
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</table>

FUNDING SOURCES

| Water Rates: | Yes |
| Service Fees: | No |
| SDG Improvement Fee Elig.: | 63% |
| Partner Cost Percentage: | 0% |

FUTURE OPERATING COST IMPACT

There is no anticipated change in operating costs associated with the land for the pipeline.

BUDGET INFORMATION & PROJECTED COSTS

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<tr>
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CIP 2019-21 Proposed

CIP: 46
**PROJECT TITLE:** Metzger Pipeline East System-wide Costs

**PROJECT DESCRIPTION**

The costs shown below represent the current projections for WWSP system-wide costs related to Metzger Pipeline East.

**PROJECT INFORMATION**

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
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**FUTURE OPERATING COST IMPACT**

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CIP 2019-21 Proposed

QIP: 47

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**KEY DRIVERS FOR CIP PROJECT**

1. **Customer Criticality:** This pipeline will deliver water to the entire District, and will serve as the main source of supply for both the Metzger and Wolf Creek areas.

2. **Project Urgency:** The project must be complete prior to the WWSP coming online in 2026.

3. **Reliability:** The new pipeline will be a reliable, seismically resilient source of supply.
### TVWD Financial Plan

#### Requested Capital Improvement Plan

**2019-21**

*(Six-Year Projection)*

---

**PROJECT TITLE:** PRV / Vault Replacements & Upgrades: Unidentified Projects

---

### KEY DRIVERS FOR CIP PROJECT

1. **Asset Condition**
   - Several of the District’s Pressure Regulating Valves and associated vaults are at the end of their useful life and have experienced failures.

2. **Safety & Security**
   - Operator safety will be improved by replacing or upgrading vaults and improving access.

3. **Customer Criticality**
   - These facilities provide water to significant portions of the District's service area.

---

### PROJECT DESCRIPTION

This line item will include replacements, upgrades, and safety improvements of pressure regulating valve vaults. Included in this line item is the 1250 A Ave. vault, which needs the piping replaced due to corrosion and the valves restored to fit the pressure zone’s needs. Other representative projects include the Sier Ridge and Oak street vaults, which also need new piping due to corrosion, and a way to keep the vaults dry so the District can get a longer life out of its vaults.

---

### PROJECT INFORMATION

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<tr>
<th>Project Category</th>
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<td>District Staff</td>
</tr>
<tr>
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</table>

### FUNDING SOURCES

- Water Rates: Yes
- Service Fees: No

### FUTURE OPERATING COST IMPACT

- The addition of a PRV station will increase operating and maintenance costs nominally, but will also allow greater operational flexibility of the Miller Hill ARS.

### BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
<tr>
<th></th>
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* CIP 2019-21 Proposed
  
* CIP - 48
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Transmission Mains CARV Rehabilitation

Tualatin Valley Water District Service Area

KEY DRIVERS FOR CIP PROJECT

1. Asset Condition
   The district needs to maintain the existing CARVs and bring them up to current standards.

2. Water Quality
   These minor rehabilitation projects will address water quality concerns associated with the old CARVs.

3. Safety and Security
   There is a risk if the CARVs are not maintained, for there to be issues with the transmission pipelines along with potential water quality concerns.

PROJECT DESCRIPTION
This line item will include replacements, upgrades, and safety improvements of CARV valves and vaults. Rehabilitation and proper operation of the CARVs in the system is essential to maintaining pipelines, and avoiding damage to the pipelines.

PROJECT INFORMATION

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<tbody>
<tr>
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<td>Service Fees:</td>
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<td>Partner Cost Percentage:</td>
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</table>

FUTURE OPERATING COST IMPACT
No material impact to operating expenses.

BUDGET INFORMATION & PROJECTED COSTS

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</table>

GIP 2019-21 Proposed CP - 49
### PROJECT TITLE: Seismic Upgrades District Headquarters

#### KEY DRIVERS FOR CIP PROJECT

1. **Reliability**: Upgrades facility to be more likely to withstand a seismic/security event.
2. **Asset Condition**: Structural improvements to make the facility capable of providing long-term, reliable service. Opportunity projects such as painting, and carpet replacement will be done at the same time to capitalize on the project.
3. **Safety/Security**: Structural improvements will improve safety/life safety/security for District Staff.

#### PROJECT DESCRIPTION

Planning, design, permitting, and construction of seismic, security, and work process improvements of multiple interior and/or exterior areas at the TVWD Headquarters. The improvements will increase the safety, security, and resilience. FY 2021 project will focus improvements for building seismic upgrade.

#### PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category</th>
<th>Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>Matt Oglesby</td>
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<tr>
<td>Work Performed By</td>
<td>Contract &amp; District Staff</td>
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<td>Total Priority Score</td>
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#### FUNDING SOURCES

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<td>No</td>
<td>50% Improvement</td>
<td>Fee LG</td>
<td>Partner Cost Percentage</td>
</tr>
</tbody>
</table>

#### FUTURE OPERATING COST IMPACT

No material impact. No expansion is planned and is already part of the routine maintenance performed by the Facility staff. No long-term operating cost impact.

#### BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
<tr>
<th>FY 17-19 Budget</th>
<th>FY 17-19 Projected</th>
<th>FY 19-20 Budget</th>
<th>FY 20-21 Projected</th>
<th>FY 21-22 Projected</th>
<th>FY 22-23 Projected</th>
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CIP 2019-21 Proposed CP: 50
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Engineering/Operations Space Reorganization

KEY DRIVERS FOR CIP PROJECT

1. Growth/Future Demands: Efficiently repurpose underutilized space to meet the growing demands.

2. Cost Effectiveness / Community Benefits: By repurposing space this will postpone building expansions.

3. Asset Condition: Opportunity projects such as painting, and carpet replacement will be done at the same time to capitalize on the project.

PROJECT DESCRIPTION
Planning, design, purchasing and construction/remodel of multiple interior areas at the District Headquarters. Example areas: Engineering, Customer Service, and Operations. These areas need to be rearranged to increase productivity by consolidating work groups and maximize existing space to accommodate future needs. Included in the scope are opportunity projects like lighting, painting, carpet replacement, and workspace furnishing to be done at the same time. Work anticipated in FY 2021 includes space modifications necessary to finalize Engineering and Operations Dept re-organization.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>Facilities</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Project Manager:</th>
<th>Collin Fleming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Performed By:</td>
<td>Contract &amp; District Staff</td>
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FUTURE OPERATING COST IMPACT

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</table>

GIP 2019-21 Proposed
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Headquarters Lobby Improvements

KEY DRIVERS FOR CIP PROJECT
1. Safety and Security
   Lobby safety and security are essential to the customer service operations at TVWD.
2. Project Urgency
   The District is utilizing a consultant for the planning and design work for this project. The consultant will provide improvement recommendations to District staff.
3. Asset Condition
   The front lobby needs to be upgraded to meet the safety and security needs of the Customer Service Department. The flag poles will need to be replaced in order to comply with state law requirements.

PROJECT DESCRIPTION
The District has identified the customer lobby as an area that needs to be renovated with improvements in order to increase safety and security. This project includes planning, design, permitting, and construction/renovations to meet District objectives. This project will also include the addition of flag poles to display state law; the passage of HB2012 in 2015 requires that the National League of Cities‘ POW/MIA flag be flown along with the United States flag and the Oregon State flag upon or near public buildings that have existing flagpoles, which accommodate the proper display of three flags simultaneously.

PROJECT INFORMATION
<table>
<thead>
<tr>
<th>Project Category</th>
<th>Facilities</th>
</tr>
</thead>
</table>

| Project Manager | Collin Fleming |
| Work Performed By | Contract & District Staff |

| Total Priority Score | 17 |
| Percent Cost Percentage | 0% |

FUNDING SOURCES
| Water Rates: | Yes |
| Service Fees: | No |
| SDC Improvement, Fee Elig.: | 0% |

FUTURE OPERATING COST IMPACT
No material impact, no expansion is planned and is already part of the ongoing maintenance performed by the facility staff. No long term operating cost impact.

BUDGET INFORMATION & PROJECTED COSTS

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<thead>
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CIP 2019-21 Proposed
CIP 52
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Headquarters Yard Modifications

KEY DRIVERS FOR CIP PROJECT
1. Growth/Future Demands: Expanding covered storage area to increase the life of multiple assets such as fleet, inventory, and tools/equipment.
2. Safety & Security: Increase the safety of pedestrians and vehicle traffic by making dedicated walking and driving paths. Possibly add an additional entry/exit for employees in the south parking lot.
3. Reliability: Creating more storage by adding racking and additional covered areas will increase the amount of inventory we can store to be able to respond quicker to emergency situations.

PROJECT DESCRIPTION
Planning, design, permitting, construction of multiple improvement projects to increase pedestrian/vehicle flow, storage, and covered parking for TVWD fleet. Evaluate and study an additional entry/exit from South parking lot to Merlo Rd.

PROJECT INFORMATION

<table>
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<tr>
<th>Project Category</th>
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<tr>
<td>Work Performed By</td>
<td>Contract &amp; District Staff</td>
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FUNDING SOURCES

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</table>

Small maintenance impact due to expanded building footprint. Some impact of utilities due to increase in enclosed and heated building. Building will have a low maintenance requirement on the facility staff due to space being uncoupled.

<table>
<thead>
<tr>
<th>Future Operating Cost Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small maintenance impact due to expanded building footprint. Some impact of utilities due to increase in enclosed and heated building. Building will have a low maintenance requirement on the facility staff due to space being uncoupled.</td>
</tr>
</tbody>
</table>
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Safety and Security Improvements

KEY DRIVERS FOR CIP PROJECT

1. Asset Condition
   Many of the safety and security hardware is at or near its end of life and is valued on to work daily. Replacing/upgrading the systems will make TVWD better equipped to be able to expand in the future.

2. Safety & Security
   Facility safety and security are essential to the operations at TVWD and these systems are critical for that to happen. The safety rating is needed to meet OSHA codes.

3. Cost Effectiveness
   These systems are more cost effective if replaced before the end of life. Many systems would need to be replaced ASAP if they failed which would be done at a premium cost.

PROJECT DESCRIPTION

Planning, design, purchasing, and installation of critical safety and security hardware. Safety railing needs to be added to many areas on the roof to protect staff from fall hazards per OSHA. The electronic security equipment is in need of replacement due to equipment being at the end of its life. The new equipment and software may be easily expanded in the future. Examples: Alarm Panel Replacement, CyberLock Phase 2, modernization of the Access Control System, Fire Panel, Security Cameras.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category:</th>
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<tbody>
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FUNDING SOURCES

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<th>FY 20-21</th>
<th>FY 21-22</th>
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FUTURE OPERATING COST IMPACT

| Operating cost should decrease due to the new hardware taking less maintenance and time for reprogramming. Less vendor involvement is anticipated. Safety improvement: Staff will not have to tie off when on the roof to do maintenance activities which will save them time.

BUDGET INFORMATION & PROJECTED COSTS

CIP 2019-21 Proposed
CP - 54
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Board Room Audio Visual Improvements

KEY DRIVERS FOR CIP PROJECT

1. Asset Condition
   The AV equipment continues to have hardware and software issues that cannot be remediated.

2. Cost Effectiveness / Community Benefits
   Time would be saved with each meeting setup due to the multiple issues that arise with each setup. As the
   meeting frequency increases the cost savings are amplified.

3. Reliability
   The new equipment would be more reliable and easily scalable to meet the ever growing needs of the Board
   Room.

PROJECT DESCRIPTION

Replacement of existing audio and visual equipment in the Board Room is necessary due to issues that cannot be fixed. Project includes planning, design, purchase and installation of audio and visual equipment with the option to live stream/record meetings. The existing equipment is beyond its useful life and is increasingly costlier to maintain and set up for various meeting configurations (e.g., TVWD Board, WF, WW5, Joint agency boards). The new system would streamline the setup and save time. This project will be closely coordinated with potential building seismic upgrades.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Category</th>
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<tbody>
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<td>Project Manager</td>
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<td>Work Performed By</td>
<td>Contract &amp; District Staff</td>
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FUNDING SOURCES

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<thead>
<tr>
<th>FY 17-19 Budget</th>
<th>FY 17-19 Projected</th>
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</table>

FUTURE OPERATING COST IMPACT

- Operating cost would decrease due to less maintenance need by the vendor (which has increased the last couple years) as well as less labor used to setup and troubleshoot issues.

BUDGET INFORMATION & PROJECTED COSTS

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<thead>
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</table>
# Appendix B – Capital Improvement Plan

## Tualatin Valley Water District

**Requested Capital Improvement Plan**

**2019-21**

**(Six-Year Projection)**

### PROJECT TITLE: HVAC Replacements

![Image of HVAC unit]

### KEY DRIVERS FOR CIP PROJECT

<table>
<thead>
<tr>
<th>Driver</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reliability</td>
<td>The server room backup HVAC unit is needed due to the criticality of that room and a redundant system relieves some of the risk of overheating.</td>
</tr>
<tr>
<td>2. Aging Infrastructure</td>
<td>Proactively prioritizing an HVAC replacement program. Many of the HVAC units are approaching the end of their lives. One unit costs the original building, making it hard to find repair parts.</td>
</tr>
<tr>
<td>3. Cost Effectiveness / Community Benefit</td>
<td>Systematically replacing the units will be more cost effective than replacing them when they stop working. Some units will need to have duct work replaced which cannot be done in an emergency.</td>
</tr>
</tbody>
</table>

### PROJECT DESCRIPTION

Many of the HVAC units are in need of replacing due to the units reaching their life expectancy. This project would include the addition of a backup HVAC unit for the server room and a systematic replacement of the rest of the units. Replacement of HVAC units will be coordinated with any building improvements for seismic resiliency.

### PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Category</th>
<th>Facilities</th>
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### FUNDING SOURCES

<table>
<thead>
<tr>
<th>Source</th>
<th>Water Rates: Yes</th>
<th>Service Fees: No</th>
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<tbody>
<tr>
<td>SDC Improvement</td>
<td>Fee 1BP: 0%</td>
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### TOTAL PRIORITIZATION SCORE:

| Score | 14 |

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<thead>
<tr>
<th>Project Manager</th>
<th>Collin Fleming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Performed By</td>
<td>Contract &amp; District Staff</td>
</tr>
</tbody>
</table>

### FUTURE OPERATING COST IMPACT

Operating cost should decrease due to more efficient units which will decrease energy consumption. Less labor will be needed by staff in managing the repairs by vendors.

### BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
<tr>
<th></th>
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</table>
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Headquarters Lighting Improvements

KEY DRIVERS FOR CP PROJECT

1. Cost Effectiveness / Community Benefit
   Partnering with the Energy Trust of Oregon, the new fixtures would decrease energy usage as well as maintenance by the facilities staff. Relamping frequency would decrease due to the LED lights lasting 15-20 years instead of 4-5 years.

2. Asset Condition
   The light panel is outdated and needs to be replaced due to unreliability issues.

3. Safety and Security
   The outdoor lighting is inadequate for security light. The existing lighting is not instant on which is needed for a high-security campus. Also, the light panel does not work properly with the motion sensors for the safety of our personnel.

PROJECT DESCRIPTION

Multiple interior and exterior lights have been found to have inadequate light for safety and security. This project would lay out a plan to replace light fixtures instead of relamping, which happens on a four-year rotation for proper illumination and maintenance issues. The light panels that are connected to the security system have become unreliable and need to be replaced. Facilities would work with the Energy Trust of Oregon to increase efficiency, improve light quality, increase security, and maximize rebates that are offered.

PROJECT INFORMATION

<table>
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<tr>
<th>Project Category:</th>
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<td>Matt Ogden</td>
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<td>Total Priority Score:</td>
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FUNDING SOURCES

| Water Rates: | Yes |
| Service Fees: | No |
| SOC Improvement: Fee(s): | 0% |
| Partner Cost Percentage: | 0% |

FUTURE OPERATING COST IMPACT

Operating cost would decrease from more energy-efficient systems. Decreased replacement frequency results in lowered labor cost.

BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
<tr>
<th>FY 17-19 Budget</th>
<th>FY 17-19 Projected</th>
<th>FY 19-20 Budget</th>
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GIP 2019-21 Proposed
## Tualatin Valley Water District
### Requested Capital Improvement Plan
#### 2019-21

**FLEET REPLACEMENT SCHEDULE**

<table>
<thead>
<tr>
<th>DIVISION OR PROGRAM</th>
<th>ITEM</th>
<th>QTY</th>
<th>DESCRIPTIONS AND RATIONALE</th>
<th>TOTAL AMT</th>
<th>FY 19-20</th>
<th>FY 20-21</th>
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<td>System Ops</td>
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</table>

CIP 2019-21 Proposed

CP - 58
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Customer Information System

Tualatin Valley Water District Service Area

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   The District’s legacy utility billing system is outdated, requires significant internal support and lacks functionality necessary to meet District objectives such as improving the customer experience.

2. Customer Criticality
   The Customer Information System (CIS) impacts District customers as well as billing partners. Newer CIS technologies are expected to address customer satisfaction by expanding secure customer self-service options.

3. Reliability
   The CIS is a mission-critical system that must be reliable and flexible in order to meet current and future District needs, including potential affordability measures. The new CIS is expected to provide improved system reliability as compared to the legacy utility billing system.

PROJECT DESCRIPTION

This project, a joint venture with billing partner Clear Water Services, focuses on selecting and implementing a commercial Customer Information System (CIS) to replace the District’s legacy utility billing system. The District and Clear Water Services will share costs for the project. CIS project phases will be: selection; implementation; and beginning ongoing operations under the new system. The CIS project timeline through cutover and new system stabilization is anticipated to take approximately three years. The District will continue to refine project cost estimates and staffing requirements throughout the project cycles and provide ongoing reporting to the Board of Commissioners and management. The project will involve extensive customer communications prior to cutover.

<table>
<thead>
<tr>
<th>PROJECT INFORMATION</th>
<th>FUNDING SOURCES</th>
<th>FUTURE OPERATING COST IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Category:</td>
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<td></td>
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<td>Service Fees: No</td>
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<tr>
<td>Project Manager:</td>
<td>Andrew Carlstrom</td>
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BUDGET INFORMATION & PROJECTED COSTS

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</table>
TVWD Financial Plan

Appendix B – Capital Improvement Plan

Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Service Installations

Tualatin Valley Water District Service Area

KEY DRIVERS FOR CIP PROJECT

1. Growth/Future Demands
   Serves new customers as they are added to the District’s service area, and replaces aging meters and services as needed to provide reliable service.

2. Reliability
   Improvements required to maintain reliable water service to customers.

3. Customer Criticality
   Enhances safety by improving level of service for customers and providing safe, reliable drinking water.

PROJECT DESCRIPTION

This category of work involves the various ongoing installation and replacement of service installations and large meters by District crews in support of new development and customer base growth, and to replace aging infrastructure on an as-needed basis. The service and large meter installation work is completed by TVWD Field Operations. Costs for new service installations are paid by separate development fees.

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>Meters &amp; Services</th>
<th>Funding Sources</th>
<th>Future Operating Cost Impact</th>
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<tbody>
<tr>
<td>Project Manager:</td>
<td>Field Operations</td>
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<td>Meter and service maintenance is an ongoing and routine district activity. Meters and services for new customers are recovered through separate fees.</td>
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<tr>
<td>Work Performed By:</td>
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<td>Service Fees: Yes</td>
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<td>Partner Cost Percentage: 0%</td>
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FUTURE OPERATING COST IMPACT

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Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Customer Service: Meter Installations

Tualatin Valley
Water District
Service Area

KEY DRIVERS FOR CIP PROJECT

1. Growth/Future Demands
   Serves new customers as they are added to the District's service area, and replacement of aging meters and services as needed to provide reliable service.

2. Reliability
   Improvements required to maintain reliable water service to customers.

3. Customer Criticality
   Enhances safety by improving level of service for customers and providing safe, reliable drinking water.

PROJECT DESCRIPTION

This category of work involves the various ongoing installation and replacement primarily residential meters and services by District crews in support of new development and customer base growth, and to replace aging infrastructure on an as needed basis. The meter installation work is completed by TVWD Field Customer Service. Costs for new meters installations are paid by separate development fees.

PROJECT INFORMATION

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<thead>
<tr>
<th>Project Category:</th>
<th>Meters &amp; Services</th>
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<tbody>
<tr>
<td>Project Manager:</td>
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<td>Service Fees:</td>
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<tr>
<td>Work Performed By:</td>
<td>District Staff</td>
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<tr>
<td>Total Priority Score:</td>
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<td>Partner Cost Percentage:</td>
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</table>

FUTURE OPERATING COST IMPACT

Meter and service maintenance is an ongoing and routine district activity. Meters and services for new customers are recovered through separate fees.

BUDGET INFORMATION & PROJECTED COSTS

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<tr>
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</table>
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: Automated Meter Reading Program (AMR)

Tualatin Valley Water District Service Area

KEY DRIVERS FOR CIP PROJECT

1. Asset Condition
   Replacement of aging infrastructure to provide new resilient appurtenances capable of providing long-term, reliable service.

2. Reliability
   Improvements required to maintain reliable and resilient facilities.

3. Cost Effectiveness / Community Benefit
   Provides new AMR meters to improve cost-effectiveness of long term operations to the District’s customers.

PROJECT DESCRIPTION

This program is being postponed until the District considers and develops a plan based on the results of the upcoming AMR business case analysis.

PROJECT INFORMATION

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<tr>
<th>Project Category</th>
<th>Meters &amp; Services</th>
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</table>

<table>
<thead>
<tr>
<th>Project Manager</th>
<th>Field Customer Service</th>
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<td>Work Performed By</td>
<td>District Staff</td>
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| Total Priority Score     | TE0                   |

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<th>FUNDING SOURCES</th>
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<tr>
<td>Water Rates:</td>
<td>Yes</td>
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<tr>
<td>Service Fees:</td>
<td>No</td>
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</table>

<table>
<thead>
<tr>
<th>FUTURE OPERATING COST IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMR meters result in decreased labor costs over time. Each AMR battery will need to be replaced about every twelve years. The District will budget for these replacements in the future as needed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUDGET INFORMATION &amp; PROJECTED COSTS</th>
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</table>

CP 2019-21 Proposed
CP - 62
### Project Title: Joint Venture: WIF

#### Key Drivers for CIP Project

1. **Project Criticality:**
   - First piece of the Willamette Water Supply System (WWSS), which will provide reliable and safe drinking water to the District's customers.

2. **Growth/Future Demands:**
   - Project is a key element of the District's new long-term supply source that will meet current and future demands.

3. **Reliability:**
   - WWSS will increase overall reliability by providing a new, seismically hardened source for the District.

#### Project Description

Program level costs associated with the Willamette Intake Facilities (WIF) Commission, including new fish screens, anhurst system improvements, and seismic improvements to the expanded intake within the raw water facility at the Willamette River Water Treatment Plant (WRWTP). For more details on the WWSS raw water facility project (WWF 1.0), please see page 9-2 in your budget workbook.

Costs shown below are TVWD's share of projected total project costs. Therefore, under funding Sources, the partner cost percentage (of the costs shown) is zero (0%).

#### Project Information

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>Joint Venture</th>
<th>Funding Sources:</th>
<th>Future Operating Cost Impact</th>
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<tbody>
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<td>Water Rates:</td>
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<td>The water intake improvements are either replacements or static in nature, and should not drive material net impacts on future operating costs.</td>
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<tr>
<td>Source Impact:</td>
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<td>Work Performed By:</td>
<td>Outside Contract</td>
<td>SBC Improvement, Fee Elig.</td>
<td>For details on the estimated cost impact of the future new water facility (WWF 1.0), please see page 9-2 in your budget workbook.</td>
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<td>Total Priority Score:</td>
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<td>Partner Cost Percentage:</td>
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#### Budget Information & Projected Costs

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<td>FY 23-24</td>
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CP 2019-21 Proposed

CP - 15

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**TVWD Financial Plan**

Appendix B – Capital Improvement Plan

Page 146

May 2019
### Joint Venture: WWSS

**Project Title:** Joint Venture: WWSS

#### Key Drivers for CIP Project

<table>
<thead>
<tr>
<th>Driver</th>
<th>Description</th>
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<tbody>
<tr>
<td>1. Project Criticality</td>
<td>Willamette Water Supply System (WWSS) will provide reliable and safe drinking water to the District's customers.</td>
</tr>
<tr>
<td>2. Growth/Future Demands</td>
<td>WWSS will be a new long-term supply source to meet current and future demands.</td>
</tr>
<tr>
<td>3. Reliability</td>
<td>WWSS will increase overall reliability by providing a new, seismically hardened source for the District.</td>
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</tbody>
</table>

**Project Description**

Program level costs associated with supporting the development and implementation of the Willamette Water Supply System (WWSS), including design and construction of the WWSS projects, costs for real estate and easements, permitting and mitigation, legal expenses, program management services, and management reserves. For more details on individual WWSS projects, please see pages 1-12 in your budget workbook.

Costs shown below are TVWD's share of projected total project costs. Therefore, under Funding Sources, the partner cost percentage (of the costs shown) is zero (0%).

#### Project Information

- **Project Category:** Joint Venture
- **Project Manager:** David Knack
- **Work Performed By:** Outside Contract
- **Total Priority Score:** 28

#### Funding Sources

- **Water Rates:** Yes
- **Service Fees:** No
- **SDC Improvmt. Fee Sht:** 61%

#### Future Operating Cost Impact

Overall, the WWSS will result in significant savings by eliminating purchased water costs from Portland. The District is projecting net savings of approximately $5 million in FY2027 (i.e., a 96% decrease from FY2026), after shifting from 100% purchased water costs to a new balance of MCC water purchases plus the costs of WWSS treatment and pumping power.

#### Budget Information & Projected Costs

<table>
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CIP 2019-21 Proposed: 147

CIP 2019-21 Proposed: 147

TVWD Financial Plan

Appendix B – Capital Improvement Plan

May 2019
# Tualatin Valley Water District

## Requested Capital Improvement Plan

**2019-21**

*(Six-Year Projection)*

## PROJECT TITLE: JWC WTP improvements to existing 75 MGD

![](image)

### KEY DRIVERS FOR CIP PROJECT

1. **Project Uniqueness**
   - This project is unique and nearing completion. The budget accounts for items associated with final completion of the project.
2. **Growth/Future Demand**
   - Plant improvements increase production to meet growing demands cost effectively.
3. **Reliability**
   - Improvements required to maintain reliable supply.

### PROJECT DESCRIPTION

This project will replace the Joint Water Commission (JWC) Water Treatment Plant to its rated capacity of 75 MGD. Each JWC partner will have a capacity share responsibility for this. Also included are design-life safety improvements as recommended in the 2008 seismic study, and further prioritized by Corvallis in the Seismic CIP program. A facility plan for the proposed WTP build-out based on the Willamette Supply decision.

Costs shown below are TVWD’s share of projected total project costs. Therefore, under Funding Sources, the partner cost percentage (all the costs shown) is zero (0%).

## BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
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</table>

![CIP 2019-21 Proposed](image)
### Project Title: JWC WTP improvements to increase to 85 MGD

![Project Site Map](image)

#### Key Drivers for CIP Project

1. **Project Urgency**: This project is on-going and nearing completion. The budget accounts for items associated with final completion of the project.
2. **Growth/Future Demands**: Plant expansion increases production to meet growing demand cost effectively.
3. **Reliability**: Improvements required to maintain reliable supply.

#### Project Description

This is a continuation from current fiscal year. The key component of this project is to expand the capacity from 75 to 85 MGD. Milburn will take 3 MGD of this expansion and TVWD will take 2 MGD. The treatment plant expansion design was awarded to CH2M and started in the second half of FY 15/16. Stoydan Construction was selected as the CM/GC contractor for the project. Package 1 WTP Improvement started in February 2017. Package 2 Construction started in November 2017. The Expansion is expected to be complete in fall 2019.

Costs shown below are TVWD's share of projected total project costs. Therefore, under Funding Sources, the partner cost percentage (of the costs shown) is zero (0%).

#### Project Information

<table>
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<tr>
<td>Project Manager</td>
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#### Funding Sources

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<td>Service Fees</td>
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<td>SOE Improvement Fund</td>
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#### Future Operating Cost Impact

A slight decrease in operating cost is anticipated since the District will no longer need to lease capacity.

#### Partner Cost Percentage

Partner Cost Percentage: 0%

#### Budget Information & Projected Costs

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</tr>
<tr>
<td>Future Years</td>
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</tr>
</tbody>
</table>

CIP 2010-15 Proposed: CIP 2019-21 Proposed
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: JWC Fern Hill Reservoir 1 Repair

KEY DRIVERS FOR CIP PROJECT

1. Asset Condition
   The reservoir has concrete spalling around the interior perimeter of the tank and the roof has concrete cracking, exposed rebar, and poor drainage.

2. Project Urgency
   The reservoir is in need of repairs to address spalling around the interior perimeter of the tank and to prevent further cracking on the roof, project exposed rebar, and fix poor drainage.

3. Reliability
   Improvements required to maintain reliable supply.

PROJECT DESCRIPTION

In June 2017, routine diving inspection of Fern Hill Reservoir #1 revealed concrete spalling around the interior perimeter of the tank. JWC contracted with OBC Consulting Engineers to perform a full reservoir internal inspection (‘boat-soft’) and external inspection. Their report dated December 15, 2017 indicated that cosmetic repairs were required on the interior of the tank to address the spalling. In addition, OBC identified that the exterior roof needed repairs to seal and prevent further existing concrete cracking, protect exposed rebar, and fix poor drainage. Estimates for the repairs (including engineering services and contingencies) were provided by OBC in a total of $513,000. Design work will be performed in FY 19/20. Construction work will be performed in FY 19/20.

Costs shown below are TVWD's share of projected total project costs. Therefore, under Funding Sources, the partner cost percentage (of the costs shown) is zero (0%).

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category</th>
<th>JWC</th>
<th>Water Rates: Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>TBD</td>
<td>Service Fees: No</td>
</tr>
<tr>
<td>Work Performed By</td>
<td>Outside Contract</td>
<td></td>
</tr>
<tr>
<td>Total Priority Score</td>
<td>This is a partnership project, agreed to by the JWC</td>
<td></td>
</tr>
</tbody>
</table>

FUTURE OPERATING COST IMPACT

| Partner Cost Percentage | 0% |

BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
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<td></td>
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</tbody>
</table>

CIP 2019-21 Proposed
PROJECT INFORMATION

1. Asset Condition: Some pumps are from the 1970s, so they are unreliable, energy inefficient, and there are no spare parts available.

2. Cost Effectiveness: In order to minimize delays in engineering and installation, the future replacement of two pumps was accelerated to be concurrent with the immediate replacement of two other pumps.

3. Safety/Security: Some of these projects will repair facility leaks, while another will replace chemical storage buildings.

PROJECT DESCRIPTION

This collection of projects consists of minor capital repairs, replacements, upgrades, and unstreamlined miscellaneous expenses, including repairs of finished water and backwash pumps and motors, electrical assessments and improvements, a new JW 10 pump with a variable frequency drive, concrete in sedimentation basins (basins A, B, and C), roof repairs, replacement of the operations and chemical storage buildings, future annual capital leaks, and a master plan update in 2023. The JW master plan was most recently amended in 2015.

Costs shown below are TVWD’s share of projected total project costs. Therefore, under funding sources, the partner cost percentage (of the costs shown) is zero (0%).

FUNDING SOURCES

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>JW</th>
<th>Water Rates: Yes</th>
<th>Service Fees: No</th>
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<tbody>
<tr>
<td>Project Manager:</td>
<td>TBO</td>
<td>SOX Improvement, Fees: 0%</td>
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</tr>
<tr>
<td>Work Performed By:</td>
<td>Outside Contract</td>
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</tr>
<tr>
<td>Total Priority Score:</td>
<td>This is a partnership project, agreed to by the JW.</td>
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</tr>
<tr>
<td>Partner Cost Percentage:</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FUTURE OPERATING COST IMPACT

Costs for JW operations are passed through to JW partners (water wholesale, chemical and water purchases). Most of these capital projects are minor equipment upgrades and replacements, which will not have a significant operating cost impact.

BUDGET INFORMATION & PROJECTED COSTS

<table>
<thead>
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<td>1,506,000</td>
<td>19,518,500</td>
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</table>
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

**PROJECT TITLE:** BRJOC Capital Repair/Replacement

**KEY DRIVERS FOR CIP PROJECT**

1. Project Urgency
   - Maintains supply for multiple water supply partners.

2. Customer Criticality
   - Reserves funds to ensure continuity of service in the event of unanticipated maintenance or equipment repair needs.

3. Reliability
   - Improvements required to maintain reliable supply.

**PROJECT DESCRIPTION**

This project funds a reserve for unanticipated capital expenses for the Barney Reservoir Joint Ownership Commission (BRJOC) partners. Reserve funds are allocated based on ownership shares of the reservoir facilities, of which the District is a 25% owner. Establishment of the reserve provides resources to the BRJOC in the event of unplanned capital expenditure needs. Use of the reserve requires approval by all BRJOC partners including the District.

Costs shown below are TVWD's share of projected total project costs. Therefore, under Funding Sources, the partner cost percentage (of the costs shown) is zero (0%). The FY 19-20 amount includes the District's share of the flame force project, budgeted at approximately $75,000. The FY 19-20 budget also includes about 25% of a new server and software for water sampling (remainder covered by JWC and Hillsboro), and budget to cover about 30% of a new vehicle for water sampling.

**PROJECT INFORMATION**

- **Project Category:** JWC
- **Funding Sources:** Water Rates: Yes, Service Fees: No
- **FUTURE OPERATING COST IMPACT:** No material impact anticipated.
- **Project Manager:** TBD
- **Work Performed By:** Outside Contractor
- **Total Priority Score:** This is a partnership project, agreed to by the JWC.
- **Partner Cost Percentage:** 0%

**BUDGET INFORMATION & PROJECTED COSTS**

<table>
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<tr>
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CIP 2019-21 Proposed

CIP - 60
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: JWC Water Line Cathodic Protection

KEY DRIVERS FOR CIP PROJECT

1. Asset Condition: Project will reduce corrosion in water transmission lines.
2. Cost Effectiveness: Project will increase the useful life of water transmission lines.
3. Reliability: Cathodic protection reduces the risk of service interruption due to leaks caused by corrosion.

PROJECT DESCRIPTION

Multi-year project to install cathodic protection devices to water transmission lines. FY 19-20 budget is for study to identify optimal placement. Project will assess soil conditions and other factors to identify specific locations to install anodes. Thereafter, budget is for installation of cathodic protection devices on identified sections of pipelines until project completion. Will increase the useful life of assets by reducing corrosion.

Costs shown below are TVWD’s share of projected total project costs. Therefore, under Funding Sources, the partner cost percentage (of the costs shown) is zero (0%).

<table>
<thead>
<tr>
<th>PROJECT INFORMATION</th>
<th>FUNDING SOURCES</th>
<th>FUTURE OPERATING COST IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Category:</td>
<td>Water Rates: Yes</td>
<td>Cathodic protection is applied to mitigate premature transmission pipe failure due to corrosion, thereby reducing future maintenance and repair costs.</td>
</tr>
<tr>
<td>Project Manager:</td>
<td>Service Fees: No</td>
<td>Aftermath of accidents, such as accidents, would reduce future maintenance and repair costs.</td>
</tr>
<tr>
<td>Work Performed By:</td>
<td>SOC Improvement. Fee $/</td>
<td></td>
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<tr>
<td>Total Priority Score:</td>
<td>This is a partnership project, agreed to by the IWC. Partner Cost Percentage: 0%</td>
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<table>
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<th>BUDGET INFORMATION &amp; PROJECTED COSTS</th>
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<tbody>
<tr>
<td>21,209</td>
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</table>

CIP 2019-21 Proposed
CP - 70
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: JWC Powder Activated Carbon Injection System Expansion

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   Expansion will increase capacity to treat water at the WTP.

2. Safety / Security
   Adding a second injector will provide the necessary capacity needed to treat water during a cyanobacteria event.

3. Reliability
   Improvements required to maintain reliable supply.

PROJECT DESCRIPTION

This project will expand the limited capacity to inject powder activated carbon (PAC) into the water treatment system. Current system is a single injector, but two injectors would be needed to treat the water in the event of a cyanobacteria event. The project includes a second PAC injector system, telemetry systems and controls, and a new PAC chlorine contactor system to store carbon. PAC will be injected into the WTP as a "WTP process".

Costs shown below are TVWD's share of projected total project costs. Therefore, under Funding Sources, the partner cost percentage (of the costs shown) is zero (0%).

<table>
<thead>
<tr>
<th>PROJECT INFORMATION</th>
<th>FUNDING SOURCES</th>
<th>FUTURE OPERATING COST IMPACT</th>
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<tr>
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<td>Project Manager:</td>
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<td>Service Fees: No</td>
</tr>
<tr>
<td>Work Performed By:</td>
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<td>Total Priority Score:</td>
<td>This is a partnership project, agreed to by the IWC.</td>
<td>Partner Cost Percentage: 0%</td>
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BUDGET INFORMATION & PROJECTED COSTS

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<thead>
<tr>
<th></th>
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<th>FY 17-19 Projected</th>
<th>FY 18-19 Budget</th>
<th>FY 18-20 Projected</th>
<th>FY 21-22 Projected</th>
<th>FY 22-23 Projected</th>
<th>FY 23-24 Projected</th>
<th>FY 24-25 Projected</th>
<th>Six-Year (FY2020-24)</th>
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<td></td>
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</tbody>
</table>
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: JWC Spring Hill Pumping Plant Mitigation Project

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   Existing fish screens do not meet criteria set by National Marine Fisheries Service (NMFS) and the Oregon Department of Fish and Wildlife (ODFW).

2. Cost Effectiveness
   Mitigation, potentially in the form of a small culvert replacement, aims to avoid costs associated with the entire Spring Hill Pumping Plant.

3. Environment
   Culvert replacement satisfies NMFS and ODFW criteria for providing safer fish passage.

PROJECT DESCRIPTION

The fish screen at the Spring Hill Pumping Plant (SHPP) does not meet criteria set by NMFS and ODFW. When JWC submitted a new supplemental water right application on the Tualatin River for non-fish use, ODFW let us know that they will not approve the water right without a fish screen that meets their criteria (including approach velocities, swirling velocities, and swirl size). NMFS was signed off on the fish screen due to the small number of endangered and threatened fish that are present, so the Bureau of Recreational and Tualatin Valley Irrigation District do not have any motivation or requirement to update the fish screen of the facility. In order to avoid paying costs associated with the entire SHPP, JWC proposed mitigation in lieu of fish screen or intake replacement. JWC completed a fish passage and impingement study over the last year that indicates that a mitigation project will be required for the JWC portion of the intake. JWC is investigating a small culvert replacement for the mitigation project.

Costs shown below are TVWD's share of projected total project costs. Therefore, under Funding Sources, the partner cost percentage (of the costs shown) is zero (0%).

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category</th>
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<tbody>
<tr>
<td>Project Manager</td>
<td>TBD</td>
</tr>
<tr>
<td>Work Performed By</td>
<td>Outside Contract</td>
</tr>
</tbody>
</table>
| Total Priority Score | 80%

FUNDING SOURCES

| Future Operating Cost Impact | Water Rates: Yes |
|------------------------------| Service Fees: No |
|                              | No material impact anticipated. Avoid capital cost of replacing fish screen at the Spring Hill Pumping Plant. |
|                              | Service Fees: |
|                              | SDC Improvement Fee Exp: |
|                              | Site Development: |
|                              | Partner Cost Percentage: 0%

BUDGET INFORMATION & PROJECTED COSTS

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<tr>
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</table>

CIP 2019-21 Proposed: CIP - 72
**JWC Disinfection Facility (chlorine replacement)**

**PROJECT TITLE:** JWC Disinfection Facility (chlorine replacement)

**KEY DRIVERS FOR CIP PROJECT**

1. **Reliability**
   - Improvements required to maintain reliable supply.

2. **Safety / Security**
   - Producing chlorine on an as-needed basis will reduce chemical storage requirements.

3. **Asset Conditions**
   - This project will modernize operations at the JWC treatment facility.

**PROJECT DESCRIPTION**

The disinfection facility is a replacement to the existing chlorine gas system. Generating chlorine on-site will reduce the need to store large amounts of chlorine gas.

Costs shown below are TVWD's share of projected total project costs. Therefore, under funding sources, the partner cost percentage (all the costs shown) is zero (0%).

**PROJECT INFORMATION**

<table>
<thead>
<tr>
<th>Project Category:</th>
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<tbody>
<tr>
<td>Project Manager:</td>
<td>TBO</td>
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<tr>
<td>Work Performed By:</td>
<td>Outside Contract</td>
</tr>
<tr>
<td>Total Priority Score:</td>
<td>This is a partnership project, agreed to by the JWC</td>
</tr>
</tbody>
</table>

**FUNDING SOURCES**

- **Water Rates:** Yes
- **Service Fees:** No
- **SDC Improvement, Fee Eq.:** $0

**FUTURE OPERATING COST IMPACT**

- No material net impact is anticipated. There will be new operational costs associated with the facility, however, these costs will be offset by the reduction in costs from safely transporting and storing chlorine gas.

**BUDGET INFORMATION & PROJECTED COSTS**

<table>
<thead>
<tr>
<th>FY 17-18 Budget</th>
<th>FY 17-18 Projected</th>
<th>FY 18-19 Budget</th>
<th>FY 18-19 Projected</th>
<th>FY 20-21 Budget</th>
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</thead>
<tbody>
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<table>
<thead>
<tr>
<th>FY 21-22 Projected</th>
<th>FY 22-23 Projected</th>
<th>FY 23-24 Projected</th>
<th>FY 24-25 Projected</th>
<th>Six-Year (FY2020-25)</th>
<th>Future Years (FY2026-48)</th>
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<tbody>
<tr>
<td>188,800</td>
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<td>688,906</td>
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</table>

CIP 2019-21 Proposed
TVWD Financial Plan
Appendix B – Capital Improvement Plan

Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: JWC Intake Facility Expansion Site

KEY DRIVERS FOR CIP PROJECT

1. Customer Criticality: The future larger Intake will provide additional capacity for the JWC partners and their customers.

2. Growth/Future Demand: Additional site space is required to expand the Intake facility to meet growing demands cost effectively.

3. Reliability: Improvements required to maintain reliable supply.

PROJECT DESCRIPTION

Purchased land to site a new Intake facility in the future. This will replace the existing Intake facility with a larger Intake.

Cost shown below is TVWD’s share of projected total cost. Therefore, under Funding Sources, the partner cost percentage (all costs shown) is zero (0%).

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Category:</th>
<th>JWC</th>
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</thead>
<tbody>
<tr>
<td>Project Manager:</td>
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<td>Work Performed By:</td>
<td>Outside Contractor</td>
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<tr>
<td>Total Priority Score:</td>
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FUNDING SOURCES

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</table>

BUDGET INFORMATION & PROJECTED COSTS

There is no anticipated change in operating cost associated with the land for the expansion site.

10% of total cost.

CP 2019-21 Proposed

CP - 74
Tualatin Valley Water District
Requested Capital Improvement Plan
2019-21
(Six-Year Projection)

PROJECT TITLE: JWC Equipment Replacement

KEY DRIVERS FOR CIP PROJECT

1. Project Urgency
   Maintains supply for multiple water supply partners.

2. Customer Criticality
   Reserve funds ensure continuity of service in the event of unanticipated maintenance or equipment repair needs.

3. Reliability
   Improvements required to maintain reliable supply.

PROJECT DESCRIPTION

This project funds a reserve for unanticipated costs expected for the Joint Water Commission partners. Reserve funds are allocated based on ownership shares of Joint Water Commission facilities, of which the District is a 16.67% owner. Establishment of the reserve provides resources to the JWC in the event of unplanned capital expenditure needs. Use of the reserve requires approval by all JWC partners including the District.

Costs shown below are TVWD’s share of projected total project costs. Therefore, under Funding Sources, the partner cost percentage (all costs shown) is zero (0%).

PROJECT INFORMATION

<table>
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<tr>
<th>Project Category</th>
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<tr>
<td>Project Manager</td>
<td>Pete Boone</td>
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<td>Work Performed By</td>
<td>Outside Contract</td>
</tr>
<tr>
<td>Total Priority Score</td>
<td>NA</td>
</tr>
</tbody>
</table>

FUNDING SOURCES

| Water Rates | Yes |
| Service Fees | No |
| IDC Improvement | Fee Excl |
| Partner Cost Percentage | 0% |

FUTURE OPERATING COST IMPACT

No material impact anticipated.

BUDGET INFORMATION & PROJECTED COSTS

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<td>1,028,600</td>
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CIIP 2019-21 Proposed: CP-75
C. Ordinance 01-19 – Authorizing the Issuance of Debt

AN ORDINANCE OF THE TUALATIN VALLEY WATER DISTRICT, OREGON, AUTHORIZING THE ISSUANCE OF WATER REVENUE BONDS.

WHEREAS, the District is authorized to issue revenue bonds for a public purpose under ORS 287A.150 and related statutes (the “Act”). Revenue bonds issued under the Act may be payable from all or any portion of the water system revenues of the District; and

WHEREAS, the District may authorize revenue bonds under the Act by nonemergency ordinance. The District may not sell the revenue bonds under the Act until the period for referral of the nonemergency ordinance authorizing the revenue bonds has expired. If a nonemergency ordinance authorizing the revenue bonds is referred, the District may not sell the revenue bonds unless the voters approve the revenue bonds; and

WHEREAS, the District now finds it financially feasible and in the best interests of the District to authorize the issuance of revenue bonds under the Act in order to finance capital assets of the water system, including but not limited to the District’s portion of the Willamette Water Supply System including pumps, pipelines, the water treatment plant and the reservoir (collectively, the “System Improvements”); and

WHEREAS, it may be desirable to issue revenue bonds to finance the System Improvements under one or more financing structures, including as water revenue bonds with a senior lien on net revenues of the District’s water system, as water revenue bonds with a subordinated lien on net revenues of the District’s water system, as short term water revenue bonds or refunding bonds; and

WHEREAS, prior to the issuance of the water revenue bonds, the District desires to incur certain capital expenditures with respect to the System Improvements from available moneys of the District and wishes to declare its official intent to reimburse itself for any such expenditures from the proceeds of borrowings authorized by this ordinance.

NOW THEREFORE, IT IS HEREBY ORDAINED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT:

Section 1. Issuance of Bonds for System Improvements.
a. The District hereby authorizes the issuance of revenue bonds pursuant to ORS 287A.150 in an amount that is sufficient to provide net proceeds of up to $600 million to pay for costs of System Improvements, plus additional amounts that are required to pay capitalized interest, fund bond reserves for bonds authorized by Section 1.a and Section 2 of this ordinance and to pay costs related to the financings. The District estimates that the total principal amount of revenue bonds required for this purpose will not exceed $680 million. The bonds shall be issued and sold in accordance with the Act.
b. The bonds authorized by this ordinance shall be special obligations of the District that are payable solely from water system revenues and related amounts that the District pledges to pay the bonds. The District may issue the bonds authorized by this ordinance with a first lien on net revenues of the water system or with a subordinate lien on the net revenues of the water system.

c. No bonds authorized by Section 1.a of this ordinance may be sold and no purchase agreement for any of those bonds may be executed until the period for referral of this nonemergency ordinance has expired. If this ordinance is referred, the District may not sell the bonds authorized by Section 1.a of this ordinance unless the voters approve those bonds.

Section 2. Issuance of Refunding Bonds. The District hereby authorizes the issuance of refunding bonds pursuant to applicable Oregon statutes to refinance any water revenue bonds that are issued pursuant to Section 1.a of this ordinance to provide interim financing. The refunding bonds authorized by this Section 2 may be issued in an aggregate principal amount sufficient to refund any water revenue bonds selected by the District Official pursuant to Section 3.a of this ordinance, plus amounts required to pay costs related to the refunding bonds.

Section 3. Delegation. When and if this ordinance takes effect, the Chief Financial Officer, the Chief Executive Officer or the employees of the District designated by the District’s Chief Executive Officer or Board of Commissioners to act on behalf of the District under this ordinance (each of whom is referred to herein as a “District Official”) are each hereby authorized, on behalf of the District and without further action by the Board of Commissioners, to:

a. Issue the revenue bonds authorized by this ordinance (the “Water Bonds”) in one or more series, which may be sold at different times, and issue any series of Water Bonds as First Lien Bonds, as defined below, or with a subordinate lien on water system revenues.

b. Issue the Water Bonds as short or intermediate term bonds to provide interim financing for System Improvements and enter into lines of credit or similar documents which permit the District to draw Water Bond proceeds over time.

c. Participate in the preparation of, authorize the distribution of and deem final the preliminary and final official statements and any other disclosure documents for each series of the Water Bonds, as applicable.

d. Subject to the limits of this ordinance, establish the final principal amounts, lien status, maturity schedules, interest rates, redemption terms and other terms for each series of Water Bonds.

e. Either publish a notice of sale, receive bids and award the sale of that series to the bidder complying with the notice and offering the most favorable terms to the District or select one or more underwriters or lenders and negotiate the sale of that series with those underwriters or lenders and execute and deliver a bond purchase agreement or other document in connection with such sale.

f. Prepare, execute and deliver one or more documents that will specify the terms under which the Water Bonds are issued and the administrative provisions that apply to the Water Bonds.

g. Enter into covenants with owners or credit enhancement providers that are designed to obtain more favorable terms for the District, including covenants required by the Water Infrastructure Finance and Innovation Act, if the District borrows under that program, or by the State, if the District borrows under State lending programs.
h. Prepare and finalize the terms of a master water system declaration which pledges the revenues of the District’s water system to the Water Bonds issued with a first lien on the water system revenues (“First Lien Bonds”), contains covenants regarding the levels of fees and charges that the District must impose and describes the terms under which the District may issue obligations in the future that are secured by the revenues of the District’s water system.

i. If all or any portion of the Water Bonds is secured by a subordinate lien on water system revenues, establish a master second lien water revenue bond declaration or similar document to memorialize the terms under which that series and future series of subordinate lien bonds may be issued.

j. Make contributions to bond reserve accounts that the District Official determines are desirable and determine the reserve requirement, if any, for each series of the Water Bonds.

k. Select water revenue bonds to be refunded, refund any Water Bonds that are issued to provide interim financing with other short, intermediate or long-term term bonds.

l. Undertake to provide continuing disclosure for any series of Water Bonds in accordance with Rule 15c2-12 of the United States Securities and Exchange Commission or lender requirements, as applicable.

m. Apply for and purchase municipal bond insurance, reserve sureties or other forms of credit enhancements for any series of Water Bonds and enter into related agreements.

n. Appoint and enter into agreements with paying agents and other professionals and service providers for the Water Bonds.

o. Issue any qualifying series of Water Bonds as “tax-exempt bonds” bearing interest that is excludable from gross income under the Internal Revenue Code of 1986, as amended, (the “Code”) and enter into covenants for the benefit of the owners of those series to maintain the excludability of interest on those series from gross income under the Code.

p. If the federal government approves subsidy payments or tax credits for municipal bonds and those subsidies or tax credits are estimated to reduce the net debt service payments for the Water Bonds, issue any series of Water Bonds as eligible for those federal subsidies or tax credits, and enter into related covenants to maintain the eligibility of such series of Water Bonds for those subsidies or tax credits.

q. Issue any series of Water Bonds as “taxable bonds” bearing interest that is includable in gross income under the Code.

r. Designate any series of Water Bonds as “green bonds” if applicable.

s. Execute any documents and take any other action in connection with the Water Bonds which the District Official finds will be advantageous to the District.

Section 4. Unless referred, this ordinance shall take effect on the 30th day after it is enacted.

Section 5. Declaration of Intent to Reimburse. The District hereby declares its official intent to reimburse itself with the proceeds of the Water Bonds for any expenditures on the System Improvements paid prior to the issuance of the Water Bonds. This declaration is adopted as an official action of the District in order to comply with United States Treasury Regulation 1.150-2.
Section 6. Pursuant to Oregon Revised Statute Chapter 198, the ordinance was read at two regular meetings of the District Board of Commissioners on two different days, at least six days apart, prior to the adoption thereof, to wit: the 20th day of March 2019, and the 17th day of April 2019.

Section 7. This ordinance was adopted following a second reading by the affirmative vote of at least a majority of the members of the District Board of Commissioners at its regular meeting on the 17th day of April 2019, and was signed by the presiding officer and attested to by the secretary.

Bernice Bagnall, President

Todd Sanders, Secretary
D. Draft Master Revenue Bond Declaration

Form of

MASTER WATER SYSTEM REVENUE BOND DECLARATION

Tualatin Valley Water District, Oregon

Water Revenue Bonds
Series [2019]

Executed by the District Official of the Tualatin Valley Water District, Oregon
As of the ___ day of _____, ___
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Appendix A: Form of Water Revenue Bond, Series [2019]
MASTER WATER SYSTEM REVENUE BOND DECLARATION

THIS MASTER WATER SYSTEM REVENUE BOND DECLARATION is executed as of [Insert Date of Master], by an authorized District Official of the Tualatin Valley Water District, Oregon pursuant to the authority granted to the District Official by Ordinance No. _____ adopted by the District Board of Commissioners on ______, ______, to establish the terms under which the District’s Water Revenue Bonds, Series [2019] and future Parity Bonds may be issued.

Section 1. Findings.

The District finds that it [adopted the Ordinance on ________]. That ordinance authorizes the District to issue up to $ _______ of water revenue bonds under Oregon Revised Statutes Section 287A.150 and related provisions of ORS Chapter 287A, and to enter into this Master Declaration. This Master Declaration establishes the terms under which the District’s Water Revenue Bonds, Series [2019] are issued and the terms under which future obligations may be issued on a parity with the Series [2019] Bonds.

Section 2. Definitions.

Unless the context clearly requires otherwise, capitalized terms that are used in this Master Declaration shall have the meanings defined for those terms in this Section 2.

“Adjusted Coverage Revenues” means the Coverage Revenues, adjusted for purposes of Section 7.1.C(ii) as provided in Section 7.3.

“Adjusted Net Revenues” means the Net Revenues, adjusted for purposes of Section 7.1.C(ii) as provided in Section 7.3.

“Annual Bond Debt Service” means in any Fiscal Year the amount of principal and interest required to be paid in that Fiscal Year on all Outstanding Bonds, adjusted as follows:

(a) Interest which is to be paid from Bond Proceeds shall be subtracted;
(b) Bonds which are subject to scheduled, noncontingent redemption prepayment or tender shall be deemed to mature on the dates and in the amounts which are subject to mandatory redemption/prepayment or tender, and only the amount scheduled to be Outstanding on the final maturity date shall be treated as maturing on that date;
(c) Interest subsidies shall be subtracted from the interest due on Interest Subsidy Bonds as provided in Section 6.5;
(d) Bonds which are subject to contingent redemption prepayment or tender shall be treated as maturing on their stated maturity dates; and,
(e) Each Balloon Payment shall be assumed to be paid according to its Balloon Debt Service Requirement.

“Auditor” means a person authorized by the State Board of Accountancy to conduct municipal audits pursuant to ORS 297.670.
“Balloon Debt Service Requirement” means the Committed Debt Service Requirement for a Balloon Payment or, if the District has not entered into a firm commitment to sell Bonds or other obligations to refund that Balloon Payment, the Estimated Debt Service Requirement for that Balloon Payment.

“Balloon Payment” means any principal payment for a Series of Bonds which comprises more than twenty-five percent of the original principal amount of that Series, but only if that principal payment is designated as a Balloon Payment in the closing documents for the Series.

“Base Period” means the alternative selected by the District from the following two options: (a) any twelve consecutive months selected by the District or Qualified Consultant out of the most recent eighteen months preceding the delivery of a Series of Parity Bonds; or (b) the most recently completed fiscal year for which audited financial statements are available.

“BEO” means “book-entry-only” and refers to a system for clearance and settlement of securities transactions through electronic book-entry changes, which eliminates the need for physical movement of securities.


“Bond Counsel” means a law firm selected by the District and having knowledge and expertise in the field of municipal law and whose opinions are generally accepted by purchasers of municipal bonds.

“Bond Reserve Account” means the Bond Reserve Account in the Water Fund described in Section 5.3 of this Master Declaration.

“Business Day” means any day except a Saturday, a Sunday, a legal holiday, a day on which the offices of banks in Oregon or New York are authorized or required by law or executive order to remain closed, or a day on which the New York Stock Exchange is closed.

“Closing” means the date on which a Series of Bonds is delivered in exchange for payment.

“Code” means the Internal Revenue Code of 1986, as amended, including the rules and regulations promulgated thereunder.

“Committed Debt Service Requirement” means the schedule of principal and interest payments for a Series of Bonds or other obligations which refund a Balloon Payment, as shown in the documents evidencing the District’s firm commitment to sell that Series. A “firm commitment to sell” means a bond purchase agreement or similar document which obligates the District to sell, and obligates a purchaser to purchase, the Series of refunding Bonds or other obligations, subject only to the conditions which customarily are included in such documents.

“Coverage Revenues” means the Net Revenues less system development charges.

“Credit Facility” means a letter of credit, a municipal bond insurance policy, standby bond purchase agreement or other credit enhancement device which is obtained by the District to secure payment in full of Bonds, and which is issued or provided by a Credit Provider.
“Credit Provider” means the person or entity that is: (i) obligated to make or guarantee payments under a Credit Facility or Reserve Credit Facility; and (ii) whose long-term debt obligations or claims-paying ability (as appropriate) are rated, at the time the Credit Facility or Reserve Credit Facility is issued, in one of the two highest rating categories by a Rating Agency that has issued a rating on Outstanding Bonds. Under rating systems in effect on the date of this Master Declaration, a rating in one of the two highest rating categories by a Rating Agency would be a rating of “AA-/Aa3” or better.

“Debt Service Account” means the Debt Service Account described in Section 5.2 of this Master Declaration.

“District” means the Tualatin Valley Water District in Washington County, Oregon, a municipal corporation of the State of Oregon.

“District Board” means the Board of Commissioners of the District.

“District Official” means the Chief Financial Official of the District, or then-comparable position at the District, or the employees of the District designated by the District’s Executive Officer or Board of Directors to act on behalf of the District under this Master Declaration.

“DTC” means The Depository Trust Company or any other qualified securities depository designated by the District as its successor.

“Estimated Debt Service Requirement” means the schedule of principal and interest payments for a hypothetical Series of Bonds that refunds a Balloon Payment, that is prepared by the District Official and that meets the requirements of Section 6.4.

“Event of Default” means any event specified in 11.2 of this Master Declaration.

“Fiscal Year” means the period beginning on July 1 of each year and ending on the next succeeding June 30, or as otherwise defined by State law.


“Fund” or “Account” refers to any fund, account, or other accounting concept that permits the District to account accurately for amounts that are credited to it under this Master Declaration. A “Fund” in this Master Declaration does not need to appear as a “fund” in the District’s budget and an “Account” in this Master Declaration does not need to appear as an “account” in the District’s budget.

“Government Obligations” means (a) direct, noncallable obligations of the United States of America (including obligations issued or held in book-entry form on the books of the Department of the Treasury and principal-only and interest-only strips that are issued by the U.S. Treasury); or (b) noncallable obligations the principal of and interest on which are secured by the full faith and credit of the United States of America or are unconditionally guaranteed by the United States of America.
“Gross Revenues” means all fees and charges and other revenues that are properly accrued under generally accepted accounting principles as revenues of the Water System, including system development charges but only to the extent Oregon law allows those system development charges to be used to pay Bonds, revenues from product sales, and interest earnings on Gross Revenues in the Water Fund. Gross Revenues shall be increased by any withdrawals from the Rate Stabilization Account as provided in Section 5.5.B, and shall be reduced by any deposits to the Rate Stabilization Account as provided in Section 5.5.A. However, the term “Gross Revenues” shall not include:

(a) The interest income or other earnings derived from the investment of any escrow fund established for the defeasance or refunding of outstanding indebtedness of the District;
(b) Any gifts, grants, donations or other amounts received by the District from any State or Federal Agency or other person if such amounts are restricted by law or the grantor to uses inconsistent with the payment of Bonds;
(c) The proceeds of any borrowing;
(d) The proceeds of any liability or other insurance (excluding business interruption insurance or other insurance of like nature insuring against the loss of revenues);
(e) The proceeds of any casualty insurance which the District intends to utilize for repair or replacement of the Water System;
(f) The proceeds derived from the sales of assets pursuant to Section 10.9 of this Master Declaration;
(g) Any ad valorem or other taxes imposed by the District (except charges or payments for Water System services which become “taxes” within the meaning of Article XI, Section 11b of the Oregon Constitution only because they are imposed on property or property owners);
(h) Any income, fees, charges, receipts, profits or other amounts derived by the District from its ownership or operation of any Separate Utility System;
(i) Installment payments of District line and branch charges, connection fees, or local improvement district assessments that have been pledged as security for a borrowing other than a Bond;
(j) The proceeds of any fees or charges the District collects on behalf of a third party, including the fees currently collected by the District on behalf of the cities of Beaverton, Tigard and Hillsboro; or
(k) Any federal interest subsidies the District receives for Interest Subsidy Bonds.

“Interest Payment Date” means any date on which Bond interest is scheduled to be paid, and any date on which Bonds are called for redemption/prepayment.

“Interest Subsidy Bonds” means Bonds for which the District is eligible to receive federal interest rate subsidies that are similar to the interest subsidies that were available for Build America Bonds.

“Master Declaration” means this Master Water System Revenue Bond Declaration, including any amendments made pursuant to Section 12.

“Maximum Annual Bond Debt Service” means the greatest amount of Annual Bond Debt Service that is due in any Fiscal Year, beginning with the Fiscal Year for which the calculation is made, and ending with the last Fiscal Year in which Outstanding Bonds are scheduled to be paid.

Page 4 – Master Water System Revenue Bond Declaration
“Moody’s” means Moody’s Investors Service, a corporation organized and existing under the laws of the State of Delaware, its successors and their assigns.

“Net Revenues” means the Gross Revenues less the Operating Expenses.

“Operating Expenses” means all costs which are properly treated as expenses of operating and maintaining the Water System under generally accepted accounting principles. However, Operating Expenses do not include:
(a) Any rebates or penalties paid from Gross Revenues under Section 148 of the Code;
(b) Payments of judgments against the District and payments for the settlement of litigation;
(c) Depreciation and amortization of property values or losses, and other non-cash expenses, including non-cash expenses related to pensions and postemployment benefits;
(d) All amounts eligible to be treated for accounting purposes as payments for capital expenditures;
(e) Interest and other debt service payments, paying agent fees, broker-dealer fees and similar charges for the maintenance of borrowings;
(f) The expenses of owning, operating or maintaining any Separate Utility System;
(g) Expenditures made from any liability insurance proceeds;
(h) Expenditures made from any casualty insurance proceeds used to pay for costs of repairing or replacing portions of the Water System;
(i) Expenditures made from grant funds, regardless of whether such grant funds are dedicated to a specific purpose or available for the general operation, maintenance and repair or replacement of the Water System;
(j) Extraordinary, non-recurring expenses of the Water System;
(k) Payments to third parties from the proceeds of any fees or charges the District collects on behalf of such third parties, including the fees currently collected by the District on behalf of the cities of Beaverton, Tigard and Hillsboro, or
(l) Expenditures allocable to any other funding source which does not constitute Gross Revenues of the Water System.

“Ordinance” means Ordinance _______ adopted by the District Board on ___________.

“ORS” means the Oregon Revised Statutes.

“Outstanding” refers to all Bonds except Bonds that have been defeased pursuant to Section 13 of this Master Declaration, and Bonds which have matured and not been presented for payment (provided sufficient funds to pay those Bonds have been transferred to the Paying Agent).

“Owner” means a registered owner of a Bond.

“Parity Bond” means any obligation that is secured by the Net Revenues on an equal basis with the Bonds and is issued in accordance with Section 7.

“Paying Agent” means the paying agent for the Bonds, which is [Insert Name of Paying Agent] on the date of this Master Declaration.
“Payment Date” means a Principal Payment Date or an Interest Payment Date.

“Permitted Investments” means any investments which the District is permitted to make under the laws of the State.

“Principal Payment Date” means any date on which any Bonds are scheduled to be retired, whether by virtue of their maturity or by mandatory sinking fund redemption/prepayment prior to maturity, and the redemption/prepayment date of any Bonds which have been called for redemption/prepayment.

“Qualified Consultant” means an independent engineer, an independent auditor, an independent financial advisor, or similar independent professional consultant of recognized standing and having experience and expertise in the area for which such person or firm is retained by the District for purposes of performing activities specified in this Master Declaration or any Supplemental Declaration.

“Rate Stabilization Account” means the Rate Stabilization Account established in the Water Fund pursuant to Section 5.5.

“Rating Agency” means Fitch, Moody’s, S&P, or any other nationally recognized financial rating Agency which has rated Outstanding Bonds or a Credit Facility at the request of the District.

“Record Date” for the Bonds means the day of the month preceding the month in which each Interest Payment Date occurs, whether or not a Business Day.

“Reserve Credit Facility” means any arrangement in which the District pays a fee in exchange for an agreement of a Credit Provider to advance money to the District in the future that the District will use in lieu of using cash or Permitted Investments credited to a subaccount in the Bond Reserve Account. “Reserve Credit Facility” does not include guaranteed investment contracts, master repurchase agreements and similar Permitted Investments.

“Reserve Credit Facility Rating” means a long-term debt, financial strength or claims-paying ability rating assigned by a Rating Agency to: (a) a provider of a Reserve Credit Facility, or (b) to any reinsurer of the obligations of a provider of a Reserve Credit Facility.

“Reserve Requirement” means a set of rules for funding a subaccount in the Bond Reserve Account. Each Reserve Requirement shall indicate the amount that is required to be credited to the subaccount, the dates by which that amount must be credited to the subaccount, and the requirements for restoring amounts to the subaccount if amounts are withdrawn to pay Bonds that are secured by the subaccount. [The Series [2019] Bonds are not secured by the Bond Reserve Account or any subaccount therein.]

“S&P” means S&P Global Ratings, a corporation organized and existing under the laws of the State of New York, its successors and their assigns.

“Separate Utility System” means any utility property which is declared by the District to constitute a system which is distinct from the Water System in accordance with Section 9.
“Series” refers to all Bonds authorized by a single ordinance or declaration and delivered in exchange for payment on the same date, regardless of variations in maturity, interest rate or other provisions, unless the closing documents for the Series provide otherwise.


“State” means the State of Oregon.

“Subordinate Obligations” means obligations having a lien on the Net Revenues which is subordinate to the lien of the Bonds. Restrictions on Subordinate Obligations are described in Section 8. On the date of this Master Declaration, the District has no borrowings outstanding with a subordinate lien on the Net Revenues.

“Subordinate Obligations Account” means the Subordinate Obligations Account of the Water Fund which is described in Section 5.5.

“Supplemental Declaration” means any declaration, resolution or other document which supplements or amends this Master Declaration, entered into by the District in compliance with Section 12.

“Tax Maximum” means, for any Series of Bonds, the least of the greatest amount of principal, interest and premium, if any, required to be paid in any Fiscal Year on such Series, 125% of the average amount of principal, interest and premium, if any, required to be paid on such Series during all Fiscal Years in which such Series will be Outstanding, calculated as of the date of issuance of such Series, or, ten percent of the proceeds of such Series, as “proceeds” is defined for purposes of Section 148(d) of the Code.

“Valuation Date” means the date or dates on which a subaccount of the Bond Reserve Account shall be valued as prescribed in the Supplemental Declaration authorizing the establishment of such subaccount.

“Water Fund” means the collection of funds and accounts used by the District to hold the Gross Revenues and the proceeds of Bonds.

“Water System” means all utility property now or hereafter owned by the District to supply water within or without the corporate limits of the District, including the District’s share of joint ventures. However, the Water System does not include any Separate Utility System.

**Section 3. Rules of Construction.**

In determining the meaning of the provisions of this Master Declaration, the following rules shall apply unless the context clearly requires application of a different meaning:

A. References to section numbers shall be construed as references to sections of this Master Declaration.

B. References to one gender shall include all genders.
C. References to the singular include the plural, and references to the plural include the singular.

Section 4. Deposit, Pledge and Use of Gross Revenues.

4.1. All Gross Revenues shall be deposited to and maintained in the Water Fund, and shall be used only as described in this Section as long as any Bonds remain Outstanding. The District shall apply Gross Revenues in the Water Fund on or before the following dates for the following purposes in the following order of priority:

A. At any time to pay Operating Expenses which are then due;

B. At least one Business Day prior to each Payment Date, to transfer Net Revenues to the Debt Service Account in an amount sufficient (with amounts available in the Debt Service Account) to pay in full all Bond principal, interest and premium, if any, which is due to be paid on that Payment Date;

C. On the Closing date for a Series of Bonds and on the first day of the month following a Valuation Date for any subaccount in the Bond Reserve Account, if the balance in any subaccount of the Bond Reserve Account is determined to be less than the applicable Reserve Requirement, to transfer Net Revenues to the Bond Reserve Account in the amounts required by the provisions creating the subaccounts in the Bond Reserve Account until the balances in all subaccounts of the Bond Reserve Account are equal to their Reserve Requirement;

D. On the day on which any rebates or penalties for Bonds are due to be paid to the United States pursuant to Section 148 of the Code; an amount of Net Revenues that is sufficient, with other available funds, to pay the amounts due to the United States;

E. On the dates specified in any proceedings authorizing Subordinate Obligations, the District shall transfer to the Subordinate Obligations Account the Net Revenues required by those proceedings; and,

F. On any date, the District may transfer Net Revenues to the Rate Stabilization Account or spend Net Revenues for any other lawful purpose relating to the Water System, but only if all deposits and payments that are required to be made on or before that date and that have a higher priority under this Section have been made.

4.2. The District hereby pledges the Net Revenues and federal interest subsidies the District receives for Interest Subsidy Bonds to the payment of principal of, premium, if any, and interest on all Bonds. Pursuant to ORS 287A.310, this pledge made by the District shall be valid and binding from the Closing of the Series [2019] Bonds. The Net Revenues and federal interest subsidies so pledged and hereafter received by the District shall immediately be subject to the lien of such pledge without any physical delivery or further act. The lien of these pledges shall be superior to all other claims and liens except liens and claims for the payment of Operating Expenses. The District covenants and agrees to take such action as is necessary from time to time to perfect or otherwise preserve the priority of the pledge.
4.3. If a Reserve Credit Facility is permitted to fund a subaccount in the Bond Reserve Account, the District may pledge the Net Revenues available for transfer to that subaccount of the Bond Reserve Account to pay amounts due under any Reserve Credit Facility securing that subaccount.

Section 5. Bond Funds and Accounts.

5.1. So long as Bonds are Outstanding, the District shall maintain the Debt Service Account as a discrete account in the Water Fund.

5.2. Debt Service Account. The District shall hold the Debt Service Account. Until all Bonds are paid or defeased, amounts in the Debt Service Account shall be used only to pay Bonds.

A. After the transfer described in Section 4.1.B, if the balance in the Debt Service Account is less than the amount of Bond principal, premium, if any, and interest that is due on that Payment Date, the District shall credit to the Debt Service Account an amount equal to the deficiency from any Net Revenues in the Subordinate Obligations Account.

B. If, after the credit described in Section 5.2.A, the amounts available to pay Debt Service Account is not sufficient to pay all amounts due on the Payment Date, the District shall allocate the available amounts:

   (i) First, to pay Bond interest, and pro rata based on the amount due on Bonds if the available amount is not sufficient to pay all Bond interest that is due on that Payment Date, and

   (ii) Second, to pay Bond principal and premium that is due on that Payment Date, and pro rata based on the amount of principal and premium due on each Bond if the available amount is not sufficient to pay all Bond principal and premium that is due on that Payment Date.

C. If, after the allocation described in Section 5.2.B, there is not enough to pay all principal, interest and premium allocated to pay Bonds that are secured by a subaccount in the Bond Reserve Account, the District shall apply any amounts available in the subaccounts in the Bond Reserve Account, but only to the principal, interest and premium on the Bonds that are secured by those subaccounts.

D. The District shall transfer sufficient amounts from the Debt Service Account in time to permit payment of all Bond principal, interest and premium, if any, when due in accordance with the Bonds.

E. Amounts in the Debt Service Account shall be invested only in Permitted Investments. Earnings on the Debt Service Account shall be credited to the Water Fund.

5.3. Bond Reserve Account.
A. If the District determines to secure Bonds with the Bond Reserve Account and so long as those Bonds are Outstanding, the District shall maintain the Bond Reserve Account as a discrete account in the Water Fund held by the District. The District may create one or more subaccounts in the Bond Reserve Account to secure Series of Bonds and covenant to make deposits into any subaccounts it creates; however, the District is not obligated to create any subaccounts in the Bond Reserve Account, and is not obligated to secure any Series of Bonds with a subaccount in the Bond Reserve Account.

B. When a subaccount in the Bond Reserve Account is created, the District shall determine whether the subaccount will secure one or more Series of Bonds. If the District creates a subaccount in the Bond Reserve Account, the District shall, when it issues the first Series of Bonds that is secured by that subaccount: a) establish the Reserve Requirement for that subaccount; b) pledge amounts credited to that subaccount to pay the Bonds that are secured by that subaccount; and c) determine if the Reserve Requirement for that subaccount may be funded with Reserve Credit Facilities and the requirements for those Reserve Credit Facilities, and the valuation and replenishment provisions that apply to that subaccount.

C. The District shall not create any subaccounts in the Bond Reserve Account for any purpose except securing Bonds in accordance with this Master Declaration.

D. [The Series [2019] Bonds are not secured by the Bond Reserve Account or any subaccount therein.]

5.4. Subordinate Obligations Account. The District shall create and maintain the Subordinate Obligations Account in the Water Fund as long as Subordinate Obligations are Outstanding. The Subordinate Obligations Account may be divided into subaccounts, and the District may establish priorities for funding the subaccounts in the Subordinate Obligations Subaccount. Net Revenues shall be deposited into the Subordinate Obligations Account only as permitted by Section 4.1.E. Earnings on the Subordinate Obligations Account shall be credited as provided in the proceedings authorizing the Subordinate Obligations.

5.5. Rate Stabilization Account. The District may create a Rate Stabilization Account in the Water Fund and if created will maintain that account as long as Bonds are Outstanding. Net Revenues may be transferred to the Rate Stabilization Account at the option of the District as permitted by Section 4.1.F. Money in the Rate Stabilization Account may be withdrawn at any time and used for any purpose for which the Gross Revenues may be used.

A. Deposits to the Rate Stabilization Account decrease Gross Revenues in the Fiscal Year for which the deposit is made.

B. Withdrawals from the Rate Stabilization Account increase Gross Revenues in the Fiscal Year for which the withdrawal is made.

C. The District may adjust deposits to and withdrawals from the Rate Stabilization Account for a Fiscal Year up until 180 days after the end of that Fiscal Year.
D. Earnings on the Rate Stabilization Account shall be credited to the Water Fund.

Section 6. Rate Covenant; Calculations Relating to Balloon Payments and Interest Subsidy Bonds.

6.1. The District covenants for the benefit of the Owners that it will establish and maintain rates and charges in connection with the operation of the Water System which are sufficient to permit the District to pay all Operating Expenses and all lawful charges against the Net Revenues, and to make all transfers required by this Master Declaration to the Debt Service Account, the Bond Reserve Account and the Subordinate Obligations Account.

6.2. The District covenants for the benefit of the Owners of all Bonds that it shall charge rates and fees in connection with the operation of the Water System which, when combined with other Gross Revenues are adequate to generate:

A. Coverage Revenues each Fiscal Year at least equal to one hundred fifteen percent (115%) of Annual Bond Debt Service due in that Fiscal Year; and,

B. Net Revenues each Fiscal Year at least equal to one hundred twenty-five percent (125%) of Annual Bond Debt Service due in that Fiscal Year.

6.3. Not later than six months after the end of each Fiscal Year, the District shall prepare a report that demonstrates whether the District has complied with Section 6.2 during that Fiscal Year and shall file that report in the District records. If the report demonstrates that the District has not complied with Section 6.2 during that Fiscal Year, it shall not constitute a default under this Master Declaration if, within thirty (30) days after the report is filed, the District files a certificate of a District Official that specifies the actions that the District has taken and will take within the next ninety (90) days to permit the District to comply with Section 6.2 for the remainder of the Fiscal Year in which the report is filed, and for the succeeding Fiscal Year, and the District takes the actions specified by the District Official, or actions having a comparable effect.

6.4. The Estimated Debt Service Requirement for Balloon Payments shall be calculated in accordance with this Section 6.4.

A. For the Rate Covenants: For each Balloon Payment that is Outstanding on May 1 of any Fiscal Year, the District Official shall prepare a schedule of principal and interest payments for a hypothetical Series of Bonds that refunds that Balloon Payment in accordance with Section 6.4.D. The District Official shall prepare that schedule as of that first day of May, and that schedule shall be used to determine compliance with the rate covenant in Section 6.2 for the following Fiscal Year.

B. For Parity Bonds: Whenever a Balloon Payment will be Outstanding on the date a Series of Parity Bonds is issued, the District Official shall prepare a schedule of principal and interest payments for a hypothetical Series of Bonds that refunds each Outstanding Balloon Payment in accordance with Section 6.4.D. The District Official shall prepare...
that schedule as of the date the Parity Bonds are sold, and that schedule shall be used to
determine compliance with the tests for Parity Bonds in Section 7.1.

C. For the Reserve Requirement: Whenever a Series of Bonds that contains a Balloon
Payment is issued, the District Official shall prepare a schedule of principal and interest
payments for a hypothetical Series of Bonds that refunds each Balloon Payment in that
Series in accordance with Section 6.4.D. The District Official shall prepare that schedule
as of the date the Series is sold, and that schedule shall be combined with the schedule for
payment of any debt service on Bonds that are secured by the same subaccount, and that
combined schedule shall be used to determine the Reserve Requirement as long as that
Series is Outstanding.

D. Each hypothetical Series of refunding Bonds shall be assumed to be paid in equal annual
installments of principal and interest that are sufficient to amortize the principal amount
of the Balloon Payment over the term selected by the District Official; however, the
District Official shall not select a term that exceeds the lesser of: 30 years from the date
the Balloon Payment is originally scheduled to be paid; or, the District’s estimate of the
remaining weighted average useful life (expressed in years and rounded to the next
highest integer) of the assets which are financed with the Balloon Payment. The annual
installments shall be assumed to be due on the anniversaries of the date the Balloon
Payment is originally scheduled to be paid, with the first installment due on the first
anniversary of the date the Balloon Payment is scheduled to be paid. Each installment
shall be assumed to bear interest at a rate that is estimated by the District from the Bond
Buyer Revenue Bond Index (or if the Bond Buyer Revenue Bond Index is not available, a
reasonably comparable index selected by the District) for a revenue bond with a term that
is equal to the term of the installment. When the District prepares a schedule described in
Section 6.4.A, Section 6.4.B or Section 6.4.C, the District shall use the index that is
available to the District on the date the District is required to prepare that schedule.

6.5. Interest Subsidy Bonds. The amounts assumed to be paid on Interest Subsidy Bonds
shall be calculated as follows:

A. When calculating Annual Bond Debt Service for the rate covenant in Section 6.2, the
District shall subtract from interest to be paid on Interest Subsidy Bonds the federal
interest subsidies on Interest Subsidy Bonds that the District reasonably expects, at the
beginning of the Fiscal Year, to receive during that Fiscal Year.

B. When calculating Annual Bond Debt Service and Maximum Annual Bond Debt Service
for the tests for issuing Parity Bonds in Section 7, the District shall subtract from the
scheduled payments of interest on Interest Subsidy Bonds the amount of federal interest
subsidies that the District reasonably expects, at the time the Parity Bonds are issued, to
receive.

C. When calculating the greatest amount of principal, interest and premium, if any, required
to be paid in any Fiscal Year on a Series of Interest Subsidy Bonds to determine the Tax
Maximum for Interest Subsidy Bonds that are secured by a subaccount in the Bond
Reserve Account, the District shall subtract from the scheduled payments of interest on
Interest Subsidy Bonds the federal interest subsidies that the District reasonably expects, at the time the Series of Interest Subsidy Bonds is issued, to be paid to the District for the Series of Interest Subsidy Bonds. The District shall not be required to increase the amount the District is required to hold in a subaccount in the Bond Reserve Account if federal interest subsidies are not paid when or in the amounts expected. However, if the District reduces the amount it holds in a subaccount of the Bond Reserve Account because Bonds secured by that subaccount have been paid, the District must take into account its reasonable expectations at the time of reduction in determining the amount that the District must retain in a subaccount of the Bond Reserve Account.

Section 7. Parity Bonds.

7.1. The District may issue Parity Bonds to provide funds for any purpose relating to the Water System, but only if:

A. No Event of Default under this Master Declaration or any Supplemental Declaration has occurred and is continuing;

B. At the time of the issuance of the Parity Bonds there is no deficiency in the Debt Service Account and all required deposits to all subaccounts in the Bond Reserve Account have been made;

C. There shall have been filed with the District either:

   (i) A certificate of the District Official stating that both:

      (a) Coverage Revenues (adjusted as provided in Section 7.2) for the Base Period were not less than one hundred fifteen percent (115%) of Maximum Annual Bond Debt Service on all then Outstanding Bonds, calculated as of the date the Parity Bonds are issued and with the proposed Parity Bonds treated as Outstanding; and

      (b) Net Revenues (adjusted as provided in Section 7.2) for the Base Period were not less than one hundred twenty five percent (125%) of Maximum Annual Bond Debt Service on all then Outstanding Bonds, calculated as of the date the Parity Bonds are issued and with the proposed Parity Bonds treated as Outstanding; or

   (ii) A certificate or opinion of a Qualified Consultant:

      (a) Stating the amount of the Adjusted Coverage Revenues and the Adjusted Net Revenues for each of the five Fiscal Years after the last Fiscal Year for which interest on the Parity Bonds is, or is expected to be, capitalized, or, if interest will not be capitalized, for each of the five Fiscal Years after the proposed Parity Bonds are issued; and

      (b) Concluding that the respective amounts of Adjusted Coverage Revenues in each of the first four Fiscal Years described in Section 7.1.C(ii)(a) are
at least equal to one hundred fifteen percent (115%) of the Annual Bond Debt Service for each of those respective Fiscal Years on all Outstanding Bonds, with the proposed Parity Bonds treated as Outstanding; and,

(e) Concluding that the respective amounts of Adjusted Net Revenues in each of the first four Fiscal Years described in Section 7.1.C(ii)(a) are at least equal to one hundred twenty-five percent (125%) of the Annual Bond Debt Service for each of those respective Fiscal Years on all Outstanding Bonds, with the proposed Parity Bonds treated as Outstanding; and,

(d) Concluding that the amount of Adjusted Coverage Revenues in the fifth Fiscal Year described in Section 7.1.C(ii)(a) is at least equal to one hundred fifteen percent (115%) of the Maximum Annual Bond Debt Service, calculated for the period beginning with that fifth Fiscal Year on all then Outstanding Bonds, with the proposed Parity Bonds treated as Outstanding; and,

(e) Concluding that the amount of Adjusted Net Revenues in the fifth Fiscal Year described in Section 7.1.C(ii)(a) is at least equal to one hundred twenty-five percent (125%) of the Maximum Annual Bond Debt Service, calculated for the period beginning with that fifth Fiscal Year on all then Outstanding Bonds, with the proposed Parity Bonds treated as Outstanding.

7.2. The District may adjust Coverage Revenues and Net Revenues for purposes of Section 7.1.C(i) by adding any Coverage Revenues or Net Revenues the District Official calculates the District would have had during the Base Period because of increases in Water System rates, fees and charges which have been adopted by the District and are in effect on or before the date the Parity Bonds are issued. The District shall adjust Coverage Revenues and Net Revenues for the Base Period by eliminating the effect of any withdrawals from or deposits to the Rate Stabilization Account.

7.3. The Qualified Consultant shall calculate Adjusted Coverage Revenues for purposes of Section 7.1.C(ii) as provided in this Section 7.3:

A. The District shall provide the Qualified Consultant with the following information:

(i) The Base Period, the Coverage Revenues and Net Revenues for the Base Period and the amounts of any withdrawals from or deposits to the Rate Stabilization Account for Fiscal Years that are included in the Base Period;

(ii) Information regarding any Water System utility properties that are being acquired with Parity Bonds and that have an earnings record;

(iii) Any changes in rates and charges which have been adopted by the District since the beginning of the Base Period and the dates on which they are scheduled to take effect.
(iv) Any changes in customers since the beginning of the Base Period; and,

(v) A description of any extensions or additions to the Water System that were in the process of construction at the beginning of the Base Period or commenced construction after the beginning of the Base Period, the expected date of completion of those extensions or additions, the estimated operating and capital costs of those extensions or additions, and any other changes to the Gross Revenues or Operating Expenses that the District reasonably expects to result from the completion and operation of those extensions or additions.

B. Using the information provided by the District pursuant to Section 7.3.A and any additional information the Qualified Consultant determines is necessary, the Qualified Consultant shall adjust the Coverage Revenues and Net Revenues for the Base Period to eliminate the effect of any withdrawals from or deposits to the Rate Stabilization Account in the manner described in Section 7.2 and may adjust the Coverage Revenues and Net Revenues for the Base Period:

(i) To reflect any changes that the Qualified Consultant projects will result from the acquisition of Water System utility properties that are being financed with the Parity Bonds and that have an earnings record;

(ii) To reflect any changes in rates and charges which have been adopted by the District and which are scheduled to take effect during the period described in Section 7.1.C(ii)(a), or which increase rates and charges for inflation at a level which the Qualified Consultant determines is reasonable;

(iii) To reflect any changes in customers of the Water System that occurred after the beginning of the Base Period and prior to the date of the Qualified Consultant’s certificate; and

(iv) To reflect any changes to Coverage Revenues or Net Revenues not included in the preceding paragraphs that are projected to result from the completion and operation of additions and extensions to the Water System that were under construction at the beginning of the Base Period, or commenced construction after the beginning of the Base Period.

7.4. The District may issue Parity Bonds to refund Outstanding Bonds without complying with Section 7.1 if the refunded Bonds are legally or economically defeased on the date of delivery of the refunding Parity Bonds and if the Annual Bond Debt Service on the refunding Parity Bonds does not exceed the Annual Bond Debt Service on the refunded Bonds in any Fiscal Year by more than $5,000.

7.5. Bonds shall be treated as “legally defeased” for purposes of Section 7.4 if they are defeased as provided in Section 13. Bonds shall be treated as “economically defeased” for purposes of Section 7.4 if they have been irrevocably called for redemption or prepayment within one year after the date on which the refunding Bonds are issued, and the District has irrevocably deposited money or Government Obligations with the paying agent or Owner for the refunded Bonds, as applicable, or in escrow with an
independent trustee or escrow agent, and the money and any amounts to be received from
the Government Obligations have been calculated to be sufficient, without reinvestment,
to pay the Bonds that are economically defeased.

7.6. All Parity Bonds issued in accordance with this Section 7 shall have a lien on the Net
Revenues which is equal to the lien of all other Outstanding Bonds.

Section 8. Subordinate Obligations.

The District may issue Subordinate Obligations only if:

8.1. The Subordinate Obligations are payable solely from amounts permitted to be deposited
in the Subordinate Obligations Account pursuant to Section 4.1.E;

8.2. The Subordinate Obligations state clearly that they are secured by a lien on or pledge of
the Net Revenues which is subordinate to the lien on, and pledge of, the Net Revenues for
the Bonds.

Section 9. Separate Utility System.

The District may declare property which the District owns and is part of the Water System (but
has a value of less than five percent of the Water System at the time of the declaration), and
property which the District has not yet acquired but would otherwise become part of the Water
System, to be part of a Separate Utility System. The District may pay costs of acquiring,
operating and maintaining Separate Utility Systems from Net Revenues, but only if there is no
deficit in the Debt Service Account or the Bond Reserve Account. The District may issue
obligations which are secured by the revenues produced by the Separate Utility System, and may
pledge the Separate Utility System revenues to pay those obligations. In addition, the District
may issue Subordinate Obligations to pay for costs of a Separate Utility System, and may pledge
the revenues of the Separate Utility System to pay the Subordinate Obligations.

Section 10. General Covenants.

The District hereby covenants and agrees with the Owners of all Outstanding Bonds as follows:

10.1. The District shall promptly cause the principal, premium, if any, and interest on the
Bonds to be paid as they become due in accordance with the provisions of this Master
Declaration and any Supplemental Declaration.

10.2. The District shall maintain complete books and records relating to the operation of the
Water System and all District funds and accounts in accordance with generally accepted
accounting principles, shall cause such books and records to be audited annually at the
end of each Fiscal Year, and shall have an audit report prepared by the Auditor and made
available for the inspection of Owners.

10.3. The District shall not issue obligations which have a lien on the Net Revenues that is
superior to the lien of the Bonds except for obligations to pay Operating Expenses.
10.4. The District shall promptly deposit the Gross Revenues and other amounts described in this Master Declaration into the funds and accounts specified in this Master Declaration.

10.5. The District shall work in good faith to cause the Water System to be operated at all times in a safe, sound, efficient and economic manner in compliance with all health, safety and environmental laws, regulatory body rules, regulatory body orders and court orders applicable to the District’s operation and ownership of the Water System.

10.6. The District shall maintain the Water System in good repair, working order and condition.

10.7. The District shall not enter into any new agreements or arrangements or make any new offers to provide Water System products or services at a discount from published rate schedules or provide free Water System products or services except: a) for District-owned facilities, b) in case of emergencies, c) where the District exchanges services with other Water systems, or d) where in the reasonable judgment of the District such action does not materially reduce the Gross Revenues received by the District.

10.8. The District shall at all times maintain with responsible insurers all such insurance on the Water System as is customarily maintained with respect to works and properties of like character against accident to, loss of or damage to such works or properties.

A. The net proceeds of insurance against material accident to or material destruction of the Water System shall be used to repair or rebuild the damaged or destroyed Water System, and to the extent not so applied, will be applied to the payment or redemption/prepayment of the Bonds.

B. The insurance described in Section 10.8 shall be in the form of policies or contracts for insurance with insurers of good standing and shall be payable to the District, or in the form of self-insurance by the District. The District shall establish such fund or funds or reserves which it deems are necessary to provide for its share of any such self-insurance.

10.9. The District shall not voluntarily, nor shall it permit others to, sell, mortgage or otherwise permanently dispose of all or any portion of the Water System except:

A. The District may dispose of all or substantially all of the Water System, only if the District pays all Bonds or defenses them pursuant to Section 13.

B. Except as provided in Section 10.9.C or 10.9.D, the District will not voluntarily dispose of any part of the Water System in excess of 10% of the value of the Water System in service unless prior to such disposition either:

(i) There has been filed with the District a certificate of a Qualified Consultant or District Official stating that such disposition will not impair the ability of the District to comply with the rate covenants contained in Sections 6.1 and 6.2 of this Master Declaration; or
(ii) Provision is made for the payment, redemption/prepayment or other defacement of a principal amount of Bonds equal to the greater of the following amounts:

(a) An amount which will be in the same proportion to the net principal amount of Bonds then Outstanding (defined as the total principal amount of Bonds then Outstanding less the amount of cash and investments in the Debt Service Account, the Bond Reserve Account, and the Subordinate Obligations Account) that the Gross Revenues attributable to the part of the Water System sold or disposed of for the 12 preceding months bears to the total Gross Revenues for such period; or

(b) An amount which will be in the same proportion to the net principal amount of Bonds then Outstanding that the book value of the part of the Water System sold or disposed of bears to the book value of the Water System immediately prior to such sale or disposition.

C. The District may dispose of any portion of the Water System that has become unserviceable, inadequate, obsolete, or unfit to be used or no longer necessary for use in the operation of the Water System.

D. If the ownership of all or part of the Water System is transferred from the District through the operation of law, the District shall to the extent authorized by law, reconstruct or replace such transferred portion using any proceeds of the transfer unless the District reasonably determines that such reconstruction or replacement is not in the best interest of the District and the Owners, in which case any proceeds shall be used for the payment, redemption/prepayment or defacement of the Bonds.

Section 11. Events of Default and Remedies.

11.1 Continuous Operation Essential. District Official hereby finds and determines that the continuous operation of the Water System and the collection, deposit and disbursement of the Net Revenues in the manner provided in this Master Declaration and in any Supplemental Declaration are essential to the payment and security of the Bonds, and the failure or refusal of the District to perform the covenants and obligations contained in this Master Declaration or any such Supplemental Declaration will endanger the necessary continuous operation of the Water System and the application of the Net Revenues to the operation of the Water System and the payment of the Bonds.

11.2 Events of Default. The following shall constitute “Events of Default” so long as they are occurring and have not been cured:

A. If the District shall fail to pay any Bond principal or interest when due.

B. Except as provided in Section 11.3, if the District shall default in the observance and performance of any other of its covenants, conditions and agreements in this Master Declaration and the default continues for ninety (90) days after the District receives a written notice, specifying the Event of Default and demanding the cure of such default.
from a Credit Provider or from the Owners of not less than 25% in aggregate principal amount of the Bonds Outstanding.

C. If the District shall sell, mortgage or otherwise permanently dispose of all or any portion of the Water System in violation of Section 10.9.

D. If an order, judgment or decree shall be entered by any court of competent jurisdiction:

(i) Appointing a receiver, trustee or liquidator for the District or the whole or any part of the Water System;

(ii) Approving a petition filed against the District seeking the bankruptcy, arrangement or reorganization of the District under any applicable law of the United States or the State; or

(iii) Assuming custody or control of the District or of the whole or any part of the Water System under the provisions of any other law for the relief or aid of debtors and such order, judgment or decree shall not be vacated or set aside or stayed (or, in case custody or control is assumed by said order, such custody or control shall not be otherwise terminated) within sixty (60) days from the date of the entry of such order, judgment or decree.

E. If the District shall:

(i) Admit in writing its inability to pay its debts generally as they become due;

(ii) File a petition in bankruptcy or seeking a composition of indebtedness under any state or federal bankruptcy or insolvency law;

(iii) Consent to the appointment of a receiver of the whole or any part of the Water System; or

(iv) Consent to the assumption by any court of competent jurisdiction under the provisions of any other law for the relief or aid of debtors of custody or control of the District or of the whole or any part of the Water System.

11.3. Exception. It shall not constitute an Event of Default under 11.2.B if the default cannot practically be remedied within ninety (90) days after the District receives notice of the default, so long as the District promptly commences reasonable action to remedy the default after the notice is received, and continues reasonable action to remedy the default until the default is remedied.

11.4. Remedies. If an Event of Default occurs, any Owner may exercise any remedy available at law or in equity including mandamus where applicable. However, the Bonds shall not be subject to acceleration.

A. Books of District Open to Inspection.
(i) The District covenants that if an Event of Default shall have happened and shall not have been remedied, the books of record and account of the District and all other records relating to the Water System shall at all reasonable times be subject to the inspection and use of any persons holding at least twenty percent (20%) of the principal amount of Outstanding Bonds and their respective agents and attorneys.

(ii) The District covenants that if the Event of Default shall happen and shall not have been remedied, the District will continue to account, as a trustee of an express trust, for all Net Revenues and other amounts, securities and funds pledged under this Master Declaration.

B. Appointment of Trustee. Whenever any Event of Default exists, Owners representing 51 percent or more of the Outstanding Bonds may appoint a commercial bank or other financial institution with a reported capital and surplus in excess of $50 million as trustee (the “Trustee”) to represent the interests of the Owners.

11.5. Trustee Duties Upon Default.

A. Upon the occurrence of an Event of Default the Trustee may pursue any other available remedy at law or in equity to enforce the payment of the principal of, premium, if any, and interest on the outstanding Bonds, and to enforce any rights of the Trustee under or with respect to the Master Declaration.

B. In addition, upon the occurrence of an Event of Default, and upon the filing of a suit or other commencement of judicial proceedings to enforce the rights of the Trustee and of the Owners under the Master Declaration, the Trustee will be entitled, as a matter of right to the fullest extent permitted by Oregon law, to the appointment of a receiver or receivers of the Net Revenues and other amounts pledged under the Master Declaration, pending such proceedings, with such powers as the court making such appointment may confer.

C. If an Event of Default has occurred and is continuing and if requested so to do by the Owners of at least 25% in aggregate principal amount of Outstanding Bonds and indemnified as provided in the Master Declaration, the Trustee will be obligated to exercise any of the rights and powers conferred by this Master Declaration, as the Trustee, being advised by counsel, deems most expedient in the interest of the Owners.

D. If a Trustee has been appointed pursuant to 11.4, no Owner of any Bond shall have the right to institute any suit, action or proceeding at law or in equity, for any remedy under the Master Declaration, unless:

   (i) such Owner has previously given to the Trustee written notice of the occurrence of an Event of Default;

   (ii) the Owners of a majority in aggregate principal amount of all the Bonds then Outstanding have requested the Trustee in writing to exercise its powers under the Master Declaration;
(iii) said Owners have tendered to the Trustee indemnity reasonably acceptable to the Trustee against the costs, expenses and liabilities to be incurred in compliance with such request; and

(iv) the Trustee has refused or failed to comply with such request for a period of 60 days after such written request has been received by the Trustee and said tender of indemnity is made to the Trustee.

E. If the Trustee takes any judicial or other action in an Event of Default the Trustee has full power in its discretion with respect to any continuance, discontinuance, withdrawal, compromise, settlement or other disposition of such action, unless opposed by the written request of the Owners of a majority in aggregate principal amount of the Outstanding Bonds. The Trustee is appointed attorney-in-fact of the Owners for the purpose of bringing any suit action or proceedings in an Event of Default.

F. Waivers of Event of Default.

(i) No delay or omission of any Owner or of the Trustee to exercise any right or power arising upon the happening of an Event of Default shall impair any right or power or shall be construed to be a waiver of any such Event of Default or to be an acquiescence therein; and every power and remedy given by this Section 11 to the Owners and to the Trustee may be exercised from time to time and as often as may be deemed expedient by the Owners and/or the Trustee as applicable.

(ii) The owners of not less than fifty percent (50%) in principal amount of the affected Bonds that are at the time Outstanding, or their attorneys-in-fact duly authorized, or the Trustee may, on behalf of the Owners of all affected Bonds, waive any past default under this Master Declaration with respect to such Bonds and its consequences, except a default in the payment of the principal of, premium, if any, or interest on any of the Bonds. No such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

(iii) If a default occurs under Section 6 and that default has not become an Event of Default, that default shall be deemed waived at the end of the first Fiscal Year following that default in which the District has complied with Section 6.

11.6. Remedies Granted in Master Declaration Not Exclusive.

No remedy by the terms of this Master Declaration conferred upon or reserved to the Owners is intended to be exclusive of any other remedy, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given under this Master Declaration or existing at law or in equity or by statute on or after the date of adoption of this Master Declaration. However, the Bonds shall not be subject to acceleration.
Section 12. Amendment of Master Declaration.

12.1. This Master Declaration may be amended by Supplemental Declaration without the consent of any Owners for any one or more of the following purposes:

A. To cure any ambiguity or formal defect or omission in this Master Declaration;

B. To add to the covenants and agreements of the District in this Master Declaration, other covenants and agreements to be observed by the District which are not contrary to or inconsistent with this Master Declaration as theretofore in effect;

C. To authorize issuance of Bonds or Subordinate Obligations as permitted by this Master Declaration;

D. To modify, amend or supplement this Master Declaration or any Supplemental Declaration to qualify this Master Declaration under the Trust Indenture Act of 1939, as amended, or any similar federal statute hereafter in effect or to permit the qualification of any Bonds for sale under the securities laws of any of the states of the United States of America;

E. To confirm, as further assurance, any security interest or pledge created under this Master Declaration or any Supplemental Declaration;

F. To make any change which, in the reasonable judgment of the District, does not materially and adversely affect the rights of the owners of any Outstanding Bonds;

G. So long as a Credit Facility (other than a Reserve Credit Facility) is in full force and effect with respect to the Bonds affected by such Supplemental Declaration, to make any other change which is consented to in writing by the issuer of such Credit Facility other than any change which:

   (i) Would result in a downgrading or withdrawal of the rating then assigned to the affected Bonds by the Rating Agencies;

   (ii) Changes the maturity (except as permitted herein), the Interest Payment Dates, interest rates, redemption/prepayment and purchase provisions, and provisions regarding notices of redemption/prepayment and purchase applicable to the affected Bonds or diminishes the security afforded by such Credit Facility;

   (iii) Materially and adversely affects the rights and security afforded to the Owners of any Outstanding Bonds not secured by such Credit Facility; or

H. To modify any of the provisions of this Master Declaration or any Supplemental Declaration in any other respect whatever, as long as the modification shall take effect only after all affected Outstanding Bonds cease to be Outstanding.

12.2. This Master Declaration may be amended for any other purpose only upon consent of Owners of not less than fifty-one percent (51%) in aggregate principal amount of the
Bonds Outstanding; provided, however, that no amendment shall be valid without the consent of Owners of 100 percent (100%) of the aggregate principal amount of the Bonds Outstanding which:

A. Extends the maturity of any Bond, reduces the rate of interest upon any Bond, extends the time of payment of interest on any Bond, reduces the amount of principal payable on any Bond, or reduces any premium payable on any Bond, without the consent of the affected Owner, or

B. Reduces the percent of Owners required to approve Supplemental Declarations.

12.3. For purposes of Section 12.2, and subject to Section 12.4, the initial purchaser of a series of Bonds may be treated as the Owner of that Series at the time that series of Bonds is delivered in exchange for payment.

12.4. Except as otherwise expressly provided in Section 12.5, Section 12.6 or a Supplemental Declaration, as long as a Credit Facility securing all or a portion of any Outstanding Bonds is in effect, the issuer of such Credit Facility shall be deemed to be the Owner of the Bonds secured by such Credit Facility for the purpose of the execution and delivery of a Supplemental Declaration of any amendment, change or modification of this Master Declaration or the initiation by Owners of any action which under this Master Declaration requires the written approval or consent of or can be initiated by the Owners of at least a majority in principal amount of the affected Bonds at the time Outstanding, or following an Event of Default for all other purposes.

12.5. The issuer of a Credit Facility shall not be deemed to be an Owner for purposes of any amendment, change or modification of this Master Declaration which:

A. Would result in a downgrading or withdrawal of the rating then assigned to the affected Bonds by the Rating Agencies, or

B. Changes the maturity (except as expressly permitted herein), the Interest Payment Dates, interest rates, redemption/ prepayment and purchase provisions, and provisions regarding notices of redemption/ prepayment and purchase applicable to the affected Bonds or diminishes the security afforded by such Credit Facility; or

C. Reduces the percentage or otherwise affects the classes of affected Bonds, the consent of the Owners of which is required to effect any such modification or amendment.

12.6. No issuer of a Credit Facility shall be entitled to act as an Owner during any period in which:

A. The issuer’s Credit Facility is not in full force and effect;

B. The issuer of a Credit Facility shall have filed a petition or otherwise sought relief under any federal or state bankruptcy or similar law:

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C. The issuer of the Credit Facility shall, for any reason, have failed or refused to honor a proper demand for payment under such Credit Facility, or

D. An order or decree shall have been entered, with the consent or acquiescence of the issuer of a Credit Facility, appointing a receiver or receivers or the assets of the issuer of a Credit Facility, or if such order or decree having been entered without the consent or acquiescence of the issuer of a Credit Facility, shall not have been vacated or discharged or stayed within ninety (90) days after the entry thereof.

12.7. For purposes of determining the percentage of Owners consenting to, waiving or otherwise acting with respect to any matter that may arise under this Master Declaration, the Owners of Bonds which pay interest only at maturity, and mature more than one year after they are issued shall be treated as Owners of Bonds in an aggregate principal amount equal to the acerated value of such Bonds as of the date the notice is sent requesting consent, waiver or other action as provided herein.

Section 13. Defeasance.

13.1. The District shall be obligated to pay Bonds which are defeased pursuant to this Section solely from the money and Government Obligations deposited with the escrow agent or trustee, and the District shall have no further obligation to pay the defeased Bonds from any source except the amounts deposited in the escrow. Bonds shall be deemed defeased if the District:

A. Irrevocably deposits money or Government Obligations in escrow with an independent trustee or escrow agent which are calculated to be sufficient without reinvestment for the payment of Bonds which are to be defeased;

B. Files with the escrow agent or trustee a certificate from an independent, certified public accountant to the effect that the money and the principal and interest to be received from the Government Obligations are calculated to be sufficient, without further reinvestment, to pay the defeased Bonds when due; and

C. Files with the escrow agent or trustee an opinion of nationally recognized bond counsel that the proposed defeasance will not cause interest on the defeased Bonds to be includable in gross income under the Code.

Section 14. BEO System.

14.1. Unless otherwise provided by a Supplemental Declaration, all Bonds shall be subject to the BEO System pursuant to the provisions of this Section 14.1.

14.2. The Bonds shall be initially issued as a BEO security issue with no Bonds being made available to the Owners upon the execution and delivery of the latter of representations among the Paying Agent, DTC and the District. Ownership of the Bonds shall be recorded through entries on the books of banks and broker-dealer participants and correspondents that are related to entries on the DTC BEO system. The Bonds shall be initially issued in the form of separate single fully registered typewritten Bonds for each
maturity of the Bonds (the “Global Bonds”) in substantially the form attached hereto as Appendix A with such changes as the District Official may approve. Each Global Bond shall be registered in the name of CEDE & CO. as nominee (the “Nominee”) of DTC (DTC and any other qualified securities depository designated by the District as a successor to DTC, collectively the “Depository”) as the “Registered Owner”, and such Global Bonds shall be lodged with the Depository until early redemption or maturity of the Bond issue. The Paying Agent shall remit payment for the maturing principal and interest on the Bonds to the Owner for distribution by the Nominee for the benefit of the owners (the “Beneficial Owner” or “Record Owner”) by recorded entry on the books of the Depository participants and correspondents. While the Bonds are in BEO form, the Bonds will be available in denominations of $5,000 or any integral multiple thereof within a maturity.

14.3. In the event the Depository determines not to continue to act as securities depository for the Bonds, or the District determines that the Depository shall no longer so act, then the District will discontinue the BEO system with the Depository. If the District fails to designate another qualified securities depository to replace the Depository or elects to discontinue use of a BEO system, the Bonds shall no longer be a BEO issue but shall be registered in the registration books maintained by the Paying Agent in the name of the Owner as appearing on the Bond register and thereafter in the name or names of the Owners of the Bonds transferring or exchanging Bonds.

14.4. While the Bonds are in BEO form, the District and the Paying Agent shall have no responsibility or obligation to any participant or correspondent of the Depository or to any Registered Owner on behalf of which such participants or correspondents act as agent for the Owner with respect to:

A. The accuracy of the records of the Depository, the Nominee or any participant or correspondent with respect to any ownership interest in the Bonds;

B. The delivery to any participant or correspondent or any other person, other than an Owner as shown in the registration books maintained by the Paying Agent, of any notice with respect to the Bonds, including any notice of redemption/prepayment;

C. The selection by the Depository of the beneficial interest in Bonds to be redeemed prior to maturity, or

D. The payment to any participant, correspondent, or any other person other than the owner of the Bonds as shown in the registration books maintained by the Paying Agent, of any amount with respect to principal of or interest on the Bonds.

14.5. Notwithstanding the BEO system, the District may treat and consider the Owner in whose name each Bond is registered in the registration books maintained by the Paying Agent as the Owner and absolute owner of such Bond for the purpose of payment of principal and interest with respect to such Bond, or for the purpose of giving notices of redemption and other matters with respect to such Bond, or for the purpose of registering transfers with respect to such Bond, or for all other purposes whatsoever. The District shall pay or
cause to be paid all principal and interest on the Bonds only to or upon the order of the Registered Owner, as shown in the registration books maintained by the Paying Agent, or their respective attorneys duly authorized in writing, and all such payments shall be valid and effective to fully satisfy and discharge the District’s obligation with respect to payment thereof to the extent of the sum or sums so paid.

14.6. Upon delivery by the Depository to the District and to the Owner of written notice to the effect that the Depository has determined to substitute a new nominee in place of the Nominee, then the word “Nominee” in this Master Declaration shall refer to such new nominee of the Depository, and upon receipt of such notice, the District shall promptly deliver a copy thereof to the Paying Agent. The Depository shall tender the Bonds it holds to the Paying Agent for re-registration.

Section 15. Redemption of Bonds.

15.1. Unless otherwise provided by a Supplemental Declaration, all Bonds shall be subject to the redemption terms of this Section 15.

15.2. The District reserves the right to purchase Bonds in the open market.

15.3. If Bonds are subject to mandatory redemption the Paying Agent shall, without further action by the District, select the particular Bonds to be redeemed in accordance with the mandatory redemption schedule, by lot within each maturity, call the selected Bonds, and give notice of their redemption in accordance with this Section 15.

15.4. If certain maturities of Bonds are subject to both optional and mandatory redemption, the District may elect to apply the Bonds which it has previously optionally redeemed to any mandatory redemption maturity. In addition, if the District purchases Bonds which are subject to mandatory redemption, the District may elect to apply against the mandatory redemption requirement any such Bonds which it has previously purchased. If the District makes such an election, it shall notify the Paying Agent not less than sixty days prior to the mandatory redemption date to which the election applies.

15.5. So long as the BEO System remains in effect with respect to the Bonds, and unless DTC consents to a shorter period, the Paying Agent shall provide not less than 20 days nor more than 60 days’ notice of redemption, and shall provide such information in connection therewith as required by the letter of representations submitted to DTC in connection with the issuance of the Bonds.

15.6. During any period in which the BEO System is not in effect with respect to the Bonds, unless waived by any Owner of the Bonds to be redeemed, official notice of any redemption of Bonds shall be given by the Paying Agent on behalf of the District by mailing a copy of an official redemption notice by first class mail postage prepaid at least 20 days and not more than 60 days prior to the date fixed for redemption to the Owner of the Bonds to be redeemed, at the address shown on the Bond Register or at such other address as is furnished in writing by such owner to the Paying Agent. All such official notices of redemption shall be dated and shall state:

Page 26 – Master Water System Revenue Bond Declaration

3193833 041297 RBND
A. The redemption date;

B. The redemption price;

C. If less than all Outstanding Bonds are to be redeemed, the identification (and, in the case of partial redemption, the respective principal amounts) of the Bonds to be redeemed;

D. That on the redemption date the redemption price will become due and payable upon each such Bond or portion thereof called for redemption, and that interest thereon shall cease to accrue from and after said date; and

E. The place where such Bonds are to be surrendered for payment of the redemption price, which place of payment shall be the principal office of the Paying Agent.

15.7. The District shall deposit with the Paying Agent, on or before the redemption date, an amount of money sufficient to pay the redemption price of all the Bonds or portions of Bonds which are to be redeemed on that date.

15.8. Official notice of redemption having been given as aforesaid, the Bonds or portions of Bonds to be redeemed shall, on the redemption date, become due and payable at the Redemption Price therein specified, and from and after such date (unless the District shall default in the payment of the redemption price or unless the notice was conditional as described in Section 15.9) such Bonds or portions of Bonds shall cease to bear interest.

Upon surrender of such Bonds for redemption in accordance with said notice, such Bonds shall be paid by the Paying Agent at the Redemption Price. Installments of interest due on or prior to the redemption date shall be payable as herein provided for payment of interest. Upon surrender for any partial redemption of any Bond, there shall be prepared for the registered owner a new Bond of the same maturity in the amount of the unpaid principal. All Bonds which have been redeemed shall be canceled and destroyed by the Paying Agent and shall not be reissued. Notwithstanding that any Bonds called for redemption shall not have been surrendered, no further interest shall accrue on any such Bonds. From and after such notice having been given and such deposit having been made, the Bonds to be redeemed shall not be deemed to be Outstanding hereunder, and the District shall be under no further liability in respect thereof.

15.9. Any notice of optional redemption given for the Bonds pursuant to this Section 15 may state that the optional redemption is conditional upon receipt by the Paying Agent of amounts sufficient to pay the redemption price of such Bonds or upon the satisfaction of any other condition, and/or that such notice may be rescinded upon the occurrence of any other event, and any conditional notice so given may be rescinded at any time before payment of such redemption price if any such condition so specified is not satisfied or if any such other event occurs. Notice of such rescission or the failure of any such condition shall be given by the Paying Agent to affected owners of the Bonds as promptly as practicable.
Section 16. Authentication, Registration and Transfer.

16.1. The provisions of this Section 16 apply only if the Bonds cease to be a BEO issue, and unless otherwise specified in a Supplemental Declaration.

16.2. No Bond shall be entitled to any right or benefit under this Master Declaration unless it shall have been authenticated by an authorized officer of the Paying Agent. The Paying Agent shall authenticate all Bonds to be delivered at Closing, and shall additionally authenticate all Bonds properly surrendered for exchange or transfer pursuant to this Master Declaration.

16.3. All Bonds shall be in registered form. [Insert Name of Paying Agent] is hereby appointed to serve as Paying Agent for the Bonds. A successor Paying Agent may be appointed for the Bonds by ordinance or resolution of the District. The Paying Agent shall provide notice to Owners of any change in the Paying Agent not later than the Bond payment date following the change in Paying Agent.

16.4. The ownership of all Bonds shall be entered in the Bond register maintained by the Paying Agent and the District and Paying Agent may treat the person listed as owner in the Bond register as the owner of the Bond for all purposes.

16.5. The Paying Agent shall mail each interest payment on the Interest Payment Date (or the next Business Day if the Interest Payment Date is not a Business Day) to the name and address of the Owner, as that name and address appear on the Bond register as of the Record Date. If payment is so mailed, neither the District nor the Paying Agent shall have any further liability to any party for such payment.

16.6. Bonds may be exchanged for an equal principal amount of Bonds of the same Series and maturity which are in different authorized denominations, and Bonds may be transferred to other owners if the Owner submits the following to the Paying Agent:

A. Written instructions for exchange or transfer satisfactory to the Paying Agent, signed by the Owner or his attorney in fact and guaranteed or witnessed in a manner satisfactory to the Paying Agent; and

B. The Bonds to be exchanged or transferred.

16.7. The Paying Agent shall not be required to exchange or transfer any Bonds submitted to it during any period beginning with a Record Date and ending on the next following payment date, however, such Bonds shall be exchanged or transferred promptly following the payment date.

16.8. The Paying Agent shall not be required to exchange or transfer any Bonds which have been designated for redemption if such Bonds are submitted to it during the fifteen-day period preceding the designated redemption date.

16.9. For purposes of this Section, Bonds shall be considered submitted to the Paying Agent on the date the Paying Agent actually receives the materials described in Section 16.6.

16.10. The District may alter these provisions regarding registration and transfer by mailing notification of the altered provisions to all Owners. The altered provisions shall take
effect on the date stated in the notice, which shall not be earlier than 45 days after notice is mailed.

Section 17. The Series [2019] Bonds. [To be completed/adjusted]

17.1. Pursuant to the authority of the Ordinance and this Master Declaration, the District has issued its Water Revenue Bonds, Series [2019], in the aggregate principal amount of $[[Principal Amount]]. The Series [2019] Bonds shall be Bonds as defined in this Master Declaration. The Series [2019] Bonds shall bear interest payable on and of each year at the following rates, commencing ___________, and shall mature in the following years in the following principal amounts:

<table>
<thead>
<tr>
<th>Maturity Date (______)</th>
<th>Principal Amount ($)</th>
<th>Interest Rate (%)</th>
<th>CUSIP No. (Base______)</th>
</tr>
</thead>
</table>

17.2. The Series [2019] Bonds are subject to redemption at the option of the District prior to their stated maturity dates at any time on or after __________, 20__, as a whole or in part, and if in part, with maturities to be selected by the District at a price of par, plus accrued interest, if any, to the date of redemption. For as long as the Series [2019] Bonds are in book-entry only form, if fewer than all of the Series [2019] Bonds of a maturity are called for redemption, the selection of Series [2019] Bonds within a maturity to be redeemed shall be made by DTC in accordance with its operational procedures then in effect. If the Series [2019] Bonds are no longer held in book-entry only form, then the Paying Agent would select Series [2019] Bonds for redemption by lot.

17.3. The Series [2019] Bonds shall be special obligations of the District, and shall be payable solely from the Net Revenues and amounts required to be deposited in the Debt Service Account as required and as provided by this Master Declaration. The Series [2019] Bonds are not general obligations of the District and are payable solely from the amounts described in the previous sentence. [The Series [2019] Bonds are not secured by the Bond Reserve Account or any subaccount therein.]

17.4. The Series [2019] Bonds shall be in substantially the form attached as Appendix A and shall be signed with the facsimile or manual signature of an authorized District Official.

A. The Series [2019] Bond proceeds shall be used to finance the projects described in the Ordinance and to pay costs incurred in connection with the issuance of the Series [2019] Bonds.
EXECUTED ON BEHALF OF THE TUALATIN VALLEY WATER DISTRICT BY AN
AUTHORIZED DISTRICT OFFICIAL AS OF THE ___ day of _____, ___.

Tualatin Valley Water District, Oregon

By: ________________________________
   Authorized Officer
Appendix A

Form of Series [2019] Bond – To be revised and modified based on how the first series is structured

United States of America
State of Oregon
County of Washington
Tualatin Valley Water District
Water Revenue Bond
Series [2019]

Dated Date:
Interest Rate Per Annum: *CouponRate*%
Maturity Date: *MaturityYear*
CUSIP Number: *CUSIPNumbers*
Registered Owner: ---Cede & Co.---
Principal Amount: ---PrincipalAmountSpelledDollars---

TUALATIN VALLEY WATER DISTRICT, in Washington County, State of Oregon (the “District”), for value received, acknowledges itself indebted and hereby promises to pay to the Registered Owner hereof, or registered assigns, but solely from the sources indicated below, the Principal Amount on the Maturity Date together with interest thereon from the date hereof at the Interest Rate Per Annum indicated above. Interest is payable semiannually on the first days of and in each year until maturity or prior redemption, commencing . Payment of each installment of interest shall be made on the payment date to the Registered Owner hereof whose name appears on the registration books of the District maintained by the District’s paying agent and registrar, which is currently [Insert Name of Paying Agent] (the “Paying Agent”), as the Registered Owners appear on the registration books as of the day of the month immediately preceding the applicable interest payment date. For so long as this Series [2019] Bond is subject to a book-entry-only system, principal and interest payments shall be paid on each payment date to the nominee of the securities depository for this Series [2019] Bond. On the date of issuance of this Series [2019] Bond, the securities depository for this Series [2019] Bond is The Depository Trust Company, New York, New York, and Cede & Co. is the nominee of The Depository Trust Company. Such payments shall be made payable to the order of “Cede & Co.” Capitalized terms used in this Bond have the meanings defined for such terms in the Master Water System Revenue Bond Declaration dated [Insert Date of Master](the “Master Declaration”).


This Series [2019] Bond is not a general obligation or liability of the District, is issued as a “Bond” under the Master Declaration, and is payable solely from the Net Revenues of the Water System and other funds as provided in the Master Declaration. The District covenants and agrees with the owner of this Series [2019] Bond that it will keep and perform all of the covenants in this Series [2019] Bond and in the Master Declaration. The District has pledged the Net Revenues of the Water System to the payment of principal and interest on this Series [2019] Bond. The District has reserved the right to issue Purity Bonds with an equal lien on the Net Revenues. This Series [2019] Bond is not secured by the Bond Reserve Account or any subaccount therein.

The Series [2019] Bonds are initially issued as a book-entry-only security issue with no certificates provided to the owners of the Series [2019] Bonds. Records of Series [2019] Bond ownership will be maintained by the Paying Agent and The Depository Trust Company and its participants. Should the book-entry-only security system be discontinued, the District shall cause the Paying Agent to authenticate and deliver replacement Series [2019] Bonds in fully registered form in authorized denominations in the names of the beneficial owners or their nominees, as provided in the Master Declaration.

Unless the book-entry-only system is discontinued, notice of any call for redemption shall be given as required by the Blanket Letter of Representations to The Depository Trust Company, as referenced in the Master Declaration. Interest on any Series [2019] Bond so called for Rule 15c2-12 of the Securities and Exchange Commission, adopted under the Securities Exchange Act of 1934 shall cease on the redemption date designated in the notice unless the notice is in conditional, as permitted by the Master Declaration. The Paying Agent will notify The Depository Trust Company of any Series [2019] Bonds called for redemption not less than 30 days prior to the date fixed for redemption unless DTC consents to a shorter period. If the book-entry-only system is discontinued, notice of redemption shall be given by first-class mail, postage prepaid at least 30 days prior to the date fixed for redemption to the registered owner of each Series [2019] Bond to be redeemed at the address shown on the Series [2019] Bond register.

Any exchange or transfer of this Series [2018] Bond must be registered, as provided in the Master Declaration, upon the Series [2019] Bond register kept for that purpose by the Paying Agent. The exchange or transfer this Series [2019] Bond may be registered only by surrendering it, together with a written instrument of exchange or transfer which is satisfactory to the Paying Agent and which is executed by the registered owner or their duly authorized attorney. Upon registration, a new registered Series [2019] Bond or Series [2019] Bonds, of the same series and maturity and in the same aggregate principal amount, shall be issued to the transferee as provided in the Master Declaration. The Paying Agent and the District may treat the person in whose name this Series [2019] Bond is registered as its absolute owner for all purposes, as provided in the Master Declaration.

Unless this Series [2019] Bond is presented by an authorized representative of The Depository Trust Company to the issuer or its agent for registration of transfer, exchange or payment, and any Series [2019] Bond issued is registered in the name of Cede & Co. or such other name as requested by an authorized representative of The Depository Trust Company and any payment is made to Cede & Co., any transfer, pledge or other use hereof for value or otherwise by or to any person is wrongful, since the registered owner hereof, Cede & Co., has an interest herein.

This Series [2019] Bond shall remain in the Paying Agent’s custody subject to the provisions of the FAST Balance Certificate Agreement currently in effect between the Paying Agent and The Depository Trust Company.

IT IS HEREBY CERTIFIED, RECITED, AND DECLARED that all conditions, acts, and things required to exist, to happen, and to be performed precedent to and in the issuance of this Series [2019] Bond have existed, have happened, and have been performed in due time, form, and manner as required by the Constitution and Statutes of the State of Oregon, that the issue of which this Series [2019] Bond is a part, and all other obligations of the District, are within every debt limitation and other limits prescribed by such Constitution and Statutes.

IN WITNESS WHEREOF, the Board of Commissioners of the Tualatin Valley Water District, Oregon, has caused this Series [2019] Bond to be signed by facsimile signature of an authorized District Official as of the date indicated above.

Tualatin Valley Water District, Oregon

Authorized Officer

Page 2 - Appendix A
THIS SERIES [2019] BOND SHALL NOT BE VALID UNLESS PROPERLY AUTHENTICATED BY THE PAYING AGENT IN THE SPACE INDICATED BELOW.

CERTIFICATE OF AUTHENTICATION

This Series [2019] Bond is one of a series of $[Principal Amount] aggregate principal amount of Water Revenue Bonds, Series [2019], of the District, issued pursuant to the Master Declaration described herein. Date of authentication: [Insert Date of Master].

[Insert Name of Paying Agent] as Paying Agent

Authorized Officer

ASSIGNMENT

FOR VALUE RECEIVED, the undersigned sells, assigns and transfers unto:

________________________________________

(please insert social security or other identifying number of assignee)

this Series [2019] Bond and does hereby irrevocably constitute and appoint

________________________________________

as attorney to transfer this Series [2019] Bond on the books kept for registration thereof with the full power of substitution in the premises.

Dated:

NOTICE: The signature to this assignment must correspond with the name of the registered owner as it appears upon the face of this Series [2019] Bond in every particular, without alteration or enlargement or any change whatever.

NOTICE: Signature(s) must be guaranteed by a member of the New York Stock Exchange or a commercial bank or trust company.

Signature Guaranteed

(Bank, Trust Company or Brokerage Firm)

Authorized Officer

The following abbreviations, when used in the inscription on the face of this Series [2019] Bond, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM — tenants in common

TEN ENT — tenants by the entirety

JT TEN — joint tenants with right of survivorship and not as tenants in common

OREGON CUSTODIANS use the following:

CUST OF OREGON

as custodian for [name of minor] MIN

OR UNIF TRANS MIN ACT

under the Oregon Uniform Transfer to Minors Act

Additional abbreviations may also be used though not in the list above.
### TVWD Forecast Model Summary

Table 1: Tuolumne Valley Water District Water Financial Plan 45-year Categorical CIP Summary (Escalated)

<table>
<thead>
<tr>
<th>Category</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>JWC</td>
<td>3,255,750</td>
<td>1,318,700</td>
<td>649,900</td>
<td>836,300</td>
<td>497,100</td>
<td>345,700</td>
<td>357,700</td>
<td>359,500</td>
<td>776,700</td>
</tr>
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<td>TVWD Source</td>
<td>353,500</td>
<td>103,500</td>
<td>0</td>
<td>1,110,000</td>
<td>689,000</td>
<td>119,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Storage</td>
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<td>2,069,400</td>
<td>7,386,000</td>
<td>4,305,500</td>
<td>2,970,000</td>
<td>3,070,000</td>
<td>3,070,000</td>
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<td>Pumping</td>
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<td>992,000</td>
<td>4,948,500</td>
<td>1,094,000</td>
<td>3,247,000</td>
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<td>1,475,000</td>
<td>1,372,500</td>
<td>2,843,500</td>
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<td>Pipelines</td>
<td>9,000,500</td>
<td>20,331,283</td>
<td>19,947,261</td>
<td>39,446,526</td>
<td>58,263,490</td>
<td>28,080,343</td>
<td>19,746,807</td>
<td>18,287,210</td>
<td>27,781,840</td>
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<td>PRVs/Vaults</td>
<td>97,600</td>
<td>325,000</td>
<td>336,000</td>
<td>348,500</td>
<td>360,500</td>
<td>373,000</td>
<td>388,000</td>
<td>272,500</td>
<td>282,000</td>
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<td>Facilities</td>
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<td>835,100</td>
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<td>Fleet</td>
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<td>637,500</td>
<td>499,000</td>
<td>516,500</td>
<td>534,500</td>
<td>553,000</td>
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<td>IT</td>
<td>100,000</td>
<td>1,559,500</td>
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<td>Meters/Svcs</td>
<td>1,736,950</td>
<td>1,573,500</td>
<td>1,760,500</td>
<td>1,540,000</td>
<td>1,595,000</td>
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<td>1,640,000</td>
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<tr>
<td>Other/Undefined</td>
<td>0</td>
<td>1,035,000</td>
<td>1,071,000</td>
<td>1,663,000</td>
<td>1,721,500</td>
<td>1,781,500</td>
<td>1,844,000</td>
<td>1,908,500</td>
<td>9,676,000</td>
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<tr>
<td>Capital Outlays from O&amp;M</td>
<td>427,800</td>
<td>500,000</td>
<td>522,500</td>
<td>546,013</td>
<td>570,583</td>
<td>596,259</td>
<td>623,091</td>
<td>651,130</td>
<td>680,431</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$48,543,236</strong></td>
<td><strong>$76,636,144</strong></td>
<td><strong>$100,447,033</strong></td>
<td><strong>$138,145,555</strong></td>
<td><strong>$216,022,707</strong></td>
<td><strong>$157,391,836</strong></td>
<td><strong>$76,951,771</strong></td>
<td><strong>$60,279,342</strong></td>
<td><strong>$53,934,096</strong></td>
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<td><strong>Depreciation and Amortization Expense</strong></td>
<td><strong>$7,994,046</strong></td>
<td><strong>$7,973,956</strong></td>
<td><strong>$7,952,454</strong></td>
<td><strong>$7,929,570</strong></td>
<td><strong>$7,905,329</strong></td>
<td><strong>$7,879,753</strong></td>
<td><strong>$7,852,862</strong></td>
<td><strong>$7,824,668</strong></td>
<td><strong>$7,795,185</strong></td>
</tr>
</tbody>
</table>

5/1/2019
## TVWD Forecast Model Summary

Table 1
Tuolumne Valley Water District
Water Financial Plan
45-year Categorical CIP Summary (Escalated)

<table>
<thead>
<tr>
<th>Category</th>
<th>FY2028</th>
<th>FY2029</th>
<th>FY2030</th>
<th>FY2031</th>
<th>FY2032</th>
<th>FY2033</th>
<th>FY2034</th>
<th>FY2035</th>
<th>FY2036</th>
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</thead>
<tbody>
<tr>
<td>WWSP</td>
<td>0</td>
<td>0</td>
<td>55,733</td>
<td>0</td>
<td>4,941</td>
<td>0</td>
<td>3,384,000</td>
<td>12,287,416</td>
<td>18,126,500</td>
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<tr>
<td>JWC</td>
<td>804,200</td>
<td>1,121,100</td>
<td>1,097,900</td>
<td>1,200,950</td>
<td>1,176,300</td>
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5/1/2019
### Table 1
Tuolatin Valley Water District
Water Financial Plan
45-year Categorical CIP Summary (Escalated)

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5/1/2019
# TVWD Forecast Model Summary

## Table 1
Tulalip Valley Water District
Water Financial Plan
45-Year Categorical CIP Summary (Escalated)

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| Depreciation and Amortization Expense | $17,821,540 | $17,882,965 | $17,942,411 | $17,999,942 | $18,055,621 | $18,109,506 | $18,161,655 | $18,212,125 | $18,260,970 |

5/1/2019
## TVWD Forecast Model Summary

### Table 1
Tuolumne Valley Water District
Water Financial Plan
45-year Categorical CIP Summary (Escalated)

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| Depreciation and Amortization Expense | $18,308,241 | $18,353,989 | $18,398,265 | $18,441,114 | $18,482,580 | $18,522,716 | $18,561,557 | $18,599,147 | $18,635,526 |

5/1/2019
## TVWD Forecast Model Summary

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<td>100,000,000</td>
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<td>5,680,347</td>
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<td>5,571,222</td>
<td>5,515,509</td>
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### Funding Split (after Calibration)

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<th>FY2021</th>
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5/1/2019
## TVWD Forecast Model Summary

### Funding Summary (after Calibration)

<table>
<thead>
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<th>Description</th>
<th>FY2029</th>
<th>FY2030</th>
<th>FY2031</th>
<th>FY2032</th>
<th>FY2033</th>
<th>FY2034</th>
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<th>FY2036</th>
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<td>5,281,261</td>
<td>5,178,415</td>
<td>5,061,901</td>
<td>4,990,887</td>
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### Funding Split (after Calibration)

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<tr>
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Check:
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5/1/2019
# TVWD Forecast Model Summary

## Funding Summary (after Calibration)

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<th>FY2040</th>
<th>FY2041</th>
<th>FY2042</th>
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## Funding Split (after Calibration)

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<tr>
<th>Description</th>
<th>FY2019</th>
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<td>98.6%</td>
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<tr>
<td>SDC-Funded Capital Projects</td>
<td>3.8%</td>
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5/1/2019
## TVWD Forecast Model Summary

### Table 3
Tualatin Valley Water District
Water Financial Plan
Projected LTD Sizing & Debt Service Assumptions

<table>
<thead>
<tr>
<th></th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
<th>FY2028</th>
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<tbody>
<tr>
<td><strong>PROJECTED DEBT ISSUE SIZING</strong></td>
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<tr>
<td><strong>Issue Proceeds, Costs, &amp; Reserves Estimates</strong></td>
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<tr>
<td>Bond Proceeds Requested</td>
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<td>Issuance Costs</td>
<td>1.50%</td>
<td>1.50%</td>
<td>1.50%</td>
<td>1.50%</td>
<td>1.50%</td>
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<tr>
<td>Reserve Req. Selected: Minimum of 3-Prong Test</td>
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### DEBT SERVICE FORECASTING

#### Debt Service Requirements
- **Term (Years):** 30
- **Interest Rate:** 5.00%

#### New Debt Service
- **Annual Debt Service Costs:** $3,212,524
- **Accumulated Debt Service:** 0

#### Check Proceeds
- OK

5/1/2019
## TVWD Forecast Model Summary

### Table 3
Tualatin Valley Water District
Water Financial Plan
Projected LTD Sizing & Debt Service Assumptions

<table>
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<th>FY2032</th>
<th>FY2033</th>
<th>FY2034</th>
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<th>FY2036</th>
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<td>Total Cost of Debt-Eligible Projects</td>
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<td>Rev. Bonds Issue Size used in model</td>
<td>$28,100,000</td>
<td>$31,357,000</td>
<td>$31,505,000</td>
<td>$0</td>
<td>$35,205,000</td>
<td>$37,835,000</td>
<td>$28,775,000</td>
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<tr>
<td><strong>Summary of Costs and Reserves by Issue</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Issuance Costs</td>
<td>$421,500</td>
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<td>$0</td>
<td>$200,400</td>
<td>$473,230</td>
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<td>$528,075</td>
<td>$567,525</td>
<td>$431,625</td>
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<td>1,933,431</td>
<td>0</td>
<td>0</td>
<td>919,240</td>
<td>2,170,810</td>
<td>0</td>
<td>2,422,294</td>
<td>2,601,252</td>
<td>1,979,875</td>
</tr>
<tr>
<td>Proceeds Used in model forecast</td>
<td>$25,743,069</td>
<td>$0</td>
<td>$0</td>
<td>$12,240,360</td>
<td>$28,905,940</td>
<td>$0</td>
<td>$32,254,631</td>
<td>$34,664,223</td>
<td>$26,363,500</td>
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<tr>
<td>LTD Proceeds Used in model forecast</td>
<td>$25,743,069</td>
<td>$0</td>
<td>$0</td>
<td>$12,240,360</td>
<td>$28,905,940</td>
<td>$0</td>
<td>$32,254,631</td>
<td>$34,664,223</td>
<td>$26,363,500</td>
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<td>Difference recovered from (or added to) Rates/Reserves</td>
<td>1,153</td>
<td>0</td>
<td>0</td>
<td>(37)</td>
<td>594</td>
<td>0</td>
<td>526</td>
<td>(2,018)</td>
<td>(510)</td>
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<tr>
<td><strong>DEBT SERVICE FORECASTING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term (Years)</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
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<tr>
<td>Interest Rate</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
</tr>
<tr>
<td><strong>New Debt Service</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Debt Service Costs</td>
<td>$1,933,431</td>
<td>$0</td>
<td>$0</td>
<td>$919,240</td>
<td>$2,170,810</td>
<td>$0</td>
<td>$2,422,294</td>
<td>$2,601,252</td>
<td>$1,979,875</td>
</tr>
<tr>
<td>Accumulated Debt Service</td>
<td>8,047,134</td>
<td>9,013,850</td>
<td>9,013,850</td>
<td>9,473,470</td>
<td>11,018,495</td>
<td>12,109,900</td>
<td>13,315,047</td>
<td>14,827,820</td>
<td>16,119,983</td>
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<tr>
<td><strong>Check Proceeds</strong></td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
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</tr>
</tbody>
</table>

5/1/2019
### TVWD Forecast Model Summary

#### Table 3
Tualatin Valley Water District
Water Financial Plan
Projected LTD Sizing & Debt Service Assumptions

<table>
<thead>
<tr>
<th>PROJECTED DEBT ISSUE SIZING</th>
<th>FY2019</th>
<th>FY2040</th>
<th>FY2041</th>
<th>FY2042</th>
<th>FY2043</th>
<th>FY2044</th>
<th>FY2045</th>
<th>FY2046</th>
<th>FY2047</th>
<th>FY2048</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost of Debt-Eligible Projects</td>
<td>$68,779,801</td>
<td>$76,415,605</td>
<td>$60,183,023</td>
<td>$53,034,670</td>
<td>$70,357,564</td>
<td>$76,683,395</td>
<td>$71,687,962</td>
<td>$110,131,933</td>
<td>$105,112,513</td>
<td>$70,009,100</td>
</tr>
</tbody>
</table>

**Issue Proceeds, Costs, & Reserves Estimates**

- **Bond Proceeds Requested**
  - FY2019: $23,485,682
  - FY2040: $35,433,769
  - FY2041: $0
  - FY2042: $0
  - FY2043: $2,520,898
  - FY2044: $0
  - FY2045: $13,672,320
  - FY2046: $47,696,632
  - FY2047: $77,388,449
  - FY2048: $0
- **Issuance Costs**
  - FY2019: 1.5%
  - FY2040: 1.5%
  - FY2041: 1.5%
  - FY2042: 1.5%
  - FY2043: 1.5%
  - FY2044: 1.5%
  - FY2045: 1.5%
  - FY2046: 1.5%
  - FY2047: 1.5%
  - FY2048: 1.5%
- **Reserve Req. Selected: Minimum of 3-Prong Test**
  - FY2019: 6.88%
  - FY2040: 6.88%
  - FY2041: 0.00%
  - FY2042: 0.00%
  - FY2043: 6.88%
  - FY2044: 0.00%
  - FY2045: 6.88%
  - FY2046: 6.88%
  - FY2047: 6.88%
  - FY2048: 0.00%

**Issue Sizing**

- **Rev. Bonds Issue Sizing Formulas**
  - FY2019: $25,653,945
  - FY2040: $60,504,361
  - FY2041: $0
  - FY2042: $0
  - FY2043: $27,508,236
  - FY2044: $0
  - FY2045: $17,105,886
  - FY2046: $15,031,520
  - FY2047: $84,467,254
  - FY2048: $0
- **Rev. Bonds Issue Size in model**
  - FY2019: $25,653,000
  - FY2040: $60,505,000
  - FY2041: $0
  - FY2042: $0
  - FY2043: $27,510,000
  - FY2044: $0
  - FY2045: $17,105,000
  - FY2046: $52,060,000
  - FY2047: $84,465,000
  - FY2048: $0

**Summary of Costs and Reserves by Issue**

- **Issuance Costs**
  - FY2019: $384,515
  - FY2040: $907,575
  - FY2041: $0
  - FY2042: $412,630
  - FY2043: $0
  - FY2044: $2,56,575
  - FY2045: $780,900
  - FY2046: $1,266,975
  - FY2047: $0
  - FY2048: $0
- **Reserve Requirement**
  - FY2019: 1,763,826
  - FY2040: 4,163,070
  - FY2041: 0
  - FY2042: 0
  - FY2043: 1,892,836
  - FY2044: 0
  - FY2045: 1,176,916
  - FY2046: 3,182,009
  - FY2047: 5,811,647
  - FY2048: 0

- **Proceeds Used in model forecast**
  - FY2019: $23,486,649
  - FY2040: $55,434,355
  - FY2041: $0
  - FY2042: $2,520,514
  - FY2043: $0
  - FY2044: $15,671,309
  - FY2045: $47,697,091
  - FY2046: $77,386,378
  - FY2047: $0
  - FY2048: $0
- **LTD Proceeds Used in model forecast**
  - FY2019: $23,486,649
  - FY2040: $55,434,355
  - FY2041: $0
  - FY2042: $2,520,514
  - FY2043: $0
  - FY2044: $15,671,309
  - FY2045: $47,697,091
  - FY2046: $77,386,378
  - FY2047: $0
  - FY2048: $0
- **Difference recouped from (or added to) Rates/Reserves**
  - FY2019: (967)
  - FY2040: (585)
  - FY2041: 0
  - FY2042: 0
  - FY2043: (1,616)
  - FY2044: 0
  - FY2045: 811
  - FY2046: (459)
  - FY2047: 2,065
  - FY2048: 0

**DEBT SERVICE FORECASTING**

**Debt Service Requirements**

<table>
<thead>
<tr>
<th>Term (Years)</th>
<th>30</th>
<th>30</th>
<th>30</th>
<th>30</th>
<th>30</th>
<th>30</th>
<th>30</th>
<th>30</th>
<th>30</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Rate</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
<td>5.50%</td>
</tr>
</tbody>
</table>

**New Debt Service**

<table>
<thead>
<tr>
<th>Annual Debt Service Costs</th>
<th>FY2019: $1,763,826</th>
<th>FY2040: $4,163,070</th>
<th>FY2041: $0</th>
<th>FY2042: $1,892,836</th>
<th>FY2043: $0</th>
<th>FY2044: $1,176,916</th>
<th>FY2045: $3,182,009</th>
<th>FY2046: $5,811,647</th>
<th>FY2047: $0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check Proceeds</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
<td>OK</td>
</tr>
</tbody>
</table>

5/1/2019
## TVWD Forecast Model Summary

Table 4  
Tualatin Valley Water District  
Water Financial Plan  
WWSP WIFIA Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
<th>Baseline 3.1</th>
<th>TVWD</th>
<th>COH</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Construction</td>
<td>$864,737,698</td>
<td>$527,639,190</td>
<td>$336,906,960</td>
<td>$191,548</td>
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</tr>
<tr>
<td>2. Design</td>
<td>87,703,471</td>
<td>53,716,203</td>
<td>33,768,651</td>
<td>218,618</td>
<td></td>
</tr>
<tr>
<td>3. Planning</td>
<td>21,075,000</td>
<td>12,442,701</td>
<td>8,582,445</td>
<td>49,854</td>
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</tr>
<tr>
<td>4. Land Acquisition</td>
<td>63,325,614</td>
<td>30,807,627</td>
<td>32,517,988</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5. Other Capital Costs</td>
<td>105,048,940</td>
<td>63,449,560</td>
<td>40,653,940</td>
<td>945,440</td>
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</tr>
<tr>
<td>6. Contingency</td>
<td>56,993,220</td>
<td>34,423,905</td>
<td>22,569,315</td>
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</tr>
<tr>
<td>9. Ineligible Costs</td>
<td>46,368,969</td>
<td>27,097,516</td>
<td>14,706,635</td>
<td>4,564,819</td>
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</tr>
<tr>
<td>8. Other</td>
<td>1,000,000</td>
<td>500,000</td>
<td>500,000</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>$1,246,252,912</td>
<td>$750,076,701</td>
<td>$490,205,932</td>
<td>$5,970,279</td>
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</table>

### 9. Ineligible Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
<th>Baseline 3.1</th>
<th>TVWD</th>
<th>COH</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLM_2.0</td>
<td>$6,080,742</td>
<td>$3,703,172</td>
<td>$2,377,570</td>
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<tr>
<td>PLM_3.0</td>
<td>14,825,480</td>
<td>9,028,717</td>
<td>5,796,762</td>
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</tr>
<tr>
<td>PLW_1.1</td>
<td>5,790,013</td>
<td>3,138,187</td>
<td>2,651,826</td>
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</tr>
<tr>
<td>RWF_1.0 - WIF</td>
<td>15,267,000</td>
<td>8,564,787</td>
<td>2,174,185</td>
<td>4,528,028</td>
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</tr>
<tr>
<td>Non-Capital Expenditures</td>
<td>4,087,886</td>
<td>2,469,083</td>
<td>1,582,012</td>
<td>36,791</td>
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<tr>
<td>WWSP Predesign - Prior to 4/1/14</td>
<td>317,849</td>
<td>193,570</td>
<td>124,279</td>
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</tr>
<tr>
<td><strong>Totals</strong></td>
<td>$46,368,969</td>
<td>$27,097,516</td>
<td>$14,706,635</td>
<td>$4,564,819</td>
<td></td>
</tr>
</tbody>
</table>

| Check                  | OK     | OK           | OK        | OK       |

5/1/2019
### TVWD Forecast Model Summary

#### Table 5

**Tualatin Valley Water District**  
**Water Financial Plan**  
**WIFIA Loan Sizing & Debt Service Assumptions**

<table>
<thead>
<tr>
<th></th>
<th>Totals</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIFIA Proceeds and Ratio based on TVWD Cost Shares</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>WWSP Project Costs</td>
<td>$749,576,701</td>
<td>$5,000,000</td>
<td>$20,000,000</td>
<td>$100,000,000</td>
<td>$125,000,000</td>
<td>$65,000,000</td>
<td>$30,000,000</td>
<td>$25,500,000</td>
<td>NA</td>
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<tr>
<td>EPA WIFIA Issuance Costs</td>
<td>500,000</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total WWSP/WIFIA Costs</td>
<td>$750,076,701</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less: Ineligible Costs</td>
<td>27,097,516</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Eligible WWSP/WIFIA Costs</td>
<td>$722,979,185</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>WIFIA Proceeds Requests</td>
<td>$370,500,000</td>
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<td></td>
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</tr>
<tr>
<td>WIFIA %</td>
<td>51.25%</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### WIFIA Loan Sizing

| WIFIA Proceeds (FY2027 OSP amt, based on MADS) | $370,500,000 | $5,000,000 | $20,000,000 | $100,000,000 | $125,000,000 | $65,000,000 | $30,000,000 | $25,500,000 | $0      |
| Capitalized Interest on Proceeds | TRUE | 3,161,386 | 4,585,107 | 18,768,631 | 18,440,375 | 7,066,662 | 2,136,750 | 892,500 | NA      |
| WIFIA Debt               | $423,751,420 | $6,361,396 | $24,585,107 | $118,768,631 | $143,440,375 | $72,066,662 | $32,136,750 | $26,392,500 | $0      |

#### Debt Service Requirements

<table>
<thead>
<tr>
<th>Term (Years)</th>
<th>35</th>
<th>Interest Rate</th>
<th>3.50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Repayment (beginning FY2023)</td>
<td>$21,186,871</td>
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<td>$0</td>
</tr>
<tr>
<td>Interest-only Payments (if not capitalized)</td>
<td>FALSE</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

#### Summary of WIFIA Proceeds and Requirements

| Issuance Costs | $500,000 | $500,000 | $0 | $0 | $0 | $0 | $0 | $0 | $0 |
| Reserve Requirement | 0 | NA | NA | NA | NA | NA | NA | NA | NA |
| WIFIA Proceeds for WWSP Projects | $370,000,000 | $4,500,000 | $20,000,000 | $100,000,000 | $125,000,000 | $65,000,000 | $30,000,000 | $25,500,000 | $0 |
TVWD Forecast Model Summary

Table 6
Tualatin Valley Water District
Water Financial Plan
Total Annual Debt Service and Balance Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
<th>FY2028</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Debt Service</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>None</td>
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<td>$0</td>
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<td>$0</td>
<td>$0</td>
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</tr>
<tr>
<td>BANs Interest (if applicable)</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Amount Subject to Coverage</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Debt Service on Proposed Debt</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Future Revenue Bonds</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$1,606,262</td>
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<td>$7,080,419</td>
<td>$7,080,419</td>
</tr>
<tr>
<td>WIRFA Interest-only</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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5/1/2019
### TVWD Forecast Model Summary

#### Table 6
Tualatin Valley Water District
Water Financial Plan
Total Annual Debt Service and Balance Summary

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5/1/2019
### TVWD Forecast Model Summary

#### Table 6
Tualatin Valley Water District
Water Financial Plan
Total Annual Debt Service and Balance Summary

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TVWD Financial Plan
Page 215
Appendix E – Forecast Model Summary Results

May 2019


Table 7
Tulare Valley Water District
Water Financial Plan
Summary O&M Forecast

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<th>FY2020</th>
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TVWD Forecast Model Summary

Appendix E – Forecast Model Summary Results
## TVWD Forecast Model Summary

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<th>Tulare/Lincoln Water District</th>
<th>Water Financial Plan</th>
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Check: OK, OK, OK, OK, OK, OK
## TVWD Forecast Model Summary

### Water Financial Plan

#### Rate Revenue Assumptions

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<th>FY2027</th>
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<td>3.90%</td>
<td>3.90%</td>
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#### RETAIL RATE Assumptions

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<tr>
<td>Class Customer/ System Growth Rate</td>
<td>(1.00%)</td>
<td>(1.00%)</td>
<td>0.15%</td>
<td>0.03%</td>
<td>0.05%</td>
<td>0.05%</td>
<td>0.05%</td>
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</tr>
<tr>
<td>Sales Growth / Conservation Adj.</td>
<td>(2.52%)</td>
<td>(6.33%)</td>
<td>0.34%</td>
<td>0.34%</td>
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<tr>
<td>Retail - Volumetric Revenue</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
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<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
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<tr>
<td>Internal Revenue Growth</td>
<td>(2.36%)</td>
<td>(2.82%)</td>
<td>0.43%</td>
<td>0.41%</td>
<td>0.40%</td>
<td>0.39%</td>
<td>0.38%</td>
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</table>

5/1/2019
### TVWD Forecast Model Summary

**Table 8**
Tuatuliv Water District
Water Financial Plan
Rate Revenue Assumptions

<table>
<thead>
<tr>
<th>FY2029</th>
<th>FY2030</th>
<th>FY2031</th>
<th>FY2032</th>
<th>FY2033</th>
<th>FY2034</th>
<th>FY2035</th>
<th>FY2036</th>
<th>FY2037</th>
<th>FY2038</th>
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</thead>
<tbody>
<tr>
<td>Overall Rate Revenue Increases</td>
<td>3.90%</td>
<td>3.90%</td>
<td>3.90%</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.25%</td>
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<tr>
<td>Projected Percent Impact of Increase</td>
<td>48.66%</td>
<td>48.66%</td>
<td>48.66%</td>
<td>48.66%</td>
<td>48.66%</td>
<td>48.66%</td>
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**RETAIL RATE Assumptions**

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<tr>
<th>Class/Category/System Growth Rate</th>
<th>FY2029</th>
<th>FY2030</th>
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<th>FY2032</th>
<th>FY2033</th>
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<th>FY2036</th>
<th>FY2037</th>
<th>FY2038</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Growth / Conservation Adj.</td>
<td>0.35%</td>
<td>0.30%</td>
<td>0.25%</td>
<td>0.20%</td>
<td>0.15%</td>
<td>0.10%</td>
<td>0.05%</td>
<td>0.00%</td>
<td>0.00%</td>
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<tr>
<td>Rate - Volume's Revenue</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
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<tr>
<td>Internal Revenue Growth</td>
<td>0.35%</td>
<td>0.30%</td>
<td>0.25%</td>
<td>0.20%</td>
<td>0.15%</td>
<td>0.10%</td>
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5/1/2019
## TVWD Forecast Model Summary

### GENERAL Assumptions

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<tr>
<th>Month of Rate Increase Impact</th>
<th>FY2019</th>
<th>FY2020</th>
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<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
<th>FY2028</th>
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<tbody>
<tr>
<td>Overall Rate Revenue Increases</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.58%</td>
<td>4.58%</td>
<td>4.58%</td>
<td>4.58%</td>
<td>4.58%</td>
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<tr>
<td>Projected Percent Impact of Increase</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
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### RETAIL RATE Assumptions

<table>
<thead>
<tr>
<th>Rate Revenue Increase Overides</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
<th>FY2028</th>
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<tbody>
<tr>
<td>Class/Department System Growth Rate</td>
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<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
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<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
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<tr>
<td>Sales Growth/Conservation Adj.</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Ratio - Volumetric Revenue</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
<td>79.49%</td>
</tr>
<tr>
<td>Internal Revenue Growth</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
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# TVWD Forecast Model Summary

## Appendix E – Forecast Model Summary Results

## Water Financial Plan

### Revenue Forecast

<table>
<thead>
<tr>
<th></th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
<th>FY2028</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Retail</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail Revenue Before Increase</td>
<td>$65,703,514</td>
<td>$70,240,157</td>
<td>$73,239,456</td>
<td>$76,467,475</td>
<td>$79,772,952</td>
<td>$83,232,791</td>
<td>$86,792,866</td>
<td>$90,516,024</td>
<td>$94,390,892</td>
<td>$98,415,883</td>
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<tr>
<td>Retail Revenue from Increase</td>
<td>4,298,486</td>
<td>3,137,567</td>
<td>3,185,238</td>
<td>3,145,266</td>
<td>3,107,741</td>
<td>3,572,755</td>
<td>3,640,405</td>
<td>3,719,789</td>
<td>3,784,831</td>
<td>3,860,175</td>
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<tr>
<td>Total Retail Revenue</td>
<td>$70,000,000</td>
<td>$73,377,724</td>
<td>$76,424,714</td>
<td>$79,612,741</td>
<td>$82,339,693</td>
<td>$86,805,536</td>
<td>$89,433,271</td>
<td>$94,226,813</td>
<td>$98,175,723</td>
<td>$100,280,058</td>
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<tr>
<td><strong>Total User Charges</strong></td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>Total Revenues</td>
<td>$70,000,000</td>
<td>$73,377,724</td>
<td>$76,424,714</td>
<td>$79,612,741</td>
<td>$82,339,693</td>
<td>$86,805,536</td>
<td>$89,433,271</td>
<td>$94,226,813</td>
<td>$98,175,723</td>
<td>$100,280,058</td>
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### Non-Rate Revenues*  

<table>
<thead>
<tr>
<th>Non-Rate Revenues*</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
<th>FY2028</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meter &amp; Use Revenue</td>
<td>$1,313,009</td>
<td>$1,356,399</td>
<td>$1,202,002</td>
<td>$1,238,069</td>
<td>$1,275,201</td>
<td>$1,313,458</td>
<td>$1,353,861</td>
<td>$1,393,447</td>
<td>$1,433,251</td>
<td>$1,478,108</td>
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<tr>
<td>Special Service &amp; Turn On Fees</td>
<td>3,100</td>
<td>3,193</td>
<td>3,290</td>
<td>3,387</td>
<td>3,489</td>
<td>3,590</td>
<td>3,703</td>
<td>3,813</td>
<td>3,927</td>
<td>4,045</td>
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<tr>
<td>Penalty Fees</td>
<td>10,400</td>
<td>10,572</td>
<td>11,013</td>
<td>11,364</td>
<td>11,705</td>
<td>12,056</td>
<td>12,458</td>
<td>12,914</td>
<td>13,570</td>
<td>14,404</td>
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<tr>
<td>Dispatch Fees</td>
<td>300,300</td>
<td>317,549</td>
<td>327,075</td>
<td>336,888</td>
<td>346,994</td>
<td>357,404</td>
<td>368,126</td>
<td>379,131</td>
<td>390,945</td>
<td>404,268</td>
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<td>Miscellaneous Income</td>
<td>223,500</td>
<td>231,015</td>
<td>237,511</td>
<td>244,224</td>
<td>251,551</td>
<td>259,098</td>
<td>266,871</td>
<td>274,877</td>
<td>282,123</td>
<td>291,617</td>
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<tr>
<td>Plan Review</td>
<td>18,509</td>
<td>19,055</td>
<td>19,627</td>
<td>20,192</td>
<td>20,682</td>
<td>21,447</td>
<td>22,090</td>
<td>22,753</td>
<td>23,435</td>
<td>24,138</td>
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<tr>
<td>Contract Reimbursements</td>
<td>1,800,700</td>
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<td>2,086,003</td>
<td>2,230,383</td>
<td>2,376,560</td>
<td>2,523,795</td>
<td>2,672,569</td>
<td>2,721,686</td>
<td>2,770,365</td>
<td>2,827,596</td>
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<tr>
<td>Backpack Program Reimbursement</td>
<td>273,900</td>
<td>282,117</td>
<td>290,381</td>
<td>299,298</td>
<td>308,277</td>
<td>317,525</td>
<td>327,051</td>
<td>336,862</td>
<td>346,968</td>
<td>357,177</td>
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<td>Power Generation Station</td>
<td>9,600</td>
<td>9,888</td>
<td>10,185</td>
<td>10,490</td>
<td>10,805</td>
<td>11,129</td>
<td>11,463</td>
<td>11,807</td>
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<td>12,526</td>
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<td>Payments for Fund 15 Expenses</td>
<td>965,039</td>
<td>1,003,829</td>
<td>1,035,182</td>
<td>1,067,157</td>
<td>1,102,201</td>
<td>1,138,351</td>
<td>1,174,513</td>
<td>1,210,692</td>
<td>1,247,979</td>
<td>1,285,634</td>
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<td>COE Wheeling Revenue</td>
<td>547,320</td>
<td>1,300,638</td>
<td>1,301,650</td>
<td>1,302,583</td>
<td>1,303,549</td>
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<td>1,305,549</td>
<td>1,306,549</td>
<td>1,307,549</td>
<td>1,308,549</td>
</tr>
<tr>
<td>Interest Earnings - Cash &amp; Investments</td>
<td>2,667,569</td>
<td>2,550,801</td>
<td>1,648,525</td>
<td>1,108,498</td>
<td>1,210,515</td>
<td>1,322,337</td>
<td>1,399,308</td>
<td>1,624,448</td>
<td>1,642,638</td>
<td>1,798,154</td>
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<tr>
<td>Total Non-Rate Revenues</td>
<td>$7,560,339</td>
<td>$8,741,718</td>
<td>$7,592,019</td>
<td>$6,985,186</td>
<td>$7,097,348</td>
<td>$7,203,832</td>
<td>$7,289,388</td>
<td>$7,506,450</td>
<td>$6,138,178</td>
<td>$5,018,520</td>
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</table>

* Note: Non-Rate Revenues are net of related expenses.

5/1/2019
## TVWD Forecast Model Summary

### Revenue Forecast

<table>
<thead>
<tr>
<th></th>
<th>FY2020</th>
<th>FY2030</th>
<th>FY2041</th>
<th>FY2052</th>
<th>FY2063</th>
<th>FY2074</th>
<th>FY2085</th>
<th>FY2096</th>
<th>FY2107</th>
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<tbody>
<tr>
<td><strong>Retail</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Retail Revenue Before Increase</td>
<td>$102,611,200</td>
<td>$106,923,033</td>
<td>$111,381,293</td>
<td>$115,956,089</td>
<td>$121,060,220</td>
<td>$126,337,766</td>
<td>$131,772,980</td>
<td>$137,373,755</td>
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<tr>
<td>Retail Revenue from Increase</td>
<td>1,593,393</td>
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<td>2,355,351</td>
<td>2,388,332</td>
<td>2,493,531</td>
<td>2,602,127</td>
<td>2,714,074</td>
<td>2,820,422</td>
<td>2,940,673</td>
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<tr>
<td><strong>Total Retail Revenue</strong></td>
<td>$104,204,593</td>
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<td>$113,736,644</td>
<td>$118,345,020</td>
<td>$123,553,751</td>
<td>$128,939,904</td>
<td>$134,487,055</td>
<td>$140,202,754</td>
<td>$146,161,372</td>
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<td>Manual Override</td>
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</table>

### Non-Rate Revenues*

<table>
<thead>
<tr>
<th>Non-Rate Revenues</th>
<th>FY2020</th>
<th>FY2030</th>
<th>FY2041</th>
<th>FY2052</th>
<th>FY2063</th>
<th>FY2074</th>
<th>FY2085</th>
<th>FY2096</th>
<th>FY2107</th>
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</thead>
<tbody>
<tr>
<td>Meter &amp; Service Revenue</td>
<td>$1,522,657</td>
<td>$1,568,537</td>
<td>$1,615,387</td>
<td>$1,663,849</td>
<td>$1,713,764</td>
<td>$1,765,177</td>
<td>$1,818,132</td>
<td>$1,872,676</td>
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<td>Special Service &amp; Turn On Fees</td>
<td>4,166</td>
<td>4,291</td>
<td>4,420</td>
<td>4,552</td>
<td>4,689</td>
<td>4,830</td>
<td>4,975</td>
<td>5,124</td>
<td>5,278</td>
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<td>Penalty Fees</td>
<td>13,977</td>
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<td>14,428</td>
<td>15,273</td>
<td>15,751</td>
<td>16,203</td>
<td>16,689</td>
<td>17,190</td>
<td>17,705</td>
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<tr>
<td>Dispatch Fees</td>
<td>414,329</td>
<td>426,739</td>
<td>439,562</td>
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<td>466,331</td>
<td>480,321</td>
<td>494,731</td>
<td>509,575</td>
<td>524,860</td>
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<td>Miscellaneous Income</td>
<td>300,365</td>
<td>309,537</td>
<td>318,638</td>
<td>328,217</td>
<td>338,064</td>
<td>348,206</td>
<td>358,652</td>
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<td>380,894</td>
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<td>Plan Revenue</td>
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<td>2,137</td>
<td>1,768</td>
<td>1,562</td>
<td>1,382</td>
<td>1,252</td>
<td>1,150</td>
<td>1,060</td>
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<td>Contract Reimbursements</td>
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<td>2,182,145</td>
<td>2,247,712</td>
<td>2,313,154</td>
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<td>402,231</td>
<td>414,298</td>
<td>426,727</td>
<td>439,299</td>
<td>452,751</td>
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<td>14,098</td>
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<td>14,956</td>
<td>15,405</td>
<td>15,867</td>
<td>16,343</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>COB Wheeling Revenue</td>
<td>225,537</td>
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<td>239,273</td>
<td>246,455</td>
<td>253,844</td>
<td>261,460</td>
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### Total Revenues

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*Note: Non-Rate Revenues are net of related expenses.
TVWD Forecast Model Summary

| Table 9 |
| Tualatin Valley Water District |
| Water Financial Plan |
| Revenue Forecast |

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5/1/2019

* Note: Non-Rate Revenues are not net of related expenses.
### TVWD Forecast Model Summary

#### Table 30
Tualatin Valley Water District
Water Financial Plan
SDC Revenue Forecast

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<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
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#### SDC Forecast Revenue

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<tbody>
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5/1/2019
### TVWD Forecast Model Summary

#### SDC Revenue Forecast

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<tr>
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<td>3.50%</td>
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<tr>
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5/1/2019
### TVWD Forecast Model Summary

#### Table 10
Tualatin Valley Water District
Financial Plan
SDC Revenue Forecast

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</table>

5/1/2019
TVWD Financial Plan
Page 227
Appendix E – Forecast Model Summary Results

May 2019


### Appendix E – Forecast Model Summary Results

#### Table 1: Value Index (Index to $1,000,000)

<table>
<thead>
<tr>
<th>Description</th>
<th>2019</th>
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#### Note:
- The Value Index is calculated based on historical data and projected growth rates.
- The values shown are for illustrative purposes only.

---

**TVWD Financial Plan**

*Page 228*  
*May 2019*
### TVWD Forecast Model Summary

#### Table 11
Tulalip Valley Water District
Water Financial Plan
Debt Service Coverage Calculations
– Net (Equity incl. DSG)

<table>
<thead>
<tr>
<th>Growth-related Revenue</th>
<th>FY2021</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
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<td>$223,475,119</td>
<td>$233,518,300</td>
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#### Non-fare Revenue
- Motor & Sea Revenue: TRUE
  - 2,303,156
- Special Service & Turnoff Fees: 6,502
- Penalty Fees: 21,342
- Dispatch Fees: 626,780
- Miscellaneous Income: 454,529
- Plan Revenue: 37,607
- Contract Reimbursments: 2,862,135
- Back-Ross Program Reimbursements: 556,782
- Power Generation Station: 19,565
- Payments for Fixed DSG Expenses: 0
- C&H Wholesaling Revenue: 343,145

#### Interest Earnings on Revenues
- Cash & Investments: 2,496,120
- Rev. Bond Debt Service: 509,392
- Construction Clearing Account: 0
- Imputed Interest: TRUE
- Balance: 2,940,128

#### Gross Revenue (Including Growth-related Revenue)
- $201,383,972
- $208,675,034
- $218,981,214
- $227,395,084
- $230,782,159
- $246,217,538

#### Operating Expenses (excluding depreciation)
- Total O&M Costs: $104,742,248
- O&M Capitalized in Prior Periods: $(4,935,328)
- Net O&M Costs: $99,806,920

#### Net Revenue (Including Growth-related Revenue)
- $101,580,042
- $109,701,074
- $217,037,375
- $184,952,231
- $116,878,388
- $129,469,239

#### Annual DSG Subject to Coverage
- $47,165,506
- $46,125,815
- $48,704,382
- $31,083,845
- $37,235,584
- $36,886,496

#### DSG Test 1 (Including Growth-related Revenue)
<table>
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<tr>
<th>Estimated Coverage</th>
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<th>Additional Revenues Required - Test 1</th>
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#### DSG Test 2 (Including Growth-related Revenue)
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## TVWD Forecast Model Summary

### Reserves Balance Summary

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5/1/2019
## TVWD Forecast Model Summary

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### Year-End Min. Balance Assumptions

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5/1/2019
### TVWD Forecast Model Summary

#### Reserves Balance Summary

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#### Ending Reserve Balances

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#### Year-End Min. Balance Assumptions

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<td>Rev. Bond Debt Service</td>
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5/1/2019
### TVWD Forecast Model Summary

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### Sources of Funds

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<td>2,607,050</td>
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<td>2,062,589</td>
<td>2,558,801</td>
<td>3,448,515</td>
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<td>4,730,554</td>
<td>5,112,232</td>
<td>5,399,308</td>
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<td>$191,839,287</td>
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<td>$158,466,943</td>
<td>$138,601,329</td>
<td>$122,891,331</td>
<td>$126,651,999</td>
<td>$136,944,237</td>
<td>$139,317,387</td>
<td>$155,499,269</td>
<td>$146,976,123</td>
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### Uses of Funds

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
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<tbody>
<tr>
<td>Capital Outlays from Budget</td>
<td>427,800</td>
<td>580,000</td>
<td>527,500</td>
<td>546,013</td>
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<td>651,150</td>
<td>680,431</td>
<td>711,050</td>
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<td>Transfers Out</td>
<td>Cash &amp; Investments to Construction Clearing Account</td>
<td>$42,596,916</td>
<td>$65,924,497</td>
<td>$74,269,030</td>
<td>$138,888,980</td>
<td>$41,075,652</td>
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<td>$40,675,642</td>
<td>$28,511,354</td>
<td>$41,682,443</td>
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<td>8,632,604</td>
<td>8,632,604</td>
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<td>0</td>
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<td>$40,322,378</td>
<td>$39,638,084</td>
<td>$53,187,488</td>
<td>$40,677,545</td>
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<tr>
<td>Total Uses of Funds</td>
<td>$191,839,287</td>
<td>$183,055,442</td>
<td>$158,466,943</td>
<td>$138,601,329</td>
<td>$122,891,331</td>
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<td>$136,944,237</td>
<td>$139,317,387</td>
<td>$155,499,269</td>
<td>$146,976,123</td>
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Check Sources/Uses: OK OK OK OK OK OK OK OK OK OK
Check Ending Reserve Balance: OK OK OK OK OK OK OK OK OK OK

5/1/2019
## TVWD Forecast Model Summary

### Table 11
Tualatin Valley Water District
Water Financial Plan

#### Reserve Summary – Cash & Investments

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
<th>FY2028</th>
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</thead>
<tbody>
<tr>
<td>Interest Rate on Fund Balance</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
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#### Sources of Funds

<table>
<thead>
<tr>
<th>Source of Funds</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
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<tr>
<td>Beginning Cash &amp; Investments Balance</td>
<td>$386,433,249</td>
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<td>$543,959,300</td>
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<td>Non-Rate Revenues</td>
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<td>1,568,337</td>
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<td>1,986,722</td>
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<td>4,295</td>
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<td>4,532</td>
<td>4,489</td>
<td>4,610</td>
<td>4,975</td>
<td>5,124</td>
<td>5,278</td>
<td>5,436</td>
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<td>Penalty Fees</td>
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<td>34,396</td>
<td>34,828</td>
<td>35,273</td>
<td>35,731</td>
<td>36,203</td>
<td>36,689</td>
<td>37,189</td>
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<td>426,759</td>
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<td>466,331</td>
<td>480,321</td>
<td>494,731</td>
<td>509,573</td>
<td>528,860</td>
<td>540,406</td>
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<td>Miscellaneous Income</td>
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<td>318,058</td>
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<td>358,062</td>
<td>369,411</td>
<td>380,494</td>
<td>391,309</td>
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<td>Plan Revenue</td>
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<td>25,808</td>
<td>26,737</td>
<td>27,588</td>
<td>28,582</td>
<td>29,640</td>
<td>30,768</td>
<td>31,945</td>
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<td>Contract Reimbursements</td>
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<td>379,912</td>
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<td>Power Generation Sales</td>
<td>12,992</td>
<td>13,280</td>
<td>13,500</td>
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<tr>
<td>COG Wholesale Revenue</td>
<td>225,527</td>
<td>232,383</td>
<td>239,273</td>
<td>246,451</td>
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<td>261,460</td>
<td>269,303</td>
<td>277,182</td>
<td>285,204</td>
<td>294,275</td>
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<td>1,552,271</td>
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<td>2,480,319</td>
<td>2,640,139</td>
<td>2,808,025</td>
<td>2,996,430</td>
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<tr>
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<td>$165,024,574</td>
<td>$168,038,358</td>
<td>$170,739,733</td>
<td>$176,352,055</td>
<td>$187,392,054</td>
<td>$195,280,911</td>
<td>$201,047,932</td>
<td>$204,266,326</td>
<td>$207,973,312</td>
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#### Uses of Funds

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<tr>
<th>Use of Funds</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
<th>FY2028</th>
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</thead>
<tbody>
<tr>
<td>Non-Cash Expenditures (including OPERS Self Account deposits)</td>
<td>$53,555,780</td>
<td>$56,558,453</td>
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<td>$33,904,547</td>
<td>$34,914,515</td>
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<td>Cash &amp; Investments to Construction Clearing Account</td>
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<td>$12,849,020</td>
<td>$13,723,847</td>
<td>$14,485,205</td>
<td>$15,840,495</td>
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<tr>
<td>Total Uses of Funds</td>
<td>$149,504,882</td>
<td>$165,024,574</td>
<td>$168,038,358</td>
<td>$170,739,733</td>
<td>$176,352,055</td>
<td>$187,392,054</td>
<td>$195,280,911</td>
<td>$201,047,932</td>
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<td>$207,973,312</td>
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### Minimum Fund Balance Assumptions

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<th>Minimum Fund Balance</th>
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<th>FY2020</th>
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<th>FY2023</th>
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<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
<th>FY2028</th>
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<tbody>
<tr>
<td>$38,713,759</td>
<td>$40,882,531</td>
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## TVWD Forecast Model Summary

### Table 13
Tuolumne Valley Water District
Water Financial Plan

#### Reserve Summary – Cash & Investments

<table>
<thead>
<tr>
<th>Description</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
<th>FY2028</th>
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<tbody>
<tr>
<td><strong>Interest Rate on Fund Balance</strong></td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
<td>3.50%</td>
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<tr>
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<td>$72,817,618</td>
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<td>Motor &amp; Misc Revenue</td>
<td>$2,086,324</td>
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<td>Capital Outlays from Budget</td>
<td>$1,535,930</td>
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<tr>
<td>Ending Cash &amp; Investments Balance</td>
<td>$61,998,672</td>
<td>$87,990,964</td>
<td>$74,888,062</td>
<td>$72,817,618</td>
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5/1/2019
TVWD Forecast Model Summary

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Minimum Fund Balance Assumptions

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| Check Ending Reserve Balance | OK | OK | OK | OK | OK | OK | OK | OK | OK | OK |

5/1/2019
## TVWD Forecast Model Summary

### Reserve Summary – Bond Proceeds

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5/1/2019
## TVWD Forecast Model Summary

### Reserve Summary – Bond Proceeds

**Table 14**

Tuakelie Valley Water District

Water Financial Plan

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<tr>
<th>Description</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
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<td>3.50%</td>
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**Sources of Funds**
- **Beginning Bond Proceeds Balance**: $0
- **Bond Proceeds**: $25,635,000 to $40,545,000
- **Interest Earnings**: $0

| Total Sources of Funds | $25,635,000 | $40,545,000 | $0 | $0 | $27,510,000 | $0 | $17,105,000 | $52,040,000 | $84,465,000 | $0 |

**Uses of Funds**
- **Insurance Costs**: $3,083,525 to $9,877,573
- **STD Retirement**: $0
- **Transfers Out**
  - **Bond Proceeds to Rev. Bond Debt Service**: $1,763,826 to $4,183,078
  - **Bond Proceeds to Construction Closing Account**: $25,948,649 to $55,834,355
- **Use of Price Bond Proceeds for CIP**: $0
- **Ending Bond Proceeds Balance**: $0

| Total Uses of Funds | $25,635,000 | $40,545,000 | $0 | $0 | $27,510,000 | $0 | $17,105,000 | $52,040,000 | $84,465,000 | $0 |

**Minimum Fund Balance Assumptions**
- **Check Sources/Uses**: OK, OK, OK, OK, OK, OK, OK, OK, OK
- **Check Ending Reserve Balance**: OK, OK, OK, OK, OK, OK, OK, OK

5/1/2019
## TVWD Forecast Model Summary

### Reserve Summary – Rev. Bond Debt Service

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### Table 15
**Tuolumne Valley Water District**
**Water Financial Plan**

#### Reserve Summary – Rev. Bond Debt Service

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5/1/2019
### TVWD Forecast Model Summary

#### Reserve Summary – Rev. Bond Debt Service

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<td>$47,990,800</td>
<td>$50,072,435</td>
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5/1/2019
## TVWD Forecast Model Summary

### Reserve Summary – Construction Clearing Account

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<td>$42,596,936</td>
<td>$45,924,487</td>
<td>$74,250,030</td>
<td>$33,888,980</td>
<td>$41,975,652</td>
<td>$34,613,350</td>
<td>$40,675,842</td>
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<td>$47,682,443</td>
<td>$28,396,781</td>
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<td>$23,452,124</td>
<td>$156,795,577</td>
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<td>$59,628,212</td>
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<td>$33,912,230</td>
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5/1/2019
## TVWD Forecast Model Summary

### Reserve Summary - Construction Clearing Account

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<td>$29,946,204</td>
<td>$32,626,739</td>
<td>$32,347,536</td>
<td>$18,291,289</td>
<td>$42,677,983</td>
<td>$37,040,184</td>
<td>$33,540,079</td>
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<td>5,002,501</td>
<td>4,930,842</td>
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### Uses of Funds

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5/1/2019
TVWD Forecast Model Summary

Table 6
Truckee Valley Water District
Water Financial Plan

Reserve Summary – Construction Clearing Account

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Sources of Funds

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<td>$1,246,914</td>
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<td>$49,788,152</td>
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<td>4,026,538</td>
<td>3,708,324</td>
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<td>2,940,328</td>
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Uses of Funds

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<td>Total Uses of Funds</td>
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Minimum Fund Balance Assumptions

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5/1/2019
## TVWD Forecast Model Summary

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<td>1,017,197</td>
<td>1,038,489</td>
<td>1,034,399</td>
<td>1,013,117</td>
<td>1,006,236</td>
<td>$999,816</td>
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5/1/2019
## TVWD Forecast Model Summary

### Table 17
Tedla Valley Water District
Water Financial Plan

#### Reserve Summary – Reimbursement SDC Account

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<td><strong>Total Sources of Funds</strong></td>
<td>$5,499,072</td>
<td>$5,371,229</td>
<td>$5,281,261</td>
<td>$5,178,145</td>
<td>$5,061,301</td>
<td>$4,930,887</td>
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#### Minimum fund balance assumptions

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### TVWD Forecast Model Summary

#### Table 17
Tulelake Valley Water District
Water Financial Plan

**Reserve Summary – Reimbursement SDC Account**

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#### Sources of Funds

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<td>Reimbursement Fee Receipts</td>
<td>4,026,238</td>
<td>3,788,324</td>
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<td>3,246,538</td>
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#### Uses of Funds

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#### Minimum Fund Balance Assumptions

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5/1/2019
### TVWD Forecast Model Summary

#### Reserve Summary – Improvement SD&U Account

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5/1/2019

Appendix E – Forecast Model Summary Results

Page 248

TVWD Financial Plan

Tulare Valley Water District

Water Financial Plan

Table 18
## Appendix E – Forecast Model Summary Results

### TVWD Forecast Model Summary

#### Table E1
Taft Water Valley Water District
Water Financial Plan

**Reserve Summary – Improvement SDIC Account**

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5/1/2019
### TVWD Forecast Model Summary

#### Table 18
Tuscaloosa Valley Water District
Water Financial Plan

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5/1/2019
### TVWD Forecast Model Summary

#### Reserve Summary – WIFIA Reserve

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5/1/2019
## TVWD Forecast Model Summary

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<td>$21,180,871</td>
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### Uses of Funds

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5/1/2019
### TVWD Forecast Model Summary

**Table 10**

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5/1/2019
## TVWD Forecast Model Summary

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## Uses of Funds

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## TVWD Forecast Model Summary

### Table 20
Tulehecko Valley Water District
Water Financial Plan

Sources and Uses Summary with Changes in Reserves by Fund

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<td>4,573,933</td>
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<tr>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rev. Bond Debt Service</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Improvement SDC Account</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Total Sources of Funds</td>
<td>$144,692,355</td>
<td>$122,854,091</td>
<td>$128,046,697</td>
<td>$144,029,855</td>
<td>$167,786,738</td>
<td>$149,508,716</td>
<td>$182,623,225</td>
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<td>$188,158,311</td>
<td>$170,287,027</td>
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### Uses of Funds

<table>
<thead>
<tr>
<th>Uses of Funds</th>
<th>FY2029</th>
<th>FY2030</th>
<th>FY2031</th>
<th>FY2032</th>
<th>FY2033</th>
<th>FY2034</th>
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<th>FY2036</th>
<th>FY2037</th>
<th>FY2038</th>
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<tbody>
<tr>
<td>Operating Exp</td>
<td>$43,033,837</td>
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<td>$49,230,264</td>
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<td>$53,875,643</td>
<td>$56,212,328</td>
<td>$58,581,149</td>
<td>$61,065,185</td>
<td>$63,152,449</td>
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<td>38,119,327</td>
<td>50,614,232</td>
<td>53,145,228</td>
<td>48,344,842</td>
<td>73,040,957</td>
<td>75,837,915</td>
<td>58,733,064</td>
<td>50,302,519</td>
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<tr>
<td>Debt Service</td>
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<td>30,205,721</td>
<td>30,205,721</td>
<td>30,640,341</td>
<td>32,205,366</td>
<td>33,206,771</td>
<td>34,501,918</td>
<td>37,014,691</td>
<td>39,306,254</td>
<td>40,296,182</td>
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<td>Building Reserves</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2,422,294</td>
<td>2,643,535</td>
<td>1,970,875</td>
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<td>Rev. Bond Debt Service</td>
<td>1,933,431</td>
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<td>0</td>
<td>939,240</td>
<td>2,170,810</td>
<td>0</td>
<td>2,422,294</td>
<td>2,643,535</td>
<td>1,970,875</td>
<td>0</td>
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<tr>
<td>Improvement SDC Account</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Total Uses of Funds</td>
<td>$144,692,355</td>
<td>$122,854,091</td>
<td>$128,046,697</td>
<td>$144,029,855</td>
<td>$167,786,738</td>
<td>$149,508,716</td>
<td>$182,623,225</td>
<td>$190,970,520</td>
<td>$188,158,311</td>
<td>$170,287,027</td>
</tr>
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5/1/2019
## TVWD Forecast Model Summary

### Table 20: Truckee Valley Water District
Financial Plan
Water Financial Plan
Sources and Uses Summary with Changes in Reserves by Fund

<table>
<thead>
<tr>
<th>Sources of Funds</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
<th>FY2028</th>
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<tbody>
<tr>
<td>SDGs</td>
<td>4,026,378</td>
<td>3,788,324</td>
<td>3,328,824</td>
<td>3,246,538</td>
<td>2,940,328</td>
<td>2,640,313</td>
<td>2,249,670</td>
<td>1,962,727</td>
<td>1,645,842</td>
<td>997,700</td>
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<tr>
<td>Other Revenue</td>
<td>9,256,428</td>
<td>10,028,535</td>
<td>10,221,317</td>
<td>10,461,531</td>
<td>10,819,398</td>
<td>11,201,273</td>
<td>11,500,594</td>
<td>11,800,318</td>
<td>12,865,298</td>
<td>13,088,138</td>
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<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Debt Proceeds</td>
<td>25,635,000</td>
<td>40,545,000</td>
<td>0</td>
<td>0</td>
<td>27,510,000</td>
<td>0</td>
<td>17,035,000</td>
<td>52,040,000</td>
<td>84,465,000</td>
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<td>Reserves</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cash &amp; Investments</td>
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<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>Rev. Bond Debt Service</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Improvement SDG Account</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Sources of Funds</td>
<td>$197,766,759</td>
<td>$239,923,838</td>
<td>$219,919,729</td>
<td>$195,554,062</td>
<td>$228,893,972</td>
<td>$230,529,643</td>
<td>$235,498,124</td>
<td>$279,893,859</td>
<td>$322,247,359</td>
<td>$254,064,860</td>
</tr>
</tbody>
</table>

### Uses of Funds

| Operating Exp             | $66,371,905 | $79,111,435 | $72,310,820 | $75,333,965 | $79,134,167 | $80,827,499 | $80,980,753 | $90,095,401 | $94,587,850 | $97,267,928 |
| Purchased Water & Pumping | $7,277,940  | $7,992,036  | $8,801,678  | $9,647,754  | $10,535,502 | $21,655,836 | $22,412,552 | $23,430,122 | $24,818,676 | $25,980,496 |
| Capital Outlay             | 69,853,731  | 77,623,462  | 62,555,343  | 54,553,486  | 71,353,647  | 58,321,402  | 73,590,979  | 113,702,291 | 108,753,538 | 72,523,950 |
| Building Reserves          | 1,301,932   | 2,592,295   | 0          | 0          | 8,433,633   | 0          | 4,069,823   | 0          | 33,376,083  | 0 |
| Cash & Investments        | 1,763,826   | 4,163,070   | 0          | 0          | 1,892,836   | 0          | 1,176,916   | 0          | 3,580,049   | 0 |
| Rev. Bond Debt Service    | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0 |
| Improvement SDG Account   | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0          | 0 |
| Total Uses of Funds       | $197,766,759 | $239,923,838 | $219,919,729 | $195,554,062 | $228,893,972 | $230,529,643 | $235,498,124 | $279,893,859 | $322,247,359 | $254,064,860 |

| Check Sources/Uses        | OK        | OK        | OK        | OK        | OK        | OK        | OK        | OK        | OK        | OK |

5/1/2019
### TVWD Forecast Model Summary

#### O&M Summary
<table>
<thead>
<tr>
<th></th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Expenses</td>
<td>$86,498,415</td>
<td>$80,687,070</td>
<td>$80,239,370</td>
<td>$51,156,449</td>
<td>$48,762,775</td>
<td>$45,701,816</td>
<td>$47,761,446</td>
<td>$48,751,337</td>
<td>$48,155,680</td>
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<td>JWRC</td>
<td>2,252,361</td>
<td>2,613,596</td>
<td>2,699,420</td>
<td>2,202,179</td>
<td>2,323,210</td>
<td>2,430,754</td>
<td>2,565,155</td>
<td>2,726,776</td>
<td>5,251,658</td>
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<tr>
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<td>438,364</td>
<td>458,090</td>
<td>494,300</td>
<td>516,544</td>
<td>539,788</td>
<td>564,078</td>
<td>589,462</td>
<td>615,688</td>
<td>1,648,362</td>
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<td>Pension Expense [1][2]</td>
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<td>0</td>
<td>1,160,621</td>
<td>1,022,849</td>
<td>1,298,394</td>
<td>1,257,449</td>
<td>1,304,777</td>
<td>1,365,492</td>
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<td>OPEB Funded by Operations</td>
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<td>55,900</td>
<td>72,754</td>
<td>105,619</td>
<td>124,596</td>
<td>144,630</td>
<td>165,908</td>
<td>182,823</td>
<td>330,500</td>
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<td>Total O&amp;M</td>
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<td>$83,832,319</td>
<td>$55,526,134</td>
<td>$51,395,034</td>
<td>$53,931,868</td>
<td>$55,067,994</td>
<td>$61,977,099</td>
<td>$54,308,668</td>
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<tr>
<td>Less Capitalized OI &amp; Outlays from O&amp;M</td>
<td>$3,162,670</td>
<td>$3,357,939</td>
<td>$3,099,047</td>
<td>$3,666,954</td>
<td>$3,831,967</td>
<td>$4,004,405</td>
<td>$4,184,603</td>
<td>$4,372,910</td>
<td>$2,716,381</td>
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#### Debt Service from Rates (net of Debt Reserve Retirements)
<table>
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<tr>
<th></th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Revenue Bonds</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$1,608,262</td>
<td>$1,546,471</td>
<td>$7,080,419</td>
<td>$7,080,419</td>
<td>$7,080,419</td>
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<tr>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Total Debt Service</td>
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<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$1,608,262</td>
<td>$1,546,471</td>
<td>$7,080,419</td>
<td>$7,080,419</td>
<td>$7,080,419</td>
</tr>
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</table>

#### Cash-Funded Capital Expenditures
<table>
<thead>
<tr>
<th></th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Projects &amp; Outlays from O&amp;M</td>
<td>$48,543,236</td>
<td>$76,636,144</td>
<td>$100,487,033</td>
<td>$138,145,555</td>
<td>$216,022,707</td>
<td>$157,391,836</td>
<td>$76,951,771</td>
<td>$60,279,342</td>
<td>$53,934,096</td>
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<tr>
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<td>(20,000,000)</td>
<td>(100,000,000)</td>
<td>(167,771,268)</td>
<td>(116,503,880)</td>
<td>(30,000,000)</td>
<td>(25,500,000)</td>
<td>0</td>
</tr>
<tr>
<td>Total Requirements [4][5][6]</td>
<td>$84,607,707</td>
<td>$122,572,861</td>
<td>$130,478,031</td>
<td>$89,800,012</td>
<td>$93,983,054</td>
<td>$92,190,095</td>
<td>$102,307,006</td>
<td>$92,048,572</td>
<td>$120,641,260</td>
</tr>
</tbody>
</table>

#### Less Non-Rate Revenues and Reserves
| Non-Rate Revenue (net of related expenses) | $1,133,000 | $1,166,990 | $1,202,000 | $1,236,060 | $1,273,201 | $1,313,458 | $1,352,861 | $1,393,447 | $1,435,251 |
| Non-Rate Revenue (net of related expenses) | $2,759,750 | $3,023,927 | $2,741,895 | $4,638,608 | $4,611,793 | $4,578,317 | $4,537,219 | $4,468,596 | $3,062,290 |
| SDC Funding for Capital | 5,518,500 | 5,711,648 | 5,714,503 | 5,710,962 | 5,999,345 | 5,680,347 | 5,653,038 | 5,616,858 | 5,571,222 |
| Funding from Reserves (incl. interest earnings) | 4,196,456 | 39,102,573 | 44,143,339 | 1,108,498 | 1,266,778 | 1,492,364 | 2,331,417 | 1,872,262 | 1,400,396 |
| Total | $14,607,707 | $15,003,517 | $15,803,317 | $12,659,728 | $12,853,123 | $13,064,306 | $13,874,535 | $13,371,164 | $24,467,158 |

#### Net Revenue Requirements [7][8][9]
| Net Revenue Requirements | $79,000,000 | $73,567,724 | $74,676,694 | $73,104,284 | $81,129,942 | $79,325,789 | $86,432,471 | $78,677,408 | $56,174,102 |

---

[1] Pension costs included in Fixed Expenses to FY2022.
[3] Total O&M minus total cash and funds from O&M.
[4] Total Requirements minus total cash and funds from O&M.
[5] Total Requirements minus total non-rate revenue and reserves.
[6] Total requirements minus total non-rate revenue and reserves.
[8] Total requirements minus total non-rate revenue and reserves.
### TVWD Forecast Model Summary

#### 45-year Revenue Requirements Forecast

<table>
<thead>
<tr>
<th>Year</th>
<th>FY2028</th>
<th>FY2029</th>
<th>FY2030</th>
<th>FY2031</th>
<th>FY2032</th>
<th>FY2033</th>
<th>FY2034</th>
<th>FY2035</th>
<th>FY2036</th>
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</tr>
<tr>
<td>WWC</td>
<td>5,487,982</td>
<td>5,734,941</td>
<td>5,991,014</td>
<td>6,262,699</td>
<td>6,544,521</td>
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<td>7,146,780</td>
<td>7,468,385</td>
<td>7,804,463</td>
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<tr>
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<td>1,733,751</td>
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<td>1,916,349</td>
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<td>2,211,560</td>
<td>2,315,397</td>
<td>2,421,848</td>
<td>2,530,831</td>
</tr>
<tr>
<td>OPEB Funded by Operations</td>
<td>1,272,115</td>
<td>1,328,335</td>
<td>1,398,856</td>
<td>2,020,083</td>
<td>1,915,189</td>
<td>2,002,372</td>
<td>1,844,303</td>
<td>1,927,305</td>
<td>1,843,099</td>
</tr>
<tr>
<td>Total D&amp;M</td>
<td>$54,044,197</td>
<td>$56,321,466</td>
<td>$59,659,295</td>
<td>$62,385,885</td>
<td>$65,019,748</td>
<td>$67,967,028</td>
<td>$71,379,722</td>
<td>$73,964,949</td>
<td>$77,135,831</td>
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<tr>
<td>Net D&amp;M</td>
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<td>$51,205,569</td>
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<td>$61,548,453</td>
<td>$64,429,593</td>
<td>$67,661,382</td>
<td>$70,113,981</td>
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<tr>
<td><strong>Debt Service from Rates (net of Debt Reserve Retirements)</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Future Revenue Bonds</td>
<td>$7,080,419</td>
<td>$8,047,134</td>
<td>$9,013,850</td>
<td>$9,013,850</td>
<td>$9,473,470</td>
<td>$11,018,495</td>
<td>$12,103,900</td>
<td>$13,315,047</td>
<td>$15,827,820</td>
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<td>21,186,711</td>
<td>21,186,711</td>
<td>21,186,711</td>
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<td>21,186,711</td>
<td>21,186,711</td>
<td>21,186,711</td>
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</tr>
<tr>
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<td>$30,200,721</td>
<td>$30,660,431</td>
<td>$32,205,366</td>
<td>$33,320,772</td>
<td>$34,501,918</td>
</tr>
<tr>
<td><strong>Cash-Funded Capital Expenditures</strong></td>
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</tr>
<tr>
<td>Less Debt Funding</td>
<td>0</td>
<td>(25,745,069)</td>
<td>0</td>
<td>0</td>
<td>(12,240,360)</td>
<td>(28,905,940)</td>
<td>0</td>
<td>(32,254,631)</td>
<td>(34,664,223)</td>
</tr>
<tr>
<td>CIP &amp; Outlays from Cash/Reserves</td>
<td>[I]</td>
<td>$34,623,340</td>
<td>$22,990,709</td>
<td>$56,096,819</td>
<td>$58,219,477</td>
<td>$50,614,232</td>
<td>$48,534,842</td>
<td>$42,792,326</td>
<td>$41,173,692</td>
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<tr>
<td>Total Requirements</td>
<td>[A]+[B]+[C]</td>
<td>$114,096,198</td>
<td>$105,780,504</td>
<td>$122,834,091</td>
<td>$128,066,697</td>
<td>$130,668,635</td>
<td>$120,874,247</td>
<td>$149,508,716</td>
<td>$147,416,225</td>
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<tr>
<td><strong>Less Non-Rate Revenues and Reserves</strong></td>
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<tr>
<td>Meter &amp; Svc Revenue</td>
<td>$5,478,308</td>
<td>$5,352,657</td>
<td>$5,166,337</td>
<td>$5,165,387</td>
<td>$5,166,849</td>
<td>$5,171,764</td>
<td>$5,765,177</td>
<td>$5,818,132</td>
<td>$5,872,676</td>
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<tr>
<td>Non-Rate Revenue (net of related expenses)</td>
<td>3,152,088</td>
<td>3,246,661</td>
<td>3,344,061</td>
<td>3,444,838</td>
<td>3,547,715</td>
<td>3,654,146</td>
<td>3,763,770</td>
<td>3,876,683</td>
<td>3,990,564</td>
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<tr>
<td>SDC Funding for Capital</td>
<td>5,515,059</td>
<td>5,449,072</td>
<td>5,371,229</td>
<td>5,281,261</td>
<td>5,178,415</td>
<td>5,061,901</td>
<td>4,950,887</td>
<td>4,784,501</td>
<td>4,611,828</td>
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<tr>
<td>Funding from Reserves (incl. interest earnings)</td>
<td>3,670,225</td>
<td>1,823,371</td>
<td>3,616,354</td>
<td>4,239,223</td>
<td>1,933,875</td>
<td>2,249,156</td>
<td>10,108,988</td>
<td>2,449,854</td>
<td>2,454,278</td>
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<td>Totals</td>
<td>[I]</td>
<td>$13,816,140</td>
<td>$12,041,762</td>
<td>$13,699,981</td>
<td>$14,580,253</td>
<td>$12,323,833</td>
<td>$12,678,967</td>
<td>$20,568,822</td>
<td>$12,929,170</td>
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</table>

1. Pension costs included in Fixed Expenses to FY2022.
2. Pension costs aggregated separately beginning FY2022.

5/1/2019
## TVWD Forecast Model Summary

### Table 21
Tuatulina Valley Water District
Water Financial Plan
45-year Revenue Requirements Forecast

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<tr>
<td>O&amp;M Summary</td>
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<tr>
<td>Fixed Expenses</td>
<td>$67,126,647</td>
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<td>$73,445,478</td>
<td>$76,790,615</td>
<td>$80,204,209</td>
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<td>Variable Costs</td>
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<td>$8,906,189</td>
<td>$9,306,967</td>
<td>$9,715,781</td>
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<td>$10,620,796</td>
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<td>$11,598,174</td>
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<td>JWV</td>
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<tr>
<td>Pension Expense (1)</td>
<td>1,925,997</td>
<td>1,813,603</td>
<td>1,859,215</td>
<td>2,234,251</td>
<td>2,354,735</td>
<td>2,419,818</td>
<td>2,463,440</td>
<td>2,515,949</td>
<td>2,663,416</td>
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<tr>
<td>OPEB Funded by Operations</td>
<td>631,331</td>
<td>653,646</td>
<td>676,319</td>
<td>699,090</td>
<td>714,490</td>
<td>749,847</td>
<td>783,590</td>
<td>807,098</td>
<td>831,311</td>
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<td>Total O&amp;M</td>
<td>$80,614,377</td>
<td>$84,056,604</td>
<td>$87,811,300</td>
<td>$92,009,847</td>
<td>$96,143,086</td>
<td>$100,236,683</td>
<td>$104,747,738</td>
<td>$110,024,074</td>
<td>$114,698,819</td>
</tr>
</tbody>
</table>

Less Capitalized O&M from O&M

|                   |           |           |           |           |           |           |           |           |           |
| $4,218,457       | $4,408,288 | $4,606,661 | $4,813,960 | $5,050,588 | $5,296,965 | $5,493,528 | $5,740,737 | $5,999,070 |           |


### Debt Service from Rates (net of Debt Reserve Retirements)

|                   |           |           |           |           |           |           |           |           |           |
| Future Revenue Bonds | $18,119,383 | $19,109,321 | $19,991,234 | $22,954,682 | $25,036,217 | $25,982,635 | $26,929,053 | $27,517,512 |           |
| WIPA              | $21,186,671 | $21,186,671 | $21,186,671 | $21,186,671 | $21,186,671 | $21,186,671 | $21,186,671 | $21,186,671 | $21,186,671 |

### Cash-Funded Capital Expenditures

|                   |           |           |           |           |           |           |           |           |           |
| Capital Projects & Outlays from O&M | $50,733,064 | $50,362,519 | $69,953,371 | $77,621,462 | $62,555,143 | $54,351,496 | $71,733,647 | $78,112,402 | $73,190,679 |
| Less Debt Funding | $(26,363,300) | 0 | $(23,496,669) | $(55,453,355) | 0 | 0 | $(23,404,514) | 0 | $(15,671,509) |
| Total Debt Service | $34,369,764 | $50,362,519 | $66,457,702 | $77,621,462 | $62,555,143 | $54,351,496 | $71,733,647 | $78,112,402 | $73,190,679 |

### Total Requirements (1)+(1)+(2)

|                   | $149,071,738 | $170,287,027 | $170,829,826 | $155,524,546 | $199,800,729 | $195,554,302 | $192,952,359 | $210,320,663 | $214,323,301 |

### Less Non-Rate Revenues and Reserves

|                   |           |           |           |           |           |           |           |           |           |
| Meter & Svc Revenue | $1,928,857 | $1,986,722 | $2,046,324 | $2,107,714 | $2,170,945 | $2,236,074 | $2,303,156 | $2,372,230 | $2,443,418 |
| Non-Rate Revenue (net of related expenses) | $4,113,773 | $4,326,157 | $4,306,241 | $4,494,139 | $4,628,963 | $4,767,832 | $4,950,867 | $5,058,193 | $5,209,936 |
| SDC Funding for Capital | $4,441,907 | $4,243,729 | $4,026,238 | $3,788,324 | $3,528,824 | $3,246,518 | $2,940,128 | $2,608,313 | $2,249,670 |
| Funding from Reserves (incl. interest earnings) | $2,738,203 | $7,447,189 | $2,846,863 | $3,426,483 | $16,923,811 | $3,528,570 | $3,605,562 | $4,651,419 | $3,847,257 |
| Totals             | $13,221,740 | $17,913,797 | $13,282,667 | $13,816,659 | $27,252,543 | $5,578,993 | $13,759,712 | $14,690,175 | $13,750,264 |

### Net Revenue Requirements (1)+(2)

|                   | $135,840,998 | $152,373,230 | $157,547,160 | $139,707,887 | $172,638,186 | $179,975,309 | $175,152,646 | $195,830,488 | $200,573,037 |

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(1) Pension costs included in Fixed Expenses to FY2022.
(2) Pension costs aggregated separately beginning FY2022.
## TVWD Forecast Model Summary

### Table 21
Tulalip Valley Water District
Water Financial Plan
45-year Revenue Requirements Forecast

<table>
<thead>
<tr>
<th></th>
<th>FY2046</th>
<th>FY2047</th>
<th>FY2048</th>
<th>FY2049</th>
<th>FY2050</th>
<th>FY2051</th>
<th>FY2052</th>
<th>FY2053</th>
<th>FY2054</th>
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<tbody>
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<td><strong>O&amp;M Summary</strong></td>
<td></td>
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<tr>
<td>Variable Costs</td>
<td></td>
<td></td>
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<tr>
<td>JWC</td>
<td>12,120,092</td>
<td>12,665,496</td>
<td>13,233,444</td>
<td>13,831,093</td>
<td>14,453,435</td>
<td>15,103,840</td>
<td>15,783,513</td>
<td>16,493,771</td>
<td>17,235,990</td>
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<td>Pension Expense</td>
<td>2,126,841</td>
<td>2,255,989</td>
<td>2,218,944</td>
<td>2,212,296</td>
<td>2,205,049</td>
<td>2,722,276</td>
<td>2,574,785</td>
<td>2,690,650</td>
<td>2,512,676</td>
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<tr>
<td>OPEB Funded by Operations</td>
<td>856,250</td>
<td>881,938</td>
<td>906,396</td>
<td>944,732</td>
<td>968,330</td>
<td>992,599</td>
<td>1,017,371</td>
<td>1,042,807</td>
<td>1,068,877</td>
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<tr>
<td><strong>Total O&amp;M</strong></td>
<td>$129,012,841</td>
<td>$124,536,668</td>
<td>$129,700,350</td>
<td>$133,283,634</td>
<td>$141,806,405</td>
<td>$147,148,933</td>
<td>$153,472,011</td>
<td>$160,066,774</td>
<td>$166,944,918</td>
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<td>Less: Capitalized O&amp;M &amp; Outlays from O&amp;M</td>
<td>$6,269,028</td>
<td>$6,551,135</td>
<td>$6,845,936</td>
<td>$7,134,003</td>
<td>$7,473,933</td>
<td>$7,812,350</td>
<td>$8,161,906</td>
<td>$8,551,282</td>
<td>$8,915,189</td>
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<tr>
<td><strong>Debt Service from Rates</strong>&lt;br&gt;(net of Debt Reserve Retirements)</td>
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<tr>
<td>Future Revenue Bonds</td>
<td>$28,696,974</td>
<td>$36,046,714</td>
<td>$37,498,625</td>
<td>$37,498,625</td>
<td>$37,498,625</td>
<td>$37,498,625</td>
<td>$37,498,625</td>
<td>$37,498,625</td>
<td>$34,287,102</td>
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<td>21,186,671</td>
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<td>21,186,671</td>
<td>21,186,671</td>
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<tr>
<td><strong>Total Debt Service</strong></td>
<td>$51,883,645</td>
<td>$57,233,584</td>
<td>$58,686,496</td>
<td>$58,686,496</td>
<td>$58,686,496</td>
<td>$58,686,496</td>
<td>$58,686,496</td>
<td>$58,686,496</td>
<td>$55,473,972</td>
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<tr>
<td><strong>Cash-Funded Capital Expenditures</strong></td>
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<td></td>
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<tr>
<td>Capital Projects &amp; Outlays from O&amp;M</td>
<td>$111,702,293</td>
<td>$106,758,518</td>
<td>$72,523,950</td>
<td>$70,738,118</td>
<td>$78,604,416</td>
<td>$75,942,779</td>
<td>$80,034,893</td>
<td>$73,928,015</td>
<td>$76,537,281</td>
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<td>Less: Debt Funding</td>
<td>[47,697,091]</td>
<td>[77,186,378]</td>
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<td>0</td>
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<tr>
<td><strong>CIP &amp; Outlays from Cash/Reserves</strong></td>
<td>$64,005,202</td>
<td>$29,367,140</td>
<td>$72,523,950</td>
<td>$70,738,118</td>
<td>$78,604,416</td>
<td>$75,942,779</td>
<td>$80,034,893</td>
<td>$73,928,015</td>
<td>$76,537,281</td>
</tr>
<tr>
<td><strong>Total Requirements</strong>&lt;br&gt;[A] + [B]</td>
<td>$227,833,859</td>
<td>$204,406,260</td>
<td>$254,064,860</td>
<td>$257,545,245</td>
<td>$270,897,384</td>
<td>$273,965,877</td>
<td>$284,029,494</td>
<td>$284,151,004</td>
<td>$290,040,982</td>
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<tr>
<td><strong>Less: Non-Rate Revenues and Reserves</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meter &amp; Svc Revenue</td>
<td>$2,566,720</td>
<td>$2,592,222</td>
<td>$2,668,989</td>
<td>$2,750,088</td>
<td>$2,832,591</td>
<td>$2,917,569</td>
<td>$3,005,096</td>
<td>$3,095,249</td>
<td>$3,188,106</td>
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<tr>
<td>Non-Rate Revenue (net of related expenses)</td>
<td>5,366,237</td>
<td>5,537,224</td>
<td>5,690,040</td>
<td>5,886,833</td>
<td>6,099,747</td>
<td>6,220,958</td>
<td>6,407,567</td>
<td>6,599,784</td>
<td>6,799,768</td>
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<tr>
<td>SOC Funding for Capital</td>
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<td>997,700</td>
<td>516,310</td>
<td>534,341</td>
<td>553,084</td>
<td>572,442</td>
<td>592,477</td>
<td>613,214</td>
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<tr>
<td>Funding from Reserves (incl. interest earnings)</td>
<td>4,238,386</td>
<td>4,741,852</td>
<td>11,172,632</td>
<td>4,270,154</td>
<td>7,887,759</td>
<td>3,500,252</td>
<td>3,673,981</td>
<td>6,862,416</td>
<td>7,887,823</td>
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<tr>
<td><strong>Totals</strong></td>
<td>$31,982,070</td>
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<td>$13,659,094</td>
<td>$17,149,936</td>
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<td><strong>Net Revenue Requirements</strong>&lt;br&gt;[C] = [D]</td>
<td>$233,851,789</td>
<td>$199,699,063</td>
<td>$233,533,500</td>
<td>$244,144,862</td>
<td>$253,617,007</td>
<td>$260,774,034</td>
<td>$270,370,400</td>
<td>$267,903,068</td>
<td>$271,554,050</td>
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</tbody>
</table>

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[A] Pension costs included in Fixed Expenses to FY2022.
[B] Pension costs aggregated separately beginning FY2022.
[C] Total of O&M and Debt Service from Rates.
[D] Total of CIP & Outlays from Cash/Reserves and Non-Rate Revenues and Reserves.
## TVWD Forecast Model Summary

### O&M Summary

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<td><strong>Fixed Expenses</strong></td>
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<td>$159,048,236</td>
<td>$159,569,032</td>
<td>$166,703,504</td>
<td>$173,853,591</td>
<td>$180,967,997</td>
<td>$188,662,411</td>
<td>$197,095,604</td>
<td>$205,484,923</td>
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<tr>
<td><strong>Variable Costs</strong></td>
<td>$18,031,610</td>
<td>$18,822,132</td>
<td>$19,669,128</td>
<td>$20,544,239</td>
<td>$21,479,180</td>
<td>$22,445,743</td>
<td>$23,455,801</td>
<td>$24,513,312</td>
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<td><strong>Pumping Power</strong></td>
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<td>$6,965,269</td>
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<td>$7,606,247</td>
<td>$7,948,528</td>
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<tr>
<td><strong>Pension Expense</strong></td>
<td>$2,625,746</td>
<td>$2,498,152</td>
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<td><strong>OP &amp; E</strong></td>
<td>$1,196,288</td>
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<td>$1,130,082</td>
<td>$1,174,002</td>
<td>$1,197,482</td>
<td>$1,221,451</td>
<td>$1,258,074</td>
<td>$1,276,945</td>
<td>$1,296,099</td>
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<tr>
<td><strong>Total O&amp;M</strong></td>
<td>$174,118,618</td>
<td>$181,600,573</td>
<td>$189,404,036</td>
<td>$197,542,815</td>
<td>$206,051,321</td>
<td>$214,864,582</td>
<td>$224,184,272</td>
<td>$233,748,738</td>
<td>$243,795,029</td>
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<td><strong>Less Capitalized Oh &amp; Outlays from O&amp;M</strong></td>
<td>$9,316,373</td>
<td>$9,735,650</td>
<td>$10,173,712</td>
<td>$10,631,529</td>
<td>$11,109,948</td>
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<td>$12,132,341</td>
<td>$12,678,296</td>
<td>$13,248,819</td>
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<tr>
<td><strong>Net O&amp;M</strong></td>
<td>$164,802,245</td>
<td>$171,864,966</td>
<td>$178,230,324</td>
<td>$186,911,286</td>
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</table>

### Debt Service from Rates (net of Debt Reserve Retirements)

<table>
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<td><strong>WIPA</strong></td>
<td>$21,186,771</td>
<td>$21,186,771</td>
<td>$21,186,771</td>
<td>$21,186,771</td>
<td>$21,186,771</td>
<td>$21,186,771</td>
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### Cash-Funded Capital Expenditures

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</thead>
<tbody>
<tr>
<td><strong>Less Debt Funding</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</table>

|-------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|

### Less Non-Rate Revenues and Reserves

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<tbody>
<tr>
<td><strong>Non-Rate Revenue (net of related expenses)</strong></td>
<td>$7,001,772</td>
<td>$7,211,773</td>
<td>$7,418,126</td>
<td>$7,650,970</td>
<td>$7,860,499</td>
<td>$8,116,914</td>
<td>$8,360,422</td>
<td>$8,611,334</td>
<td>$8,869,571</td>
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<tr>
<td><strong>SOC Funding for Capital</strong></td>
<td>$634,676</td>
<td>$656,890</td>
<td>$679,681</td>
<td>$701,677</td>
<td>$728,306</td>
<td>$753,797</td>
<td>$780,179</td>
<td>$807,486</td>
<td>$835,748</td>
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<tr>
<td><strong>Funding from Reserves (incl. interest earnings)</strong></td>
<td>$4,583,149</td>
<td>$8,524,323</td>
<td>$7,062,808</td>
<td>$6,879,962</td>
<td>$6,660,558</td>
<td>$5,369,106</td>
<td>$6,024,635</td>
<td>$8,021,123</td>
<td>$10,739,978</td>
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<tr>
<td><strong>Total</strong></td>
<td>$15,453,296</td>
<td>$19,775,248</td>
<td>$19,494,546</td>
<td>$18,822,851</td>
<td>$18,965,252</td>
<td>$18,013,582</td>
<td>$19,086,205</td>
<td>$21,478,441</td>
<td>$24,605,052</td>
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</table>

### Net Revenue Requirements

|-------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|

---

(1) Pension costs included in Fixed Expenses to FY2022.
(2) Pension costs aggregated separately beginning FY2022.

5/1/2019

**Appendix E – Forecast Model Summary Results**
### TVWD Forecast Model Summary

#### Table 22
Tualatin Valley Water District
Water Financial Plan
45-year Rate Revenue, Coverage, and Reserves

<table>
<thead>
<tr>
<th></th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rate Revenue Forecast</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Rate Revenue Increases</td>
<td>13.50%</td>
<td>3.90%</td>
<td>3.90%</td>
<td>3.90%</td>
<td>3.90%</td>
<td>3.90%</td>
<td>3.90%</td>
<td>3.90%</td>
<td>3.90%</td>
</tr>
<tr>
<td>Pro-rated Percent Impact of Increase</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
</tr>
<tr>
<td>Internal Revenue Growth</td>
<td>(2.36%)</td>
<td>(3.81%)</td>
<td>0.43%</td>
<td>0.42%</td>
<td>0.41%</td>
<td>0.40%</td>
<td>0.39%</td>
<td>0.38%</td>
<td>0.37%</td>
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</table>

| **Revenue Before Increase** | $65,701,514 | $70,240,157 | $73,291,456 | $76,467,473 | $79,772,932 | $83,212,791 | $86,792,066 | $90,516,024 | $94,390,092 |

| **Revenue from Increase** | 4,298,486   | 1,327,567  | 1,135,238  | 1,145,266  | 1,507,741  | 1,572,755  | 1,640,405  | 1,710,789  | 1,784,011   |

| **Total Rate Revenue** | $70,000,000 | $71,567,724 | $74,676,694 | $77,912,740 | $81,280,693 | $84,785,546 | $88,432,471 | $92,226,813 | $96,174,102 |

| **Debt Service Coverage Summary** |           |           |           |           |           |           |           |           |           |
| **Net Revenue (incl. OG&E & interest earnings)** | $47,014,369 | $15,583,372 | $31,992,219 | $38,954,011 | $50,002,593 | $51,694,183 | $53,347,886 | $55,409,166 | $59,098,006 |
| Debt Service | 0          | 0          | 0          | 0          | 0          | 1,606,262  | 5,146,471  | 7,080,419  | 7,080,419   |
| **Debt Service Coverage** | 0.00       | 0.00       | 0.00       | 0.00       | 0.00       | 31.13      | 10.04      | 7.53       | 7.83        | 3.34        |

| **Cash & Investments Summary** |           |           |           |           |           |           |           |           |
| Beginning Reserves Balance | $124,278,867 | $122,750,000 | $16,198,228 | $33,071,414 | $34,511,870 | $34,662,620 | $40,322,378 | $39,638,083 | $32,187,488 |
| Change in Cash Balance (net of interest earnings) | (5,528,867) | (36,551,772) | (41,046,813) | 808,456    | 1,507,751  | 5,659,757  | (864,194)  | 13,549,405 | (12,509,943) |
| Ending Cash Balance | $112,750,000 | $76,198,228  | $33,071,414 | $34,662,620 | $40,322,378 | $39,638,083 | $32,187,488 | $40,677,144 | $17,673,854 |
| Debt Service Reserve | $0          | $0          | $0          | $0          | $3,212,524 | $7,080,419 | $7,080,419 | $7,080,419 | $7,080,419   |
| Total Year-End Reserves | $112,750,000 | $76,198,228  | $33,071,414 | $34,662,620 | $40,322,378 | $39,638,083 | $32,187,488 | $40,677,144 | $17,673,854 |


5/1/2019
## TVWD Forecast Model Summary

### Table 22
Tualatin Valley Water District  
Water Financial Plan  
45-year Rate Revenue, Coverage, and Reserves

<table>
<thead>
<tr>
<th>FY2018</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Rate Revenue Increases</td>
<td>3.90%</td>
<td>3.90%</td>
<td>3.90%</td>
<td>3.90%</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.25%</td>
</tr>
<tr>
<td>Prorated Percent Impact of Increase</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
</tr>
<tr>
<td>Internal Revenue Growth</td>
<td>0.36%</td>
<td>0.35%</td>
<td>0.30%</td>
<td>0.25%</td>
<td>0.20%</td>
<td>0.15%</td>
<td>0.10%</td>
<td>0.05%</td>
</tr>
</tbody>
</table>

| Revenue Before Increase | $98,419,883 | $102,611,200 | $106,933,033 | $111,381,293 | $115,956,689 | $121,066,220 | $126,337,766 | $131,772,980 | $137,373,332 |
| Revenue from Increase | $1,860,175  | $1,939,393  | $2,021,077  | $2,105,151  | $2,388,312  | $2,498,551  | $2,602,127  | $2,714,074  | $2,829,422  |

| Total Rate Revenue | $100,280,058 | $104,550,693 | $108,954,110 | $113,486,444 | $118,345,002 | $123,559,771 | $128,993,864 | $134,487,055 | $140,202,754 |

| Debt Service Coverage Summary | | | | | | | | |
| Debt Revenue (incl. GOC & interest earnings) | $60,856,334 | $63,058,563 | $64,696,734 | $66,631,357 | $69,026,671 | $71,809,146 | $74,138,118 | $77,171,595 | $80,032,470 |
| Debt Service | 28,267,289 | 29,234,005 | 30,200,721 | 30,200,721 | 30,660,341 | 31,205,366 | 33,290,771 | 34,501,918 | 37,014,691 |
| Debt Service Coverage | 2.15  | 2.16  | 2.14  | 2.21  | 2.25  | 2.23  | 2.23  | 2.24  | 2.16  |

| Cash & Investments Summary | | | | | | | | |
| Change in Cash Balance (net of interest earnings) | (2,034,286) | 10,811,851 | (1,597,904) | (2,288,790) | (7,542) | (15,364,490) | (7,857,495) | (122,648) | 1,844,088 |
| Total Year-End Reserves | $66,910,538 | $79,655,821 | $76,057,916 | $75,769,126 | $76,680,825 | $84,216,127 | $86,528,632 | $88,828,277 | $93,275,617 |
| Min. Ending Cash Balance | $37,016,566 | $38,713,799 | $40,862,531 | $42,730,059 | $44,554,074 | $46,552,759 | $48,890,220 | $50,674,623 | $52,835,512 |

5/1/2019
### TVWD Forecast Model Summary

**Table 22**

**Tualeitu Valley Water District**

**Water Financial Plan**

**45-year Rate Revenue, Coverage, and Reserves**

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<tbody>
<tr>
<td>Rate Revenue Forecast</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Overall Rate Revenue Increases</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.25%</td>
<td>4.50%</td>
</tr>
<tr>
<td>Prorated Percent Impact of Increase</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
</tr>
<tr>
<td>Internal Revenue Growth</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
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<tr>
<td>Revenue Before Increase</td>
<td>$143,211,699</td>
<td>$149,298,196</td>
<td>$155,643,369</td>
<td>$162,256,212</td>
<td>$169,154,186</td>
<td>$176,343,239</td>
<td>$183,837,827</td>
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<td>Revenue from Increase</td>
<td>2,949,673</td>
<td>3,075,034</td>
<td>3,205,723</td>
<td>3,341,966</td>
<td>3,484,000</td>
<td>3,632,070</td>
<td>3,786,433</td>
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<td>Total Rate Revenue</td>
<td>$146,161,372</td>
<td>$152,373,230</td>
<td>$158,849,092</td>
<td>$165,600,175</td>
<td>$172,638,186</td>
<td>$179,975,309</td>
<td>$187,624,260</td>
<td>$195,830,488</td>
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<td>Debt Service Coverage Summary</td>
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<tr>
<td>Net Revenue (incl. 2022 &amp; interest earnings)</td>
<td>$82,987,191</td>
<td>$86,084,778</td>
<td>$88,927,119</td>
<td>$90,220,951</td>
<td>$95,575,830</td>
<td>$98,703,640</td>
<td>$102,130,232</td>
<td>$105,356,737</td>
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<td>2.11</td>
<td>2.14</td>
<td>2.16</td>
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<td>2.07</td>
<td>2.14</td>
<td>2.17</td>
<td>2.19</td>
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<tr>
<td>Beginning Reserves Balance</td>
<td>$54,959,300</td>
<td>$65,270,673</td>
<td>$60,696,741</td>
<td>$60,988,673</td>
<td>$87,890,964</td>
<td>$74,688,563</td>
<td>$71,817,618</td>
<td>$81,249,232</td>
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<td>Change in Cash Balance (net of interest earnings)</td>
<td>10,311,373</td>
<td>(4,575,933)</td>
<td>1,301,912</td>
<td>23,892,391</td>
<td>(13,202,402)</td>
<td>(1,870,944)</td>
<td>8,431,613</td>
<td>(880,588)</td>
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<td>Ending Cash Balance</td>
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<td>$61,988,673</td>
<td>$87,890,964</td>
<td>$74,688,563</td>
<td>$71,817,618</td>
<td>$81,249,232</td>
<td>$80,368,642</td>
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<tr>
<td>Total Year-End Reserves</td>
<td>$105,566,865</td>
<td>$100,992,932</td>
<td>$104,058,691</td>
<td>$134,114,052</td>
<td>$120,911,650</td>
<td>$119,040,706</td>
<td>$129,365,156</td>
<td>$128,484,566</td>
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<td>Min. Ending Cash Balance</td>
<td>$55,215,327</td>
<td>$57,559,318</td>
<td>$60,144,726</td>
<td>$63,020,443</td>
<td>$65,851,429</td>
<td>$68,653,262</td>
<td>$71,744,690</td>
<td>$75,358,955</td>
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5/1/2019
Table 22
Tualatin Valley Water District
Water Financial Plan
45-year Rate Revenue, Coverage, and Reserves

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<th>FY2047</th>
<th>FY2048</th>
<th>FY2049</th>
<th>FY2050</th>
<th>FY2051</th>
<th>FY2052</th>
<th>FY2053</th>
<th>FY2054</th>
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<tr>
<td>Rate Revenue Forecast</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Rate Revenue Increases</td>
<td>4.50%</td>
<td>4.50%</td>
<td>4.50%</td>
<td>4.50%</td>
<td>3.25%</td>
<td>3.25%</td>
<td>3.25%</td>
<td>3.25%</td>
</tr>
<tr>
<td>Pro-rated Percent Impact of Increase</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
<td>48.46%</td>
</tr>
<tr>
<td>Internal Revenue Growth</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Revenue Before Increase</td>
<td>$209,287,612</td>
<td>$218,705,555</td>
<td>$228,547,304</td>
<td>$238,831,983</td>
<td>$249,579,370</td>
<td>$257,690,700</td>
<td>$266,069,647</td>
<td>$274,712,781</td>
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<tr>
<td>Revenue from Increase</td>
<td>4,564,177</td>
<td>4,769,565</td>
<td>4,984,195</td>
<td>5,208,484</td>
<td>3,930,958</td>
<td>4,056,713</td>
<td>4,190,623</td>
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<td>Total Rate Revenue</td>
<td>$213,851,789</td>
<td>$223,475,120</td>
<td>$233,531,499</td>
<td>$244,040,417</td>
<td>$253,510,329</td>
<td>$261,749,414</td>
<td>$270,256,270</td>
<td>$279,039,599</td>
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<tr>
<td>Debt Service Coverage Summary</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Debt Service (incl. LGD &amp; interest earnings)</td>
<td>$114,850,221</td>
<td>$119,976,808</td>
<td>$125,363,123</td>
<td>$125,051,016</td>
<td>$129,308,575</td>
<td>$132,104,403</td>
<td>$134,933,270</td>
<td>$137,791,626</td>
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<tr>
<td>Debt Service</td>
<td>55,083,845</td>
<td>57,233,584</td>
<td>58,686,496</td>
<td>58,686,496</td>
<td>58,686,496</td>
<td>58,686,496</td>
<td>58,686,496</td>
<td>58,686,496</td>
</tr>
<tr>
<td>Debt Service Coverage</td>
<td>2.25</td>
<td>2.10</td>
<td>2.14</td>
<td>2.13</td>
<td>2.20</td>
<td>2.23</td>
<td>2.30</td>
<td>2.33</td>
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</tbody>
</table>

Cash & Investments Summary

<table>
<thead>
<tr>
<th>FY2046</th>
<th>FY2047</th>
<th>FY2048</th>
<th>FY2049</th>
<th>FY2050</th>
<th>FY2051</th>
<th>FY2052</th>
<th>FY2053</th>
<th>FY2054</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Reserves Balance</td>
<td>$84,436,465</td>
<td>$84,199,640</td>
<td>$117,575,723</td>
<td>$111,728,400</td>
<td>$111,119,408</td>
<td>$106,812,702</td>
<td>$107,898,888</td>
<td>$107,731,414</td>
</tr>
<tr>
<td>Change in Cash Balance (net of interest earnings)</td>
<td>(236,823)</td>
<td>33,376,083</td>
<td>(5,847,323)</td>
<td>(608,993)</td>
<td>(4,306,706)</td>
<td>1,086,186</td>
<td>(167,473)</td>
<td>8,943,561</td>
</tr>
<tr>
<td>Ending Cash Balance</td>
<td>$84,199,640</td>
<td>$117,575,723</td>
<td>$111,728,400</td>
<td>$111,119,408</td>
<td>$106,812,702</td>
<td>$107,898,888</td>
<td>$107,731,414</td>
<td>$116,674,975</td>
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<tr>
<td>Debt Service Reserve</td>
<td>$52,874,849</td>
<td>$56,686,496</td>
<td>$58,686,496</td>
<td>$58,686,496</td>
<td>$58,686,496</td>
<td>$58,686,496</td>
<td>$58,686,496</td>
<td>$55,473,972</td>
</tr>
<tr>
<td>Total Year-End Reserves</td>
<td>$137,074,489</td>
<td>$170,262,219</td>
<td>$170,414,897</td>
<td>$169,805,904</td>
<td>$165,499,198</td>
<td>$166,583,385</td>
<td>$166,417,910</td>
<td>$172,148,947</td>
</tr>
<tr>
<td>Min. Ending Cash Balance</td>
<td>$81,516,330</td>
<td>$85,175,812</td>
<td>$88,853,856</td>
<td>$92,653,174</td>
<td>$96,654,524</td>
<td>$100,786,934</td>
<td>$105,117,816</td>
<td>$109,634,777</td>
</tr>
</tbody>
</table>

5/1/2019
### TVWD Forecast Model Summary

#### Rate Revenue Forecast

<table>
<thead>
<tr>
<th></th>
<th>FY2055</th>
<th>FY2056</th>
<th>FY2057</th>
<th>FY2058</th>
<th>FY2059</th>
<th>FY2060</th>
<th>FY2061</th>
<th>FY2062</th>
<th>FY2063</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Rate Revenue</td>
<td>3.25%</td>
<td>3.25%</td>
<td>3.25%</td>
<td>3.25%</td>
<td>3.25%</td>
<td>3.25%</td>
<td>3.25%</td>
<td>3.25%</td>
<td>3.25%</td>
</tr>
<tr>
<td>Prorated Percent Impact of Increase</td>
<td>0.84%</td>
<td>0.84%</td>
<td>0.84%</td>
<td>0.84%</td>
<td>0.84%</td>
<td>0.84%</td>
<td>0.84%</td>
<td>0.84%</td>
<td>0.84%</td>
</tr>
<tr>
<td>Internal Revenue Growth</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Revenue from Increase</td>
<td>4,612,632</td>
<td>4,762,542</td>
<td>4,917,325</td>
<td>5,077,138</td>
<td>5,242,145</td>
<td>5,412,514</td>
<td>5,588,421</td>
<td>5,770,045</td>
<td>5,957,571</td>
</tr>
<tr>
<td>Total Rate Revenue</td>
<td>$297,471,909</td>
<td>$307,139,746</td>
<td>$317,121,787</td>
<td>$327,426,245</td>
<td>$338,069,663</td>
<td>$349,056,928</td>
<td>$360,401,278</td>
<td>$372,114,319</td>
<td>$384,208,035</td>
</tr>
</tbody>
</table>

#### Debt Service Coverage Summary

<table>
<thead>
<tr>
<th></th>
<th>FY2055</th>
<th>FY2056</th>
<th>FY2057</th>
<th>FY2058</th>
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<th>FY2060</th>
<th>FY2061</th>
<th>FY2062</th>
<th>FY2063</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Service Revenue</td>
<td>$143,589,811</td>
<td>$146,525,705</td>
<td>$149,483,201</td>
<td>$152,459,848</td>
<td>$155,452,984</td>
<td>$158,459,717</td>
<td>$161,476,916</td>
<td>$164,501,195</td>
<td>$167,528,900</td>
</tr>
<tr>
<td>Debt Service Coverage</td>
<td>2.78</td>
<td>2.84</td>
<td>2.90</td>
<td>2.95</td>
<td>3.01</td>
<td>3.19</td>
<td>3.25</td>
<td>5.77</td>
<td>6.08</td>
</tr>
</tbody>
</table>

#### Cash & Investments Summary

<table>
<thead>
<tr>
<th></th>
<th>FY2055</th>
<th>FY2056</th>
<th>FY2057</th>
<th>FY2058</th>
<th>FY2059</th>
<th>FY2060</th>
<th>FY2061</th>
<th>FY2062</th>
<th>FY2063</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Reserves Balance</td>
<td>$129,482,496</td>
<td>$146,632,080</td>
<td>$142,863,609</td>
<td>$139,581,342</td>
<td>$137,210,596</td>
<td>$151,770,022</td>
<td>$172,775,502</td>
<td>$191,911,212</td>
<td>$235,161,088</td>
</tr>
<tr>
<td>Change in Cash Balance (net of interest earnings)</td>
<td>$17,149,584</td>
<td>$(3,768,471)</td>
<td>$(3,822,267)</td>
<td>$(2,370,746)</td>
<td>$15,559,425</td>
<td>$20,009,480</td>
<td>$20,153,710</td>
<td>$42,499,876</td>
<td>$42,456,681</td>
</tr>
<tr>
<td>Ending Cash Balance</td>
<td>$146,632,080</td>
<td>$142,863,609</td>
<td>$139,581,342</td>
<td>$137,210,596</td>
<td>$151,770,022</td>
<td>$172,775,502</td>
<td>$191,911,212</td>
<td>$235,161,088</td>
<td>$277,617,770</td>
</tr>
<tr>
<td>Total Year-End Reserves</td>
<td>$198,238,158</td>
<td>$194,469,687</td>
<td>$191,187,420</td>
<td>$188,816,674</td>
<td>$202,442,668</td>
<td>$222,448,148</td>
<td>$242,583,858</td>
<td>$262,717,624</td>
<td>$303,013,495</td>
</tr>
<tr>
<td>Min. Ending Cash Balance</td>
<td>$198,238,158</td>
<td>$124,383,956</td>
<td>$129,728,792</td>
<td>$135,309,298</td>
<td>$141,117,843</td>
<td>$147,181,221</td>
<td>$153,505,666</td>
<td>$160,101,875</td>
<td>$166,981,527</td>
</tr>
</tbody>
</table>

5/1/2019
F. Map – Tualatin Valley Water District (Washington County, Oregon)
RESOLUTION NO. 16-19

A RESOLUTION APPROVING THE DRAFT MASTER REVENUE BOND DECLARATION

WHEREAS on April 17, 2019, Tualatin Valley Water District (the “District”) authorized the issuance of revenue bonds pursuant to ORS 287A.150 and related provisions of ORS Chapter 287A under Ordinance 01-19 (the “Ordinance”); and

WHEREAS, the District may issue the revenue bonds described in the Ordinance; and

WHEREAS, the Board adopts this resolution to approve a Master Water System Revenue Bond Declaration that outlines the terms under which first lien water bonds may be issued by the District, and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: Adoption of Resolution.

The Chief Financial Officer of the District, the Chief Executive Officer or the employees of the District designated by the District’s Chief Executive Officer or Board of Commissioners to act on behalf of the District under this resolution (each of whom is referred to herein as a “District Official”) is authorized to finalize the Master Water System Revenue Bond Declaration (the “Master Declaration”) in substantially the form attached as Exhibit 1, but with such changes as are approved by the District Official. The Master Declaration pledges the revenues of the District’s water system to bonds issued with a first lien on the water system revenues, contains covenants regarding the levels of fees and charges that the District must impose, and describes the terms under which the District may issue obligations in the future that are secured by the revenues of the District’s water system.

Section 2: Effective Date. This resolution shall take effect on the date it is adopted.

Approved and adopted at a regular meeting held on the 15th day of May 2019.

_______________________________    _____________________________ ___
Bernice Bagnall, President            Todd Sanders, Secretary
Exhibit 1

Form of

MASTER WATER SYSTEM REVENUE BOND DECLARATION

Tualatin Valley Water District, Oregon

Water Revenue Bonds

Series [2019]

Executed by the District Official of the Tualatin Valley Water District, Oregon

As of the __ day of ______, ___
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MASTER WATER SYSTEM REVENUE BOND DECLARATION

THIS MASTER WATER SYSTEM REVENUE BOND DECLARATION is executed as of [Insert Date of Master], by an authorized District Official of the Tualatin Valley Water District, Oregon pursuant to the authority granted to the District Official by Ordinance No. ____ adopted by the District Board of Commissioners on __________, ___., to establish the terms under which the District’s Water Revenue Bonds, Series [2019] and future Parity Bonds may be issued.

Section 1. Findings.

The District finds that it adopted the Ordinance on __________, ___. That ordinance authorizes the District to issue up to $_________ of water revenue bonds under Oregon Revised Statutes Section 287A.150 and related provisions of ORS Chapter 287A, and to enter into this Master Declaration. This Master Declaration establishes the terms under which the District’s Water Revenue Bonds, Series [2019] are issued and the terms under which future obligations may be issued on a parity with the Series [2019] Bonds.

Section 2. Definitions.

Unless the context clearly requires otherwise, capitalized terms that are used in this Master Declaration shall have the meanings defined for those terms in this Section 2.

“Adjusted Coverage Revenues” means the Coverage Revenues, adjusted for purposes of Section 7.1.C(ii) as provided in Section 7.3.

“Adjusted Net Revenues” means the Net Revenues, adjusted for purposes of Section 7.1.C(ii) as provided in Section 7.3.

“Annual Bond Debt Service” means in any Fiscal Year the amount of principal and interest required to be paid in that Fiscal Year on all Outstanding Bonds, adjusted as follows:

(a) Interest which is to be paid from Bond Proceeds shall be subtracted;
(b) Bonds which are subject to scheduled, noncontingent redemption/prepayment or tender shall be deemed to mature on the dates and in the amounts which are subject to mandatory redemption/prepayment or tender, and only the amount scheduled to be Outstanding on the final maturity date shall be treated as maturing on that date;
(c) Interest subsidies shall be subtracted from the interest due on Interest Subsidy Bonds as provided in Section 6.5;
(d) Bonds which are subject to contingent redemption/prepayment or tender shall be treated as maturing on their stated maturity dates; and,
(e) Each Balloon Payment shall be assumed to be paid according to its Balloon Debt Service Requirement.

“Auditor” means a person authorized by the State Board of Accountancy to conduct municipal audits pursuant to ORS 297.670.
“Balloon Debt Service Requirement” means the Committed Debt Service Requirement for a Balloon Payment or, if the District has not entered into a firm commitment to sell Bonds or other obligations to refund that Balloon Payment, the Estimated Debt Service Requirement for that Balloon Payment.

“Balloon Payment” means any principal payment for a Series of Bonds which comprises more than twenty-five percent of the original principal amount of that Series, but only if that principal payment is designated as a Balloon Payment in the closing documents for the Series.

“Base Period” means the alternative selected by the District from the following two options: (a) any twelve consecutive months selected by the District or Qualified Consultant out of the most recent eighteen months preceding the delivery of a Series of Parity Bonds; or (b) the most recently completed fiscal year for which audited financial statements are available.

“BEO” means “book-entry-only” and refers to a system for clearance and settlement of securities transactions through electronic book-entry changes, which eliminates the need for physical movement of securities.


“Bond Counsel” means a law firm selected by the District and having knowledge and expertise in the field of municipal law and whose opinions are generally accepted by purchasers of municipal bonds.

“Bond Reserve Account” means the Bond Reserve Account in the Water Fund described in Section 5.3 of this Master Declaration.

“Business Day” means any day except a Saturday, a Sunday, a legal holiday, a day on which the offices of banks in Oregon or New York are authorized or required by law or executive order to remain closed, or a day on which the New York Stock Exchange is closed.

“Closing” means the date on which a Series of Bonds is delivered in exchange for payment.

“Code” means the Internal Revenue Code of 1986, as amended, including the rules and regulations promulgated thereunder.

“Committed Debt Service Requirement” means the schedule of principal and interest payments for a Series of Bonds or other obligations which refund a Balloon Payment, as shown in the documents evidencing the District’s firm commitment to sell that Series. A “firm commitment to sell” means a bond purchase agreement or similar document which obligates the District to sell, and obligates a purchaser to purchase, the Series of refunding Bonds or other obligations, subject only to the conditions which customarily are included in such documents.

“Coverage Revenues” means the Net Revenues less System Development Charges.

“Credit Facility” means a letter of credit, a municipal bond insurance policy, standby bond purchase agreement or other credit enhancement device which is obtained by the District to secure payment in full of Bonds, and which is issued or provided by a Credit Provider.
“Credit Provider” means the person or entity that is: (i) obligated to make or guarantee payments under a Credit Facility or Reserve Credit Facility; and (ii) whose long-term debt obligations or claims-paying ability (as appropriate) are rated, at the time the Credit Facility or Reserve Credit Facility is issued, in one of the two highest rating categories by a Rating Agency that has issued a rating on Outstanding Bonds. Under rating systems in effect on the date of this Master Declaration, a rating in one of the two highest rating categories by a Rating Agency would be a rating of “AA-/Aa3” or better.

“Debt Service Account” means the Debt Service Account described in Section 5.2 of this Master Declaration.

“District” means the Tualatin Valley Water District in Washington County, Oregon, a municipal corporation of the State of Oregon.

“District Board” means the Board of Commissioners of the District.

“District Official” means the Chief Financial Official of the District, or then-comparable position at the District, or the employees of the District designated by the District’s Executive Officer or Board of Directors to act on behalf of the District under this Master Declaration.

“DTC” means The Depository Trust Company or any other qualified securities depository designated by the District as its successor.

“Estimated Debt Service Requirement” means the schedule of principal and interest payments for a hypothetical Series of Bonds that refunds a Balloon Payment, that is prepared by the District Official and that meets the requirements of Section 6.4.

“Event of Default” means any event specified in 11.2 of this Master Declaration.

“Fiscal Year” means the period beginning on July 1 of each year and ending on the next succeeding June 30, or as otherwise defined by State law.


“Fund” or “Account” refers to any fund, account, or other accounting concept that permits the District to account accurately for amounts that are credited to it under this Master Declaration. A “Fund” in this Master Declaration does not need to appear as a “fund” in the District’s budget and an “Account” in this Master Declaration does not need to appear as an “account” in the District’s budget.

“Government Obligations” means (a) direct, noncallable obligations of the United States of America (including obligations issued or held in book-entry form on the books of the Department of the Treasury and principal-only and interest-only strips that are issued by the U.S. Treasury); or (b) noncallable obligations the principal of and interest on which are secured by the full faith and credit of the United States of America or are unconditionally guaranteed by the United States of America.
“Gross Revenues” means all fees and charges and other revenues that are properly accrued under generally accepted accounting principles as revenues of the Water System, including System Development Charges, revenues from product sales, and interest earnings on Gross Revenues in the Water Fund. Gross Revenues shall be increased by any withdrawals from the Rate Stabilization Account as provided in Section 5.5.B, and shall be reduced by any deposits to the Rate Stabilization Account as provided in Section 5.5.A. However, the term “Gross Revenues” shall not include:

(a) The interest income or other earnings derived from the investment of any escrow fund established for the defeasance or refunding of outstanding indebtedness of the District;
(b) Any gifts, grants, donations or other amounts received by the District from any State or Federal Agency or other person if such amounts are restricted by law or the grantor to uses inconsistent with the payment of Bonds;
(c) The proceeds of any borrowing;
(d) The proceeds of any liability or other insurance (excluding business interruption insurance or other insurance of like nature insuring against the loss of revenues);
(e) The proceeds of any casualty insurance which the District intends to utilize for repair or replacement of the Water System;
(f) The proceeds derived from the sales of assets pursuant to Section 10.9 of this Master Declaration;
(g) Any ad valorem or other taxes imposed by the District (except charges or payments for Water System services which become “taxes” within the meaning of Article XI, Section 11b of the Oregon Constitution only because they are imposed on property or property owners);
(h) Any income, fees, charges, receipts, profits or other amounts derived by the District from its ownership or operation of any Separate Utility System;
(i) Installment payments of District line and branch charges, connection fees, or local improvement district assessments that have been pledged as security for a borrowing other than a Bond;
(j) The proceeds of any fees or charges the District collects on behalf of a third party, including the fees currently collected by the District on behalf of the cities of Beaverton, Tigard and Hillsboro; or
(k) Any federal interest subsidies the District receives for Interest Subsidy Bonds.

“Interest Payment Date” means any date on which Bond interest is scheduled to be paid, and any date on which Bonds are called for redemption/prepayment.

“Interest Subsidy Bonds” means Bonds for which the District is eligible to receive federal interest rate subsidies that are similar to the interest subsidies that were available for Build America Bonds.

“Master Declaration” means this Master Water System Revenue Bond Declaration, including any amendments made pursuant to Section 12.

“Maximum Annual Bond Debt Service” means the greatest amount of Annual Bond Debt Service that is due in any Fiscal Year, beginning with the Fiscal Year for which the calculation is made, and ending with the last Fiscal Year in which Outstanding Bonds are scheduled to be paid.
“Moody’s” means Moody’s Investors Service, a corporation organized and existing under the laws of the State of Delaware, its successors and their assigns.

“Net Revenues” means the Gross Revenues less the Operating Expenses.

“Operating Expenses” means all costs which are properly treated as expenses of operating and maintaining the Water System under generally accepted accounting principles. However, Operating Expenses do not include:

(a) Any rebates or penalties paid from Gross Revenues under Section 148 of the Code;
(b) Payments of judgments against the District and payments for the settlement of litigation;
(c) Depreciation and amortization of property values or losses, and other non-cash expenses, including non-cash expenses related to pensions and postemployment benefits;
(d) All amounts eligible to be treated for accounting purposes as payments for capital expenditures;
(e) Interest and other debt service payments, paying agent fees, broker-dealer fees and similar charges for the maintenance of borrowings;
(f) The expenses of owning, operating or maintaining any Separate Utility System;
(g) Expenditures made from any liability insurance proceeds;
(h) Expenditures made from any casualty insurance proceeds used to pay for costs of repairing or replacing portions of the Water System;
(i) Expenditures made from grant funds, regardless of whether such grant funds are dedicated to a specific purpose or available for the general operation, maintenance and repair or replacement of the Water System;
(j) Extraordinary, non-recurring expenses of the Water System;
(k) Payments to third parties from the proceeds of any fees or charges the District collects on behalf of such third parties, including the fees currently collected by the District on behalf of the cities of Beaverton, Tigard and Hillsboro; or
(l) Expenditures allocable to any other funding source which does not constitute Gross Revenues of the Water System.

“Ordinance” means Ordinance ____ adopted by the District Board on __________, ___.

“ORS” means the Oregon Revised Statutes.

“Outstanding” refers to all Bonds except Bonds that have been defeased pursuant to Section 13 of this Master Declaration, and Bonds which have matured and not been presented for payment (provided sufficient funds to pay those Bonds have been transferred to the Paying Agent).

“Owner” means a registered owner of a Bond.

“Parity Bond” means any obligation that is secured by the Net Revenues on an equal basis with the Bonds and is issued in accordance with Section 7.

“Paying Agent” means the paying agent for the Bonds, which is [Insert Name of Paying Agent] on the date of this Master Declaration.
“Payment Date” means a Principal Payment Date or an Interest Payment Date.

“Permitted Investments” means any investments which the District is permitted to make under the laws of the State.

“Principal Payment Date” means any date on which any Bonds are scheduled to be retired, whether by virtue of their maturity or by mandatory sinking fund redemption/prepayment prior to maturity, and the redemption/prepayment date of any Bonds which have been called for redemption/prepayment.

“Qualified Consultant” means an independent engineer, an independent auditor, an independent financial advisor, or similar independent professional consultant of recognized standing and having experience and expertise in the area for which such person or firm is retained by the District for purposes of performing activities specified in this Master Declaration or any Supplemental Declaration.

“Rate Stabilization Account” means the Rate Stabilization Account established in the Water Fund pursuant to Section 5.5.

“Rating Agency” means Fitch, Moody’s, S&P, or any other nationally recognized financial rating Agency which has rated Outstanding Bonds or a Credit Facility at the request of the District.

“Record Date” for the Bonds means the _________ day of the month preceding the month in which each Interest Payment Date occurs, whether or not a Business Day.

“Reserve Credit Facility” means any arrangement in which the District pays a fee in exchange for an agreement of a Credit Provider to advance money to the District in the future that the District will use in lieu of using cash or Permitted Investments credited to a subaccount in the Bond Reserve Account. “Reserve Credit Facility” does not include guaranteed investment contracts, master repurchase agreements and similar Permitted Investments.

“Reserve Credit Facility Rating” means a long-term debt, financial strength or claims-paying ability rating assigned by a Rating Agency to: (a) a provider of a Reserve Credit Facility, or (b) to any reinsurer of the obligations of a provider of a Reserve Credit Facility.

“Reserve Requirement” means a set of rules for funding a subaccount in the Bond Reserve Account. Each Reserve Requirement shall indicate the amount that is required to be credited to the subaccount, the dates by which that amount must be credited to the subaccount, and the requirements for restoring amounts to the subaccount if amounts are withdrawn to pay Bonds that are secured by the subaccount. [The Series [2019] Bonds are not secured by the Bond Reserve Account or any subaccount therein.]

“S&P” means S&P Global Ratings, a corporation organized and existing under the laws of the State of New York, its successors and their assigns.
“Separate Utility System” means any utility property which is declared by the District to constitute a system which is distinct from the Water System in accordance with Section 9.

“Series” refers to all Bonds authorized by a single ordinance or declaration and delivered in exchange for payment on the same date, regardless of variations in maturity, interest rate or other provisions, unless the closing documents for the Series provide otherwise.


“State” means the State of Oregon.

“Subordinate Obligations” means obligations having a lien on the Net Revenues which is subordinate to the lien of the Bonds. Restrictions on Subordinate Obligations are described in Section 8. On the date of this Master Declaration, the District has no borrowings outstanding with a subordinate lien on the Net Revenues.

“Subordinate Obligations Account” means the Subordinate Obligations Account of the Water Fund which is described in Section 5.5.

“Supplemental Declaration” means any declaration, resolution or other document which supplements or amends this Master Declaration, entered into by the District in compliance with Section 12.

“System Development Charges” means the fees on development imposed by the District pursuant to ORS Chapter 223 or subsequent statutes and which are legally permitted to be used to pay the Bonds.

“Tax Maximum” means, for any Series of Bonds, the least of: the greatest amount of principal, interest and premium, if any, required to be paid in any Fiscal Year on such Series; 125% of average amount of principal, interest and premium, if any, required to be paid on such Series during all Fiscal Years in which such Series will be Outstanding, calculated as of the date of issuance of such Series; or, ten percent of the proceeds of such Series, as “proceeds” is defined for purposes of Section 148(d) of the Code.

“Valuation Date” means the date or dates on which a subaccount of the Bond Reserve Account shall be valued as prescribed in the Supplemental Declaration authorizing the establishment of such subaccount.

“Water Fund” means the collection of funds and accounts used by the District to hold the Gross Revenues and the proceeds of Bonds.

“Water System” means all utility property now or hereafter used by the District to supply water within or without the corporate limits of the District, except property described in the following sentence. The Water System does not include any Separate Utility System or the District’s interest in the Willamette Wastewater Supply System, the Willamette Intake Facilities Commission, the Willamette River Water Coalition and other joint ventures which the District
may enter into after the date of this Master Declaration and which the District declares is excluded from the definition of Water System.

**Section 3. Rules of Construction.**

In determining the meaning of the provisions of this Master Declaration, the following rules shall apply unless the context clearly requires application of a different meaning:

A. References to section numbers shall be construed as references to sections of this Master Declaration.

B. References to one gender shall include all genders.

C. References to the singular include the plural, and references to the plural include the singular.

**Section 4. Deposit, Pledge and Use of Gross Revenues.**

4.1. All Gross Revenues shall be deposited to and maintained in the Water Fund, and shall be used only as described in this Section as long as any Bonds remain Outstanding. The District shall apply Gross Revenues in the Water Fund on or before the following dates for the following purposes in the following order of priority:

A. At any time to pay Operating Expenses which are then due;

B. At least one Business Day prior to each Payment Date, to transfer Net Revenues to the Debt Service Account in an amount sufficient (with amounts available in the Debt Service Account) to pay in full all Bond principal, interest and premium, if any, which is due to be paid on that Payment Date;

C. On the Closing date for a Series of Bonds and on the first day of the month following a Valuation Date for any subaccount in the Bond Reserve Account, if the balance in any subaccount of the Bond Reserve Account is determined to be less than the applicable Reserve Requirement, to transfer Net Revenues to the Bond Reserve Account in the amounts required by the provisions creating the subaccounts in the Bond Reserve Account until the balances in all subaccounts of the Bond Reserve Account are equal to their Reserve Requirement;

D. On the day on which any rebates or penalties for Bonds are due to be paid to the United States pursuant to Section 148 of the Code, an amount of Net Revenues that is sufficient, with other available funds, to pay the amounts due to the United States;

E. On the dates specified in any proceedings authorizing Subordinate Obligations, the District shall transfer to the Subordinate Obligations Account the Net Revenues required by those proceedings; and,

F. On any date, the District may transfer Net Revenues to the Rate Stabilization Account or spend Net Revenues for any other lawful purpose relating to the Water System, but only
if all deposits and payments that are required to be made on or before that date and that have a higher priority under this Section have been made.

4.2. The District hereby pledges the Net Revenues and federal interest subsidies the District receives for Interest Subsidy Bonds to the payment of principal of, premium, if any, and interest on all Bonds. Pursuant to ORS 287A.310, this pledge made by the District shall be valid and binding from the Closing of the Series [2019] Bonds. The Net Revenues and federal interest subsidies so pledged and hereafter received by the District shall immediately be subject to the lien of such pledge without any physical delivery or further act. The lien of these pledges shall be superior to all other claims and liens except liens and claims for the payment of Operating Expenses. The District covenants and agrees to take such action as is necessary from time to time to perfect or otherwise preserve the priority of the pledge.

4.3. If a Reserve Credit Facility is permitted to fund a subaccount in the Bond Reserve Account, the District may pledge the Net Revenues available for transfer to that subaccount of the Bond Reserve Account to pay amounts due under any Reserve Credit Facility securing that subaccount.

Section 5. Bond Funds and Accounts.

5.1. So long as Bonds are Outstanding, the District shall maintain the Debt Service Account as a discrete account in the Water Fund.

5.2. Debt Service Account. The District shall hold the Debt Service Account. Until all Bonds are paid or defeased, amounts in the Debt Service Account shall be used only to pay Bonds.

A. After the transfer described in Section 4.1.B, if the balance in the Debt Service Account is less than the amount of Bond principal, premium, if any, and interest that is due on that Payment Date, the District shall credit to the Debt Service Account an amount equal to the deficiency from any Net Revenues in the Subordinate Obligations Account.

B. If, after the credit described in Section 5.2.A, the amounts available to pay Debt Service Account is not sufficient to pay all amounts due on the Payment Date, the District shall allocate the available amounts:

(i) First, to pay Bond interest, and pro rata based on the amount due on Bonds if the available amount is not sufficient to pay all Bond interest that is due on that Payment Date; and,

(ii) Second, to pay Bond principal and premium that is due on that Payment Date, and pro rata based on the amount of principal and premium due on each Bond if the available amount is not sufficient to pay all Bond principal and premium that is due on that Payment Date.
C. If, after the allocation described in Section 5.2.B, there is not enough to pay all principal, interest and premium allocated to pay Bonds that are secured by a subaccount in the Bond Reserve Account, the District shall apply any amounts available in the subaccounts in the Bond Reserve Account, but only to pay the principal, interest and premium on the Bonds that are secured by those subaccounts.

D. The District shall transfer sufficient amounts from the Debt Service Account in time to permit payment of all Bond principal, interest and premium, if any, when due in accordance with the Bonds.

E. Amounts in the Debt Service Account shall be invested only in Permitted Investments. Earnings on the Debt Service Account shall be credited to the Water Fund.

5.3. **Bond Reserve Account.**

A. If the District determines to secure Bonds with the Bond Reserve Account and so long as those Bonds are Outstanding, the District shall maintain the Bond Reserve Account as a discrete account in the Water Fund held by the District. The District may create one or more subaccounts in the Bond Reserve Account to secure Series of Bonds and covenant to make deposits into any subaccounts it creates; however, the District is not obligated to create any subaccounts in the Bond Reserve Account, and is not obligated to secure any Series of Bonds with a subaccount in the Bond Reserve Account.

B. When a subaccount in the Bond Reserve Account is created, the District shall determine whether the subaccount will secure one or more Series of Bonds. If the District creates a subaccount in the Bond Reserve Account, the District shall, when it issues the first Series of Bonds that is secured by that subaccount: a) establish the Reserve Requirement for that subaccount; b) pledge amounts credited to that subaccount to pay the Bonds that are secured by that subaccount; and c) determine if the Reserve Requirement for that subaccount may be funded with Reserve Credit Facilities and the requirements for those Reserve Credit Facilities, and the valuation and replenishment provisions that apply to that subaccount.

C. The District shall not create any subaccounts in the Bond Reserve Account for any purpose except securing Bonds in accordance with this Master Declaration.

D. [The Series [2019] Bonds are not secured by the Bond Reserve Account or any subaccount therein.]

5.4. **Subordinate Obligations Account.** The District shall create and maintain the Subordinate Obligations Account in the Water Fund as long as Subordinate Obligations are Outstanding. The Subordinate Obligations Account may be divided into subaccounts, and the District may establish priorities for funding the subaccounts in the Subordinate Obligations Subaccount. Net Revenues shall be deposited into the Subordinate Obligations Account only as permitted by Section 4.1.E. Earnings on the Subordinate Obligations Account shall be credited as provided in the proceedings authorizing the Subordinate Obligations.
5.5. **Rate Stabilization Account.** The District may create a Rate Stabilization Account in the Water Fund and if created will maintain that account as long as Bonds are Outstanding. Net Revenues may be transferred to the Rate Stabilization Account at the option of the District as permitted by Section 4.1.F. Money in the Rate Stabilization Account may be withdrawn at any time and used for any purpose for which the Gross Revenues may be used.

A. Deposits to the Rate Stabilization Account decrease Gross Revenues in the Fiscal Year for which the deposit is made.

B. Withdrawals from the Rate Stabilization Account increase Gross Revenues in the Fiscal Year for which the withdrawal is made.

C. The District may adjust deposits to and withdrawals from the Rate Stabilization Account for a Fiscal Year up until 180 days after the end of that Fiscal Year.

D. Earnings on the Rate Stabilization Account shall be credited to the Water Fund.

**Section 6. Rate Covenant; Calculations Relating to Balloon Payments and Interest Subsidy Bonds.**

6.1. The District covenants for the benefit of the Owners that it will establish and maintain rates and charges in connection with the operation of the Water System which are sufficient to permit the District to pay all Operating Expenses and all lawful charges against the Net Revenues, and to make all transfers required by this Master Declaration to the Debt Service Account, the Bond Reserve Account and the Subordinate Obligations Account.

6.2. The District covenants for the benefit of the Owners of all Bonds that it shall charge rates and fees in connection with the operation of the Water System which, when combined with other Gross Revenues are adequate to generate:

A. Coverage Revenues each Fiscal Year at least equal to one hundred fifteen percent (115%) of Annual Bond Debt Service due in that Fiscal Year; and,

B. Net Revenues each Fiscal Year at least equal to one hundred twenty-five percent (125%) of Annual Bond Debt Service due in that Fiscal Year.

6.3. Not later than six months after the end of each Fiscal Year, the District shall prepare a report that demonstrates whether the District has complied with Section 6.2 during that Fiscal Year and shall file that report in the District records. If the report demonstrates that the District has not complied with Section 6.2 during that Fiscal Year, it shall not constitute a default under this Master Declaration if, within thirty (30) days after the report is filed, the District files a certificate of a District Official that specifies the actions that the District has taken and will take within the next ninety (90) days to permit the District to comply with Section 6.2 for the remainder of the Fiscal Year in which the
report is filed, and for the succeeding Fiscal Year, and the District takes the actions specified by the District Official, or actions having a comparable effect.

6.4. The Estimated Debt Service Requirement for Balloon Payments shall be calculated in accordance with this Section 6.4.

A. For the Rate Covenants: For each Balloon Payment that is Outstanding on May 1 of any Fiscal Year, the District Official shall prepare a schedule of principal and interest payments for a hypothetical Series of Bonds that refunds that Balloon Payment in accordance with Section 6.4.D. The District Official shall prepare that schedule as of that first day of May, and that schedule shall be used to determine compliance with the rate covenant in Section 6.2 for the following Fiscal Year.

B. For Parity Bonds: Whenever a Balloon Payment will be Outstanding on the date a Series of Parity Bonds is issued, the District Official shall prepare a schedule of principal and interest payments for a hypothetical Series of Bonds that refunds each Outstanding Balloon Payment in accordance with Section 6.4.D. The District Official shall prepare that schedule as of the date the Parity Bonds are sold, and that schedule shall be used to determine compliance with the tests for Parity Bonds in Section 7.1.

C. For the Reserve Requirement: Whenever a Series of Bonds that contains a Balloon Payment is issued, the District Official shall prepare a schedule of principal and interest payments for a hypothetical Series of Bonds that refunds each Balloon Payment in that Series in accordance with Section 6.4.D. The District Official shall prepare that schedule as of the date the Series is sold, and that schedule shall be combined with the schedule for payment of any debt service on Bonds that are secured by the same subaccount, and that combined schedule shall be used to determine the Reserve Requirement as long as that Series is Outstanding.

D. Each hypothetical Series of refunding Bonds shall be assumed to be paid in equal annual installments of principal and interest that are sufficient to amortize the principal amount of the Balloon Payment over the term selected by the District Official; however, the District Official shall not select a term that exceeds the lesser of: 30 years from the date the Balloon Payment is originally scheduled to be paid; or, the District’s estimate of the remaining weighted average useful life (expressed in years and rounded to the next highest integer) of the assets which are financed with the Balloon Payment. The annual installments shall be assumed to be due on the anniversaries of the date the Balloon Payment is originally scheduled to be paid, with the first installment due on the first anniversary of the date the Balloon Payment is scheduled to be paid. Each installment shall be assumed to bear interest at a rate that is estimated by the District from the Bond Buyer Revenue Bond Index (or if the Bond Buyer Revenue Bond Index is not available, a reasonably comparable index selected by the District) for a revenue bond with a term that is equal to the term of the installment. When the District prepares a schedule described in Section 6.4.A, Section 6.4.B or Section 6.4.C, the District shall use the index that is available to the District on the date the District is required to prepare that schedule.
6.5. Interest Subsidy Bonds. The amounts assumed to be paid on Interest Subsidy Bonds shall be calculated as follows:

A. When calculating Annual Bond Debt Service for the rate covenant in Section 6.2, the District shall subtract from interest to be paid on Interest Subsidy Bonds the federal interest subsidies on Interest Subsidy Bonds that the District reasonably expects, at the beginning of the Fiscal Year, to receive during that Fiscal Year.

B. When calculating Annual Bond Debt Service and Maximum Annual Bond Debt Service for the tests for issuing Parity Bonds in Section 7, the District shall subtract from the scheduled payments of interest on Interest Subsidy Bonds the amount of federal interest subsidies that the District reasonably expects, at the time the Parity Bonds are issued, to receive.

C. When calculating the greatest amount of principal, interest and premium, if any, required to be paid in any Fiscal Year on a Series of Interest Subsidy Bonds to determine the Tax Maximum for Interest Subsidy Bonds that are secured by a subaccount in the Bond Reserve Account, the District shall subtract from the scheduled payments of interest on Interest Subsidy Bonds the federal interest subsidies that the District reasonably expects, at the time the Series of Interest Subsidy Bonds is issued, to be paid to the District for the Series of Interest Subsidy Bonds. The District shall not be required to increase the amount the District is required to hold in a subaccount in the Bond Reserve Account if federal interest subsidies are not paid when or in the amounts expected. However, if the District reduces the amount it holds in a subaccount of the Bond Reserve Account because Bonds secured by that subaccount have been paid, the District must take into account its reasonable expectations of the amount of federal interest subsidies it expects to receive at the time of reduction in determining the amount that the District must retain in a subaccount of the Bond Reserve Account.

Section 7. Parity Bonds.

7.1. The District may issue Parity Bonds to provide funds for any purpose relating to the Water System, but only if:

A. No Event of Default under this Master Declaration or any Supplemental Declaration has occurred and is continuing;

B. At the time of the issuance of the Parity Bonds there is no deficiency in the Debt Service Account and all required deposits to all subaccounts in the Bond Reserve Account have been made;

C. There shall have been filed with the District either:

(i) A certificate of the District Official stating that both:

(a) Coverage Revenues (adjusted as provided in Section 7.2) for the Base Period were not less than one hundred fifteen percent (115%) of
Maximum Annual Bond Debt Service on all then Outstanding Bonds, calculated as of the date the Parity Bonds are issued and with the proposed Parity Bonds treated as Outstanding; and

(b) Net Revenues (adjusted as provided in Section 7.2) for the Base Period were not less than one hundred twenty five percent (125%) of Maximum Annual Bond Debt Service on all then Outstanding Bonds, calculated as of the date the Parity Bonds are issued and with the proposed Parity Bonds treated as Outstanding; or

(ii) A certificate or opinion of a Qualified Consultant:

(a) Stating the amount of the Adjusted Coverage Revenues and the Adjusted Net Revenues for each of the five Fiscal Years after the last Fiscal Year for which interest on the Parity Bonds is, or is expected to be, capitalized, or, if interest will not be capitalized, for each of the five Fiscal Years after the proposed Parity Bonds are issued; and

(b) Concluding that the respective amounts of Adjusted Coverage Revenues in each of the first four Fiscal Years described in Section 7.1.C(ii)(a) are at least equal to one hundred fifteen percent (115%) of the Annual Bond Debt Service for each of those respective Fiscal Years on all Outstanding Bonds, with the proposed Parity Bonds treated as Outstanding; and,

(c) Concluding that the respective amounts of Adjusted Net Revenues in each of the first four Fiscal Years described in Section 7.1.C(ii)(a) are at least equal to one hundred twenty-five percent (125%) of the Annual Bond Debt Service for each of those respective Fiscal Years on all Outstanding Bonds, with the proposed Parity Bonds treated as Outstanding; and,

(d) Concluding that the amount of Adjusted Coverage Revenues in the fifth Fiscal Year described in Section 7.1.C(ii)(a) is at least equal to one hundred fifteen percent (115%) of the Maximum Annual Bond Debt Service, calculated for the period beginning with that fifth Fiscal Year on all then Outstanding Bonds, with the proposed Parity Bonds treated as Outstanding; and,

(e) Concluding that the amount of Adjusted Net Revenues in the fifth Fiscal Year described in Section 7.1.C(ii)(a) is at least equal to one hundred twenty-five percent (125%) of the Maximum Annual Bond Debt Service, calculated for the period beginning with that fifth Fiscal Year on all then Outstanding Bonds, with the proposed Parity Bonds treated as Outstanding.

7.2. The District may adjust Coverage Revenues and Net Revenues for purposes of Section 7.1.C(i) by adding any Coverage Revenues or Net Revenues the District Official
calculates the District would have had during the Base Period because of increases in Water System rates, fees and charges which have been adopted by the District and are in effect on or before the date the Parity Bonds are issued. The District shall adjust Coverage Revenues and Net Revenues for the Base Period by eliminating the effect of any withdrawals from or deposits to the Rate Stabilization Account.

7.3. The Qualified Consultant shall calculate Adjusted Net Revenues and Adjusted Coverage Revenues for purposes of Section 7.1.C(ii) as provided in this Section 7.3:

A. The District shall provide the Qualified Consultant with the following information:

(i) The Base Period, the Coverage Revenues and Net Revenues for the Base Period and the amounts of any withdrawals from or deposits to the Rate Stabilization Account for Fiscal Years that are included in the Base Period;

(ii) Information regarding any Water System utility properties that are being acquired with Parity Bonds and that have an earnings record;

(iii) Any changes in rates and charges which have been adopted by the District since the beginning of the Base Period and the dates on which they are scheduled to take effect;

(iv) Any changes in customers since the beginning of the Base Period; and,

(v) A description of any extensions or additions to the Water System that were in the process of construction at the beginning of the Base Period or commenced construction after the beginning of the Base Period, the expected date of completion of those extensions or additions, the estimated operating and capital costs of those extensions or additions, and any other changes to the Gross Revenues or Operating Expenses that the District reasonably expects to result from the completion and operation of those extensions or additions.

B. Using the information provided by the District pursuant to Section 7.3.A and any additional information the Qualified Consultant determines is necessary, the Qualified Consultant shall adjust the Coverage Revenues and Net Revenues for the Base Period to eliminate the effect of any withdrawals from or deposits to the Rate Stabilization Account in the manner described in Section 7.2 and may adjust the Coverage Revenues and Net Revenues for the Base Period:

(i) To reflect any changes that the Qualified Consultant projects will result from the acquisition of Water System utility properties that are being financed with the Parity Bonds and that have an earnings record;

(ii) To reflect any changes in rates and charges which have been adopted by the District and which are scheduled to take effect during the period described in Section 7.1.C(ii)(a), or which increase rates and charges for inflation at a level which the Qualified Consultant determines is reasonable;
(iii) To reflect any changes in customers of the Water System that occurred after the beginning of the Base Period and prior to the date of the Qualified Consultant’s certificate; and

(iv) To reflect any changes to Coverage Revenues or Net Revenues not included in the preceding paragraphs that are projected to result from the completion and operation of additions and extensions to the Water System that were under construction at the beginning of the Base Period, or commenced construction after the beginning of the Base Period.

7.4. The District may issue Parity Bonds to refund Outstanding Bonds without complying with Section 7.1 if the refunded Bonds are legally or economically defeased on the date of delivery of the refunding Parity Bonds and if the Annual Bond Debt Service on the refunding Parity Bonds does not exceed the Annual Bond Debt Service on the refunded Bonds in any Fiscal Year by more than $5,000.

7.5. Bonds shall be treated as “legally defeased” for purposes of Section 7.4 if they are defeased as provided in Section 13. Bonds shall be treated as “economically defeased” for purposes of Section 7.4 if they have been irrevocably called for redemption/prepayment within one year after the date on which the refunding Bonds are issued, and the District has irrevocably deposited money or Government Obligations with the paying agent or Owner for the refunded Bonds, as applicable, or in escrow with an independent trustee or escrow agent, and the money and any amounts to be received from the Government Obligations have been calculated to be sufficient, without reinvestment, to pay the Bonds that are economically defeased.

7.6. All Parity Bonds issued in accordance with this Section 7 shall have a lien on the Net Revenues which is equal to the lien of all other Outstanding Bonds.

Section 8. Subordinate Obligations.

The District may issue Subordinate Obligations only if:

8.1. The Subordinate Obligations are payable solely from amounts permitted to be deposited in the Subordinate Obligations Account pursuant to Section 4.1.E;

8.2. The Subordinate Obligations state clearly that they are secured by a lien on or pledge of the Net Revenues which is subordinate to the lien on, and pledge of, the Net Revenues for the Bonds.

Section 9. Separate Utility System.

The District may declare property which the District owns and is part of the Water System (but has a value of less than five percent of the Water System at the time of the declaration), and property which the District has not yet acquired but would otherwise become part of the Water System, to be part of a Separate Utility System. The District may pay costs of acquiring, operating and maintaining Separate Utility Systems from Net Revenues, but only if there is no
deficit in the Debt Service Account or the Bond Reserve Account. The District may issue obligations which are secured by the revenues produced by the Separate Utility System, and may pledge the Separate Utility System revenues to pay those obligations. In addition, the District may issue Subordinate Obligations to pay for costs of a Separate Utility System, and may pledge the revenues of the Separate Utility System to pay the Subordinate Obligations.

**Section 10. General Covenants.**

The District hereby covenants and agrees with the Owners of all Outstanding Bonds as follows:

10.1. The District shall promptly cause the principal, premium, if any, and interest on the Bonds to be paid as they become due in accordance with the provisions of this Master Declaration and any Supplemental Declaration.

10.2. The District shall maintain complete books and records relating to the operation of the Water System and all District funds and accounts in accordance with generally accepted accounting principles, shall cause such books and records to be audited annually at the end of each Fiscal Year, and shall have an audit report prepared by the Auditor and made available for the inspection of Owners.

10.3. The District shall not issue obligations which have a lien on the Net Revenues that is superior to the lien of the Bonds except for obligations to pay Operating Expenses.

10.4. The District shall promptly deposit the Gross Revenues and other amounts described in this Master Declaration into the funds and accounts specified in this Master Declaration.

10.5. The District shall work in good faith to cause the Water System to be operated at all times in a safe, sound, efficient and economic manner in compliance with all health, safety and environmental laws, regulatory body rules, regulatory body orders and court orders applicable to the District’s operation and ownership of the Water System.

10.6. The District shall maintain the Water System in good repair, working order and condition.

10.7. The District shall not enter into any new agreements or arrangements or make any new offers to provide Water System products or services at a discount from published rate schedules or provide free Water System products or services except: a) for District-owned facilities, b) in case of emergencies, c) where the District exchanges services with other Water systems, or d) where in the reasonable judgment of the District such action does not materially reduce the Gross Revenues received by the District.

10.8. The District shall at all times maintain with responsible insurers all such insurance on the Water System as is customarily maintained with respect to works and properties of like character against accident to, loss of or damage to such works or properties.

A. The net proceeds of insurance against material accident to or material destruction of the Water System shall be used to repair or rebuild the damaged or destroyed Water System,
and to the extent not so applied, will be applied to the payment or redemption/prepayment of the Bonds.

B. The insurance described in Section 10.8 shall be in the form of policies or contracts for insurance with insurers of good standing and shall be payable to the District, or in the form of self-insurance by the District. The District shall establish such fund or funds or reserves which it deems are necessary to provide for its share of any such self-insurance.

10.9. The District shall not voluntarily, nor shall it permit others to, sell, mortgage or otherwise permanently dispose of all or any portion of the Water System except:

A. The District may dispose of all or substantially all of the Water System, only if the District pays all Bonds or defeases them pursuant to Section 13.

B. Except as provided in Section 10.9.C or 10.9.D, the District will not voluntarily dispose of any part of the Water System in excess of 10% of the value of the Water System in service unless prior to such disposition either:

   (i) There has been filed with the District a certificate of a Qualified Consultant or District Official stating that such disposition will not impair the ability of the District to comply with the rate covenants contained in Sections 6.1 and 6.2 of this Master Declaration; or

   (ii) Provision is made for the payment, redemption/prepayment or other defeasance of a principal amount of Bonds equal to the greater of the following amounts:

      (a) An amount which will be in the same proportion to the net principal amount of Bonds then Outstanding (defined as the total principal amount of Bonds then Outstanding less the amount of cash and investments in the Debt Service Account, the Bond Reserve Account, and the Subordinate Obligations Account) that the Gross Revenues attributable to the part of the Water System sold or disposed of for the 12 preceding months bears to the total Gross Revenues for such period; or

      (b) An amount which will be in the same proportion to the net principal amount of Bonds then Outstanding that the book value of the part of the Water System sold or disposed of bears to the book value of the Water System immediately prior to such sale or disposition.

C. The District may dispose of any portion of the Water System that has become unserviceable, inadequate, obsolete, or unfit to be used or no longer necessary for use in the operation of the Water System.

D. If the ownership of all or part of the Water System is transferred from the District through the operation of law, the District shall to the extent authorized by law, reconstruct or replace such transferred portion using any proceeds of the transfer unless
the District reasonably determines that such reconstruction or replacement is not in the best interest of the District and the Owners, in which case any proceeds shall be used for the payment, redemption/prepayment or defeasance of the Bonds.

**Section 11. Events of Default and Remedies.**

11.1. **Continuous Operation Essential.** District Official hereby finds and determines that the continuous operation of the Water System and the collection, deposit and disbursement of the Net Revenues in the manner provided in this Master Declaration and in any Supplemental Declaration are essential to the payment and security of the Bonds, and the failure or refusal of the District to perform the covenants and obligations contained in this Master Declaration or any such Supplemental Declaration will endanger the necessary continuous operation of the Water System and the application of the Net Revenues to the operation of the Water System and the payment of the Bonds.

11.2. **Events of Default.** The following shall constitute “Events of Default” so long as they are occurring and have not been cured in accordance with the terms of this Master Declaration:

A. If the District shall fail to pay any Bond principal or interest when due.

B. Except as provided in Section 11.3, if the District shall default in the observance and performance of any other of its covenants, conditions and agreements in this Master Declaration and the default continues for ninety (90) days after the District receives a written notice, specifying the Event of Default and demanding the cure of such default, from a Credit Provider or from the Owners of not less than 25% in aggregate principal amount of the Bonds Outstanding.

C. If the District shall sell, mortgage or otherwise permanently dispose of all or any portion of the Water System in violation of Section 10.9.

D. If an order, judgment or decree shall be entered by any court of competent jurisdiction:

   (i) Appointing a receiver, trustee or liquidator for the District or the whole or any part of the Water System;

   (ii) Approving a petition filed against the District seeking the bankruptcy, arrangement or reorganization of the District under any applicable law of the United States or the State; or

   (iii) Assuming custody or control of the District or of the whole or any part of the Water System under the provisions of any other law for the relief or aid of debtors and such order, judgment or decree shall not be vacated or set aside or stayed (or, in case custody or control is assumed by said order, such custody or control shall not be otherwise terminated) within sixty (60) days from the date of the entry of such order, judgment or decree.
E. If the District shall:

(i) Admit in writing its inability to pay its debts generally as they become due;

(ii) File a petition in bankruptcy or seeking a composition of indebtedness under any state or federal bankruptcy or insolvency law;

(iii) Consent to the appointment of a receiver of the whole or any part of the Water System; or

(iv) Consent to the assumption by any court of competent jurisdiction under the provisions of any other law for the relief or aid of debtors of custody or control of the District or of the whole or any part of the Water System.

11.3. **Exception.** It shall not constitute an Event of Default under 11.2.B if the default cannot practicably be remedied within ninety (90) days after the District receives notice of the default, so long as the District promptly commences reasonable action to remedy the default after the notice is received, and continues reasonable action to remedy the default until the default is remedied.

11.4. **Remedies.** If an Event of Default occurs, any Owner may exercise any remedy available at law or in equity including mandamus where applicable. However, the Bonds shall not be subject to acceleration.

A. **Books of District Open to Inspection.**

(i) The District covenants that if an Event of Default shall have happened and shall not have been remedied, the books of record and account of the District and all other records relating to the Water System shall at all reasonable times be subject to the inspection and use of any persons holding at least twenty percent (20%) of the principal amount of Outstanding Bonds and their respective agents and attorneys.

(ii) The District covenants that if the Event of Default shall happen and shall not have been remedied, the District will continue to account, as a trustee of an express trust, for all Net Revenues and other amounts, securities and funds pledged under this Master Declaration.

B. **Appointment of Trustee.** Whenever any Event of Default exists, Owners representing 51 percent or more of the Outstanding Bonds may appoint a commercial bank or other financial institution with a reported capital and surplus in excess of $50 million as trustee (the “Trustee”) to represent the interests of the Owners.

11.5. **Trustee Duties Upon Default.**

A. Upon the occurrence of an Event of Default the Trustee may pursue any other available remedy at law or in equity to enforce the payment of the principal of, premium, if any,
and interest on the outstanding Bonds, and to enforce any rights of the Trustee under or with respect to the Master Declaration.

B. In addition, upon the occurrence of an Event of Default, and upon the filing of a suit or other commencement of judicial proceedings to enforce the rights of the Trustee and of the Owners under the Master Declaration, the Trustee will be entitled, as a matter of right to the fullest extent permitted by Oregon law, to the appointment of a receiver or receivers of the Net Revenues and other amounts pledged under the Master Declaration, pending such proceedings, with such powers as the court making such appointment may confer.

C. If an Event of Default has occurred and is continuing and if requested so to do by the Owners of at least 25% in aggregate principal amount of Outstanding Bonds and indemnified as provided in the Master Declaration, the Trustee will be obligated to exercise any of the rights and powers conferred by this Master Declaration, as the Trustee, being advised by counsel, deems most expedient in the interest of the Owners.

D. If a Trustee has been appointed pursuant to 11.4.B, no Owner of any Bond shall have the right to institute any suit, action or proceeding at law or in equity, for any remedy under the Master Declaration, unless:

   (i) such Owner has previously given to the Trustee written notice of the occurrence of an Event of Default;

   (ii) the Owners of a majority in aggregate principal amount of all the Bonds then Outstanding have requested the Trustee in writing to exercise its powers under the Master Declaration;

   (iii) said Owners have tendered to the Trustee indemnity reasonably acceptable to the Trustee against the costs, expenses and liabilities to be incurred in compliance with such request; and

   (iv) the Trustee has refused or failed to comply with such request for a period of 60 days after such written request has been received by the Trustee and said tender of indemnity is made to the Trustee.

E. If the Trustee takes any judicial or other action in an Event of Default the Trustee has full power in its direction with respect to any continuance, discontinuance, withdrawal, compromise, settlement or other disposition of such action, unless opposed by the written request of the Owners of a majority in aggregate principal amount of the Outstanding Bonds. The Trustee is appointed attorney-in-fact of the Owners for the purpose of bringing any suit action or proceedings in an Event of Default.

F. Waivers of Event of Default.

   (i) No delay or omission of any Owner or of the Trustee to exercise any right or power arising upon the happening of an Event of Default shall impair any right
or power or shall be construed to be a waiver of any such Event of Default or to be an acquiescence therein; and every power and remedy given by this Section 11 to the Owners and to the Trustee may be exercised from time to time and as often as may be deemed expedient by the Owners and/or the Trustee as applicable.

(ii) The owners of not less than fifty percent (50%) in principal amount of the affected Bonds that are at the time Outstanding, or their attorneys-in-fact duly authorized, or the Trustee may, on behalf of the Owners of all of affected Bonds, waive any past default under this Master Declaration with respect to such Bonds and its consequences, except a default in the payment of the principal of, premium, if any, or interest on any of the Bonds. No such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

(iii) If a default occurs under Section 6 and that default has not become an Event of Default, that default shall be deemed waived at the end of the first Fiscal Year following that default in which the District has complied with Section 6.

11.6. Remedies Granted in Master Declaration Not Exclusive.

No remedy by the terms of this Master Declaration conferred upon or reserved to the Owners is intended to be exclusive of any other remedy, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given under this Master Declaration or existing at law or in equity or by statute on or after the date of adoption of this Master Declaration. However, the Bonds shall not be subject to acceleration.

Section 12. Amendment of Master Declaration.

12.1. This Master Declaration may be amended by Supplemental Declaration without the consent of any Owners for any one or more of the following purposes:

A. To cure any ambiguity or formal defect or omission in this Master Declaration;

B. To add to the covenants and agreements of the District in this Master Declaration, other covenants and agreements to be observed by the District which are not contrary to or inconsistent with this Master Declaration as theretofore in effect;

C. To authorize issuance of Bonds or Subordinate Obligations as permitted by this Master Declaration;

D. To modify, amend or supplement this Master Declaration or any Supplemental Declaration to qualify this Master Declaration under the Trust Indenture Act of 1939, as amended, or any similar federal statute hereafter in effect or to permit the qualification of any Bonds for sale under the securities laws of any of the states of the United States of America;
E. To confirm, as further assurance, any security interest or pledge created under this Master Declaration or any Supplemental Declaration;

F. To make any change which, in the reasonable judgment of the District, does not materially and adversely affect the rights of the owners of any Outstanding Bonds;

G. So long as a Credit Facility (other than a Reserve Credit Facility) is in full force and effect with respect to the Bonds affected by such Supplemental Declaration, to make any other change which is consented to in writing by the issuer of such Credit Facility other than any change which:
   
   (i) Would result in a downgrading or withdrawal of the rating then assigned to the affected Bonds by the Rating Agencies;

   (ii) Changes the maturity (except as permitted herein), the Interest Payment Dates, interest rates, redemption/prepayment and purchase provisions, and provisions regarding notices of redemption/prepayment and purchase applicable to the affected Bonds or diminishes the security afforded by such Credit Facility;

   (iii) Materially and adversely affects the rights and security afforded to the Owners of any Outstanding Bonds not secured by such Credit Facility; or

H. To modify any of the provisions of this Master Declaration or any Supplemental Declaration in any other respect whatever, as long as the modification shall take effect only after all affected Outstanding Bonds cease to be Outstanding.

12.2. This Master Declaration may be amended for any other purpose only upon consent of Owners of not less than fifty-one percent (51%) in aggregate principal amount of the Bonds Outstanding; provided, however, that no amendment shall be valid without the consent of Owners of 100 percent (100%) of the aggregate principal amount of the Bonds Outstanding which:

A. Extends the maturity of any Bond, reduces the rate of interest upon any Bond, extends the time of payment of interest on any Bond, reduces the amount of principal payable on any Bond, or reduces any premium payable on any Bond, without the consent of the affected Owner; or

B. Reduces the percent of Owners required to approve Supplemental Declarations.

12.3. For purposes of Section 12.2, and subject to Section 12.4, the initial purchaser of a series of Bonds may be treated as the Owner of that Series at the time that series of Bonds is delivered in exchange for payment.

12.4. Except as otherwise expressly provided in Section 12.5, Section 12.6 or a Supplemental Declaration, as long as a Credit Facility securing all or a portion of any Outstanding Bonds is in effect, the issuer of such Credit Facility shall be deemed to be the Owner of the Bonds secured by such Credit Facility for the purpose of the execution and delivery
12.5. The issuer of a Credit Facility shall not be deemed to be an Owner for purposes of any amendment, change or modification of this Master Declaration which:

A. Would result in a downgrading or withdrawal of the rating then assigned to the affected Bonds by the Rating Agencies; or

B. Changes the maturity (except as expressly permitted herein), the Interest Payment Dates, interest rates, redemption/prepayment and purchase provisions, and provisions regarding notices of redemption/prepayment and purchase applicable to the affected Bonds or diminishes the security afforded by such Credit Facility; or

C. Reduces the percentage or otherwise affects the classes of affected Bonds, the consent of the Owners of which is required to effect any such modification or amendment.

12.6. No issuer of a Credit Facility shall be entitled to act as an Owner during any period in which:

A. The issuer’s Credit Facility is not in full force and effect;

B. The issuer of a Credit Facility shall have filed a petition or otherwise sought relief under any federal or state bankruptcy or similar law;

C. The issuer of the Credit Facility shall, for any reason, have failed or refused to honor a proper demand for payment under such Credit Facility; or

D. An order or decree shall have been entered, with the consent or acquiescence of the issuer of a Credit Facility, appointing a receiver or receivers or the assets of the issuer of a Credit Facility, or if such order or decree having been entered without the consent or acquiescence of the issuer of a Credit Facility, shall not have been vacated or discharged or stayed within ninety (90) days after the entry thereof.

12.7. For purposes of determining the percentage of Owners consenting to, waiving or otherwise acting with respect to any matter that may arise under this Master Declaration, the Owners of Bonds which pay interest only at maturity, and mature more than one year after they are issued shall be treated as Owners of Bonds in an aggregate principal amount equal to the accreted value of such Bonds as of the date the notice is sent requesting consent, waiver or other action as provided herein.

Section 13. Defeasance.

13.1. The District shall be obligated to pay Bonds which are defeased pursuant to this Section solely from the money and Government Obligations deposited with the escrow agent or
trustee, and the District shall have no further obligation to pay the defeased Bonds from any source except the amounts deposited in the escrow. Bonds shall be deemed defeased if the District:

A. Irrevocably deposits money or Government Obligations in escrow with an independent trustee or escrow agent which are calculated to be sufficient without reinvestment for the payment of Bonds which are to be defeased;

B. Files with the escrow agent or trustee a certificate from an independent, certified public accountant to the effect that the money and the principal and interest to be received from the Government Obligations are calculated to be sufficient, without further reinvestment, to pay the defeased Bonds when due; and

C. Files with the escrow agent or trustee an opinion of nationally recognized bond counsel that the proposed defeasance will not cause interest on the defeased Bonds to be includable in gross income under the Code.

**Section 14. BEO System.**

14.1. Unless otherwise provided by a Supplemental Declaration, all Bonds shall be subject to the BEO System pursuant to the provisions of this Section 14.1.

14.2. The Bonds shall be initially issued as a BEO security issue with no Bonds being made available to the Owners upon the execution and delivery of the letter of representations among the Paying Agent, DTC and the District. Ownership of the Bonds shall be recorded through entries on the books of banks and broker-dealer participants and correspondents that are related to entries on the DTC BEO system. The Bonds shall be initially issued in the form of separate single fully registered typewritten Bonds for each maturity of the Bonds (the “Global Bonds”) in substantially the form attached hereto as Appendix A with such changes as the District Official may approve. Each Global Bond shall be registered in the name of CEDE & CO. as nominee (the “Nominee”) of DTC (DTC and any other qualified securities depository designated by the District as a successor to DTC, collectively the “Depository”) as the “Registered Owner”, and such Global Bonds shall be lodged with the Depository until early redemption or maturity of the Bond issue. The Paying Agent shall remit payment for the maturing principal and interest on the Bonds to the Owner for distribution by the Nominee for the benefit of the owners (the “Beneficial Owner” or “Record Owner”) by recorded entry on the books of the Depository participants and correspondents. While the Bonds are in BEO form, the Bonds will be available in denominations of $5,000 or any integral multiple thereof within a maturity.

14.3. In the event the Depository determines not to continue to act as securities depository for the Bonds, or the District determines that the Depository shall no longer so act, then the District will discontinue the BEO system with the Depository. If the District fails to designate another qualified securities depository to replace the Depository or elects to discontinue use of a BEO system, the Bonds shall no longer be a BEO issue but shall be registered in the registration books maintained by the Paying Agent in the name of the
Owner as appearing on the Bond register and thereafter in the name or names of the Owners of the Bonds transferring or exchanging Bonds.

14.4. While the Bonds are in BEO form, the District and the Paying Agent shall have no responsibility or obligation to any participant or correspondent of the Depository or to any Registered Owner on behalf of which such participants or correspondents act as agent for the Owner with respect to:

A. The accuracy of the records of the Depository, the Nominee or any participant or correspondent with respect to any ownership interest in the Bonds;

B. The delivery to any participant or correspondent or any other person, other than an Owner as shown in the registration books maintained by the Paying Agent, of any notice with respect to the Bonds, including any notice of redemption/prepayment;

C. The selection by the Depository of the beneficial interest in Bonds to be redeemed prior to maturity; or

D. The payment to any participant, correspondent, or any other person other than the owner of the Bonds as shown in the registration books maintained by the Paying Agent, of any amount with respect to principal of or interest on the Bonds.

14.5. Notwithstanding the BEO system, the District may treat and consider the Owner in whose name each Bond is registered in the registration books maintained by the Paying Agent as the Owner and absolute owner of such Bond for the purpose of payment of principal and interest with respect to such Bond, or for the purpose of giving notices of redemption and other matters with respect to such Bond, or for the purpose of registering transfers with respect to such Bond, or for all other purposes whatsoever. The District shall pay or cause to be paid all principal and interest on the Bonds only to or upon the order of the Registered Owner, as shown in the registration books maintained by the Paying Agent, or their respective attorneys duly authorized in writing, and all such payments shall be valid and effective to fully satisfy and discharge the District’s obligation with respect to payment thereof to the extent of the sum or sums so paid.

14.6. Upon delivery by the Depository to the District and to the Owner of written notice to the effect that the Depository has determined to substitute a new nominee in place of the Nominee, then the word “Nominee” in this Master Declaration shall refer to such new nominee of the Depository, and upon receipt of such notice, the District shall promptly deliver a copy thereof to the Paying Agent. The Depository shall tender the Bonds it holds to the Paying Agent for re-registration.

Section 15. Redemption of Bonds.

15.1. Unless otherwise provided by a Supplemental Declaration, all Bonds shall be subject to the redemption terms of this Section 15.

15.2. The District reserves the right to purchase Bonds in the open market.
15.3. If Bonds are subject to mandatory redemption the Paying Agent shall, without further action by the District, select the particular Bonds to be redeemed in accordance with the mandatory redemption schedule, by lot within each maturity, call the selected Bonds, and give notice of their redemption in accordance with this Section 15.

15.4. If certain maturities of Bonds are subject to both optional and mandatory redemption, the District may elect to apply the Bonds which it has previously optionally redeemed to any mandatory redemption maturity. In addition, if the District purchases Bonds which are subject to mandatory redemption, the District may elect to apply against the mandatory redemption requirement any such Bonds which it has previously purchased. If the District makes such an election, it shall notify the Paying Agent not less than sixty days prior to the mandatory redemption date to which the election applies.

15.5. So long as the BEO System remains in effect with respect to the Bonds, and unless DTC consents to a shorter period, the Paying Agent shall provide not less than 20 days nor more than 60 days’ notice of redemption, and shall provide such information in connection therewith as required by the letter of representations submitted to DTC in connection with the issuance of the Bonds.

15.6. During any period in which the BEO System is not in effect with respect to the Bonds, unless waived by any Owner of the Bonds to be redeemed, official notice of any redemption of Bonds shall be given by the Paying Agent on behalf of the District by mailing a copy of an official redemption notice by first class mail postage prepaid at least 20 days and not more than 60 days prior to the date fixed for redemption to the Owner of the Bonds to be redeemed, at the address shown on the Bond Register or at such other address as is furnished in writing by such owner to the Paying Agent. All such official notices of redemption shall be dated and shall state:

A. The redemption date;
B. The redemption price;
C. If less than all Outstanding Bonds are to be redeemed, the identification (and, in the case of partial redemption, the respective principal amounts) of the Bonds to be redeemed;
D. That on the redemption date the redemption price will become due and payable upon each such Bond or portion thereof called for redemption, and that interest thereon shall cease to accrue from and after said date; and
E. The place where such Bonds are to be surrendered for payment of the redemption price, which place of payment shall be the principal office of the Paying Agent.

15.7. The District shall deposit with the Paying Agent, on or before the redemption date, an amount of money sufficient to pay the redemption price of all the Bonds or portions of Bonds which are to be redeemed on that date.
15.8. Official notice of redemption having been given as aforesaid, the Bonds or portions of Bonds to be redeemed shall, on the redemption date, become due and payable at the Redemption Price therein specified, and from and after such date (unless the District shall default in the payment of the redemption price or unless the notice was conditional as described in Section 15.9) such Bonds or portions of Bonds shall cease to bear interest. Upon surrender of such Bonds for redemption in accordance with said notice, such Bonds shall be paid by the Paying Agent at the Redemption Price. Installments of interest due on or prior to the redemption date shall be payable as herein provided for payment of interest. Upon surrender for any partial redemption of any Bond, there shall be prepared for the registered owner a new Bond of the same maturity in the amount of the unpaid principal. All Bonds which have been redeemed shall be canceled and destroyed by the Paying Agent and shall not be reissued. Notwithstanding that any Bonds called for redemption shall not have been surrendered, no further interest shall accrue on any such Bonds. From and after such notice having been given and such deposit having been made, the Bonds to be redeemed shall not be deemed to be Outstanding hereunder, and the District shall be under no further liability in respect thereof.

15.9. Any notice of optional redemption given for the Bonds pursuant to this Section 15 may state that the optional redemption is conditional upon receipt by the Paying Agent of amounts sufficient to pay the redemption price of such Bonds or upon the satisfaction of any other condition, and/or that such notice may be rescinded upon the occurrence of any other event, and any conditional notice so given may be rescinded at any time before payment of such redemption price if any such condition so specified is not satisfied or if any such other event occurs. Notice of such rescission or of the failure of any such condition shall be given by the Paying Agent to affected owners of the Bonds as promptly as practicable.

Section 16. Authentication, Registration and Transfer.

16.1. The provisions of this Section 16 apply only if the Bonds cease to be a BEO issue, and unless otherwise specified in a Supplemental Declaration.

16.2. No Bond shall be entitled to any right or benefit under this Master Declaration unless it shall have been authenticated by an authorized officer of the Paying Agent. The Paying Agent shall authenticate all Bonds to be delivered at Closing, and shall additionally authenticate all Bonds properly surrendered for exchange or transfer pursuant to this Master Declaration.

16.3. All Bonds shall be in registered form. [Insert Name of Paying Agent] is hereby appointed to serve as Paying Agent for the Bonds. A successor Paying Agent may be appointed for the Bonds by ordinance or resolution of the District. The Paying Agent shall provide notice to Owners of any change in the Paying Agent not later than the Bond payment date following the change in Paying Agent.

16.4. The ownership of all Bonds shall be entered in the Bond register maintained by the Paying Agent and the District and Paying Agent may treat the person listed as owner in the Bond register as the owner of the Bond for all purposes.
16.5. The Paying Agent shall mail each interest payment on the Interest Payment Date (or the next Business Day if the Interest Payment Date is not a Business Day) to the name and address of the Owner, as that name and address appear on the Bond register as of the Record Date. If payment is so mailed, neither the District nor the Paying Agent shall have any further liability to any party for such payment.

16.6. Bonds may be exchanged for an equal principal amount of Bonds of the same Series and maturity which are in different authorized denominations, and Bonds may be transferred to other owners if the Owner submits the following to the Paying Agent:

A. Written instructions for exchange or transfer satisfactory to the Paying Agent, signed by the Owner or his attorney in fact and guaranteed or witnessed in a manner satisfactory to the Paying Agent; and

B. The Bonds to be exchanged or transferred.

16.7. The Paying Agent shall not be required to exchange or transfer any Bonds submitted to it during any period beginning with a Record Date and ending on the next following payment date; however, such Bonds shall be exchanged or transferred promptly following the payment date.

16.8. The Paying Agent shall not be required to exchange or transfer any Bonds which have been designated for redemption if such Bonds are submitted to it during the fifteen-day period preceding the designated redemption date.

16.9. For purposes of this Section, Bonds shall be considered submitted to the Paying Agent on the date the Paying Agent actually receives the materials described in Section 16.6.

16.10. The District may alter these provisions regarding registration and transfer by mailing notification of the altered provisions to all Owners. The altered provisions shall take effect on the date stated in the notice, which shall not be earlier than 45 days after notice is mailed.

Section 17. The Series [2019] Bonds. [To be completed/adjusted]

17.1. Pursuant to the authority of the Ordinance and this Master Declaration, the District has issued its Water Revenue Bonds, Series [2019], in the aggregate principal amount of $[Principal Amount]. The Series [2019] Bonds shall be Bonds as defined in this Master Declaration. The Series [2019] Bonds shall bear interest payable on ______ and ______ of each year at the following rates, commencing ______, ____, and shall mature in the following years in the following principal amounts:

<table>
<thead>
<tr>
<th>Maturity Date (______)</th>
<th>Principal Amount ($)</th>
<th>Interest Rate (%)</th>
<th>CUSIP No. (Base_______)</th>
</tr>
</thead>
</table>

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Page 29 – Master Water System Revenue Bond Declaration
17.2. The Series [2019] Bonds are subject to redemption at the option of the District prior to their stated maturity dates at any time on or after ______, 20__, as a whole or in part, and if in part, with maturities to be selected by the District at a price of par, plus accrued interest, if any, to the date of redemption. For as long as the Series [2019] Bonds are in book-entry only form, if fewer than all of the Series [2019] Bonds of a maturity are called for redemption, the selection of Series [2019] Bonds within a maturity to be redeemed shall be made by DTC in accordance with its operational procedures then in effect. If the Series [2019] Bonds are no longer held in book-entry only form, then the Paying Agent would select Series [2019] Bonds for redemption by lot.

17.3. The Series [2019] Bonds shall be special obligations of the District, and shall be payable solely from the Net Revenues and amounts required to be deposited in the Debt Service Account as required and as provided by this Master Declaration. The Series [2019] Bonds are not general obligations of the District and are payable solely from the amounts described in the previous sentence. [The Series [2019] Bonds are not secured by the Bond Reserve Account or any subaccount therein.]

17.4. The Series [2019] Bonds shall be in substantially the form attached as Appendix A and shall be signed with the facsimile or manual signature of an authorized District Official.

A. The Series [2019] Bond proceeds shall be used to finance the projects described in the Ordinance and to pay costs incurred in connection with the issuance of the Series [2019] Bonds.
EXECUTED ON BEHALF OF THE TUALATIN VALLEY WATER DISTRICT BY AN AUTHORIZED DISTRICT OFFICIAL AS OF THE ___ day of ______, ___.

Tualatin Valley Water District, Oregon

By: ________________________________

Authorized Officer
Appendix A

Form of Series [2019] Bond – To be revised and modified based on how the first series is structured

United States of America
State of Oregon
County of Washington
Tualatin Valley Water District
Water Revenue Bond
Series [2019]

Dated Date: ____________________
Interest Rate Per Annum: «CouponRate»%  
Maturity Date: ________, «MaturityYear»
CUSIP Number: __________«CUSIPNumbr»
Registered Owner: -----Cede & Co.-----
Principal Amount: -----«PrincipalAmtSpelled» Dollars-----

TUALATIN VALLEY WATER DISTRICT, in Washington County, State of Oregon (the “District”), for value received, acknowledges itself indebted and hereby promises to pay to the Registered Owner hereof, or registered assigns, but solely from the sources indicated below, the Principal Amount on the Maturity Date together with interest thereon from the date hereof at the Interest Rate Per Annum indicated above. Interest is payable semiannually on the first days of ______ and ______ in each year until maturity or prior redemption, commencing ______, ______. Payment of each installment of interest shall be made on the payment date to the Registered Owner hereof whose name appears on the registration books of the District maintained by the District’s paying agent and registrar, which is currently [Insert Name of Paying Agent] (the “Paying Agent”), as the Registered Owners appear on the registration books as of the ___ day of the month immediately preceding the applicable interest payment date. For so long as this Series [2019] Bond is subject to a book-entry-only system, principal and interest payments shall be paid on each payment date to the nominee of the securities depository for this Series [2019] Bond. On the date of issuance of this Series [2019] Bond, the securities depository for this Series [2019] Bond is The Depository Trust Company, New York, New York, and Cede & Co. is the nominee of The Depository Trust Company. Such payments shall be made payable to the order of “Cede & Co.” Capitalized terms used in this Bond have the meanings defined for such terms in the Master Water System Revenue Bond Declaration dated [Insert Date of Master] (the “Master Declaration”).


This Series [2019] Bond is not a general obligation or liability of the District, is issued as a “Bond” under the Maser Declaration, and is payable solely from the Net Revenues of the Water System and other funds as provided in the Master Declaration. The District covenants and agrees with the owner of this Series [2019] Bond that it will keep and perform all of the covenants in this Series [2019] Bond and in the Master Declaration. The District has pledged the Net Revenues of the Water System to the payment of principal and interest on this Series [2019] Bond. The District has reserved the right to issue Parity Bonds with an equal lien on the Net Revenues. This Series [2019] Bond is not secured by the Bond Reserve Account or any subaccount therein.

The Series [2019] Bonds are initially issued as a book-entry-only security issue with no certificates provided to the owners of the Series [2019] Bonds. Records of Series [2019] Bond ownership will be maintained by the Paying Agent and The Depository Trust Company and its participants. Should the book-entry-only security system be discontinued, the District shall cause the Paying Agent to authenticate and
deliver replacement Series [2019] Bonds in fully registered form in authorized denominations in the names of the beneficial owners or their nominees, as provided in the Master Declaration.


Unless the book-entry-only system is discontinued, notice of any call for redemption shall be given as required by the Blanket Letter of Representations to The Depository Trust Company, as referenced in the Master Declaration. Interest on any Series [2019] Bond so called for Rule 15c2-12 of the Securities and Exchange Commission, adopted under the Securities Exchange Act of 1934 shall cease on the redemption date designated in the notice unless the notice is conditional, as permitted by the Master Declaration. The Paying Agent will notify The Depository Trust Company of any Series [2019] Bonds called for redemption not less than 20 days prior to the date fixed for redemption unless DTC consents to a shorter period. If the book-entry-only system is discontinued, notice of redemption shall be given by first-class mail, postage prepaid at least 20 days and not more than 60 days prior to the date fixed for redemption to the registered owner of each Series [2019] Bond to be redeemed at the address shown on the Series [2019] Bond register.

Any exchange or transfer of this Series [2019] Bond must be registered, as provided in the Master Declaration, upon the Series [2019] Bond register kept for that purpose by the Paying Agent. The exchange or transfer this Series [2019] Bond may be registered only by surrendering it, together with a written instrument of exchange or transfer which is satisfactory to the Paying Agent and which is executed by the registered owner or their duly authorized attorney. Upon registration, a new registered Series [2019] Bond or Series [2019] Bonds, of the same series and maturity and in the same aggregate principal amount, shall be issued to the transferee as provided in the Master Declaration. The Paying Agent and the District may treat the person in whose name this Series [2019] Bond is registered as its absolute owner for all purposes, as provided in the Master Declaration.

Unless this Series [2019] Bond is presented by an authorized representative of The Depository Trust Company to the issuer or its agent for registration of transfer, exchange or payment, and any Series [2019] Bond issued is registered in the name of Cede & Co. or such other name as requested by an authorized representative of The Depository Trust Company and any payment is made to Cede & Co., ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL since the registered owner hereof, Cede & Co., has an interest herein.

This Series [2019] Bond shall remain in the Paying Agent’s custody subject to the provisions of the FAST Balance Certificate Agreement currently in effect between the Paying Agent and The Depository Trust Company.

IT IS HEREBY CERTIFIED, RECITED, AND DECLARED that all conditions, acts, and things required to exist, to happen, and to be performed precedent to and in the issuance of this Series [2019] Bond have existed, have happened, and have been performed in due time, form, and manner as required by the Constitution and Statutes of the State of Oregon; that the issue of which this Series [2019] Bond is a part, and all other obligations of such District, are within every debt limitation and other limits prescribed by such Constitution and Statutes.

IN WITNESS WHEREOF, the Board of Commissioners of the Tualatin Valley Water District, Oregon, has caused this Series [2019] Bond to be signed by facsimile signature of an authorized District Official as of the date indicated above.

Tualatin Valley Water District, Oregon

Authorized Officer
THIS SERIES [2019] BOND SHALL NOT BE VALID UNLESS PROPERLY AUTHENTICATED BY THE PAYING AGENT IN THE SPACE INDICATED BELOW.

CERTIFICATE OF AUTHENTICATION

This Series [2019] Bond is one of a series of $[Principal Amount] aggregate principal amount of Water Revenue Bonds, Series [2019], of the District, issued pursuant to the Master Declaration described herein.

Date of authentication: [Insert Date of Master].

[Insert Name of Paying Agent], as Paying Agent

________________________________________
Authorised Officer

ASSIGNMENT

FOR VALUE RECEIVED, the undersigned sells, assigns and transfers unto: ________________

________________________________________
(Please insert social security or other identifying number of assignee)

this Series [2019] Bond and does hereby irrevocably constitute and appoint __________________________ as attorney to transfer this Series [2019] Bond on the books kept for registration thereof with the full power of substitution in the premises.

Dated: __________________________

NOTICE: The signature to this assignment must correspond with the name of the registered owner as it appears upon the face of this Series [2019] Bond in every particular, without alteration or enlargement or any change whatever.

NOTICE: Signature(s) must be guaranteed by a member of the New York Stock Exchange or a commercial bank or trust company

Signature Guaranteed

________________________________________
(Bank, Trust Company or Brokerage Firm)

________________________________________
Authorised Officer

The following abbreviations, when used in the inscription on the face of this Series [2019] Bond, shall be construed as though they were written out in full according to applicable laws or regulations.

TEN COM -- tenants in common
TEN ENT -- as tenants by the entireties
JT TEN -- as joint tenants with right of survivorship and not as tenants in common
OREGON CUSTODIANS use the following:
_________________ CUST UL OREG __________________________ MIN
as custodian for (name of minor)
OR UNIF TRANS MIN ACT
under the Oregon Uniform Transfer to Minors Act

Additional abbreviations may also be used though not in the list above.
RESOLUTION NO. 17-19

A RESOLUTION DECLARING PUBLIC NECESSITY TO ACQUIRE FEE TITLE TO THE REAL PROPERTY KNOWN AS 1S225BD TAX LOT 1105, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON FOR THE MILLER HILL ROAD AQUIFER STORAGE AND RECOVERY PROJECT.

WHEREAS, Tualatin Valley Water District owns real property known as 1S225BD Tax Lot 1106, Willamette Meridian, Washington County, Oregon (District Property), adjacent to S.W. Miller Hill Road, and has designed and constructed an Aquifer Storage and Recovery Well (ASR Well), along with necessary structures, pumps, piping and mechanical and electrical equipment, to connect the ASR Well to the District’s drinking water system to serve users of that system, as part of the Miller Hill Road Aquifer Storage and Recovery Project (ASR Project); and

WHEREAS, the contiguous real property to the north of the District Property, known as 1S225BD Tax Lot 1105, Willamette Meridian, Washington County, Oregon (Gray Property), as more fully described in Exhibit 1 hereto and incorporated by reference, is owned by Tim Gray (Owner), upon which is situated a well and groundwater system equipment, including pumps and pipes (Gray Well); and

WHEREAS, the District previously determined by Resolution 26-18, attached hereto as Exhibit 2 and incorporated by reference, that the location and operation of the Gray Well has an adverse impact on the water quality and functioning of the ASR Well, and that it is in the best interest of the District to acquire all rights to the Gray Well, including any certificate, permit or right to take water from the point of appropriation, to decommission the well in accordance with Oregon statutes and administrative rules so that it cannot be used, all in order to protect the health, safety and welfare of the District’s water system users; and

WHEREAS, by Resolution 26-18 the District declared the need for a temporary easement over and upon the Gray Property to access the Gray Well to decommission it in accordance with applicable statutes and regulations; and

WHEREAS, the District has authority under ORS 264.240 and Oregon Revised Statutes Chapter 35 to acquire interests in real property by purchase or through eminent domain proceedings; and

WHEREAS, upon further consideration of the decommissioning of the Gray Well, the continued use of the ASR Project on the contiguous District Property, and the need for additional land for use in conjunction with the ASR Project, the Board determines, consistent with the powers and purposes of the District, that it is necessary for the economic well-being, public health, safety and welfare of the District and members of the public it serves, that the District acquire the Gray Property in fee title, to decommission the Gray Well in accordance with Oregon law so that the well cannot be used and to use the Gray Property for the ASR Project; and

WHEREAS, the Board of Commissioners has determined that acquiring fee title to the Gray Property is necessary to achieve the purposes of the ASR Project on the contiguous District Property and to allow ASR Project uses on the Gray Property, and that this proposed use and ASR Project are planned and located in a manner that will be most compatible with the greatest public benefit and the least private injury, and being fully advised.
NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

**Section 1:** The above recitals are adopted herein and incorporated by reference.

**Section 2:** It is necessary for the preservation of economic well-being, public health, safety and welfare of the District and members of the public served that the District acquire fee title to the Gray Property, as more fully described in Exhibit 1 attached hereto and incorporated by reference, through exercise of the power of eminent domain.

**Section 3:** Resolution 26-18 is hereby superseded and of no further effect.

**Section 4:** District staff and legal counsel are authorized to retain valuation experts, negotiators and other consultants, with any reports or appraisals to be prepared under the auspices of legal counsel, for initiation of legal proceedings as described below.

**Section 5:** The District shall in good faith attempt to negotiate a purchase and sale agreement for the Gray Property with the owner and applicable interest holders, and pay just compensation (and, to the extent applicable, damages therefore) in accordance with applicable law. District staff and legal counsel, including consultants and agents, are authorized to engage in and complete negotiations with the owner and applicable interest holders.

**Section 6:** District staff and legal counsel are authorized to commence eminent domain proceedings to acquire the Gray Property and take other steps as they deem necessary to prosecute such proceedings to final determination, if negotiations reach impasse.

**Section 7:** That upon the trial of any suit or action instituted to acquire the Gray Property, legal counsel, acting for and on behalf of the District, are authorized to make such stipulation, agreement or admission as in their judgment may be in the best interest of the District, and to take possession of the Gray Property at such time as appropriate in their judgment, without necessity of further Board approval.

Approved and adopted at a special meeting held on the 4th day of June 2019.

_____________________________   _______________________________
Bernice Bagnall, President          Todd Sanders, Secretary
Exhibit 1

LEGAL DESCRIPTION

A tract of land in the Southeast Quarter of the Northwest Quarter of Section 25, Township 1 South, Range 2 West of the Willamette Meridian, in the County of Washington and State of Oregon, described as follows:

Beginning at an iron rod on the West line of that certain tract of land conveyed to Richard N. and Ruby I. Watts by Deed recorded in Book 844, Page 701, Washington County Deed Records, which point bears South 00° 26’ West 740.0 feet, South 89° 34’ West 718.44 feet (also said to be 719.04 feet) and North 00° 08’ 57” West (also said to be North 00° 04’ 3” West) 374.0 feet from the Northeast corner of the Southeast Quarter of the Northwest Quarter of said Section 25; and running thence, North 00° 08’ 57” West 273.67 feet to an iron rod on the Southerly line of Gassner Road (County Road No. 1941) which iron rod is 35 feet distance from the centerline of said road when measured at right angles, and which point is also in line with an iron rod on the Southerly line of said Gassner Road; thence, North 71° 09’ 07” East parallel to and 35 feet distance from (when measured at right angles) the centerline of said road 56.47 feet to a point opposite Engineers’ centerline station 6 + 86.58 PT; thence continuing 35 feet distance from and parallel to said centerline along the arc of a 537.96 foot radius curve to the right through a central angle of 16° 36’ 42” 155.97 feet, the chord of which bears North 79° 27’ 28” East 155.42 feet to an iron rod; thence along the arc of a 15 foot radius curve to the right through a central angle of 119° 12’ 25” 31.21 feet, the chord of which bears South 32° 37’ 53” East 25.88 feet to an iron rod; thence running in a non-tangent direction along the West line of Miller Hill Road (County Road No. 2154) South 00° 20’ 57” West 104.31 feet to an iron rod; thence continuing along the West line of said Miller Hill Road and along the arc of a non-tangent 225 foot radius curve to the left through a central angle of 63° 08’ 24” 247.95 feet and the chord of which bears South 31° 05’ 35” East 235.59 feet to an iron rod; thence North 88° 44’ 24” West 340.60 feet to the point of beginning.
RESOLUTION NO. 26-18

A RESOLUTION DECLARING PUBLIC NECESSITY TO ACQUIRE A WELL, EQUIPMENT, ATTENDANT WATER RIGHT AND TEMPORARY ACCESS EASEMENT ON AND UNDER THE REAL PROPERTY KNOWN AS 1S225BD TAX LOT 01105, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON.

WHEREAS, Tualatin Valley Water District owns real property known as 1S225BD Tax Lot 1106, Willamette Meridian, Washington County, Oregon, adjacent to SW Miller Hill Road and has designed and constructed an Aquifer Storage and Recovery (ASR) well along with necessary structures, pumps, piping, mechanical and electrical equipment to connect the ASR Well to the District’s drinking water system to serve users of that system; and

WHEREAS, the contiguous real property to the north of the District’s property is known as 1S225BD Tax Lot 1105, Willamette Meridian, Washington County, Oregon, owned by Tim Gray and Marianne Gray (the “Gray Property”), upon which are situated a well and groundwater system equipment including pumps and pipes that, if used, would access groundwater for beneficial use; and

WHEREAS, the District has determined that the location and operation of the well on the Gray Property has an adverse impact on the water quality and functioning of the District’s ASR well and that it is in the best interest of the District to acquire all rights to the well on the Gray Property, including any certificate, permit or right to take water from the point of appropriation, to decommission the well in accordance with Oregon statutes and administrative rules so that it cannot be used, all in order to protect the health, safety and welfare of the District’s water system users; and

WHEREAS, the District needs a temporary easement over and upon the Gray Property as set forth on Exhibit A, attached hereto and incorporated by reference, to access the well to disinfect and decommission it in accordance with statutes and regulations; and

WHEREAS, the District has authority under ORS 264.240 and Oregon Revised Statutes Chapter 35 to acquire interests in real property by purchase or through eminent domain proceedings; and

WHEREAS, the Board determines, consistent with the powers and purposes of the District, that it is necessary for the economic well-being, public health, safety and welfare of the District and members of the public it serves that District acquire the well; all equipment, pumps, pipes, mechanical and electrical equipment; all attendant water certificates, permits and rights of use at that point of appropriation; and a temporary access easement to enter upon the Gray Property to disinfect and decommission the subject well in accordance with Oregon law so that the well cannot be used (collectively, the “Property Interests”) and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: It is necessary for the preservation of economic well-being, public health, safety and welfare of the District and members of the public served that the District commence the acquisition process for the Property Interests as set forth on Exhibit A, attached hereto and incorporated by reference, through exercise of the power of eminent domain.
Section 2: That District staff and legal counsel are authorized to retain valuation experts, negotiators, and other consultants with any reports or appraisals to be prepared under the auspices of the District’s legal counsel, for initiation of legal proceedings as described below.

Section 3: The District shall in good faith attempt to negotiate a purchase and sale agreement for the Property Interests with the owners (and, to the extent applicable, any other interest holders) and pay just compensation therefore in accordance with applicable law. District staff and legal counsel, including consultants and agents, are authorized to engage in and complete negotiations with the owners and any applicable interest holders.

Section 4: District staff and legal counsel are authorized to commence eminent domain proceedings to acquire the Property Interests and take other steps as they deem necessary to prosecute to final determination if negotiations reach impasse.

Section 5: That upon the trial of any suit or action instituted to acquire the Property, legal counsel acting for and on behalf of District are authorized to make such stipulation, agreement or admission as in their judgment may be for the best interest of the District and to take possession of the Property Interests at such time as appropriate in their judgment without necessity of further Board approval.

Section 6: That upon completion of condemnation proceedings or negotiations, District staff and legal counsel are authorized to retain consultants and vendors as needed to disinfect and decommission the well on the Gray Property.

Approved and adopted at a regular meeting held on the 24th day of October, 2018.

Bernice Bagnall, President

Todd Sanders, Secretary
RESOLUTION NO. 18-19

A RESOLUTION ADOPTING THE BUDGET AND MAKING APPROPRIATIONS FOR THE TUALATIN VALLEY WATER DISTRICT FOR THE 2019-21 BIENNium.

WHEREAS, pursuant to the requirements of ORS Chapter 294, the Board of Commissioners of the Tualatin Valley Water District is required to adopt the budget and make appropriations for the District for the 2019-21 biennium; and

WHEREAS, on May 30, 2019, following public notice and hearing thereon, the duly appointed and authorized Budget Committee unanimously approved the biennial budget proposed for 2019-21, now on file at the District office, and recommended adoption by the Board of Commissioners; and being fully advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: In compliance with Oregon Local Budget Law under ORS 294, the Board of Commissioners of the Tualatin Valley Water District hereby adopts the biennial budget of the District as approved on May 30, 2019 by the Budget Committee of Tualatin Valley Water District.

Section 2: Establish two new budgetary funds for the District called Debt Proceeds and Willamette Water Supply System.

Section 3: That the amounts for the biennium beginning July 1, 2019 and for the purposes shown are hereby appropriated as follows:

GENERAL FUND

<table>
<thead>
<tr>
<th>Appropriations</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Services</td>
<td>$43,536,651</td>
</tr>
<tr>
<td>Materials and Services</td>
<td>42,131,195</td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>212,200</td>
</tr>
<tr>
<td>Special Payments</td>
<td>21,446,000</td>
</tr>
<tr>
<td>General Operating Contingency</td>
<td>15,000,000</td>
</tr>
<tr>
<td>Transfer to Other Funds</td>
<td>78,482,822</td>
</tr>
<tr>
<td>Appropriations Total (General Fund)</td>
<td>$200,808,868</td>
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CAPITAL IMPROVEMENT FUND

<table>
<thead>
<tr>
<th>Appropriations</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Outlay</td>
<td>$179,522,721</td>
</tr>
<tr>
<td>Appropriations Total (Capital Improvement Fund)</td>
<td>$179,522,721</td>
</tr>
</tbody>
</table>
CAPITAL RESERVE FUND

Appropriations:
Transfer to Other Funds $179,522,721
Appropriations Total (Capital Reserve Fund) $179,522,721

DEBT PROCEEDS FUND

Appropriations:
Transfer to Other Funds $25,000,000
Appropriations Total (Debt Proceeds Fund) $25,000,000

CUSTOMER EMERGENCY ASSISTANCE

Appropriations:
Materials and Services $33,000
Appropriations Total (Customer Emergency Assistance Fund) $33,000

WILLAMETTE RIVER WATER COALITION FUND

Appropriations:
Materials and Services $167,000
Appropriations Total (Willamette River Water Coalition Fund) $167,000

WILLAMETTE INTAKE FACILITIES FUND

Appropriations:
Materials and Services $346,615
Capital Outlay 7,557,825
General Operating Contingency 36,000
Appropriations Total (Willamette Intake Facilities Fund) $7,940,440

WILLAMETTE WATER SUPPLY SYSTEM FUND

Appropriations:
Materials and Services $1,714,154
Capital Outlay 217,296,865
General Operating Contingency 173,000
Appropriations Total (Willamette Water Supply System Fund) $219,184,019

TOTAL APPROPRIATIONS: $812,178,769

Section 4: That the Budget Officer, in accordance with ORS 294.458(2), shall file with the Oregon Department of Revenue a true copy of this resolution and the Exhibit A Notice of Budget Hearing attached hereto and by this reference incorporated herein.

Approved and adopted at a regular meeting held on the 19th day of June 2019.

_______________________________
Bernice Bagnall, President

_______________________________
Jim Doane, Acting Secretary
A public meeting of the Tualatin Valley Water District will be held on June 19, 2019 at 7:00 pm at 1850 SW 170th Avenue, Beaverton, Oregon, 97003. The purpose of this meeting is to discuss the budget for the fiscal year beginning July 1, 2019 as approved by the Tualatin Valley Water District Budget Committee. A summary of the budget is presented below. A copy of the budget may be inspected at the Tualatin Valley Water District, between the hours of 8:00 a.m. and 4:30 p.m. or online at www.tvwd.org/budget. This budget is for a biennial budget period 2019-21.

Contact: Tod Burton, Financial Planning & Debt Project Mgr. Ph: (503) 848-3040 Email: tod.burton@tvwd.org

### FINANCIAL SUMMARY - RESOURCES

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual Amount 2015-17</th>
<th>Revised Budget This Biennium 2017-19</th>
<th>Approved Budget Next Biennium 2019-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Fund Balance/Net Working Capital</td>
<td>85,686,250</td>
<td>102,816,660</td>
<td>132,950,815</td>
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<tr>
<td>Fees, Licenses, Permits, Fines, Assessments &amp; Other Service Charges</td>
<td>101,190,314</td>
<td>122,275,000</td>
<td>149,248,466</td>
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<tr>
<td>Federal, State and All Other Grants, Gifts, Allocations and Donations</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Revenue from Bonds and Other Debt</td>
<td>0</td>
<td>0</td>
<td>25,000,000</td>
</tr>
<tr>
<td>Interfund Transfers / Internal Service Reimbursements</td>
<td>119,335,217</td>
<td>202,658,328</td>
<td>293,200,159</td>
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<tr>
<td>All Other Resources Except Current Year Property Taxes</td>
<td>42,257,364</td>
<td>80,162,999</td>
<td>251,443,935</td>
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<tr>
<td>Current Year Property Taxes Estimated to be Received</td>
<td>0</td>
<td>0</td>
<td>25,000,000</td>
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<tr>
<td><strong>Total Resources</strong></td>
<td><strong>348,469,145</strong></td>
<td><strong>507,912,987</strong></td>
<td><strong>851,843,395</strong></td>
</tr>
</tbody>
</table>

### FINANCIAL SUMMARY - REQUIREMENTS BY OBJECT CLASSIFICATION

<table>
<thead>
<tr>
<th>Description</th>
<th>Actual Amount 2015-17</th>
<th>Revised Budget This Biennium 2017-19</th>
<th>Approved Budget Next Biennium 2019-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Services</td>
<td>31,219,216</td>
<td>40,052,089</td>
<td>43,536,651</td>
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<tr>
<td>Materials and Services</td>
<td>33,746,999</td>
<td>37,429,378</td>
<td>44,391,964</td>
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<tr>
<td>Capital Outlay</td>
<td>61,764,542</td>
<td>174,881,292</td>
<td>404,589,611</td>
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<tr>
<td>Debt Service</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Special Payments</td>
<td>336,823</td>
<td>1,760,350</td>
<td>21,446,000</td>
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<tr>
<td>Interfund Transfers</td>
<td>112,873,465</td>
<td>195,494,340</td>
<td>283,005,543</td>
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<tr>
<td>Contingencies</td>
<td>0</td>
<td>0</td>
<td>15,209,000</td>
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<tr>
<td>Unappropriated Ending Balance and Reserved for Future Expenditure</td>
<td>108,528,100</td>
<td>43,553,638</td>
<td>39,664,626</td>
</tr>
<tr>
<td><strong>Total Requirements</strong></td>
<td><strong>348,469,145</strong></td>
<td><strong>507,912,987</strong></td>
<td><strong>851,843,395</strong></td>
</tr>
</tbody>
</table>

### FINANCIAL SUMMARY - REQUIREMENTS AND FULL-TIME EQUIVALENT EMPLOYEES (FTE) BY ORGANIZATIONAL UNIT OR PROGRAM

<table>
<thead>
<tr>
<th>Name of Organizational Unit or Program</th>
<th>FTE 2015-17</th>
<th>FTE 2017-19</th>
<th>FTE 2019-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Services Department</td>
<td>5,273,173</td>
<td>5,304,102</td>
<td>7,318,326</td>
</tr>
<tr>
<td>Customer Service Department</td>
<td>7,837,044</td>
<td>10,771,644</td>
<td>11,619,810</td>
</tr>
<tr>
<td>Engineering &amp; Operations Department</td>
<td>18,725,005</td>
<td>22,736,722</td>
<td>25,024,992</td>
</tr>
<tr>
<td>Finance Department</td>
<td>8,760,436</td>
<td>8,173,430</td>
<td>8,559,876</td>
</tr>
<tr>
<td>Water Supply Program</td>
<td>2,238,506</td>
<td>3,949,419</td>
<td>4,870,901</td>
</tr>
<tr>
<td>Information Technology Services Department</td>
<td>9,513,149</td>
<td>10,567,941</td>
<td>15,209,000</td>
</tr>
<tr>
<td>Water Purchases (General Fund)</td>
<td>18,744,720</td>
<td>22,351,335</td>
<td>24,364,000</td>
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<tr>
<td>Capital Improvements Fund</td>
<td>26,287,531</td>
<td>38,611,964</td>
<td>179,522,721</td>
</tr>
<tr>
<td>Willamette Water Supply Program Fund</td>
<td>38,506,648</td>
<td>139,426,441</td>
<td>0</td>
</tr>
<tr>
<td>Capital Reserve Fund</td>
<td>105,149,954</td>
<td>151,120,797</td>
<td>207,101,734</td>
</tr>
<tr>
<td>Bond Construction Fund</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Debt Proceeds Fund</td>
<td>0</td>
<td>0</td>
<td>25,000,000</td>
</tr>
<tr>
<td>Revenue Bond Debt Service Fund</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>Customer Emergency Assistance</td>
<td>39,868</td>
<td>56,782</td>
<td>45,805</td>
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<tr>
<td>Willamette River Water Coalition Fund</td>
<td>348,509</td>
<td>128,716</td>
<td>188,948</td>
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<tr>
<td>Willamette Intake Facilities Fund</td>
<td>0</td>
<td>2,575,672</td>
<td>7,940,440</td>
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<tr>
<td>Willamette Water Supply System Fund</td>
<td>0</td>
<td>0</td>
<td>219,184,019</td>
</tr>
<tr>
<td>Non-Departmental / Non-Program</td>
<td>116,557,378</td>
<td>97,192,903</td>
<td>125,533,683</td>
</tr>
<tr>
<td><strong>Total Requirements</strong></td>
<td><strong>348,469,145</strong></td>
<td><strong>507,912,987</strong></td>
<td><strong>851,843,395</strong></td>
</tr>
<tr>
<td><strong>Total FTE</strong></td>
<td><strong>133</strong></td>
<td><strong>139</strong></td>
<td><strong>144</strong></td>
</tr>
</tbody>
</table>
Total Approved 2019-21 Budget General Fund operating budget expenditures increase 11.5% for the two-year period. The approved appropriations support personnel services costs, including two staff positions in the Water Supply Program Department and four limited-term staff positions in the Customer Service Department to provide support on the Customer Information Systems project. Materials and services costs include a 9.0% increase in purchased water and pumping power costs for wholesale water purchased from the City of Portland Water Bureau and purchases from the District’s participation in the Joint Water Commission.

Total capital outlay expenditures increase 131%, driven by the timing and scope of the District’s participation in the Willamette River Water Supply Program (WWSP) and serving as manager agency for both the Willamette Water Supply System (WWSS) and Willamette Intake Facilities (WIF) joint ventures. Approved In-District capital improvements plan (CIP) expenditures continue to be planned for reservoir, pump station, and pipeline construction and upgrades. No debt service is included in the Approved 2019-21 Budget. The District anticipates closing its loan with the US Environmental Protection Agency Water Infrastructure Finance and Innovation Act (WIFIA) program during calendar year 2019 and begin taking draws budgeted at $25 million during the 2019-21 biennium.

Transfers to other funds, although not an expenditure category, represents the largest appropriation item in the Approved 2019-21 Budget at $283 million. The District uses a Capital Reserve Fund to hold substantially all current and future District reserves. This fund supports the in-District CIP and the District’s share of the WWSS and WIF. Transfers to the Capital Reserve Fund are initiated through the General Fund, and during the biennium transfers out from the fund will support the District’s capital project expenditures. General Fund operating contingency is budgeted at $15 million and contingencies of $173,000 and $36,000 are approved for the WWSS and WIF funds respectively. Contingency can only be accessed through approval by resolution by the District Board of Commissioners.

Total Approved 2019-21 Budget resources, including transfers, reserves and fund balance increase 67.7%. Primary revenues to support operating, WWSS, WIF and in-District CIP expenditures include water rates and service fees, contributed capital from WWSS and WIF partners, contract reimbursements for services provided to other entities, and meter and services installation fees paid by customers/developers. Water services charges and fees increase 22.1% based on projected rates and fees for services, projected water demand, and customer growth. System development charges are conservatively projected to increase 6.4% based on development trends. WWSS and WIF partners pay their portion of water supply project expenditures. The Approved 2019-21 Budget includes $224.8 million in contributed capital and reimbursements by WWSS/WIF partners.
RESOLUTION NO. 19-19

A RESOLUTION ENDORSING THE ANNEXATION TO THE TUALATIN VALLEY WATER DISTRICT OF A SINGLE PROPERTY LOCATED AT TAX LOT 100, T1NR2W, SECTION 14, WILLAMETTE MERIDIAN, AT 21627 NW WEST UNION ROAD, IN WASHINGTON COUNTY.

WHEREAS, this matter came before the Board of Commissioners of the Tualatin Valley Water District, hereinafter referred as the Board; and

WHEREAS, Ashok and Sumathi Raj (Owners) are the owners of a parcel known as Tax Lot 100, Section 14, T1NR2W, Willamette Meridian in Washington County. The Owners have petitioned to annex this parcel to the District as set forth in Exhibit B, attached hereto and incorporated by reference; and

WHEREAS, the Board is required by ORS 198.850 to consider an annexation upon receiving the necessary consent in writing from the owner of the property and endorse the annexation if deemed in the best interest of the District; and

WHEREAS, the annexation request is subject to approval by the Washington County Board of County Commissioners in accordance with State statutes, Washington County ordinances and Metro ordinances prior to water services being provided by TVWD; and

WHEREAS, the Board has received a request for such an annexation as set forth in Exhibit A, Exhibit B and Exhibit C, attached hereto and incorporated by reference; and being fully advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The Board, by this resolution, endorses the proposed annexation as described in Exhibit A, Exhibit B and Exhibit C, attached hereto and incorporated by reference.

Section 2: The Board hereby directs and authorizes District staff to take all action to file this resolution with Board of County Commissioners of Washington County to cause the annexation of the property to the District.

Section 3: The Board requests the Board of County Commissioners conduct the annexation process as required by law and approve annexation of the property to the District.

Approved and adopted at a regular meeting held on the 19th day of June 2019.

_________________________________  _______________________________________
Bernice Bagnall, President                Jim Doane, Acting Secretary
EXHIBIT A

LEGAL DESCRIPTION: Real property in the County of Washington, State of Oregon, described as follows:

Beginning at the Southeast corner of Tract No. Twenty (20) of lands platted as Bendemeer according to the duly recorded plat thereof on record in said Washington County, Oregon; thence Westerly along the South boundary line of said tract No. Twenty (20) One Hundred Forty five and 664/1000 feet (145.664); thence Northerly about Thirteen Hundred Eighteen and 62/100 feet (1318.62) to a point on the North boundary line of Tract No. Nineteen (19), of Bendemeer Ninety-two and 26/100 feet (92.26) westerly from the Northeast corner of said tract No. Nineteen (19) of Bendemeer; thence Easterly along the North boundary line of said tract No. Nineteen (19) of Bendemeer to the Northeast corner of said tract No. Nineteen (19); thence Southerly along the East boundary line of Tract numbered Nineteen (19) and Twenty (20) to the Southeast corner of Tract No. Twenty (20) the point of beginning.

NOTE: This legal description was created prior to January 1, 2008.
To: Tualatin Valley Water District
   Board of Commissioners

From: Ashok Raj & Sumathi Raj
      3295 NW 114th Ter,
      Portland, OR 97229

Subject: Re: Request for water from TVWD

Dear Sir/Madam

We are planning to build a new home in our land located on West Union. The property address is 21627 NW West Union Road. As we understand our property is outside of the urban growth boundary and designated Urban Reserve. We are zoned AF5. The extraterritorial waterline extension being sought would not affect any urban service agreements, annexation plans, planning agreements or public facility plans that we are aware of.

We spoke to one of our neighbor in 21541 at the end of Bendemeer whose water meter is located just around the corner of our property at West Union and Bendemeer, and we also spoke to another neighbor Beverly Gideon residing at 21835 NW West Union Road, they had mentioned their water pressure dropped from 22 gpm to 1 ½ gpm and they have now water from the district. Several others also said the ground water is almost dried up or had smell of Sulphur. It appeared given the conditions around the neighbouring lots it made sense rather than drilling which does not guarantee ample water, we would love to get water from TVWD instead.

We hereby humbly request the approval of the Board of Commissioners to approve moving forward with our request.

Sincerely

[Signature]

Ashok Raj & Sumathi Raj

05/31/2019
RESOLUTION NO. 20-19

A RESOLUTION REAFFIRMING THE DECLARATION OF PUBLIC NECESSITY IN RESOLUTION 20-18 TO ACQUIRE PERMANENT EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS FOR PIPELINE SECTION PLM_5.2 FOR THE WILLAMETTE WATER SUPPLY SYSTEM AND CONTINUATION OF CONDEMNATION PROCEEDINGS.

WHEREAS, on July 18, 2018, the Board of Commissioners of the Tualatin Valley Water District approved Resolution 20-18 declaring public necessity to acquire permanent easements and temporary construction easements for pipeline section PLM_5.2 (“Real Property Interests”) by the power of eminent domain for the Willamette water supply system, and identified the necessary parcels attached hereto as Exhibit 1 and incorporated by reference (“Properties”); and

WHEREAS, Resolution 20-18 directed TVWD staff, counsel, consultants and agents to begin the condemnation process and negotiate for acquisition of the Real Property Interests and to make offers of just compensation in accordance with ORS 35.346; and

WHEREAS, TVWD through staff, consultants and agents have made the required offers of just compensation to the Property owners and the 40-day offer period has expired; and

WHEREAS, the Property owners have rejected TVWD’s offers, and staff and counsel have concluded that negotiations are at an impasse; and

WHEREAS, Resolution 20-18 required TVWD staff and counsel to report back to the Board if negotiations were unsuccessful for authorization to continue condemnation proceedings prior to filing a complaint in Circuit Court as specified in Oregon law; and

WHEREAS, there remains a need to proceed with acquisition of the Real Property Interests as set forth in Resolution 20-18, and the Board reaffirms those findings and conclusions, and being fully advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The Board hereby reaffirms Resolution 20-18, attached hereto as Exhibit 2 and incorporated by reference herein, whereby it declared public necessity to acquire the Real Property Interests in the identified Properties in Exhibit 1, attached hereto and incorporated by reference, for the Willamette water supply system and that the location of the easements achieves the greatest public benefit at the least private injury.

Section 2: TVWD staff and counsel are authorized to continue condemnation proceedings by filing a complaint in condemnation and to take all steps as they deem necessary and appropriate to obtain final judgment vesting the appropriate title to the Real Property Interests in TVWD.
**Section 3:** That upon the trial of any suit or action to acquire the Real Property Interests, TVWD counsel is authorized to make such stipulation, agreement or admission as in their judgment may be in the best interest of TVWD and to take possession of the Real Property Interests at such time as appropriate in their judgment without necessity of further Board approval.

Approved and adopted at a regular meeting held on the 19th day of June 2019.

_______________________________  __________________________________
Bernice Bagnall, President                Jim Doane, Acting Secretary
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<th>Map Number</th>
<th>Owner</th>
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<th>Easement Types</th>
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</table>

Legend

- **PLM_5.2 Alignment**
- Permanent Easement Area
- Temporary Easement Area
- Complaint Properties
- Tax Lot Boundary

Date: 6/13/2019

Exhibit 1
AFTER RECORDING RETURN TO:
Tualatin Valley Water District
Attn: Chief Executive Officer
1850 SW 170th Avenue
Beaverton OR 97003

UNTIL A CHANGE IS REQUESTED
SEND TAX STATEMENTS TO:
No change in tax statements

File #: PLM_5.2-040
Map and Tax Lot #: 1S2360000900

This space is reserved for recorder’s use.

WATER SYSTEM FACILITIES EASEMENT

This Water System Facilities Easement is made this ___ day of ____________, 20___,
by and between Dean K. Sparks (“Grantor”), Tualatin Valley Water District, a domestic water
supply district, organized under ORS Chapter 264 and the City of Hillsboro (hereinafter
collectively referred to as “Grantees”).

Grantor and Grantees agree as follows:

1. **Grant of Permanent Easement.** Grantor hereby grants to Grantees, jointly and severally,
   their successors, and heirs a perpetual and non-exclusive easement (“Easement”) on, over,
   and under a portion of that certain real property described in Exhibit A (the “Property”),
   which portion is depicted on Exhibit B (the “Easement Area”), both of which are attached
   hereto and incorporated herein by this reference. The Easement shall be used by Grantee only
   for the purposes and as provided herein.

2. **Right of Entry and Use.** Subject to the terms of this Easement, Grantees shall have the right
   to enter upon and use the Easement Area for the purposes of constructing, operating,
   maintaining, repairing, replacing, and modifying water pipelines and other water facilities,
   and all appurtenances incident thereto (“Water System Facilities”). Within the Easement
   Area, Grantee shall have the perpetual right to cut, trim, control, and remove trees, brush, and
   other obstructions which injure or interfere with the Grantee’s use or occupation of the
   Easement or Grantee’s right to construct, reconstruct, install, use, operate, maintain, repair,
   patrol, replace, upgrade, or remove its improvements, without liability for damages arising
   there from. The use of the Easement by Grantees shall be in compliance with applicable
   laws.

Page 1 – WATER SYSTEM FACILITIES EASEMENT
there from. The use of the Easement by Grantees shall be in compliance with applicable laws.

3. **Temporary Easement.** During construction of the Water System Facilities, Grantor hereby grants a temporary construction easement ("TCE") on, over, and under the Property as described and depicted in Exhibit C (the "TCE Area") for such reasonable period to perform the work. Grantor acknowledges construction will occur in multiple phases prior to 2026. Unless otherwise specified in writing, this TCE takes effect upon thirty (30) days advanced written notice to Grantor and extends for two years from this date, which may be extended up to two (2) six (6)-month extensions with a pro rata compensation.

4. **Restrictions on Grantees Use of Easement.** Grantees shall use good faith efforts to not interfere with Grantor’s use and enjoyment of the Property outside the Easement Area or otherwise cause operations on Grantor’s Property outside the Easement Area to be interfered with or interrupted by the use of the Easement by Grantees. Grantees shall maintain reasonable access to Grantor’s property during construction, maintenance, repair, replacement, or modification of the Water System Facilities.

5. **Non-Exclusive Grant; Use of the Easement.** The Easement herein shall be non-exclusive for the purposes stated herein, and Grantor may not use the Easement Area inconsistent with the terms of this easement or permit third parties to use any portion of the Easement Area without the Grantees’ prior written approval, which shall not be unreasonably withheld, delayed or conditioned, provided:

   a) The Grantor or approved third party shall provide a written request to the Grantees to use the Easement Area so that the Grantees’ right to construct, use, access, repair, and maintain the Water System Facilities is not impaired; and

   b) The Grantor or approved third party assumes full responsibility in the event the Water System Facilities are damaged or impaired by their actions, in which case the Grantor or such third party shall immediately remedy the damage or impairment and indemnify Grantees from all expenses, costs, damages or impacts associated with such remedy. Grantees reserve the right to make necessary repairs or remedies with their own forces or contractors with the cost to be reimbursed by Grantor or third party; and

   c) All design and construction plans must be approved in writing by the Grantees in advance and construction shall require Grantees’ inspection and approval; and

   d) The Grantor or approved third party complies with Section 6.

6. **Grantor’s Rights and Restrictions.**

   a) **Grantor’s Rights.** Grantor shall retain the right to make full use of the Property outside the Easement Area provided that such use does not interfere with the rights of the Grantee or Grantee’s use of the Easement Area or endanger
Grantee’s Water System Facilities, except as provided in Section 6.b. below. Agricultural use within the Easement Area is permissible provided such use conforms to Section 6.b. below. Grantor shall only perform or permit other persons or entities to perform construction or other work within the Easement Area after prior written approval by Grantee and only if such construction or other work is performed in accordance with the terms of this Easement, all applicable laws, rules and regulations, and Grantee’s rules and regulations as they may be modified from time to time. With Grantor’s written request for approval, Grantor shall submit drawings, specifications, reports, and/or other applicable information describing proposed work with sufficient detail to be reviewed by Grantee. Notwithstanding the provisions of Section 6.b. below, Grantor reserves use of the Easement, including installing driveways that are located at least five (5) feet above the Water System Facilities, fences and gates (Grantor must provide Grantee means to unlock gates) with an embedment depth of less than twenty-four (24) inches, irrigation and drain piping crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance, and residential level (200 amp or less) electrical service line(s) crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance (electrical line is required to be placed in a conduit for a minimum length of twenty (20) feet centered over the Water System Facilities and crossing at substantially right angles to the Water System Facilities) provided, however, that the exercise of such rights, in the reasonable opinion of Grantee, does not impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, repair and reasonable access. Grantor must request a locate from Grantee prior to installation to ensure proper distance from Grantee’s Water System Facilities.

b) **Restrictions on Grantor.** Within the Easement Area, unless otherwise approved in advance in writing by the Grantee, Grantor agrees not to construct or permit others to use, construct, install, store, plant, change grade, or create any improvements, structures, impoundments, or stockpile any materials that in the sole opinion of Grantee will impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, and reasonable access.

Grantor agrees not to store any materials including hazardous materials, fuel, oil, and chemicals on, over, under, or in the Easement Area. Grantor agrees not to store personal property, including but not limited to, derelict personal property, refuse piles, vehicles, equipment, or machinery in the Easement Area.

Grantor agrees not to plant trees within the Easement Area and to limit any plants requiring rooting depths or cultivation within the Easement Area to avoid any ground disturbance or excavation exceeding twenty-four (24) inches in depth.
Grantor agrees not to plant trees or other plants within 10 feet of any above-ground portion of the Water System Facilities. Grantor agrees not to obstruct access to Grantee’s above-ground Water System Facilities.

Grantor agrees not to change the grade within the Easement Area or drainage patterns within the Easement Area or adjacent to the Easement Area during the term of this Easement by adding, removing, or displacing any more than six (6) inches of material from the surface. Grantee agrees to provide as-built drawings showing existing grades for elevation reference purposes. Grantor also agrees not to impair any lateral or sub-adjacent support for the Water System Facilities within the Easement Area.

Grantor agrees not to install or permit others to install within the Easement Area any utilities which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep.

Grantor agrees not to install or permit others to install within the Easement Area electric utilities, service lines, or transformers above the 200-amp residential service level which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep. If Grantor desires to cross or longitudinally use the Easement Area, Grantor agrees to apply to Grantee in writing, provide drawings with specifications for any installation of an electric utility, service line, or transformer greater than twenty-four (24) inches deep, undergo a review and approval process, and must receive written permission from Grantee. Electrical conductors parallel to the Water System Facilities need to be placed in conduit agreeable to the Grantee and shall be no greater than twenty-four (24) inches deep.

Grantor agrees not to place or permit others to place a load of any kind over the Water System Facilities where the weight of the load could cause damage of any type to the Water System Facilities.

Grantor agrees not to impound water, change drainage patterns or create ponds, reservoirs, structures, or facilities designed to hold water over the Easement Area, unless the prior written consent of Grantee is provided.

Within the Easement Area, Grantor agrees that periodic easement encroachment review by Grantees may be performed, and Grantor agrees to remove any item unacceptable under this Easement or any other item deemed detrimental to the Water System Facilities in the sole discretion of the Grantees within thirty (30) days of notification by Grantees. Should Grantor fail to remedy the situation in the time frame provided, Grantees may remove said encroachment and charge the cost of such removal to the Grantor on a time and materials basis.

c) **Restoration of Easement Following Construction.** At Grantees’ sole cost and expense, and except where modifications to the Property are otherwise agreed to
in this Agreement, Grantees shall restore the Easement Area to the same or better condition as existed in the Easement Areas as applicable prior to the commencement of such work.

Upon completion of construction and/or any subsequent maintenance activities of the herein described facility, including the use of Grantee for temporary construction and/or ingress and egress purposes, Grantee agrees to restore said land, as near as practicable to its original condition, unless otherwise agreed to in writing by the Grantor, provided, however, that all such restoration efforts shall comply with any applicable City, County, and State of Oregon codes.

Grantees shall not fence or otherwise obstruct free and open access to and travel upon the Property without written authorization from the Grantor, with the exception of construction and silt fence during construction and restoration. Grantees shall not install any surface structures unless specifically mentioned herein.

7. **Indemnification.** To the extent permitted by the Oregon Constitution and subject to the Oregon Tort Claims Act (ORS 30.260 to 30.300), Grantees shall indemnify, defend, and hold harmless Grantor and its members, managers, employees, agents, and representatives (collectively, “Indemnified Parties”) from and against any injury, expense, damage, liability, or claim, including, but not limited, to reasonable attorney fees, incurred by any Indemnified Party, arising directly or indirectly from the rights granted by Grantor to Grantees hereunder or any act or omission by Grantees or any Grantees’ Party. Grantees assume all risk arising out of their activities and use of the Easement by it and the Grantees Parties.

8. **Default and Remedies.** Time is of the essence regarding the terms of this Easement. If Grantor or Grantees violate any of the terms, covenants, or conditions of this Easement, or fails to perform any of its obligations included in this Easement in a timely manner, the non-defaulting Party(ies) shall have the right to declare a default by written notice and seek available legal or equitable remedies in the Circuit Court of the State for Oregon in Washington County. Notice shall be given by first class mail addressed to the parties as follows:

City of Hillsboro  
Water Department Manager  
150 E. Main Street  
Hillsboro, Oregon 97123

Tualatin Valley Water District  
Attn: Chief Executive Officer  
1850 S.W. 170th Avenue  
Beaverton, Oregon 97003

Dean K. Sparks  
PO Box 766  
Prineville, Oregon 97754  

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Page 5 – WATER SYSTEM FACILITIES EASEMENT
The notice shall provide a detailed statement(s) of the alleged default. If the default is not cured within 15 days from the date of notice, or if the defaulting Party has not commenced to diligently commence cure for a matter that requires more than 15 days, then the non-defaulting Party(ies) may commence litigation and seek all remedies available at law or in equity. If the Easement is terminated as a result of litigation, Grantees shall, at their sole cost and expense, return the Easement Area to Grantor in the same or better condition as existed prior to the grant of the Easement.

9. **Binding Effect.** This Easement is binding upon, inures to the benefit of and may be enforced by the Parties and their respective successors and assigns. Grantees may assign or transfer their interests without consent of Grantor. Grantee may use agents, employees, contractors, and other authorized persons for the purposes of exercising Grantees’ rights and obligations under this Easement, provided no third-party beneficiary rights are created by this Easement. This Easement shall be construed in accordance with Oregon law.

10. **Amendment.** This Easement may be amended only by an instrument in writing signed by both Grantor and Grantee. All approvals required hereunder shall be in writing.

11. **No Public Dedication.** Nothing in this Easement will be deemed to be a gift or a dedication of any portion of the Water System Facilities Easement to the general public or for the use of the general public or for any public purpose whatsoever, it being the intent of the parties that this Easement be strictly limited to and for the purposes expressed herein.

[SPACE LEFT INTENTIONALLY BLANK]

[SIGNATURES TO FOLLOW]
GRANTOR
Dean K. Sparks

By: __________________________
Name: ________________________
Its: _________________________

GRANTEE
Tualatin Valley Water District, a domestic water supply district

By: __________________________
Name: ________________________
Its: _________________________

GRANTOR

By: __________________________
Name: ________________________
Its: _________________________

GRANTEE
City of Hillsboro, a municipal corporation

By: __________________________
Name: ________________________
Its: _________________________

[Acknowledgments follow on next page]
STATE OF OREGON )
                  ) ss.
County of _________ )

This instrument was acknowledged before me on ________________, 20___, by Dean K. Sparks.

NOTARY PUBLIC for Oregon
My Commission Expires: ________________

STATE OF OREGON )
                  ) ss.
County of Washington )

This instrument was acknowledged before me on ________________, 20___, by as
Tualatin Valley Water District, a domestic water supply district organized under ORS
Chapter 264.

NOTARY PUBLIC for Oregon
My Commission Expires: ________________

STATE OF OREGON )
                  ) ss.
County of Washington )

This instrument was acknowledged before me on ________________, 20___, by as
City of Hillsboro, an Oregon municipal corporation.

NOTARY PUBLIC for Oregon
My Commission Expires: ________________

Page 8 – WATER SYSTEM FACILITIES EASEMENT
EXHIBIT A
Willamette Water Supply
August 24, 2018

Dean K. Sparks
Tax Map No. 1S236 00900

PARCEL 1 – PERMANENT UTILITY EASEMENT

A parcel of land lying in the Section 36, Township 1 South, Range 2 West of the Willamette Meridian, Washington County, Oregon and being a portion of that property conveyed Clement F. Sparks, recorded September 3, 1963 as Book 494, Page 407, in the Washington County Book of Records, said parcel being that portion of said property included in a strip of land 50.00 feet in width, lying 25.00 feet on each side of the following described Pipeline Centerline:

Beginning at Engineer’s Centerline Station 807+72.00, said point being N 88°16'49" E, 3197.30 feet from the West 1/4 corner of Section 6, Township 2 South, Range 1 West of the Willamette Meridian;

Thence along said pipeline the following courses:
S 89°29'59" W, 189.70 feet to Station 809+61.70;
thence S 83°03'43" W, 100.59 feet to Station 810+62.29;
thence S 85°38'46" W, 147.71 feet to Station 812+10.00;
thence S 71°15'21" W, 55.55 feet to Station 812+65.55;
thence S 89°18'27" W, 1151.34 feet to Station 824+16.88;
thence N 45°57'23" W, 129.72 feet to Station 825+46.60;
thence S 88°46'47" W, 441.22 feet to Station 829+87.82;
thence S 89°29'07" W, 906.98 feet to Station 838+94.79;
thence S 85°10'41" W, 149.31 feet to Station 840+44.10, said point being N 19°22'34" W, 105.21 feet from said West 1/4 corner of Section 6;

thence continuing along said pipeline S 79°51'57" W, 34.86 feet to Station 840+78.97;
thence S 76°09'13" W, 93.90 feet to Station 841+72.87;
thence S 71°04'33" W, 82.23 feet to Station 842+55.09;
thence S 68°42'19" W, 756.34 feet to Station 850+11.44;
thence S 69°44'05" W, 88.45 feet to Station 850+99.89;
thence N 68°25'58" W, 61.32 feet to Station 851+61.20;
thence N 32°20'49" W, 105.87 feet to Station 852+67.07;
thence N 30°20'05" W, 916.82 feet to Station 861+83.90;
thence N 29°58'27" W, 227.75 feet to Station 864+11.64;
thence N 74°58'27" W, 35.00 feet to Station 864+46.65;
thence N 29°58'27" W, 162.22 feet to Station 866+08.86;
thence N 33°01'07" W, 96.75 feet to Station 867+05.61;
thence N 8°01'36" E, 35.07 feet to Station 867+40.68;
thence N 38°22'58" W, 25.07 feet to Station 867+65.75;
thence N 39°09'05" W, 561.37 feet to Station 873+27.12;
thence N 40°04'53" W, 358.16 feet to a point of curvature at Station 876+85.28;
thence along the arc of a 5034.50 foot radius curve to the left with a central angle of 4°12'40" a curve distance of 370.02 feet (the chord of which bears N 42°11'13" W, 369.94 feet) to a point of tangency at Station 880+55.30 PT;
thence N 44°17'33" W, 144.60 feet to Station 881+99.90;
thence N 46°04'20" W, 126.52 feet to Station 883+26.42;
EXHIBIT A

Willamette Water Supply
August 24, 2018

thence N 49°38'24" W, 126.52 feet to Station 884+52.94;
thence N 51°25'11" W, 99.53 feet to Station 885+52.47;
thence N 57°45'20" W, 84.86 feet to Station 886+37.33;
thence N 70°25'37" W, 84.86 feet to Station 887+22.19; said point being N 51°41'57" W, 50.68 feet from the Northeast corner of the Solomon F. Shattuck D.L.C. number 51;
thence continuing along said pipeline N 83°05'54" W, 84.86 feet to Station 888+07.05;
thence N 89°26'02" W, 1401.57 feet to Station 902+08.62;
thence N 44°26'02" W, 27.23 feet to Station 902+35.85;
thence N 0°55'28" E, 224.95 feet to Station 904+60.80;
thence N 25°53'14" W, 150.00 feet to Station 906+10.80;
thence N 0°55'28" E, 94.19 feet to Station 907+04.99 and the Terminus of said pipeline description, said terminus also being N 2°51'50" W, 508.09 feet from the Southeast corner of the John Landess D.L.C. number 37.

EXCEPT THEREFROM that portion lying within the right-of-way of SW Tile Flat Rd (CR 3279) and Doc. 2015-015838 Washington County Book of Records.

The parcel of land to which this description applies contains 34,566 square feet (0.79 acre), more or less.

Basis of Bearings is the Oregon Coordinate Reference System (OCRS), Portland Zone.

PARCEL 2 – TEMPORARY CONSTRUCTION EASEMENT

That portion of said Sparks property included in a strip of land 50.00 feet in width, lying on the northerly side of the Pipeline Centerline described in Parcel 1:

EXCEPT THEREFROM that portion lying within the right-of-way of SW Tile Flat Rd (CR 3279), Doc. 2015-015838 Washington County Book of Records, and the above described Parcel 1.

The parcel of land to which this description applies contains 24,793 square feet (0.57 acre), more or less.
Exhibit 1-2
Lisa M. Dubisar, David S. Hewlett, Donald J. Hewlett
as tenants in common
1S2360000901
PLM_5.2-041
WATER SYSTEM FACILITIES EASEMENT

This Water System Facilities Easement is made this _____ day of ______________, 20___, by and between Lisa M. Dubisar, as to an undivided one-third interest, David S. Hewlett, as to an undivided one-third interest and Donald J. Hewlett, as to an undivided one-third interest, as tenant in common as to the Fee Simple interest, ("Grantor"), Tualatin Valley Water District, a domestic water supply district organized under ORS Chapter 264, and the City of Hillsboro, a municipal corporation, (hereinafter collectively referred to as "Grantees").

Grantor and Grantees agree as follows:

1. **Grant of Permanent Easement.** Grantor hereby grants to Grantees, jointly and severally, their successors, and heirs a perpetual and non-exclusive easement ("Easement") on, over, and under a portion of that certain real property described in Exhibit A (the "Property"), which portion is depicted on Exhibit B (the "Easement Area"), both of which are attached hereto and incorporated herein by this reference. The Easement shall be used by Grantee only for the purposes and as provided herein.

2. **Right of Entry and Use.** Subject to the terms of this Easement, Grantees shall have the right to enter upon and use the Easement Area for the purposes of constructing, operating, maintaining, repairing, replacing, and modifying water pipelines and other water facilities, and all appurtenances incident thereto ("Water System Facilities"). Within the Easement Area, Grantee shall have the perpetual right to cut, trim, control, and remove trees, brush, and other obstructions which injure or interfere with the Grantee’s use or occupation of the
Easement or Grantee’s right to construct, reconstruct, install, use, operate, maintain, repair, patrol, replace, upgrade, or remove its improvements, without liability for damages arising there from. The use of the Easement by Grantees shall be in compliance with applicable laws.

3. **Temporary Easement.** During construction of the Water System Facilities, Grantor hereby grants a temporary construction easement ("TCE") on, over, and under the Property as described and depicted in Exhibit C (the "TCE Area") for such reasonable period to perform the work. Grantor acknowledges construction will occur in multiple phases prior to 2026. Unless otherwise specified in writing, this TCE takes effect upon thirty (30) days advanced written notice to Grantor and extends for two years from this date, which may be extended up to two (2) six (6)-month extensions with a pro rata compensation.

4. **Restrictions on Grantees Use of Easement.** Grantees shall use good faith efforts to not interfere with Grantor’s use and enjoyment of the Property outside the Easement Area or otherwise cause operations on Grantor’s Property outside the Easement Area to be interfered with or interrupted by the use of the Easement by Grantees. Grantees shall maintain reasonable access to Grantor’s property during construction, maintenance, repair, replacement, or modification of the Water System Facilities.

5. **Non-Exclusive Grant; Use of the Easement.** The Easement herein shall be non-exclusive for the purposes stated herein, and Grantor may not use the Easement Area inconsistent with the terms of this easement or permit third parties to use any portion of the Easement Area without the Grantees’ prior written approval, which shall not be unreasonably withheld, delayed or conditioned, provided:
   
a) The Grantor or approved third party shall provide a written request to the Grantees to use the Easement Area so that the Grantees’ right to construct, use, access, repair, and maintain the Water System Facilities is not impaired; and

b) The Grantor or approved third party assumes full responsibility in the event the Water System Facilities are damaged or impaired by their actions, in which case the Grantor or such third party shall immediately remedy the damage or impairment and indemnify Grantees from all expenses, costs, damages or impacts associated with such remedy. Grantees reserve the right to make necessary repairs or remedies with their own forces or contractors with the cost to be reimbursed by Grantor or third party; and

c) All design and construction plans must be approved in writing by the Grantees in advance and construction shall require Grantees’ inspection and approval; and

d) The Grantor or approved third party complies with Section 6.

6. **Grantor’s Rights and Restrictions.**
a) **Grantor’s Rights.** Grantor shall retain the right to make full use of the Property outside the Easement Area provided that such use does not interfere with the rights of the Grantee or Grantee’s use of the Easement Area or endanger Grantee’s Water System Facilities, except as provided in Section 6.b. below. Agricultural use within the Easement Area is permissible provided such use conforms to Section 6.b. below. Grantor shall only perform or permit other persons or entities to perform construction or other work within the Easement Area after prior written approval by Grantee and only if such construction or other work is performed in accordance with the terms of this Easement, all applicable laws, rules and regulations, and Grantee’s rules and regulations as they may be modified from time to time. With Grantor’s written request for approval, Grantor shall submit drawings, specifications, reports, and/or other applicable information describing proposed work with sufficient detail to be reviewed by Grantee. Notwithstanding the provisions of Section 6.b. below, Grantor reserves use of the Easement, including installing driveways that are located at least five (5) feet above the Water System Facilities, fences and gates (Grantor must provide Grantee means to unlock gates) with an embedment depth of less than twenty-four (24) inches, irrigation and drain piping crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance, and residential level (200 amp or less) electrical service line(s) crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance (electrical line is required to be placed in a conduit for a minimum length of twenty (20) feet centered over the Water System Facilities and crossing at substantially right angles to the Water System Facilities) provided, however, that the exercise of such rights, in the reasonable opinion of Grantee, does not impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, repair and reasonable access. Grantor must request a locate from Grantee prior to installation to ensure proper distance from Grantee’s Water System Facilities.

b) **Restrictions on Grantor.** Within the Easement Area, unless otherwise approved in advance in writing by the Grantee, Grantor agrees not to construct or permit others to use, construct, install, store, plant, change grade, or create any improvements, structures, impoundments, or stockpile any materials that in the sole opinion of Grantee will impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, and reasonable access.

Grantor agrees not to store any materials including hazardous materials, fuel, oil, and chemicals on, over, under, or in the Easement Area. Grantor agrees not to store personal property, including but not limited to, derelict personal property, refuse piles, vehicles, equipment, or machinery in the Easement Area.
Grantor agrees not to plant trees within the Easement Area and to limit any plants requiring rooting depths or cultivation within the Easement Area to avoid any ground disturbance or excavation exceeding twenty-four (24) inches in depth.

Grantor agrees not to plant trees or other plants within 10 feet of any above-ground portion of the Water System Facilities. Grantor agrees not to obstruct access to Grantee’s above-ground Water System Facilities.

Grantor agrees not to change the grade within the Easement Area or drainage patterns within the Easement Area or adjacent to the Easement Area during the term of this Easement by adding, removing, or displacing any more than six (6) inches of material from the surface. Grantee agrees to provide as-built drawings showing existing grades for elevation reference purposes. Grantor also agrees not to impair any lateral or sub-adjacent support for the Water System Facilities within the Easement Area.

Grantor agrees not to install or permit others to install within the Easement Area any utilities which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep.

Grantor agrees not to install or permit others to install within the Easement Area electric utilities, service lines, or transformers above the 200-amp residential service level which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep. If Grantor desires to cross or longitudinally use the Easement Area, Grantor agrees to apply to Grantee in writing, provide drawings with specifications for any installation of an electric utility, service line, or transformer greater than twenty-four (24) inches deep, undergo a review and approval process, and must receive written permission from Grantee. Electrical conductors parallel to the Water System Facilities need to be placed in conduit agreeable to the Grantee and shall be no greater than twenty-four (24) inches deep.

Grantor agrees not to place or permit others to place a load of any kind over the Water System Facilities where the weight of the load could cause damage of any type to the Water System Facilities.

Grantor agrees not to impound water, change drainage patterns or create ponds, reservoirs, structures, or facilities designed to hold water over the Easement Area, unless the prior written consent of Grantee is provided.

Within the Easement Area, Grantor agrees that periodic easement encroachment review by Grantees may be performed, and Grantor agrees to remove any item unacceptable under this Easement or any other item deemed detrimental to the Water System Facilities in the sole discretion of the Grantees within thirty (30) days of notification by Grantees. Should Grantor fail to remedy the situation in
the time frame provided, Grantees may remove said encroachment and charge the cost of such removal to the Grantor on a time and materials basis.

c) **Restoration of Easement Following Construction.** At Grantees’ sole cost and expense, and except where modifications to the Property are otherwise agreed to in this Agreement, Grantees shall restore the Easement Area to the same or better condition as existed in the Easement Areas as applicable prior to the commencement of such work.

Upon completion of construction and/or any subsequent maintenance activities of the herein described facility, including the use of Grantee for temporary construction and/or ingress and egress purposes, Grantee agrees to restore said land, as near as practicable to its original condition, unless otherwise agreed to in writing by the Grantor, provided, however, that all such restoration efforts shall comply with any applicable City, County, and State of Oregon codes.

Grantees shall not fence or otherwise obstruct free and open access to and travel upon the Property without written authorization from the Grantor, with the exception of construction and silt fence during construction and restoration. Grantees shall not install any surface structures unless specifically mentioned herein.

7. **Indemnification.** To the extent permitted by the Oregon Constitution and subject to the Oregon Tort Claims Act (ORS 30.260 to 30.300), Grantees shall indemnify, defend, and hold harmless Grantor and its members, managers, employees, agents, and representatives (collectively, “Indemnified Parties”) from and against any injury, expense, damage, liability, or claim, including, but not limited, to reasonable attorney fees, incurred by any Indemnified Party, arising directly or indirectly from the rights granted by Grantor to Grantees hereunder or any act or omission by Grantees or any Grantees’ Party. Grantees assume all risk arising out of their activities and use of the Easement by it and the Grantees Parties.

8. **Default and Remedies.** Time is of the essence regarding the terms of this Easement. If Grantor or Grantees violate any of the terms, covenants, or conditions of this Easement, or fails to perform any of its obligations included in this Easement in a timely manner, the non-defaulting Party(ies) shall have the right to declare a default by written notice and seek available legal or equitable remedies in the Circuit Court of the State for Oregon in Washington County. Notice shall be given by first class mail addressed to the parties as follows:

City of Hillsboro  
Attn: Water Department Manager  
150 E. Main Street  
Hillsboro, Oregon 97123

Tualatin Valley Water District  
Attn: District Recorder  
1850 S.W. 170th Avenue  
Beaverton, Oregon 97003
The notice shall provide a detailed statement(s) of the alleged default. If the default is not cured within 15 days from the date of notice, or if the defaulting Party has not commenced to diligently commence cure for a matter that requires more than 15 days, then the non-defaulting Party(ies) may commence litigation and seek all remedies available at law or in equity. If the Easement is terminated as a result of litigation, Grantees shall, at their sole cost and expense, return the Easement Area to Grantor in the same or better condition as existed prior to the grant of the Easement.

9. **Binding Effect.** This Easement is binding upon, inures to the benefit of and may be enforced by the Parties and their respective successors and assigns. Grantees may assign or transfer their interests without consent of Grantor. Grantee may use agents, employees, contractors, and other authorized persons for the purposes of exercising Grantees’ rights and obligations under this Easement, provided no third-party beneficiary rights are created by this Easement. This Easement shall be construed in accordance with Oregon law.

10. **Amendment.** This Easement may be amended only by an instrument in writing signed by both Grantor and Grantee. All approvals required hereunder shall be in writing.

11. **No Public Dedication.** Nothing in this Easement will be deemed to be a gift or a dedication of any portion of the Water System Facilities Easement to the general public or for the use of the general public or for any public purpose whatsoever, it being the intent of the parties that this Easement be strictly limited to and for the purposes expressed herein.

[SPACE LEFT INTENTIONALLY BLANK]

[SIGNATURES TO FOLLOW]
GRANTOR
Lisa M. Dubisar

By: ______________________________
Name: ____________________________
Its: ______________________________

GRANTOR
David S. Hewlett

By: ______________________________
Name: ____________________________
Its: ______________________________

GRANTOR
Donald J. Hewlett

By: ______________________________
Name: ____________________________
Its: ______________________________

GRANTEE
Tualatin Valley Water District, a domestic water supply district

By: ______________________________
Name: ____________________________
Its: ______________________________

City of Hillsboro, a municipal corporation

By: ______________________________
Name: ____________________________
Its: ______________________________

[Acknowledgments follow on next page]

Page 7 – WATER SYSTEM FACILITIES EASEMENT
STATE OF OREGON )
) ss.
County of Deschutes )

This instrument was acknowledged before me on ________________, 20__, by Lisa M. Dubisar.

NOTARY PUBLIC for Oregon
My Commission Expires: ________________

STATE OF OREGON )
) ss.
County of ________________ )

This instrument was acknowledged before me on ________________, 20__, by David S. Hewlett

NOTARY PUBLIC for Oregon
My Commission Expires: ________________

STATE OF OREGON )
) ss.
County of ________________ )

This instrument was acknowledged before me on ________________, 20__, by Donald J. Hewlett

NOTARY PUBLIC for Oregon
My Commission Expires: ________________
STATE OF OREGON )
) ss.
County of Washington )

This instrument was acknowledged before me on ________________, 20__, by
as __________________________________________ of
Tualatin Valley Water District, a domestic water supply district organized under ORS
Chapter 264.

_______________________________
NOTARY PUBLIC for Oregon
My Commission Expires: ________________

STATE OF OREGON )
) ss.
County of Washington )

This instrument was acknowledged before me on ________________, 20__, by
as __________________________________________ of
City of Hillsboro, an Oregon municipal corporation.

_______________________________
NOTARY PUBLIC for Oregon
My Commission Expires: ________________
EXHIBIT A

Willamette Water Supply
August 24, 2018

Lisa Dubisar, David Hewlett,
Donald Hewlett
Tax Map No. 1S236 00901

PARCEL 1 – PERMANENT UTILITY EASEMENT

A parcel of land lying in the Section 36, Township 1 South, Range 2 West of the Willamette Meridian, Washington County, Oregon and being a portion of that property conveyed Lisa M. Dubisar, David S. Hewlett, and Donald J. Hewlett, recorded March 6, 2015 as Document No. 2015-015838, in the Washington County Book of Records, said parcel being that portion of said property included in a strip of land 50.00 feet in width, lying 25.00 feet on each side of the following described Pipeline Centerline:

Beginning at Engineer’s Centerline Station 807+72.00, said point being N 88°16’49” E, 3197.30 feet from the West 1/4 corner of Section 6, Township 2 South, Range 1 West of the Willamette Meridian;

Thence along said pipeline the following courses:
S 89°29’59” W, 189.70 feet to Station 809+61.70;
thence S 83°03’43” W, 100.59 feet to Station 810+62.29;
thence S 85°38’46” W, 147.71 feet to Station 812+10.00;
thence S 71°15’21” W, 55.55 feet to Station 812+65.55;
thence S 89°18’27” W, 1151.34 feet to Station 824+16.88;
thence N 45°57’23” W, 129.72 feet to Station 825+46.60;
thence S 88°46’47” W, 441.22 feet to Station 829+87.82;
thence S 89°29’07” W, 906.98 feet to Station 838+94.79;
thence S 85°10’41” W, 149.31 feet to Station 840+44.10, said point being N 19°22’34” W, 105.21 feet from said West 1/4 corner of Section 6;
thence continuing along said pipeline S 79°51’57” W, 34.86 feet to Station 840+78.97;
thence S 76°09’13” W, 93.90 feet to Station 841+72.87;
thence S 71°04’33” W, 82.23 feet to Station 842+55.09;
thence S 68°42’19” W, 756.34 feet to Station 850+11.44;
thence S 69°44’05” W, 88.45 feet to Station 850+99.89;
thence N 68°25’58” W, 61.32 feet to Station 851+61.20;
thence N 32°20’49” W, 105.87 feet to Station 852+67.07;
thence N 30°20’05” W, 916.82 feet to Station 861+83.90;
thence N 29°58’27” W, 227.75 feet to Station 864+11.64;
thence N 74°58’27” W, 35.00 feet to Station 864+46.65;
thence N 29°58’27” W, 162.22 feet to Station 866+08.86;
thence N 33°01’07” W, 96.75 feet to Station 867+05.61;
thence N 8°01’36” E, 35.07 feet to Station 867+40.68;
thence N 38°22’58” W, 25.07 feet to Station 867+65.75;
thence N 39°09’05” W, 561.37 feet to Station 873+27.12;
thence N 40°04’53” W, 358.16 feet to a point of curvature at Station 876+85.28;
thence along the arc of a 5034.50 foot radius curve to the left with a central angle of 4°12’40” a curve distance of 370.02 feet (the chord of which bears N 42°11’13” W, 369.94 feet) to a point of tangency at Station 880+55.30 PT;
thence N 44°17'33" W, 144.60 feet to Station 881+99.90;
thence N 46°04'20" W, 126.52 feet to Station 883+26.42;
thence N 49°38'24" W, 126.52 feet to Station 884+52.94;
thence N 51°25'11" W, 99.53 feet to Station 885+52.47;
thence N 57°45'20" W, 84.86 feet to Station 886+37.33;
thence N 70°25'37" W, 84.86 feet to Station 887+22.19; said point being N 51°41'57" W, 50.68 feet from the Northeast corner of the Solomon F. Shattuck D.L.C. number 51;
thence continuing along said pipeline N 83°05'54" W, 84.86 feet to Station 888+07.05;
thence N 89°26'02" W, 1401.57 feet to Station 902+08.62;
thence N 44°26'02" W, 27.23 feet to Station 902+35.85;
thence N 0°55'28" E, 224.95 feet to Station 904+60.80;
thence N 25°53'14" W, 150.00 feet to Station 906+10.80;
thence N 0°55'28" E, 94.19 feet to Station 907+04.99 and the Terminus of said pipeline description, said terminus also being N 2°51'50" W, 508.09 feet from the Southeast corner of the John Landess D.L.C. number 37.

EXCEPT THEREFROM that portion lying within the right-of-way of SW Tile Flat Rd (CR 3279) and Grabhorn Rd (CR 315).

The parcel of land to which this description applies contains 37,866 square feet (0.87 acre), more or less.

Basis of Bearings is the Oregon Coordinate Reference System (OCRS), Portland Zone.
EXHIBIT A

Willamette Water Supply
August 24, 2018

Lisa Dubisar, David Hewlett,
Donald Hewlett
Tax Map No. 1S236 00901

PARCEL 2 – TEMPORARY CONSTRUCTION EASEMENT

That portion of said Dubisar/Hewlett property included in a strip of land variable in width, lying on the northerly and easterly side of the Pipeline Centerline described in Parcel 1:

The widths of the strip of land above referred to are as follows:

<table>
<thead>
<tr>
<th>PIPELINE CENTERLINE STATION</th>
<th>WIDTH ON NORTHERLY AND EASTERLY SIDE OF CENTERLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 895+00.00 To 898+49.87</td>
<td>50.00 feet.</td>
</tr>
<tr>
<td>From 898+49.87 To 901+01.24</td>
<td>0.00 feet.</td>
</tr>
<tr>
<td>From 901+01.24 To 903+25.64</td>
<td>50.00 feet.</td>
</tr>
<tr>
<td>From 903+25.64 To 904+70.50</td>
<td>0.00 feet.</td>
</tr>
<tr>
<td>From 904+70.50 To 906+00.00</td>
<td>50.00 feet.</td>
</tr>
</tbody>
</table>

EXCEPT THEREFROM that portion lying within the right-of-way of SW Tile Flat Rd (CR 3279), Grabhorn Rd (CR 315), and the above described Parcel 1.

The parcel of land to which this description applies contains 12,434 square feet (0.29 acre), more or less.
Exhibit 1-3
Kobbe Farm, LLC
an Oregon Limited Liability Company
1S2360001000
PLM_5.2-043
AFTER RECORDING RETURN TO:
Tualatin Valley Water District
Attn: Chief Executive Officer
1850 SW 170th Avenue
Beaverton OR 97003

UNTIL A CHANGE IS REQUESTED
SEND TAX STATEMENTS TO:
No change in tax statements

File #: PLM_5.2-043
Map and Tax Lot #: 1S2360001000

This space is reserved for recorder’s use.

WATER SYSTEM FACILITIES EASEMENT

This Water System Facilities Easement is made this ___ day of __________, 20___,
by and between Kobbe Farm LLC (“Grantor”), Tualatin Valley Water District, a domestic water
supply district, organized under ORS Chapter 264 and the City of Hillsboro (hereinafter
collectively referred to as “Grantees”).

Grantor and Grantees agree as follows:

1. Grant of Permanent Easement. Grantor hereby grants to Grantees, jointly and severally,
   their successors, and heirs a perpetual and non-exclusive easement (“Easement”) on, over,
   and under a portion of that certain real property described in Exhibit A (the “Property”),
   which portion is depicted on Exhibit B (the “Easement Area”), both of which are attached
   hereto and incorporated herein by this reference. The Easement shall be used by Grantee only
   for the purposes and as provided herein.

2. Right of Entry and Use. Subject to the terms of this Easement, Grantees shall have the right
   to enter upon and use the Easement Area for the purposes of constructing, operating,
   maintaining, repairing, replacing, and modifying water pipelines and other water facilities,
   and all appurtenances incident thereto (“Water System Facilities”). Within the Easement
   Area, Grantee shall have the perpetual right to cut, trim, control, and remove trees, brush, and
   other obstructions which injure or interfere with the Grantee’s use or occupation of the
   Easement or Grantee’s right to construct, reconstruct, install, use, operate, maintain, repair,
   patrol, replace, upgrade, or remove its improvements, without liability for damages arising
   there from. The use of the Easement by Grantees shall be in compliance with applicable
   laws.
3. **Temporary Easement.** During construction of the Water System Facilities, Grantor hereby grants a temporary construction easement ("TCE") on, over, and under the Property as described and depicted in Exhibit C (the "TCE Area") for such reasonable period to perform the work. Grantor acknowledges construction will occur in multiple phases prior to 2026. Unless otherwise specified in writing, this TCE takes effect upon thirty (30) days advanced written notice to Grantor and extends for two years from this date, which may be extended up to two (2) six (6)-month extensions with a pro rata compensation.

4. **Restrictions on Grantees Use of Easement.** Grantees shall use good faith efforts to not interfere with Grantor’s use and enjoyment of the Property outside the Easement Area or otherwise cause operations on Grantor’s Property outside the Easement Area to be interfered with or interrupted by the use of the Easement by Grantees. Grantees shall maintain reasonable access to Grantor’s property during construction, maintenance, repair, replacement, or modification of the Water System Facilities.

5. **Non-Exclusive Grant; Use of the Easement.** The Easement herein shall be non-exclusive for the purposes stated herein, and Grantor may not use the Easement Area inconsistent with the terms of this easement or permit third parties to use any portion of the Easement Area without the Grantees’ prior written approval, which shall not be unreasonably withheld, delayed or conditioned, provided:

   a) The Grantor or approved third party shall provide a written request to the Grantees to use the Easement Area so that the Grantees’ right to construct, use, access, repair, and maintain the Water System Facilities is not impaired; and

   b) The Grantor or approved third party assumes full responsibility in the event the Water System Facilities are damaged or impaired by their actions, in which case the Grantor or such third party shall immediately remedy the damage or impairment and indemnify Grantees from all expenses, costs, damages or impacts associated with such remedy. Grantees reserve the right to make necessary repairs or remedies with their own forces or contractors with the cost to be reimbursed by Grantor or third party; and

   c) All design and construction plans must be approved in writing by the Grantees in advance and construction shall require Grantees’ inspection and approval; and

   d) The Grantor or approved third party complies with Section 6.

6. **Grantor’s Rights and Restrictions.**

   a) **Grantor’s Rights.** Grantor shall retain the right to make full use of the Property outside the Easement Area provided that such use does not interfere with the rights of the Grantee or Grantee’s use of the Easement Area or endanger Grantee’s Water System Facilities, except as provided in Section 6.b. below. Agricultural use within the Easement Area is permissible provided such use conforms to Section 6.b. below. Grantor shall only perform or permit other
persons or entities to perform construction or other work within the Easement Area after prior written approval by Grantee and only if such construction or other work is performed in accordance with the terms of this Easement, all applicable laws, rules and regulations, and Grantee’s rules and regulations as they may be modified from time to time. With Grantor’s written request for approval, Grantor shall submit drawings, specifications, reports, and/or other applicable information describing proposed work with sufficient detail to be reviewed by Grantee. Notwithstanding the provisions of Section 6.b. below, Grantor reserves use of the Easement, including installing driveways that are located at least five (5) feet above the Water System Facilities, fences and gates (Grantor must provide Grantee means to unlock gates) with an embedment depth of less than twenty-four (24) inches, irrigation and drain piping crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance, and residential level (200 amp or less) electrical service line(s) crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance (electrical line is required to be placed in a conduit for a minimum length of twenty (20) feet centered over the Water System Facilities and crossing at substantially right angles to the Water System Facilities) provided, however, that the exercise of such rights, in the reasonable opinion of Grantee, does not impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, repair and reasonable access. Grantor must request a locate from Grantee prior to installation to ensure proper distance from Grantee’s Water System Facilities.

b) Restrictions on Grantor. Within the Easement Area, unless otherwise approved in advance in writing by the Grantee, Grantor agrees not to construct or permit others to use, construct, install, store, plant, change grade, or create any improvements, structures, impoundments, or stockpile any materials that in the sole opinion of Grantee will impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, and reasonable access.

Grantor agrees not to store any materials including hazardous materials, fuel, oil, and chemicals on, over, under, or in the Easement Area. Grantor agrees not to store personal property, including but not limited to, derelict personal property, refuse piles, vehicles, equipment, or machinery in the Easement Area.

Grantor agrees not to plant trees within the Easement Area and to limit any plants requiring rooting depths or cultivation within the Easement Area to avoid any ground disturbance or excavation exceeding twenty-four (24) inches in depth.

Grantor agrees not to plant trees or other plants within 10 feet of any above-ground portion of the Water System Facilities. Grantor agrees not to obstruct access to Grantee’s above-ground Water System Facilities.
Grantor agrees not to change the grade within the Easement Area or drainage patterns within the Easement Area or adjacent to the Easement Area during the term of this Easement by adding, removing, or displacing any more than six (6) inches of material from the surface. Grantee agrees to provide as-built drawings showing existing grades for elevation reference purposes. Grantor also agrees not to impair any lateral or sub-adjacent support for the Water System Facilities within the Easement Area.

Grantor agrees not to install or permit others to install within the Easement Area any utilities which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep.

Grantor agrees not to install or permit others to install within the Easement Area electric utilities, service lines, or transformers above the 200-amp residential service level which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep. If Grantor desires to cross or longitudinally use the Easement Area, Grantor agrees to apply to Grantee in writing, provide drawings with specifications for any installation of an electric utility, service line, or transformer greater than twenty-four (24) inches deep, undergo a review and approval process, and must receive written permission from Grantee. Electrical conductors parallel to the Water System Facilities need to be placed in conduit agreeable to the Grantee and shall be no greater than twenty-four (24) inches deep.

Grantor agrees not to place or permit others to place a load of any kind over the Water System Facilities where the weight of the load could cause damage of any type to the Water System Facilities.

Grantor agrees not to impound water, change drainage patterns or create ponds, reservoirs, structures, or facilities designed to hold water over the Easement Area, unless the prior written consent of Grantee is provided.

Within the Easement Area, Grantor agrees that periodic easement encroachment review by Grantees may be performed, and Grantor agrees to remove any item unacceptable under this Easement or any other item deemed detrimental to the Water System Facilities in the sole discretion of the Grantees within thirty (30) days of notification by Grantees. Should Grantor fail to remedy the situation in the time frame provided, Grantees may remove said encroachment and charge the cost of such removal to the Grantor on a time and materials basis.

**c) Restoration of Easement Following Construction.** At Grantees’ sole cost and expense, and except where modifications to the Property are otherwise agreed to in this Agreement, Grantees shall restore the Easement Area to the same or better condition as existed in the Easement Areas as applicable prior to the commencement of such work.
Upon completion of construction and/or any subsequent maintenance activities of the herein described facility, including the use of Grantee for temporary construction and/or ingress and egress purposes, Grantee agrees to restore said land, as near as practicable to its original condition, unless otherwise agreed to in writing by the Grantor, provided, however, that all such restoration efforts shall comply with any applicable City, County, and State of Oregon codes.

Grantees shall not fence or otherwise obstruct free and open access to and travel upon the Property without written authorization from the Grantor, with the exception of construction and silt fence during construction and restoration. Grantees shall not install any surface structures unless specifically mentioned herein.

7. **Indemnification.** To the extent permitted by the Oregon Constitution and subject to the Oregon Tort Claims Act (ORS 30.260 to 30.300), Grantees shall indemnify, defend, and hold harmless Grantor and its members, managers, employees, agents, and representatives (collectively, “Indemnified Parties”) from and against any injury, expense, damage, liability, or claim, including, but not limited, to reasonable attorney fees, incurred by any Indemnified Party, arising directly or indirectly from the rights granted by Grantor to Grantees hereunder or any act or omission by Grantees or any Grantees’ Party. Grantees assume all risk arising out of their activities and use of the Easement by it and the Grantees Parties.

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City of Hillsboro  
Water Department Manager  
150 E. Main Street  
Hillsboro, Oregon 97123  

Tualatin Valley Water District  
Attn: Chief Executive Officer  
1850 S.W. 170th Avenue  
Beaverton, Oregon 97003  

Kobbe Farm LLC  
150 NW 150th Avenue  
Beaverton, Oregon 97006  

The notice shall provide a detailed statement(s) of the alleged default. If the default is not cured within 15 days from the date of notice, or if the defaulting Party has not commenced to diligently commence cure for a matter that requires more than 15 days, then the non-defaulting Party(ies) may commence litigation and seek all remedies available at law or in equity. If the Easement is terminated as a result of litigation, Grantees shall, at their sole cost.
and expense, return the Easement Area to Grantor in the same or better condition as existed prior to the grant of the Easement.

9. **Binding Effect.** This Easement is binding upon, inures to the benefit of and may be enforced by the Parties and their respective successors and assigns. Grantees may assign or transfer their interests without consent of Grantor. Grantee may use agents, employees, contractors, and other authorized persons for the purposes of exercising Grantees’ rights and obligations under this Easement, provided no third-party beneficiary rights are created by this Easement. This Easement shall be construed in accordance with Oregon law.

10. **Amendment.** This Easement may be amended only by an instrument in writing signed by both Grantor and Grantee. All approvals required hereunder shall be in writing.

11. **No Public Dedication.** Nothing in this Easement will be deemed to be a gift or a dedication of any portion of the Water System Facilities Easement to the general public or for the use of the general public or for any public purpose whatsoever, it being the intent of the parties that this Easement be strictly limited to and for the purposes expressed herein.

[SPACE LEFT INTENTIONALLY BLANK]

[signatures to follow]
GRANTOR

Kobbe Farm LLC

By: ____________________________
Name: __________________________
Its: ____________________________

GRANTOR

By: ____________________________
Name: __________________________
Its: ____________________________

GRANTEE

Tualatin Valley Water District, a domestic water supply district

By: ____________________________
Name: __________________________
Its: ____________________________

GRANTEE

City of Hillsboro, a municipal corporation

By: ____________________________
Name: __________________________
Its: ____________________________

[Acknowledgments follow on next page]
STATE OF OREGON

) ss.
County of __________

This instrument was acknowledged before me on ____________, 20__, by ____________ of Kobbe Farm LLC.

NOTARY PUBLIC for Oregon
My Commission Expires: ________________

STATE OF OREGON

) ss.
County of Washington

This instrument was acknowledged before me on ____________, 20__, by ____________ of Tualatin Valley Water District, a domestic water supply district organized under ORS Chapter 264.

NOTARY PUBLIC for Oregon
My Commission Expires: ________________

STATE OF OREGON

) ss.
County of Washington

This instrument was acknowledged before me on ____________, 20__, by ____________ of City of Hillsboro, an Oregon municipal corporation.

NOTARY PUBLIC for Oregon
My Commission Expires: ________________

Page 8 – WATER SYSTEM FACILITIES EASEMENT
PARCEL 1 – PERMANENT UTILITY EASEMENT

A parcel of land lying in the Section 1, Township 2 South, Range 2 West of the Willamette Meridian, Washington County, Oregon and being a portion of that property conveyed Kobbe Farm, LLC, recorded December 29, 2010 as Document No. 2010-104902, in the Washington County Book of Records, said parcel being that portion of said property included in a strip of land 50.00 feet in width, lying 25.00 feet on each side of the following described Pipeline Centerline:

Beginning at Engineer’s Centerline Station 807+72.00, said point being N 88°16'49" E, 3197.30 feet from the West 1 / 4 corner of Section 6, Township 2 South, Range 1 West of the Willamette Meridian;

Thence along said pipeline the following courses:
S 89°29'59" W, 189.70 feet to Station 809+61.70;
thence S 83°03'43" W, 100.59 feet to Station 810+62.29;
thence S 85°38'46" W, 147.71 feet to Station 812+10.00;
thence S 71°15'21" W, 55.55 feet to Station 812+65.55;
thence S 89°18'27" W, 1151.34 feet to Station 824+16.88;
thence N 45°57'23" W, 129.72 feet to Station 825+46.60;
thence S 88°46'47" W, 441.22 feet to Station 829+87.82;
thence S 89°29'07" W, 906.98 feet to Station 838+94.79;
thence S 85°10'41" W, 149.31 feet to Station 840+44.10, said point being N 19°22'34" W, 105.21 feet from said West 1 / 4 corner of Section 6;
thence continuing along said pipeline S 79°51'57" W, 34.86 feet to Station 840+78.97;
thence S 76°09'13" W, 93.90 feet to Station 841+72.87;
thence S 71°04'33" W, 82.23 feet to Station 842+55.09;
thence S 68°42'19" W, 756.34 feet to Station 850+11.44;
thence S 69°44'05" W, 88.45 feet to Station 850+99.89;
thence N 68°25'58" W, 61.32 feet to Station 851+61.20;
thence N 32°20'49" W, 105.87 feet to Station 852+67.07;
thence N 30°20'05" W, 916.82 feet to Station 861+83.90;
thence N 29°58'27" W, 227.75 feet to Station 864+11.64;
thence N 74°58'27" W, 35.00 feet to Station 864+46.65;
thence N 29°58'27" W, 162.22 feet to Station 866+08.86;
thence N 33°01'07" W, 96.75 feet to Station 867+05.61;
thence N 8°01'36" E, 35.07 feet to Station 867+40.68;
thence N 38°22'58" W, 25.07 feet to Station 867+65.75;
thence N 39°09'05" W, 561.37 feet to Station 873+27.12;
thence N 40°04'53" W, 358.16 feet to a point of curvature at Station 876+85.28;
thence along the arc of a 5034.50 foot radius curve to the left with a central angle of 4°12'40" a curve distance of 370.02 feet (the chord of which bears N 42°11'13" W, 369.94 feet) to a point of tangency at Station 880+55.30 PT;
thence N 44°17'33" W, 144.60 feet to Station 881+99.90;
thence N 46°04'20" W, 126.52 feet to Station 883+26.42;
thence N 49°38'24" W, 126.52 feet to Station 884+52.94;
thence N 51°25'11" W, 99.53 feet to Station 885+52.47;
thence N 57°45'20" W, 84.86 feet to Station 886+37.33;
thence N 70°25'37" W, 84.86 feet to Station 887+22.19; said point being N 51°41'57" W, 50.68 feet from the Northeast corner of the Solomon F. Shattuck D.L.C. number 51;
thence continuing along said pipeline N 83°05'54" W, 84.86 feet to Station 888+07.05;
thence N 89°26'02" W, 1401.57 feet to Station 902+08.62;
thence N 44°26'02" W, 27.23 feet to Station 902+35.85;
thence N 0°55'28" E, 224.95 feet to Station 904+60.80;
thence N 25°53'14" W, 150.00 feet to Station 906+10.80;
thence N 0°55'28" E, 94.19 feet to Station 907+04.99 and the Terminus of said pipeline description, said terminus also being N 2°51'50" W, 508.09 feet from the Southeast corner of the John Landess D.L.C. number 37.

EXCEPT THEREFROM that portion lying within the right-of-way of SW Tile Flat Rd (CR 3279).

The parcel of land to which this description applies contains 1,260 square feet (0.03 acre), more or less.

Basis of Bearings is the Oregon Coordinate Reference System (OCRS), Portland Zone.

PARCEL 2 – TEMPORARY CONSTRUCTION EASEMENT

That portion of said Kobbe Farm, LLC property included in a strip of land 50.00 feet in width, lying on the northeasterly side of the Pipeline Centerline described in Parcel 1:

EXCEPT THEREFROM that portion lying within the right-of-way of SW Tile Flat Rd (CR 3279) and the above described Parcel 1.

The parcel of land to which this description applies contains 1,064 square feet (0.02 acre), more or less.
Exhibit 1-4
Scott and Nancy Edmonds Living Trust
Scott Edmonds and Nancy Edmonds, Trustees
2S106B000200
2S042106B000203
2S106B000204
PLM_5.2-045
AFTER RECORDING RETURN TO:
Tualatin Valley Water District
Attn: Chief Executive Officer
1850 SW 170th Avenue
Beaverton OR 97003

UNTIL A CHANGE IS REQUESTED
SEND TAX STATEMENTS TO:
No change in tax statements

File #: PLM_5.2-045
Map and Tax Lot #: 2S106B000200, 2S 042106B000203, 2S106B000204

________________________________________________________________________

This space is reserved for recorder’s use.

WATER SYSTEM FACILITIES EASEMENT

This Water System Facilities Easement is made this _______ day of ____________, 20__,
by and between Scott Edmonds and Nancy Edmonds, Trustees, or their successors in trust, under
the Scott and Nancy Edmonds Living Trust, dated December 10, 2007, (“Grantor”), Tualatin
Valley Water District, a domestic water supply district organized under ORS Chapter 264, and
the City of Hillsboro, a municipal corporation, (hereinafter collectively referred to as
“Grantees”).

Grantor and Grantees agree as follows:

1. Grant of Permanent Easement. Grantor hereby grants to Grantees, jointly and severally,
   their successors, and heirs a perpetual and non-exclusive easement (“Easement”) on, over,
   and under a portion of that certain real property described in Exhibit A (the “Property”),
   which portion is depicted on Exhibit B (the “Easement Area”), both of which are attached
   hereto and incorporated herein by this reference. The Easement shall be used by Grantee only
   for the purposes and as provided herein.

2. Right of Entry and Use. Subject to the terms of this Easement, Grantees shall have the right
   to enter upon and use the Easement Area for the purposes of constructing, operating,
   maintaining, repairing, replacing, and modifying water pipelines and other water facilities,
   and all appurtenances incident thereto (“Water System Facilities”). Within the Easement
   Area, Grantee shall have the perpetual right to cut, trim, control, and remove trees, brush, and
   other obstructions which injure or interfere with the Grantee’s use or occupation of the
   Easement or Grantee’s right to construct, reconstruct, install, use, operate, maintain, repair,
patrol, replace, upgrade, or remove its improvements, without liability for damages arising there from. The use of the Easement by Grantees shall be in compliance with applicable laws.

3. **Temporary Easement.** During construction of the Water System Facilities, Grantor hereby grants a temporary construction easement ("TCE") on, over, and under the Property as described and depicted in Exhibit C (the "TCE Area") for such reasonable period to perform the work. Grantor acknowledges construction will occur in multiple phases prior to 2026. Unless otherwise specified in writing, this TCE takes effect upon thirty (30) days advanced written notice to Grantor and extends for two years from this date, which may be extended up to two (2) six (6)-month extensions with a pro rata compensation.

4. **Restrictions on Grantees Use of Easement.** Grantees shall use good faith efforts to not interfere with Grantor’s use and enjoyment of the Property outside the Easement Area or otherwise cause operations on Grantor’s Property outside the Easement Area to be interfered with or interrupted by the use of the Easement by Grantees. Grantees shall maintain reasonable access to Grantor’s property during construction, maintenance, repair, replacement, or modification of the Water System Facilities.

5. **Non-Exclusive Grant; Use of the Easement.** The Easement herein shall be non-exclusive for the purposes stated herein, and Grantor may not use the Easement Area inconsistent with the terms of this easement or permit third parties to use any portion of the Easement Area without the Grantees’ prior written approval, which shall not be unreasonably withheld, delayed or conditioned, provided:

   a) The Grantor or approved third party shall provide a written request to the Grantees to use the Easement Area so that the Grantees’ right to construct, use, access, repair, and maintain the Water System Facilities is not impaired; and

   b) The Grantor or approved third party assumes full responsibility in the event the Water System Facilities are damaged or impaired by their actions, in which case the Grantor or such third party shall immediately remedy the damage or impairment and indemnify Grantees from all expenses, costs, damages or impacts associated with such remedy. Grantees reserve the right to make necessary repairs or remedies with their own forces or contractors with the cost to be reimbursed by Grantor or third party; and

   c) All design and construction plans must be approved in writing by the Grantees in advance and construction shall require Grantees’ inspection and approval; and

   d) The Grantor or approved third party complies with Section 6.

6. **Grantor’s Rights and Restrictions.**

   a) **Grantor’s Rights.** Grantor shall retain the right to make full use of the Property outside the Easement Area provided that such use does not interfere with the
rights of the Grantee or Grantee’s use of the Easement Area or endanger Grantee’s Water System Facilities, except as provided in Section 6.b. below. Agricultural use within the Easement Area is permissible provided such use conforms to Section 6.b. below. Grantor shall only perform or permit other persons or entities to perform construction or other work within the Easement Area after prior written approval by Grantee and only if such construction or other work is performed in accordance with the terms of this Easement, all applicable laws, rules and regulations, and Grantee’s rules and regulations as they may be modified from time to time. With Grantor’s written request for approval, Grantor shall submit drawings, specifications, reports, and/or other applicable information describing proposed work with sufficient detail to be reviewed by Grantee. Notwithstanding the provisions of Section 6.b. below, Grantor reserves use of the Easement, including installing driveways that are located at least five (5) feet above the Water System Facilities, fences and gates (Grantor must provide Grantee means to unlock gates) with an embedment depth of less than twenty-four (24) inches, irrigation and drain piping crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance, and residential level (200 amp or less) electrical service line(s) crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance (electrical line is required to be placed in a conduit for a minimum length of twenty (20) feet centered over the Water System Facilities and crossing at substantially right angles to the Water System Facilities) provided, however, that the exercise of such rights, in the reasonable opinion of Grantee, does not impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, repair and reasonable access. Grantor must request a locate from Grantee prior to installation to ensure proper distance from Grantee’s Water System Facilities.

b) **Restrictions on Grantor.** Within the Easement Area, unless otherwise approved in advance in writing by the Grantee, Grantor agrees not to construct or permit others to use, construct, install, store, plant, change grade, or create any improvements, structures, impoundments, or stockpile any materials that in the sole opinion of Grantee will impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, and reasonable access.

Grantor agrees not to store any materials including hazardous materials, fuel, oil, and chemicals on, over, under, or in the Easement Area. Grantor agrees not to store personal property, including but not limited to, derelict personal property, refuse piles, vehicles, equipment, or machinery in the Easement Area.

Grantor agrees not to plant trees within the Easement Area and to limit any plants requiring rooting depths or cultivation within the Easement Area to avoid any ground disturbance or excavation exceeding twenty-four (24) inches in depth.
Grantor agrees not to plant trees or other plants within 10 feet of any above-ground portion of the Water System Facilities. Grantor agrees not to obstruct access to Grantee’s above-ground Water System Facilities.

Grantor agrees not to change the grade within the Easement Area or drainage patterns within the Easement Area or adjacent to the Easement Area during the term of this Easement by adding, removing, or displacing any more than six (6) inches of material from the surface. Grantee agrees to provide as-built drawings showing existing grades for elevation reference purposes. Grantor also agrees not to impair any lateral or sub-adjacent support for the Water System Facilities within the Easement Area.

Grantor agrees not to install or permit others to install within the Easement Area any utilities which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep.

Grantor agrees not to install or permit others to install within the Easement Area electric utilities, service lines, or transformers above the 200-amp residential service level which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep. If Grantor desires to cross or longitudinally use the Easement Area, Grantor agrees to apply to Grantee in writing, provide drawings with specifications for any installation of an electric utility, service line, or transformer greater than twenty-four (24) inches deep, undergo a review and approval process, and must receive written permission from Grantee. Electrical conductors parallel to the Water System Facilities need to be placed in conduit agreeable to the Grantee and shall be no greater than twenty-four (24) inches deep.

Grantor agrees not to place or permit others to place a load of any kind over the Water System Facilities where the weight of the load could cause damage of any type to the Water System Facilities.

Grantor agrees not to impound water, change drainage patterns or create ponds, reservoirs, structures, or facilities designed to hold water over the Easement Area, unless the prior written consent of Grantee is provided.

Within the Easement Area, Grantor agrees that periodic easement encroachment review by Grantees may be performed, and Grantor agrees to remove any item unacceptable under this Easement or any other item deemed detrimental to the Water System Facilities in the sole discretion of the Grantees within thirty (30) days of notification by Grantees. Should Grantor fail to remedy the situation in the time frame provided, Grantees may remove said encroachment and charge the cost of such removal to the Grantor on a time and materials basis.

**c) Restoration of Easement Following Construction.** At Grantees’ sole cost and expense, and except where modifications to the Property are otherwise agreed to
in this Agreement, Grantees shall restore the Easement Area to the same or better condition as existed in the Easement Areas as applicable prior to the commencement of such work.

Upon completion of construction and/or any subsequent maintenance activities of the herein described facility, including the use of Grantee for temporary construction and/or ingress and egress purposes, Grantee agrees to restore said land, as near as practicable to its original condition, unless otherwise agreed to in writing by the Grantor, provided, however, that all such restoration efforts shall comply with any applicable City, County, and State of Oregon codes.

Grantees shall not fence or otherwise obstruct free and open access to and travel upon the Property without written authorization from the Grantor, with the exception of construction and silt fence during construction and restoration. Grantees shall not install any surface structures unless specifically mentioned herein.

7. **Indemnification.** To the extent permitted by the Oregon Constitution and subject to the Oregon Tort Claims Act (ORS 30.260 to 30.300), Grantees shall indemnify, defend, and hold harmless Grantor and its members, managers, employees, agents, and representatives (collectively, “Indemnified Parties”) from and against any injury, expense, damage, liability, or claim, including, but not limited, to reasonable attorney fees, incurred by any Indemnified Party, arising directly or indirectly from the rights granted by Grantor to Grantees hereunder or any act or omission by Grantees or any Grantees’ Party. Grantees assume all risk arising out of their activities and use of the Easement by it and the Grantees Parties.

8. **Default and Remedies.** Time is of the essence regarding the terms of this Easement. If Grantor or Grantees violate any of the terms, covenants, or conditions of this Easement, or fails to perform any of its obligations included in this Easement in a timely manner, the non-defaulting Party(ies) shall have the right to declare a default by written notice and seek available legal or equitable remedies in the Circuit Court of the State for Oregon in County. Notice shall be given by first class mail addressed to the parties as follows:

City of Hillsboro  
Attn: Water Department Manager  
150 E. Main Street  
Hillsboro, Oregon 97123  
Scott and Nancy Edmonds  
PO Box 1612  
Lake Oswego, OR 97035

Tualatin Valley Water District  
Attn: Chief Executive Officer  
1850 S.W. 170th Avenue  
Beaverton, Oregon 97003

The notice shall provide a detailed statement(s) of the alleged default. If the default is not cured within 15 days from the date of notice, or if the defaulting Party has not commenced to diligently commence cure for a matter that requires more than 15 days, then the non-
defaulting Party(ies) may commence litigation and seek all remedies available at law or in equity. If the Easement is terminated as a result of litigation, Grantees shall, at their sole cost and expense, return the Easement Area to Grantor in the same or better condition as existed prior to the grant of the Easement.

9. **Binding Effect.** This Easement is binding upon, inures to the benefit of and may be enforced by the Parties and their respective successors and assigns. Grantees may assign or transfer their interests without consent of Grantor. Grantee may use agents, employees, contractors, and other authorized persons for the purposes of exercising Grantees’ rights and obligations under this Easement, provided no third-party beneficiary rights are created by this Easement. This Easement shall be construed in accordance with Oregon law.

10. **Amendment.** This Easement may be amended only by an instrument in writing signed by both Grantor and Grantee. All approvals required hereunder shall be in writing.

11. **No Public Dedication.** Nothing in this Easement will be deemed to be a gift or a dedication of any portion of the Water System Facilities Easement to the general public or for the use of the general public or for any public purpose whatsoever, it being the intent of the parties that this Easement be strictly limited to and for the purposes expressed herein.

[SPACE LEFT INTENTIONALLY BLANK]

[SIGNATURES TO FOLLOW]
GRANTOR

Scott Edmonds, Trustee

By: ________________________
Name: ______________________
Its: _______________________

GRANTEE

Tualatin Valley Water District, a domestic water supply district

By: ________________________
Name: ______________________
Its: _______________________

GRANTOR

Nancy Edmonds, Trustee

By: ________________________
Name: ______________________
Its: _______________________

GRANTEE

City of Hillsboro, a municipal corporation

By: ________________________
Name: ______________________
Its: _______________________

[Acknowledgments follow on next page]
STATE OF OREGON )
         ) ss.
County of ___________ )

This instrument was acknowledged before me on _____________, 20__, by
Scott Edmonds as Trustee of the Scott and Nancy Living Trust.

                                      NOTARY PUBLIC for Oregon
                                      My Commission Expires: _____________

STATE OF OREGON )
         ) ss.
County of ___________ )

This instrument was acknowledged before me on _____________, 20__, by
Nancy Edmonds as Trustee of the Scott and Nancy Living Trust.

                                      NOTARY PUBLIC for Oregon
                                      My Commission Expires: _____________

STATE OF OREGON )
         ) ss.
County of Washington )

This instrument was acknowledged before me on _____________, 20__, by
__________ as ______________ of
Tualatin Valley Water District, a domestic water supply district organized under ORS
Chapter 264.

                                      NOTARY PUBLIC for Oregon
                                      My Commission Expires: _____________

Page 8 – WATER SYSTEM FACILITIES EASEMENT
STATE OF OREGON  
) ss.
County of Washington  )

This instrument was acknowledged before me on ________________, 20__, by 
as ____________________________________________ of
City of Hillsboro, an Oregon municipal corporation.

_________________________
NOTARY PUBLIC for Oregon
My Commission Expires: _____________
EXHIBIT A
Willamette Water Supply
November 13, 2018
Scott Edmonds & Nancy Edmonds, Trustees
Tax Map No. 2S106B 00200

PARCEL 1 – PERMANENT UTILITY EASEMENT

A parcel of land lying in the Section 6, Township 2 South, Range 1 West of the Willamette Meridian, Washington County, Oregon and being a portion of that property conveyed Scott Edmonds and Nancy Edmonds, Trustees, recorded February 8, 2008 as Parcel I of Document No. 2008-010896, in the Washington County Book of Records, said parcel being that portion of said property included in a strip of land 50.00 feet in width, lying 25.00 feet on each side of the following described Pipeline Centerline:

Beginning at Engineer’s Centerline Station 807+72.00, said point being N 88°16’49” E, 3197.30 feet from the West 1 / 4 corner of Section 6, Township 2 South, Range 1 West of the Willamette Meridian;
Thence along said pipeline the following courses:
S 89°29’59” W, 189.70 feet to Station 809+61.70;
thence S 83°03’43” W, 100.59 feet to Station 810+62.29;
thence S 85°38’46” W, 147.71 feet to Station 812+10.00;
thence S 71°15’21” W, 55.55 feet to Station 812+65.55;
thence S 89°18’27” W, 1151.34 feet to Station 824+16.88;
thence N 45°57’23” W, 129.72 feet to Station 825+46.60;
thence S 88°46’47” W, 441.22 feet to Station 829+87.82;
thence S 89°29’07” W, 906.98 feet to Station 838+94.79;
thence S 85°10’41” W, 149.31 feet to Station 840+44.10, said point being N 19°22’34” W, 105.21 feet from said West 1 / 4 corner of Section 6;
thence continuing along said pipeline S 79°51’57” W, 34.86 feet to Station 840+78.97;
thence S 76°09’13” W, 93.90 feet to Station 841+72.87;
thence S 71°04’33” W, 82.23 feet to Station 842+55.09;
thence S 68°42’19” W, 756.34 feet to Station 850+11.44;
thence S 69°44’05” W, 88.45 feet to Station 850+99.89;
thence N 68°25’58” W, 61.32 feet to Station 851+61.20;
thence N 32°20’49” W, 105.87 feet to Station 852+67.07;
thence N 30°20’05” W, 916.82 feet to Station 861+83.90;
thence N 29°58’27” W, 227.75 feet to Station 864+11.64;
thence N 74°58’27” W, 35.00 feet to Station 864+46.65;
thence N 29°58’27” W, 162.22 feet to Station 866+08.86;
thence N 33°01’07” W, 96.75 feet to Station 867+05.61;
thence N 8°01’36” E, 35.07 feet to Station 867+40.68;
thence N 38°22’58” W, 25.07 feet to Station 867+65.75;
thence N 39°09’05” W, 561.37 feet to Station 873+27.12;
thence N 40°04’53” W, 358.16 feet to a point of curvature at Station 876+85.28;
thence along the arc of a 5034.50 foot radius curve to the left with a central angle of 4°12’40” a curve distance of 370.02 feet (the chord of which bears N 42°11’13” W, 369.94 feet) to a point of tangency at Station 880+55.30 PT;
thence N 44°17'33" W, 144.60 feet to Station 881+99.90;
thence N 46°04'20" W, 126.52 feet to Station 883+26.42;
thence N 49°38'24" W, 126.52 feet to Station 884+52.94;
thence N 51°25'11" W, 99.53 feet to Station 885+52.47;
thence N 57°45'20" W, 84.86 feet to Station 886+37.33;
thence N 70°25'37" W, 84.86 feet to Station 887+22.19; said point being N 51°41'57" W, 50.68 feet from the Northeast corner of the Solomon F. Shattuck D.L.C. number 51;
thence continuing along said pipeline N 83°05'54" W, 84.86 feet to Station 888+07.05;
thence N 89°26'02" W, 1401.57 feet to Station 902+08.62;
thence N 44°26'02" W, 27.23 feet to Station 902+35.85;
thence N 0°55'28" E, 224.95 feet to Station 904+60.80;
thence N 25°53'14" W, 150.00 feet to Station 906+10.80;
thence N 0°55'28" E, 94.19 feet to Station 907+04.99 and the Terminus of said pipeline description, said terminus also being N 2°51'50" W, 508.09 feet from the Southeast corner of the John Landess D.L.C. number 37.

EXCEPT THEREFROM that portion lying within the right-of-way of SW Scholls Ferry Rd (CR 3278).

The parcel of land to which this description applies contains 6,053 square feet (0.14 acre), more or less.

Basis of Bearings is the Oregon Coordinate Reference System (OCRS), Portland Zone.
EXHIBIT A

Willamette Water Supply
November 13, 2018

Scott Edmonds & Nancy
Edmonds, Trustees
Tax Map No. 2S106B 00200

PARCEL 2 – TEMPORARY CONSTRUCTION EASEMENT

That portion of said Edmonds property included in a strip of land 50.00 in width, lying on the
northerly side of the Pipeline Centerline described in Parcel 1:

EXCEPT THEREFROM that portion lying within the right-of-way of SW Scholls Ferry Rd (CR
3278) and the above described Parcel 1.

The parcel of land to which this description applies contains 3,880 square feet (0.09 acre), more
or less.
EXHIBIT B

PARCEL 1 PERMANENT
UTILITY EASEMENT
ACQUISITION
AREA = 6,053 S.F.
(0.14 ac)

PARCEL 2 TEMPORARY
CONSTRUCTION EASEMENT
ACQUISITION
AREA = 3,880 S.F.
(0.09 ac)

WILLAMETTE WATER SUPPLY PROGRAM
PIPELINE MAIN STEM, SECTION 5.2

ACQUISITION MAP
PAGE 1 OF 1

FILE No. SUBMITTAL DATE:
TAX LOT: 200 ADDRESS:
TAX MAP: T2S R1W Sec06B

ch2m
SURVEY & MAPPING
2020 SW 4TH AVE. SUITE 300 PORTLAND, OR 97201
PH: (503) 235-5000
EXHIBIT A

Willamette Water Supply
November 13, 2018

Scott Edmonds & Nancy
Edmonds, Trustees
Tax Map No. 2S106B 00203

PARCEL 1 – PERMANENT UTILITY EASEMENT

A parcel of land lying in the Section 6, Township 2 South, Range 1 West of the Willamette Meridian, Washington County, Oregon and being a portion of that property conveyed Scott Edmonds and Nancy Edmonds, Trustees, recorded February 8, 2008 as Parcel III of Document No. 2008-010806, in the Washington County Book of Records, said parcel being that portion of said property included in a strip of land 50.00 feet in width, lying 25.00 feet on each side of the following described Pipeline Centerline:

Beginning at Engineer’s Centerline Station 807+72.00, said point being N 88°16’49” E, 3197.30 feet from the West 1/4 corner of Section 6, Township 2 South, Range 1 West of the Willamette Meridian;
Thence along said pipeline the following courses:
S 89°29’59” W, 189.70 feet to Station 809+61.70;
thence S 83°03’43” W, 100.59 feet to Station 810+62.29;
thence S 85°38’46” W, 147.71 feet to Station 812+10.00;
thence S 71°15’21” W, 55.55 feet to Station 812+65.55;
thence S 89°18’27” W, 1151.34 feet to Station 824+16.88;
thence N 45°57’23” W, 129.72 feet to Station 825+46.60;
thence S 88°46’47” W, 441.22 feet to Station 829+87.82;
thence S 89°29’07” W, 906.98 feet to Station 838+94.79;
thence S 85°10’41” W, 149.31 feet to Station 840+44.10, said point being N 19°22’34” W, 105.21 feet from said West 1/4 corner of Section 6;
thence continuing along said pipeline S 79°51’57” W, 34.86 feet to Station 840+78.97;
thence S 76°09’13” W, 93.90 feet to Station 841+72.87;
thence S 71°04’33” W, 82.23 feet to Station 842+55.09;
thence S 68°42’19” W, 756.34 feet to Station 850+11.44;
thence S 69°44’05” W, 88.45 feet to Station 850+99.89;
thence N 68°25’58” W, 61.32 feet to Station 851+61.20;
thence N 32°20’49” W, 105.87 feet to Station 852+67.07;
thence N 30°20’05” W, 916.82 feet to Station 861+83.90;
thence N 29°58’27” W, 227.75 feet to Station 864+11.64;
thence N 74°58’27” W, 35.00 feet to Station 864+46.65;
thence N 29°58’27” W, 162.22 feet to Station 866+08.86;
thence N 33°01’07” W, 96.75 feet to Station 867+05.61;
thence N 8°01’36” W, 35.07 feet to Station 867+40.68;
thence N 38°22’58” W, 25.07 feet to Station 867+65.75;
thence N 39°09’05” W, 561.37 feet to Station 873+27.12;
thence N 40°04’53” W, 358.16 feet to a point of curvature at Station 876+85.28;
thence along the arc of a 5034.50 foot radius curve to the left with a central angle of 4°12’40” a curve distance of 370.02 feet (the chord of which bears N 42°11’13” W, 369.94 feet) to a point of tangency at Station 880+55.30 PT;
EXHIBIT A

Willamette Water Supply
November 13, 2018

thence N 44°17'33" W, 144.60 feet to Station 881+99.90;
thence N 46°04'20" W, 126.52 feet to Station 883+26.42;
thence N 49°38'24" W, 126.52 feet to Station 884+52.94;
thence N 51°25'11" W, 99.53 feet to Station 885+52.47;
thence N 57°45'20" W, 84.86 feet to Station 886+37.33;
thence N 70°25'37" W, 84.86 feet to Station 887+22.19; said point being N 51°41'57" W, 50.68 feet from the Northeast corner of the Solomon F. Shattuck D.L.C. number 51;
thence continuing along said pipeline N 83°05'54" W, 84.86 feet to Station 888+07.05;
thence N 89°26'02" W, 1401.57 feet to Station 902+08.62;
thence N 44°26'02" W, 27.23 feet to Station 902+35.85;
thence N 0°55'28" E, 224.95 feet to Station 904+60.80;
thence N 25°53'14" W, 150.00 feet to Station 906+10.80;
thence N 0°55'28" E, 94.19 feet to Station 907+04.99 and the Terminus of said pipeline
description, said terminus also being N 2°51'50 W, 508.09 feet from the Southeast corner of the
John Landess D.L.C. number 37.

EXCEPT THEREFROM that portion lying within the right-of-way of SW Scholls Ferry Rd (CR 3278).

The parcel of land to which this description applies contains 1,170 square feet (0.03 acre), more
or less.

Basis of Bearings is the Oregon Coordinate Reference System (OCRS), Portland Zone.
EXHIBIT A

Willamette Water Supply
November 13, 2018

Scott Edmonds & Nancy Edmonds, Trustees
Tax Map No. 2S106B 00203

PARCEL 2 – TEMPORARY CONSTRUCTION EASEMENT

That portion of said Edmonds property included in a strip of land 50.00 in width, lying on the northerly side of the Pipeline Centerline described in Parcel 1:

EXCEPT THEREFROM that portion lying within the right-of-way of SW Scholls Ferry Rd (CR 3278) and the above described Parcel 1.

The parcel of land to which this description applies contains 750 square feet (0.02 acre), more or less.
EXHIBIT A

Willamette Water Supply
November 15, 2018

Scott Edmonds & Nancy
Edmonds, Trustees
Tax Map No. 2S106B 00204

PARCEL 1 – PERMANENT UTILITY EASEMENT

A parcel of land lying in the Section 6, Township 2 South, Range 1 West of the Willamette Meridian, Washington County, Oregon and being a portion of that property conveyed Scott Edmonds and Nancy Edmonds, Trustees, recorded February 8, 2008 as Parcel II of Document No. 2008-010806, in the Washington County Book of Records, said parcel being that portion of said property included in a strip of land 50.00 feet in width, lying 25.00 feet on each side of the following described Pipeline Centerline:

Beginning at Engineer’s Centerline Station 807+72.00, said point being N 88°16’49" E, 3197.30 feet from the West 1/4 corner of Section 6, Township 2 South, Range 1 West of the Willamette Meridian;
Thence along said pipeline the following courses:
S 89°29’59" W, 189.70 feet to Station 809+61.70;
thence S 83°03’43" W, 100.59 feet to Station 810+62.29;
thence S 85°38’46" W, 147.71 feet to Station 812+10.00;
thence S 71°15’21" W, 55.55 feet to Station 812+65.55;
thence S 89°18’27" W, 1151.34 feet to Station 824+16.88;
thence N 45°57’23" W, 129.72 feet to Station 825+46.60;
thence S 88°46’47" W, 441.22 feet to Station 829+87.82;
thence S 89°29’07" W, 906.98 feet to Station 838+94.79;
thence S 85°10’41" W, 149.31 feet to Station 840+44.10, said point being N 19°22’34 W, 105.21 feet from said West 1/4 corner of Section 6;
thence continuing along said pipeline S 79°51’57" W, 34.86 feet to Station 840+78.97;
thence S 76°09’13" W, 93.90 feet to Station 841+72.87;
thence S 71°04’33" W, 82.23 feet to Station 842+55.09;
thence S 68°42’19" W, 756.34 feet to Station 850+11.44;
thence S 69°44’05" W, 88.45 feet to Station 850+99.89;
thence N 68°25’58" W, 61.32 feet to Station 851+61.20;
thence N 32°20’49" W, 105.87 feet to Station 852+67.07;
thence N 30°20’05" W, 916.82 feet to Station 861+83.90;
thence N 29°58’27" W, 227.75 feet to Station 864+11.64;
thence N 74°58’27" W, 35.00 feet to Station 864+46.65;
thence N 29°58’27" W, 162.22 feet to Station 866+08.86;
thence N 33°01’07" W, 96.75 feet to Station 867+05.61;
thence N 8°01’36" E, 35.07 feet to Station 867+40.68;
thence N 38°22’58" W, 25.07 feet to Station 867+65.75;
thence N 39°09’05" W, 561.37 feet to Station 873+27.12;
thence N 40°04’53" W, 358.16 feet to a point of curvature at Station 876+85.28;
thence along the arc of a 5034.50 foot radius curve to the left with a central angle of 4°12’40" a curve distance of 370.02 feet (the chord of which bears N 42°11’13" W, 369.94 feet) to a point of tangency at Station 880+55.30 PT;
EXHIBIT A

Willamette Water Supply  Scott Edmonds & Nancy
November 15, 2018  Edmonds, Trustees

thence N 44°17'33" W, 144.60 feet to Station 881+99.90;
thence N 46°04'20" W, 126.52 feet to Station 883+26.42;
thence N 49°38'24" W, 126.52 feet to Station 884+52.94;
thence N 51°25'11" W, 99.53 feet to Station 885+52.47;
thence N 57°45'20" W, 84.86 feet to Station 886+37.33;
thence N 70°25'37" W, 84.86 feet to Station 887+22.19; said point being N 51°41'57" W, 50.68
feet from the Northeast corner of the Solomon F. Shattuck D.L.C. number 51;
thence continuing along said pipeline N 83°05'54" W, 84.86 feet to Station 888+07.05;
thence N 89°26'02" W, 1401.57 feet to Station 902+08.62;
thence N 44°26'02" W, 27.23 feet to Station 902+35.85;
thence N 0°55'28" E, 224.95 feet to Station 904+60.80;
thence N 25°53'14" W, 150.00 feet to Station 906+10.80;
thence N 0°55'28" E, 94.19 feet to Station 907+04.99 and the Terminus of said pipeline
description, said terminus also being N 2°51'50" W, 508.09 feet from the Southeast corner of the
John Landess D.L.C. number 37.

EXCEPT THEREFROM that portion lying within the right-of-way of SW Scholls Ferry Rd (CR
3278).

The parcel of land to which this description applies contains 6,058 square feet (0.14 acre), more
or less.

Basis of Bearings is the Oregon Coordinate Reference System (OCRS), Portland Zone.

PARCEL 2 – TEMPORARY CONSTRUCTION EASEMENT

That portion of said Edmonds property included in a strip of land 50.00 feet in width, lying on
the northerly side of the Pipeline Centerline described in Parcel 1:

EXCEPT THEREFROM that portion lying within the right-of-way of SW Scholls Ferry Rd (CR
3278) and the above described Parcel 1.

The parcel of land to which this description applies contains 3,890 square feet (0.09 acre), more
or less.

PAGE 2 OF 2
AFTER RECORDING RETURN TO:
Tualatin Valley Water District
Attn: Chief Executive Officer
1850 SW 170th Avenue
Beaverton OR 97003

UNTIL A CHANGE IS REQUESTED
SEND TAX STATEMENTS TO:
No change in tax statements

File #: PLM_5.2-050
Map and Tax Lot #: 2S106B000500

This space is reserved for recorder’s use.

WATER SYSTEM FACILITIES EASEMENT

This Water System Facilities Easement is made this ______ day of _______________ , 20____, by and between Ed Bartholemy (“Grantor”), Tualatin Valley Water District, a domestic water supply district, organized under ORS Chapter 264 and the City of Hillsboro (hereinafter collectively referred to as “Grantees”).

Grantor and Grantees agree as follows:

1. Grant of Permanent Easement. Grantor hereby grants to Grantees, jointly and severally, their successors, and heirs a perpetual and non-exclusive easement (“Easement”) on, over, and under a portion of that certain real property described in Exhibit A (the “Property”), which portion is depicted on Exhibit B (the “Easement Area”), both of which are attached hereto and incorporated herein by this reference. The Easement shall be used by Grantee only for the purposes and as provided herein.

2. Right of Entry and Use. Subject to the terms of this Easement, Grantees shall have the right to enter upon and use the Easement Area for the purposes of constructing, operating, maintaining, repairing, replacing, and modifying water pipelines and other water facilities, and all appurtenances incident thereto ("Water System Facilities"). Within the Easement Area, Grantee shall have the perpetual right to cut, trim, control, and remove trees, brush, and other obstructions which injure or interfere with the Grantee’s use or occupation of the Easement or Grantee’s right to construct, reconstruct, install, use, operate, maintain, repair, patrol, replace, upgrade, or remove its improvements, without liability for damages arising there from. The use of the Easement by Grantees shall be in compliance with applicable laws.

Page 1 – WATER SYSTEM FACILITIES EASEMENT
3. **Temporary Easement.** During construction of the Water System Facilities, Grantor hereby grants a temporary construction easement ("TCE") on, over, and under the Property as described and depicted in Exhibit C (the "TCE Area") for such reasonable period to perform the work. Grantor acknowledges construction will occur in multiple phases prior to 2026. Unless otherwise specified in writing, this TCE takes effect upon thirty (30) days advanced written notice to Grantor and extends for two years from this date, which may be extended up to two (2) six (6)-month extensions with a pro rata compensation.

4. **Restrictions on Grantees Use of Easement.** Grantees shall use good faith efforts to not interfere with Grantor’s use and enjoyment of the Property outside the Easement Area or otherwise cause operations on Grantor’s Property outside the Easement Area to be interfered with or interrupted by the use of the Easement by Grantees. Grantees shall maintain reasonable access to Grantor’s property during construction, maintenance, repair, replacement, or modification of the Water System Facilities.

5. **Non-Exclusive Grant; Use of the Easement.** The Easement herein shall be non-exclusive for the purposes stated herein, and Grantor may not use the Easement Area inconsistent with the terms of this easement or permit third parties to use any portion of the Easement Area without the Grantees’ prior written approval, which shall not be unreasonably withheld, delayed or conditioned, provided:

   a) The Grantor or approved third party shall provide a written request to the Grantees to use the Easement Area so that the Grantees’ right to construct, use, access, repair, and maintain the Water System Facilities is not impaired; and

   b) The Grantor or approved third party assumes full responsibility in the event the Water System Facilities are damaged or impaired by their actions, in which case the Grantor or such third party shall immediately remedy the damage or impairment and indemnify Grantees from all expenses, costs, damages or impacts associated with such remedy. Grantees reserve the right to make necessary repairs or remedies with their own forces or contractors with the cost to be reimbursed by Grantor or third party; and

   c) All design and construction plans must be approved in writing by the Grantees in advance and construction shall require Grantees’ inspection and approval; and

   d) The Grantor or approved third party complies with Section 6.

6. **Grantor’s Rights and Restrictions.**

   a) **Grantor’s Rights.** Grantor shall retain the right to make full use of the Property outside the Easement Area provided that such use does not interfere with the rights of the Grantee or Grantee’s use of the Easement Area or endanger Grantee’s Water System Facilities, except as provided in Section 6.b. below. Agricultural use within the Easement Area is permissible provided such use conforms to Section 6.b. below. Grantor shall only perform or permit other
persons or entities to perform construction or other work within the Easement Area after prior written approval by Grantee and only if such construction or other work is performed in accordance with the terms of this Easement, all applicable laws, rules and regulations, and Grantee’s rules and regulations as they may be modified from time to time. With Grantor’s written request for approval, Grantor shall submit drawings, specifications, reports, and/or other applicable information describing proposed work with sufficient detail to be reviewed by Grantee. Notwithstanding the provisions of Section 6.b. below, Grantor reserves use of the Easement, including installing driveways that are located at least five (5) feet above the Water System Facilities, fences and gates (Grantor must provide Grantee means to unlock gates) with an embedment depth of less than twenty-four (24) inches, irrigation and drain piping crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance, and residential level (200 amp or less) electrical service line(s) crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance (electrical line is required to be placed in a conduit for a minimum length of twenty (20) feet centered over the Water System Facilities and crossing at substantially right angles to the Water System Facilities) provided, however, that the exercise of such rights, in the reasonable opinion of Grantee, does not impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, repair and reasonable access. Grantor must request a locate from Grantee prior to installation to ensure proper distance from Grantee’s Water System Facilities.

b) Restrictions on Grantor. Within the Easement Area, unless otherwise approved in advance in writing by the Grantee, Grantor agrees not to construct or permit others to use, construct, install, store, plant, change grade, or create any improvements, structures, impoundments, or stockpile any materials that in the sole opinion of Grantee will impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, and reasonable access.

Grantor agrees not to store any materials including hazardous materials, fuel, oil, and chemicals on, over, under, or in the Easement Area. Grantor agrees not to store personal property, including but not limited to, derelict personal property, refuse piles, vehicles, equipment, or machinery in the Easement Area.

Grantor agrees not to plant trees within the Easement Area and to limit any plants requiring rooting depths or cultivation within the Easement Area to avoid any ground disturbance or excavation exceeding twenty-four (24) inches in depth.

Grantor agrees not to plant trees or other plants within 10 feet of any above-ground portion of the Water System Facilities. Grantor agrees not to obstruct access to Grantee’s above-ground Water System Facilities.
Grantor agrees not to change the grade within the Easement Area or drainage patterns within the Easement Area or adjacent to the Easement Area during the term of this Easement by adding, removing, or displacing any more than six (6) inches of material from the surface. Grantee agrees to provide as-built drawings showing existing grades for elevation reference purposes. Grantor also agrees not to impair any lateral or sub-adjacent support for the Water System Facilities within the Easement Area.

Grantor agrees not to install or permit others to install within the Easement Area any utilities which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep.

Grantor agrees not to install or permit others to install within the Easement Area electric utilities, service lines, or transformers above the 200-amp residential service level which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep. If Grantor desires to cross or longitudinally use the Easement Area, Grantor agrees to apply to Grantee in writing, provide drawings with specifications for any installation of an electric utility, service line, or transformer greater than twenty-four (24) inches deep, undergo a review and approval process, and must receive written permission from Grantee. Electrical conductors parallel to the Water System Facilities need to be placed in conduit agreeable to the Grantee and shall be no greater than twenty-four (24) inches deep.

Grantor agrees not to place or permit others to place a load of any kind over the Water System Facilities where the weight of the load could cause damage of any type to the Water System Facilities.

Grantor agrees not to impound water, change drainage patterns or create ponds, reservoirs, structures, or facilities designed to hold water over the Easement Area, unless the prior written consent of Grantee is provided.

Within the Easement Area, Grantor agrees that periodic easement encroachment review by Grantees may be performed, and Grantor agrees to remove any item unacceptable under this Easement or any other item deemed detrimental to the Water System Facilities in the sole discretion of the Grantees within thirty (30) days of notification by Grantees. Should Grantor fail to remedy the situation in the time frame provided, Grantees may remove said encroachment and charge the cost of such removal to the Grantor on a time and materials basis.

c) **Restoration of Easement Following Construction.** At Grantees’ sole cost and expense, and except where modifications to the Property are otherwise agreed to in this Agreement, Grantees shall restore the Easement Area to the same or better condition as existed in the Easement Areas as applicable prior to the commencement of such work.
Upon completion of construction and/or any subsequent maintenance activities of the herein described facility, including the use of Grantee for temporary construction and/or ingress and egress purposes, Grantee agrees to restore said land, as near as practicable to its original condition, unless otherwise agreed to in writing by the Grantor, provided, however, that all such restoration efforts shall comply with any applicable City, County, and State of Oregon codes.

Grantees shall not fence or otherwise obstruct free and open access to and travel upon the Property without written authorization from the Grantor, with the exception of construction and silt fence during construction and restoration. Grantees shall not install any surface structures unless specifically mentioned herein.

7. **Indemnification.** To the extent permitted by the Oregon Constitution and subject to the Oregon Tort Claims Act (ORS 30.260 to 30.300), Grantees shall indemnify, defend, and hold harmless Grantor and its members, managers, employees, agents, and representatives (collectively, “Indemnified Parties”) from and against any injury, expense, damage, liability, or claim, including, but not limited, to reasonable attorney fees, incurred by any Indemnified Party, arising directly or indirectly from the rights granted by Grantor to Grantees hereunder or any act or omission by Grantees or any Grantees’ Party. Grantees assume all risk arising out of their activities and use of the Easement by it and the Grantees Parties.

8. **Default and Remedies.** Time is of the essence regarding the terms of this Easement. If Grantor or Grantees violate any of the terms, covenants, or conditions of this Easement, or fails to perform any of its obligations included in this Easement in a timely manner, the non-defaulting Party(ies) shall have the right to declare a default by written notice and seek available legal or equitable remedies in the Circuit Court of the State for Oregon in Washington County. Notice shall be given by first class mail addressed to the parties as follows:

City of Hillsboro  
Water Department Manager  
150 E. Main Street  
Hillsboro, Oregon 97123  
Ed Bartholemey  
18485 SW Scholls Ferry Road  
Beaverton, OR 97007

Tualatin Valley Water District  
Attn: Chief Executive Officer  
1850 S.W. 170th Avenue  
Beaverton, Oregon 97003

The notice shall provide a detailed statement(s) of the alleged default. If the default is not cured within 15 days from the date of notice, or if the defaulting Party has not commenced to diligently commence cure for a matter that requires more than 15 days, then the non-defaulting Party(ies) may commence litigation and seek all remedies available at law or in equity. If the Easement is terminated as a result of litigation, Grantees shall, at their sole cost
and expense, return the Easement Area to Grantor in the same or better condition as existed prior to the grant of the Easement.

9. **Binding Effect.** This Easement is binding upon, inures to the benefit of and may be enforced by the Parties and their respective successors and assigns. Grantees may assign or transfer their interests without consent of Grantor. Grantee may use agents, employees, contractors, and other authorized persons for the purposes of exercising Grantees’ rights and obligations under this Easement, provided no third-party beneficiary rights are created by this Easement. This Easement shall be construed in accordance with Oregon law.

10. **Amendment.** This Easement may be amended only by an instrument in writing signed by both Grantor and Grantee. All approvals required hereunder shall be in writing.

11. **No Public Dedication.** Nothing in this Easement will be deemed to be a gift or a dedication of any portion of the Water System Facilities Easement to the general public or for the use of the general public or for any public purpose whatsoever, it being the intent of the parties that this Easement be strictly limited to and for the purposes expressed herein.

[SPACE LEFT INTENTIONALLY BLANK]

[SIGNATURES TO FOLLOW]
GRANTOR

Ed Bartholemy

By: __________________________
Name: ________________________
Its: __________________________

GRANTOR

By: __________________________
Name: ________________________
Its: __________________________

GRANTEE

Tualatin Valley Water District, a domestic water supply district

By: __________________________
Name: ________________________
Its: __________________________

GRANTEE

City of Hillsboro, a municipal corporation

By: __________________________
Name: ________________________
Its: __________________________

[Acknowledgments follow on next page]
STATE OF OREGON  )
County of __________  ) ss.

This instrument was acknowledged before me on _______________, 20__, by Ed Bartholemy.

NOTARY PUBLIC for Oregon
My Commission Expires: _______________

STATE OF OREGON  )
County of Washington  ) ss.

This instrument was acknowledged before me on _______________, 20__, by ______ as ______________________ of Tualatin Valley Water District, a domestic water supply district organized under ORS Chapter 264.

NOTARY PUBLIC for Oregon
My Commission Expires: _______________

STATE OF OREGON  )
County of Washington  ) ss.

This instrument was acknowledged before me on _______________, 20__, by ______ as ______________________ of City of Hillsboro, an Oregon municipal corporation.

NOTARY PUBLIC for Oregon
My Commission Expires: _______________

Page 8 – WATER SYSTEM FACILITIES EASEMENT
EXHIBIT A

Willamette Water Supply
November 13, 2018

Ed Bartholemy
Tax Map No. 2S106B 00500

PARCEL 1 – PERMANENT UTILITY EASEMENT

A parcel of land lying in the Section 6, Township 2 South, Range 1 West of the Willamette Meridian, Washington County, Oregon and being a portion of that property conveyed Ed Bartholemy, recorded October 21, 2014 as Document No. 2014-06989, in the Washington County Book of Records, said parcel being that portion of said property included in a strip of land variable in width, lying on the northerly side of the following described Centerline:

Beginning at Centerline Station 807+72.00, said point being N 88°16'49" E, 3197.30 feet from the West 1/4 corner of Section 6, Township 2 South, Range 1 West of the Willamette Meridian; Thence along said centerline the following courses:

S 89°29'59" W, 189.70 feet to Station 809+61.70;
thence S 83°03'43" W, 100.59 feet to Station 810+62.29;
thence S 85°38'46" W, 147.71 feet to Station 812+10.00;
thence S 71°15'21" W, 55.55 feet to Station 812+65.55;
thence S 89°18'27" W, 1151.34 feet to Station 824+16.88;
thence N 45°57'23" W, 129.72 feet to Station 825+46.60;
thence S 88°46'47" W, 441.22 feet to Station 829+87.82;
thence S 89°29'07" W, 906.98 feet to Station 838+94.79;
thence S 85°10'41" W, 149.31 feet to Station 840+44.10, said point being N 19°22'34 W, 105.21 feet from said West 1/4 corner of Section 6;
thence continuing along said centerline S 79°51'57" W, 34.86 feet to Station 840+78.97;
thence S 76°09'13" W, 93.90 feet to Station 841+72.87;
thence S 71°04'33" W, 82.23 feet to Station 842+55.09;
thence S 68°42'19" W, 756.34 feet to Station 850+11.44;
thence S 69°44'05" W, 88.45 feet to Station 850+99.89;
thence N 68°25'58" W, 61.32 feet to Station 851+61.20;
thence N 32°20'49" W, 105.87 feet to Station 852+67.07;
thence N 30°20'05" W, 916.82 feet to Station 861+83.90;
thence N 29°18'27" W, 227.75 feet to Station 864+11.64;
thence N 74°58'27" W, 35.00 feet to Station 864+46.65;
thence N 29°58'27" W, 162.22 feet to Station 866+08.86;
thence N 33°01'07" W, 96.75 feet to Station 867+05.61;
thence N 8°01'36" E, 35.07 feet to Station 867+40.68;
thence N 38°22'58" W, 25.07 feet to Station 867+65.75;
thence N 39°09'05" W, 561.37 feet to Station 873+27.12;
thence N 40°04'53" W, 358.16 feet to a point of curvature at Station 876+85.28;
thence along the arc of a 5034.50 foot radius curve to the left with a central angle of 4°12'40" a curve distance of 370.02 feet (the chord of which bears N 42°11'13" W, 369.94 feet) to a point of tangency at Station 880+55.30 PT;
thence N 44°17'33" W, 144.60 feet to Station 881+99.90;
thence N 46°04'20" W, 126.52 feet to Station 883+26.42;
thence N 49°38'24" W, 126.52 feet to Station 884+52.94;
EXHIBIT A

Willamette Water Supply
November 13, 2018

Ed Bartholemy
Tax Map No. 2S106B 00500

thence N 51°25'11" W, 99.53 feet to Station 885+52.47;
thence N 57°45'20" W, 84.86 feet to Station 886+37.33;
thence N 70°25'37" W, 84.86 feet to Station 887+22.19; said point being N 51°41'57" W, 50.68 feet from the Northeast corner of the Solomon F. Shattuck D.L.C. number 51;
thence continuing along said centerline N 83°05'54" W, 84.86 feet to Station 888+07.05;
thence N 89°26'02" W, 1401.57 feet to Station 902+08.62;
thence N 44°26'02" W, 27.23 feet to Station 902+35.85;
thence N 0°55'28" E, 224.95 feet to Station 904+60.80;
thence N 25°53'14" W, 150.00 feet to Station 906+10.80;
thence N 0°55'28" E, 94.19 feet to Station 907+04.99 and the Terminus of said centerline description, said terminus also being N 2°51'50" W, 508.09 feet from the Southeast corner of the John Landess D.L.C. number 37.

The widths of the strip of land above referred to are as follows:

<table>
<thead>
<tr>
<th>CENTERLINE STATION</th>
<th>WIDTH ON NORTHERLY SIDE OF CENTERLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 822+28.36</td>
<td>118.00 feet in a straight line to 25.00 feet.</td>
</tr>
<tr>
<td>To 827+50.00</td>
<td></td>
</tr>
</tbody>
</table>

EXCEPT THEREFROM that portion lying within the right-of-way of SW Scholls Ferry Rd (CR 3278).

The parcel of land to which this description applies contains 18,240 square feet (0.42 acre), more or less.

Basis of Bearings is the Oregon Coordinate Reference System (OCRS), Portland Zone.
EXHIBIT A

Willamette Water Supply
November 13, 2018

Ed Bartholemy
Tax Map No. 2S106B 00500

PARCEL 2 – TEMPORARY CONSTRUCTION EASEMENT

That portion of said Bartholemy property included in a strip of land variable in width, lying on the northerly side of the Centerline described in Parcel 1:

The widths of the strip of land above referred to are as follows:

<table>
<thead>
<tr>
<th>CENTERLINE STATION</th>
<th>WIDTH ON NORTHERLY SIDE OF CENTERLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 821+53.36</td>
<td>179.00 feet.</td>
</tr>
<tr>
<td>To 823+53.36</td>
<td></td>
</tr>
<tr>
<td>From 823+53.36</td>
<td>142.74 feet in a straight line to 50.00 feet.</td>
</tr>
<tr>
<td>To 827+50.00</td>
<td></td>
</tr>
</tbody>
</table>

EXCEPT THEREFROM that portion lying within the right-of-way of SW Scholls Ferry Rd (CR 3278) and the above described Parcel 1.

The parcel of land to which this description applies contains 23,952 square feet (0.55 acre), more or less.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JAN. 14, 2003
JOSEPH W. HURLIMAN
58960LS

RENEWAL: 7/01/19
SIGNED: 1/13/2018
Exhibit 1-6
Ronald K. Anderson and Jennifer J. Anderson
as tenants by the entirety
2S2010000400
PLM_5.2-060
WATER SYSTEM FACILITIES EASEMENT

This Water System Facilities Easement is made this ______ day of ______________, 20__,
by and between Ronald K. Anderson and Jennifer J. Anderson, as tenants by the entirety
("Grantor"), Tualatin Valley Water District, a domestic water supply district organized under
ORS Chapter 264, and the City of Hillsboro, a municipal corporation, (hereinafter collectively
referred to as "Grantees").

Grantor and Grantees agree as follows:

1. Grant of Permanent Easement. Grantor hereby grants to Grantees, jointly and severally,
their successors, and heirs a perpetual and non-exclusive easement ("Easement") on, over,
and under a portion of that certain real property described in Exhibit A (the "Property"),
which portion is depicted on Exhibit B (the "Easement Area"), both of which are attached
hereto and incorporated herein by this reference. The Easement shall be used by Grantee only
for the purposes and as provided herein.

2. Right of Entry and Use. Subject to the terms of this Easement, Grantees shall have the right
to enter upon and use the Easement Area for the purposes of constructing, operating,
maintaining, repairing, replacing, and modifying water pipelines and other water facilities,
and all appurtenances incident thereto ("Water System Facilities"). Within the Easement
Area, Grantee shall have the perpetual right to cut, trim, control, and remove trees, brush, and
other obstructions which injure or interfere with the Grantee’s use or occupation of the
Easement or Grantee’s right to construct, reconstruct, install, use, operate, maintain, repair,
patrol, replace, upgrade, or remove its improvements, without liability for damages arising
there from. The use of the Easement by Grantees shall be in compliance with applicable laws.

3. **Restrictions on Grantees Use of Easement.** Grantees shall use good faith efforts to not interfere with Grantor’s use and enjoyment of the Property outside the Easement Area or otherwise cause operations on Grantor’s Property outside the Easement Area to be interfered with or interrupted by the use of the Easement by Grantees. Grantees shall maintain reasonable access to Grantor’s property during construction, maintenance, repair, replacement, or modification of the Water System Facilities.

4. **Non-Exclusive Grant; Use of the Easement.** The Easement herein shall be non-exclusive for the purposes stated herein, and Grantor may not use the Easement Area inconsistent with the terms of this easement or permit third parties to use any portion of the Easement Area without the Grantees’ prior written approval, which shall not be unreasonably withheld, delayed or conditioned, provided:
   
a) The Grantor or approved third party shall provide a written request to the Grantees to use the Easement Area so that the Grantees’ right to construct, use, access, repair, and maintain the Water System Facilities is not impaired; and
   
b) The Grantor or approved third party assumes full responsibility in the event the Water System Facilities are damaged or impaired by their actions, in which case the Grantor or such third party shall immediately remedy the damage or impairment and indemnify Grantees from all expenses, costs, damages or impacts associated with such remedy. Grantees reserve the right to make necessary repairs or remedies with their own forces or contractors with the cost to be reimbursed by Grantor or third party; and
   
c) All design and construction plans must be approved in writing by the Grantees in advance and construction shall require Grantees’ inspection and approval; and
   
d) The Grantor or approved third party complies with Section 6.

5. **Grantor’s Rights and Restrictions.**
   
a) **Grantor’s Rights.** Grantor shall retain the right to make full use of the Property outside the Easement Area provided that such use does not interfere with the rights of the Grantee or Grantee’s use of the Easement Area or endanger Grantee’s Water System Facilities, except as provided in Section 5.b. below. Agricultural use within the Easement Area is permissible provided such use conforms to Section 5.b. below. Grantor shall only perform or permit other persons or entities to perform construction or other work within the Easement Area after prior written approval by Grantee and only if such construction or other work is performed in accordance with the terms of this Easement, all applicable laws, rules and regulations, and Grantee’s rules and regulations as they may be modified from time to time. With Grantor’s written request for approval, Grantor
shall submit drawings, specifications, reports, and/or other applicable information
describing proposed work with sufficient detail to be reviewed by Grantee.
Notwithstanding the provisions of Section 5.b. below, Grantor reserves use of the
Easement, including installing driveways that are located at least five (5) feet
above the Water System Facilities, fences and gates (Grantor must provide
Grantee means to unlock gates) with an embedment depth of less than twenty-four
(24) inches, irrigation and drain piping crossing above the Water System Facilities
with a twenty-four (24) inch minimum clearance, and residential level (200 amp
or less) electrical service line(s) crossing above the Water System Facilities with a
twenty-four (24) inch minimum clearance (electrical line is required to be placed
in a conduit for a minimum length of twenty (20) feet centered over the Water
System Facilities and crossing at substantially right angles to the Water System
Facilities) provided, however, that the exercise of such rights, in the reasonable
opinion of Grantee, does not impair, injure, or interfere with, now or in the future,
any of Grantee’s rights in the Easement including, but not limited to, Grantee’s
rights of operation, maintenance, repair and reasonable access. Grantor must
request a locate from Grantee prior to installation to ensure proper distance from
Grantee’s Water System Facilities.

b) **Restrictions on Grantor.** Within the Easement Area, unless otherwise approved
in advance in writing by the Grantee, Grantor agrees not to construct or permit
others to use, construct, install, store, plant, change grade, or create any
improvements, structures, impoundments, or stockpile any materials that in the
sole opinion of Grantee will impair, injure, or interfere with, now or in the future,
any of Grantee’s rights in the Easement including, but not limited to, Grantee’s
rights of operation, maintenance, and reasonable access.

Grantor agrees not to store any materials including hazardous materials, fuel, oil,
and chemicals on, over, under, or in the Easement Area. Grantor agrees not to
store personal property, including but not limited to, derelict personal property,
refuse piles, vehicles, equipment, or machinery in the Easement Area.

Grantor agrees not to plant trees within the Easement Area and to limit any plants
requiring rooting depths or cultivation within the Easement Area to avoid any
ground disturbance or excavation exceeding twenty-four (24) inches in depth.

Grantor agrees not to plant trees or other plants within 10 feet of any above-
ground portion of the Water System Facilities. Grantor agrees not to obstruct
access to Grantee’s above-ground Water System Facilities.

Grantor agrees not to change the grade within the Easement Area or drainage
patterns within the Easement Area or adjacent to the Easement Area during the
term of this Easement by adding, removing, or displacing any more than six (6)
inches of material from the surface. Grantee agrees to provide as-built drawings
showing existing grades for elevation reference purposes. Grantor also agrees not
to impair any lateral or sub-adjacent support for the Water System Facilities within the Easement Area.

Grantor agrees not to install or permit others to install within the Easement Area any utilities which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep.

Grantor agrees not to install or permit others to install within the Easement Area electric utilities, service lines, or transformers above the 200-amp residential service level which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep. If Grantor desires to cross or longitudinally use the Easement Area, Grantor agrees to apply to Grantee in writing, provide drawings with specifications for any installation of an electric utility, service line, or transformer greater than twenty-four (24) inches deep, undergo a review and approval process, and must receive written permission from Grantee. Electrical conductors parallel to the Water System Facilities need to be placed in conduit agreeable to the Grantee and shall be no greater than twenty-four (24) inches deep.

Grantor agrees not to place or permit others to place a load of any kind over the Water System Facilities where the weight of the load could cause damage of any type to the Water System Facilities.

Grantor agrees not to impound water, change drainage patterns or create ponds, reservoirs, structures, or facilities designed to hold water over the Easement Area, unless the prior written consent of Grantee is provided.

Within the Easement Area, Grantor agrees that periodic easement encroachment review by Grantees may be performed, and Grantor agrees to remove any item unacceptable under this Easement or any other item deemed detrimental to the Water System Facilities in the sole discretion of the Grantees within thirty (30) days of notification by Grantees. Should Grantor fail to remedy the situation in the time frame provided, Grantees may remove said encroachment and charge the cost of such removal to the Grantor on a time and materials basis.

c) **Restoration of Easement Following Construction.** At Grantees’ sole cost and expense, and except where modifications to the Property are otherwise agreed to in this Agreement, Grantees shall restore the Easement Area to the same or better condition as existed in the Easement Areas as applicable prior to the commencement of such work.

Upon completion of construction and/or any subsequent maintenance activities of the herein described facility, Grantee agrees to restore said land, as near as practicable to its original condition, unless otherwise agreed to in writing by the Grantor, provided, however, that all such restoration efforts shall comply with any applicable City, County, and State of Oregon codes.
Grantees shall not fence or otherwise obstruct free and open access to and travel upon the Property without written authorization from the Grantor, with the exception of construction and silt fence during construction and restoration. Grantees shall not install any surface structures unless specifically mentioned herein.

6. **Indemnification.** To the extent permitted by the Oregon Constitution and subject to the Oregon Tort Claims Act (ORS 30.260 to 30.300), Grantees shall indemnify, defend, and hold harmless Grantor and its members, managers, employees, agents, and representatives (collectively, "Indemnified Parties") from and against any injury, expense, damage, liability, or claim, including, but not limited, to reasonable attorney fees, incurred by any Indemnified Party, arising directly or indirectly from the rights granted by Grantor to Grantees hereunder or any act or omission by Grantees or any Grantees' Party. Grantees assume all risk arising out of their activities and use of the Easement by it and the Grantees Parties.

7. **Default and Remedies.** Time is of the essence regarding the terms of this Easement. If Grantor or Grantees violate any of the terms, covenants, or conditions of this Easement, or fails to perform any of its obligations included in this Easement in a timely manner, the non-defaulting Party(ies) shall have the right to declare a default by written notice and seek available legal or equitable remedies in the Circuit Court of the State for Oregon in Washington County. Notice shall be given by first class mail addressed to the parties as follows:

City of Hillsboro  
Attn: Water Department Manager  
150 E. Main Street  
Hillsboro, Oregon 97123

Tualatin Valley Water District  
Attn: District Recorder  
1850 S.W. 170th Avenue  
Beaverton, Oregon 97003

Ronald K. Anderson and Jennifer J. Anderson  
19237 S.W. Tile Flat Road  
Beaverton, OR 97007

The notice shall provide a detailed statement(s) of the alleged default. If the default is not cured within 15 days from the date of notice, or if the defaulting Party has not commenced to diligently commence cure for a matter that requires more than 15 days, then the non-defaulting Party(ies) may commence litigation and seek all remedies available at law or in equity. If the Easement is terminated as a result of litigation, Grantees shall, at their sole cost and expense, return the Easement Area to Grantor in the same or better condition as existed prior to the grant of the Easement.
8. **Binding Effect.** This Easement is binding upon, inures to the benefit of and may be enforced by the Parties and their respective successors and assigns. Grantees may assign or transfer their interests without consent of Grantor. Grantee may use agents, employees, contractors, and other authorized persons for the purposes of exercising Grantees’ rights and obligations under this Easement, provided no third-party beneficiary rights are created by this Easement. This Easement shall be construed in accordance with Oregon law.

9. **Amendment.** This Easement may be amended only by an instrument in writing signed by both Grantor and Grantee. All approvals required hereunder shall be in writing.

10. **No Public Dedication.** Nothing in this Easement will be deemed to be a gift or a dedication of any portion of the Water System Facilities Easement to the general public or for the use of the general public or for any public purpose whatsoever, it being the intent of the parties that this Easement be strictly limited to and for the purposes expressed herein.

    [SPACE LEFT INTENTIONALLY BLANK]

    [SIGNATURES TO FOLLOW]
GRANTOR

Ronald K. Anderson

By: ___________________________
Name: _________________________
Its: __________________________

GRANTEE

Tualatin Valley Water District, a domestic water supply district

By: ___________________________
Name: _________________________
Its: __________________________

GRANTOR

Jennifer J. Anderson

By: ___________________________
Name: _________________________
Its: __________________________

GRANTEE

City of Hillsboro, a municipal corporation

By: ___________________________
Name: _________________________
Its: __________________________

[Acknowledgments follow on next page]
STATE OF OREGON        
)                          
County of Washington     
) ss.                     

This instrument was acknowledged before me on ____________, 20__ , by 
Ronald K. Anderson. 

NOTARY PUBLIC for Oregon 
My Commission Expires: ____________

STATE OF OREGON        
)                          
County of Washington     
) ss.                     

This instrument was acknowledged before me on ____________, 20__ , by 
Jennifer J. Anderson. 

NOTARY PUBLIC for Oregon 
My Commission Expires: ____________

STATE OF OREGON        
)                          
County of Washington     
) ss.                     

This instrument was acknowledged before me on ____________, 20__ , by 
________________________ of 
Tualatin Valley Water District, a domestic water supply district organized under ORS 
Chapter 264. 

NOTARY PUBLIC for Oregon 
My Commission Expires: ____________
STATE OF OREGON  

County of Washington  

This instrument was acknowledged before me on ____________, 20__, by  
as ___________________________________ of  
City of Hillsboro, an Oregon municipal corporation.  

______________________________  
NOTARY PUBLIC for Oregon  
My Commission Expires: __________
EXHIBIT A

Willamette Water Supply  
August 24, 2018

Ronald K. Anderson and  
Jennifer J. Anderson  
Tax Map No. 2S201 00400

thence N 44°17'33" W, 144.60 feet to Station 881+99.90;  
thence N 46°04'20" W, 126.52 feet to Station 883+26.42;  
thence N 49°38'24" W, 126.52 feet to Station 884+52.94;  
thence N 51°25'11" W, 99.53 feet to Station 885+52.47;  
thence N 57°45'20" W, 84.86 feet to Station 886+37.33;  
thence N 70°25'37" W, 84.86 feet to Station 887+22.19; said point being N 51°41'57" W, 50.68 feet from the Northeast corner of the Solomon F. Shattuck D.L.C number 51;  
thence continuing along said pipeline N 83°05'54" W, 84.86 feet to Station 888+07.05;  
thence N 89°26'02" W, 1401.57 feet to Station 902+08.62;  
thence N 44°26'02" W, 27.23 feet to Station 902+35.85;  
thence N 0°55'28" E, 224.95 feet to Station 904+60.80;  
thence N 25°53'14" W, 150.00 feet to Station 906+10.80;  
thence N 0°55'28" E, 94.19 feet to Station 907+04.99 and the Terminus of said pipeline description, said terminus also being N 2°51'50" W, 508.09 feet from the Southeast corner of the John Landess D.L.C number 37.

The widths of the strip of land above referred to are as follows:

<table>
<thead>
<tr>
<th>PIPELINE CENTERLINE STATION</th>
<th>WIDTH ON NORTHEASTERLY SIDE OF CENTERLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 866+50.00</td>
<td>55.85 feet in a straight line to 25.00 feet.</td>
</tr>
<tr>
<td>To 867+40.68</td>
<td></td>
</tr>
<tr>
<td>From 867+40.68</td>
<td>25.00 feet.</td>
</tr>
<tr>
<td>To 870+00.00</td>
<td></td>
</tr>
</tbody>
</table>

EXCEPT THEREFROM that portion lying within the right-of-way of SW Tile Flat Rd (CR 3279).

The parcel of land to which this description applies contains 6,468 square feet (0.15 acre), more or less.

Basis of Bearings is the Oregon Coordinate Reference System (OCRS), Portland Zone.
AFTER RECORDING RETURN TO:
Tualatin Valley Water District
Attn: District Recorder
1850 SW 170th Avenue
Beaverton OR 97003

UNTIL A CHANGE IS REQUESTED
SEND TAX STATEMENTS TO:
No change in tax statements

File #: PLM_5.2-061
Map and Tax Lot #: 2S2010000500

WATER SYSTEM FACILITIES EASEMENT

This Water System Facilities Easement is made this _____ day of ________________, 20___,
by and between Douglas L. Evans, ("Grantor"), Tualatin Valley Water District, a domestic water
supply district organized under ORS Chapter 264, and the City of Hillsboro, a municipal
corporation, (hereinafter collectively referred to as "Grantees").

Grantor and Grantees agree as follows:

1. Grant of Permanent Easement. Grantor hereby grants to Grantees, jointly and severally,
their successors, and heirs a perpetual and non-exclusive easement ("Easement") on, over,
and under a portion of that certain real property described in Exhibit A (the "Property"),
which portion is depicted on Exhibit B (the "Easement Area"), both of which are attached
hereto and incorporated herein by this reference. The Easement shall be used by Grantee only
for the purposes and as provided herein.

2. Right of Entry and Use. Subject to the terms of this Easement, Grantees shall have the right
to enter upon and use the Easement Area for the purposes of constructing, operating,
maintaining, repairing, replacing, and modifying water pipelines and other water facilities,
and all appurtenances incident thereto ("Water System Facilities"). Within the Easement
Area, Grantee shall have the perpetual right to cut, trim, control, and remove trees, brush, and
other obstructions which injure or interfere with the Grantee’s use or occupation of the
Easement or Grantee’s right to construct, reconstruct, install, use, operate, maintain, repair,
patrol, replace, upgrade, or remove its improvements, without liability for damages arising

Page 1 – WATER SYSTEM FACILITIES EASEMENT
therefrom. The use of the Easement by Grantees shall be in compliance with applicable laws.

3. **Temporary Easement.** During construction of the Water System Facilities, Grantor hereby grants a temporary construction easement ("TCE") on, over, and under the Property as described and depicted in Exhibit C (the "TCE Area") for such reasonable period to perform the work. Grantor acknowledges construction will occur in multiple phases prior to 2026. Unless otherwise specified in writing, this TCE takes effect upon thirty (30) days advanced written notice to Grantor and extends for two years from this date, which may be extended up to two (2) six (6)-month extensions with a pro rata compensation.

4. **Restrictions on Grantees Use of Easement.** Grantees shall use good faith efforts to not interfere with Grantor's use and enjoyment of the Property outside the Easement Area or otherwise cause operations on Grantor's Property outside the Easement Area to be interfered with or interrupted by the use of the Easement by Grantees. Grantees shall maintain reasonable access to Grantor's property during construction, maintenance, repair, replacement, or modification of the Water System Facilities.

5. **Non-Exclusive Grant; Use of the Easement.** The Easement herein shall be non-exclusive for the purposes stated herein, and Grantor may not use the Easement Area inconsistent with the terms of this easement or permit third parties to use any portion of the Easement Area without the Grantees' prior written approval, which shall not be unreasonably withheld, delayed or conditioned, provided:

   a) The Grantor or approved third party shall provide a written request to the Grantees to use the Easement Area so that the Grantees' right to construct, use, access, repair, and maintain the Water System Facilities is not impaired; and

   b) The Grantor or approved third party assumes full responsibility in the event the Water System Facilities are damaged or impaired by their actions, in which case the Grantor or such third party shall immediately remedy the damage or impairment and indemnify Grantees from all expenses, costs, damages or impacts associated with such remedy. Grantees reserve the right to make necessary repairs or remedies with their own forces or contractors with the cost to be reimbursed by Grantor or third party; and

   c) All design and construction plans must be approved in writing by the Grantees in advance and construction shall require Grantees' inspection and approval; and

   d) The Grantor or approved third party complies with Section 6.

6. **Grantor's Rights and Restrictions.**

   a) **Grantor's Rights.** Grantor shall retain the right to make full use of the Property outside the Easement Area provided that such use does not interfere with the rights of the Grantee or Grantee's use of the Easement Area or endanger
Grantee’s Water System Facilities, except as provided in Section 6.b. below. Agricultural use within the Easement Area is permissible provided such use conforms to Section 6.b. below. Grantor shall only perform or permit other persons or entities to perform construction or other work within the Easement Area after prior written approval by Grantee and only if such construction or other work is performed in accordance with the terms of this Easement, all applicable laws, rules and regulations, and Grantee’s rules and regulations as they may be modified from time to time. With Grantor’s written request for approval, Grantor shall submit drawings, specifications, reports, and/or other applicable information describing proposed work with sufficient detail to be reviewed by Grantee. Notwithstanding the provisions of Section 6.b. below, Grantor reserves use of the Easement, including installing driveways that are located at least five (5) feet above the Water System Facilities, fences and gates (Grantor must provide Grantee means to unlock gates) with an embedment depth of less than twenty-four (24) inches, irrigation and drain piping crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance, and residential level (200 amp or less) electrical service line(s) crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance (electrical line is required to be placed in a conduit for a minimum length of twenty (20) feet centered over the Water System Facilities and crossing at substantially right angles to the Water System Facilities) provided, however, that the exercise of such rights, in the reasonable opinion of Grantee, does not impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, repair and reasonable access. Grantor must request a locate from Grantee prior to installation to ensure proper distance from Grantee’s Water System Facilities.

b) Restrictions on Grantor. Within the Easement Area, unless otherwise approved in advance in writing by the Grantee, Grantor agrees not to construct or permit others to use, construct, install, store, plant, change grade, or create any improvements, structures, impoundments, or stockpile any materials that in the sole opinion of Grantee will impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, and reasonable access.

Grantor agrees not to store any materials including hazardous materials, fuel, oil, and chemicals on, over, under, or in the Easement Area. Grantor agrees not to store personal property, including but not limited to, derelict personal property, refuse piles, vehicles, equipment, or machinery in the Easement Area.

Grantor agrees not to plant trees within the Easement Area and to limit any plants requiring rooting depths or cultivation within the Easement Area to avoid any ground disturbance or excavation exceeding twenty-four (24) inches in depth.
Grantor agrees not to plant trees or other plants within 10 feet of any above-ground portion of the Water System Facilities. Grantor agrees not to obstruct access to Grantee's above-ground Water System Facilities.

Grantor agrees not to change the grade within the Easement Area or drainage patterns within the Easement Area or adjacent to the Easement Area during the term of this Easement by adding, removing, or displacing any more than six (6) inches of material from the surface. Grantee agrees to provide as-built drawings showing existing grades for elevation reference purposes. Grantor also agrees not to impair any lateral or sub-adjacent support for the Water System Facilities within the Easement Area.

Grantor agrees not to install or permit others to install within the Easement Area any utilities which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep.

Grantor agrees not to install or permit others to install within the Easement Area electric utilities, service lines, or transformers above the 200-amp residential service level which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep. If Grantor desires to cross or longitudinally use the Easement Area, Grantor agrees to apply to Grantee in writing, provide drawings with specifications for any installation of an electric utility, service line, or transformer greater than twenty-four (24) inches deep, undergo a review and approval process, and must receive written permission from Grantee. Electrical conductors parallel to the Water System Facilities need to be placed in conduit agreeable to the Grantee and shall be no greater than twenty-four (24) inches deep.

Grantor agrees not to place or permit others to place a load of any kind over the Water System Facilities where the weight of the load could cause damage of any type to the Water System Facilities.

Grantor agrees not to impound water, change drainage patterns or create ponds, reservoirs, structures, or facilities designed to hold water over the Easement Area, unless the prior written consent of Grantee is provided.

Within the Easement Area, Grantor agrees that periodic easement encroachment review by Grantees may be performed, and Grantor agrees to remove any item unacceptable under this Easement or any other item deemed detrimental to the Water System Facilities in the sole discretion of the Grantees within thirty (30) days of notification by Grantees. Should Grantor fail to remedy the situation in the time frame provided, Grantees may remove said encroachment and charge the cost of such removal to the Grantor on a time and materials basis.

c) **Restoration of Easement Following Construction.** At Grantees’ sole cost and expense, and except where modifications to the Property are otherwise agreed to
in this Agreement, Grantees shall restore the Easement Area to the same or better condition as existed in the Easement Areas as applicable prior to the commencement of such work.

Upon completion of construction and/or any subsequent maintenance activities of the herein described facility, including the use of Grantee for temporary construction and/or ingress and egress purposes, Grantee agrees to restore said land, as near as practicable to its original condition, unless otherwise agreed to in writing by the Grantor, provided, however, that all such restoration efforts shall comply with any applicable City, County, and State of Oregon codes.

Grantees shall not fence or otherwise obstruct free and open access to and travel upon the Property without written authorization from the Grantor, with the exception of construction and silt fence during construction and restoration. Grantees shall not install any surface structures unless specifically mentioned herein.

7. **Indemnification.** To the extent permitted by the Oregon Constitution and subject to the Oregon Tort Claims Act (ORS 30.260 to 30.300), Grantees shall indemnify, defend, and hold harmless Grantor and its members, managers, employees, agents, and representatives (collectively, “Indemnified Parties”) from and against any injury, expense, damage, liability, or claim, including, but not limited, to reasonable attorney fees, incurred by any Indemnified Party, arising directly or indirectly from the rights granted by Grantor to Grantees hereunder or any act or omission by Grantees or any Grantees’ Party. Grantees assume all risk arising out of their activities and use of the Easement by it and the Grantees Parties.

8. **Default and Remedies.** Time is of the essence regarding the terms of this Easement. If Grantor or Grantees violate any of the terms, covenants, or conditions of this Easement, or fails to perform any of its obligations included in this Easement in a timely manner, the non-defaulting Party(ies) shall have the right to declare a default by written notice and seek available legal or equitable remedies in the Circuit Court of the State for Oregon in Washington County. Notice shall be given by first class mail addressed to the parties as follows:

City of Hillsboro
Attn: Water Department Manager
150 E. Main Street
Hillsboro, Oregon 97123

Douglas L. Evans
19161 S.W. Tile Flat Road
Beaverton, OR 97007

Tualatin Valley Water District
Attn: District Recorder
1850 S.W. 170th Avenue
Beaverton, Oregon 97003

Page 5 – WATER SYSTEM FACILITIES EASEMENT
The notice shall provide a detailed statement(s) of the alleged default. If the default is not cured within 15 days from the date of notice, or if the defaulting Party has not commenced to diligently commence cure for a matter that requires more than 15 days, then the non-defaulting Party(ies) may commence litigation and seek all remedies available at law or in equity. If the Easement is terminated as a result of litigation, Grantees shall, at their sole cost and expense, return the Easement Area to Grantor in the same or better condition as existed prior to the grant of the Easement.

9. **Binding Effect.** This Easement is binding upon, inures to the benefit of and may be enforced by the Parties and their respective successors and assigns. Grantees may assign or transfer their interests without consent of Grantor. Grantee may use agents, employees, contractors, and other authorized persons for the purposes of exercising Grantees’ rights and obligations under this Easement, provided no third-party beneficiary rights are created by this Easement. This Easement shall be construed in accordance with Oregon law.

10. **Amendment.** This Easement may be amended only by an instrument in writing signed by both Grantor and Grantee. All approvals required hereunder shall be in writing.

11. **No Public Dedication.** Nothing in this Easement will be deemed to be a gift or a dedication of any portion of the Water System Facilities Easement to the general public or for the use of the general public or for any public purpose whatsoever, it being the intent of the parties that this Easement be strictly limited to and for the purposes expressed herein.

[SPACE LEFT INTENTIONALLY BLANK]

[SIGNATURES TO FOLLOW]
GRANTOR

Douglas L. Evans,

By: 
Name: 
Its: 

GRANTEE

Tualatin Valley Water District, a domestic water supply district

By: 
Name: 
Its: 

GRANTOR

[Title of Owner], 

By: 
Name: 
Its: 

GRANTEE

City of Hillsboro, a municipal corporation

By: 
Name: 
Its: 

[Acknowledgments follow on next page]
STATE OF OREGON  
) 
) ss.
County of Washington  
)

This instrument was acknowledged before me on ________________, 20__, by Douglas L. Evans

NOTARY PUBLIC for Oregon
My Commission Expires: ________________________

STATE OF OREGON  
) 
) ss.
County of Washington  
)

This instrument was acknowledged before me on ________________, 20__, by __________________ of 

Tualatin Valley Water District, a domestic water supply district organized under ORS Chapter 264.

NOTARY PUBLIC for Oregon
My Commission Expires: ________________________

STATE OF OREGON  
) 
) ss.
County of Washington  
)

This instrument was acknowledged before me on ________________, 20__, by __________________ of 

City of Hillsboro, an Oregon municipal corporation.

NOTARY PUBLIC for Oregon
My Commission Expires: ________________________

Page 8 – WATER SYSTEM FACILITIES EASEMENT
EXHIBIT A

Willamette Water Supply
August 24, 2018

Douglas L. Evans
Tax Map No. 2S201 00500

PARCEL 1 – PERMANENT UTILITY EASEMENT

A parcel of land lying in the Section 1, Township 2 South, Range 2 West of the Willamette Meridian, Washington County, Oregon and being a portion of that property conveyed Douglas L. Evans, recorded March 31, 2014 as Document No. 2014-018345, in the Washington County Book of Records, said parcel being that portion of said property included in a strip of land variable feet in width, lying on the northeasterly side, and all of said property lying on the southwesterly side, of the following described Pipeline Centerline:

Beginning at Engineer’s Centerline Station 807+72.00, said point being N 88°16’49” E, 3197.30 feet from the West 1 / 4 corner of Section 6, Township 2 South, Range 1 West of the Willamette Meridian;

Thence along said pipeline the following courses:
S 89°29’59” W, 189.70 feet to Station 809+61.70;
thence S 83°03’43” W, 100.59 feet to Station 810+62.29;
thence S 85°38’46” W, 147.71 feet to Station 812+10.00;
thence S 71°15’21” W, 55.55 feet to Station 812+65.55;
thence S 89°18’27” W, 1151.34 feet to Station 824+16.88;
thence N 45°57’23” W, 129.72 feet to Station 825+46.60;
thence S 88°46’47” W, 441.22 feet to Station 829+87.82;
thence S 89°29’07” W, 906.98 feet to Station 838+94.79;
thence S 85°10’41” W, 149.31 feet to Station 840+44.10, said point being N 19°22’34” W, 105.21 feet from said West 1 / 4 corner of Section 6;
thence continuing along said pipeline S 79°51’57” W, 34.86 feet to Station 840+78.97;
thence S 76°09’13” W, 93.90 feet to Station 841+72.87;
thence S 71°04’33” W, 82.23 feet to Station 842+55.09;
thence S 68°42’19” W, 756.34 feet to Station 850+11.44;
thence S 69°44’05” W, 88.45 feet to Station 850+99.89;
thence N 68°25’58” W, 61.32 feet to Station 851+61.20;
thence N 32°20’49” W, 105.87 feet to Station 852+67.07;
thence N 30°20’05” W, 916.82 feet to Station 861+83.90;
thence N 29°58’27” W, 227.75 feet to Station 864+11.64;
thence N 74°58’27” W, 35.00 feet to Station 864+46.65;
thence N 29°58’27” W, 162.22 feet to Station 866+08.86;
thence N 33°01’07” W, 96.75 feet to Station 867+05.61;
thence N 8°01’36” E, 35.07 feet to Station 867+40.68;
thence N 38°22’58” W, 25.07 feet to Station 867+65.75;
thence N 39°09’05” W, 561.37 feet to Station 873+27.12;
thence N 40°04’53” W, 358.16 feet to a point of curvature at Station 876+85.28;
thence along the arc of a 5034.50 foot radius curve to the left with a central angle of 4°12’40” a curve distance of 370.02 feet (the chord of which bears N 42°11’13” W, 369.94 feet) to a point of tangency at Station 880+55.30 PT;
thence N 44°17’33” W, 144.60 feet to Station 881+99.90;
EXHIBIT A

Willamette Water Supply
August 24, 2018

thence N 46°04'20" W, 126.52 feet to Station 883+26.42;
thence N 49°38'24" W, 126.52 feet to Station 884+52.94;
thence N 51°25'11" W, 99.53 feet to Station 885+52.47;
thence N 57°45'20" W, 84.86 feet to Station 886+37.33;
thence N 70°25'37" W, 84.86 feet to Station 887+22.19; said point being N 51°41'57" W, 50.68 feet from the Northeast corner of the Solomon F. Shattuck D.L.C. number 51;
thence continuing along said pipeline N 83°05'54" W, 84.86 feet to Station 888+07.05;
thence N 89°26'02" W, 1401.57 feet to Station 902+08.62;
thence N 44°26'02" W, 27.23 feet to Station 902+35.85;
thence N 0°55'28" E, 224.95 feet to Station 904+60.80;
thence N 25°53'14" W, 150.00 feet to Station 906+10.80;
thence N 0°55'28" E, 94.19 feet to Station 907+04.99 and the Terminus of said pipeline description, said terminus also being N 2°51'50" W, 508.09 feet from the Southeast corner of the John Landess D.L.C. number 37.

The widths of the strip of land above referred to are as follows:

<table>
<thead>
<tr>
<th>PIPELINE CENTERLINE STATION</th>
<th>WIDTH ON NORTHEASTERLY SIDE OF CENTERLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 863+00.00</td>
<td>25.00 feet</td>
</tr>
<tr>
<td>To 864+11.64</td>
<td></td>
</tr>
<tr>
<td>From 864+11.64</td>
<td>25.00 feet in a straight line to 49.75 feet</td>
</tr>
<tr>
<td>To 864+76.67</td>
<td></td>
</tr>
</tbody>
</table>

EXCEPT THEREFROM that portion lying within the right-of-way of SW Tile Flat Rd (CR 3279).

The parcel of land to which this description applies contains 4,138 square feet (0.09 acre), more or less.

Basis of Bearings is the Oregon Coordinate Reference System (OCRS), Portland Zone.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JAN 14 2003
JOSEPH W. HURLIMAN
58960LS

RENEWAL: 7/01/19
SIGNED: 8/29/2018

PAGE 2 OF 2
Exhibit 1-8
Chris K. Zielinski and Jadwiga Zielinski
as tenants by the entirety
2S2010000800
PLM_5.2-062
AFTER RECORDING RETURN TO:
Tualatin Valley Water District
Attn: District Recorder
1850 SW 170th Avenue
Beaverton OR 97003

UNTIL A CHANGE IS REQUESTED
SEND TAX STATEMENTS TO:
No change in tax statements

File #: PLM 5.2-062
Map and Tax Lot #: 2S2010000800

This space is reserved for recorder’s use.

WATER SYSTEM FACILITIES EASEMENT

This Water System Facilities Easement is made this ______ day of _______, 20____, by and between Chris K. Zielinski and Jadwiga Zielinski, as tenants by the entirety (“Grantor”), Tualatin Valley Water District, a domestic water supply district organized under ORS Chapter 264, and the City of Hillsboro, a municipal corporation, (hereinafter collectively referred to as “Grantees”).

Grantor and Grantees agree as follows:

1. **Grant of Permanent Easement.** Grantor hereby grants to Grantees, jointly and severally, their successors, and heirs a perpetual and non-exclusive easement (“Easement”) on, over, and under a portion of that certain real property described in Exhibit A (the “Property”), which portion is depicted on Exhibit B (the “Easement Area”), both of which are attached hereto and incorporated herein by this reference. The Easement shall be used by Grantee only for the purposes and as provided herein.

2. **Right of Entry and Use.** Subject to the terms of this Easement, Grantees shall have the right to enter upon and use the Easement Area for the purposes of constructing, operating, maintaining, repairing, replacing, and modifying water pipelines and other water facilities, and all appurtenances incident thereto (“Water System Facilities”). Within the Easement Area, Grantee shall have the perpetual right to cut, trim, control, and remove trees, brush, and other obstructions which injure or interfere with the Grantee’s use or occupation of the Easement or Grantee’s right to construct, reconstruct, install, use, operate, maintain, repair, patrol, replace, upgrade, or remove its improvements, without liability for damages arising there from. The use of the Easement by Grantees shall be in compliance with applicable laws.

Page 1 – WATER SYSTEM FACILITIES EASEMENT
3. **Temporary Easement.** During construction of the Water System Facilities, Grantor hereby grants a temporary construction easement ("TCE") on, over, and under the Property as described and depicted in Exhibit C (the "TCE Area") for such reasonable period to perform the work. Grantor acknowledges construction will occur in multiple phases prior to 2026. Unless otherwise specified in writing, this TCE takes effect upon thirty (30) days advanced written notice to Grantor and extends for two years from this date, which may be extended up to two (2) six (6)-month extensions with a pro rata compensation.

4. **Restrictions on Grantees Use of Easement.** Grantees shall use good faith efforts to not interfere with Grantor’s use and enjoyment of the Property outside the Easement Area or otherwise cause operations on Grantor’s Property outside the Easement Area to be interfered with or interrupted by the use of the Easement by Grantees. Grantees shall maintain reasonable access to Grantor’s property during construction, maintenance, repair, replacement, or modification of the Water System Facilities.

5. **Non-Exclusive Grant; Use of the Easement.** The Easement herein shall be non-exclusive for the purposes stated herein, and Grantor may not use the Easement Area inconsistent with the terms of this easement or permit third parties to use any portion of the Easement Area without the Grantees’ prior written approval, which shall not be unreasonably withheld, delayed or conditioned, provided:

   a) The Grantor or approved third party shall provide a written request to the Grantees to use the Easement Area so that the Grantees’ right to construct, use, access, repair, and maintain the Water System Facilities is not impaired; and

   b) The Grantor or approved third party assumes full responsibility in the event the Water System Facilities are damaged or impaired by their actions, in which case the Grantor or such third party shall immediately remedy the damage or impairment and indemnify Grantees from all expenses, costs, damages or impacts associated with such remedy. Grantees reserve the right to make necessary repairs or remedies with their own forces or contractors with the cost to be reimbursed by Grantor or third party; and

   c) All design and construction plans must be approved in writing by the Grantees in advance and construction shall require Grantees’ inspection and approval; and

   d) The Grantor or approved third party complies with Section 6.

6. **Grantor’s Rights and Restrictions.**

   a) **Grantor’s Rights.** Grantor shall retain the right to make full use of the Property outside the Easement Area provided that such use does not interfere with the rights of the Grantee or Grantee’s use of the Easement Area or endanger Grantee’s Water System Facilities, except as provided in Section 6.b. below. Agricultural use within the Easement Area is permissible provided such use conforms to Section 6.b. below. Grantor shall only perform or permit other
persons or entities to perform construction or other work within the Easement Area after prior written approval by Grantee and only if such construction or other work is performed in accordance with the terms of this Easement, all applicable laws, rules and regulations, and Grantee’s rules and regulations as they may be modified from time to time. With Grantor’s written request for approval, Grantor shall submit drawings, specifications, reports, and/or other applicable information describing proposed work with sufficient detail to be reviewed by Grantee.

Notwithstanding the provisions of Section 6.b. below, Grantor reserves use of the Easement, including installing driveways that are located at least five (5) feet above the Water System Facilities, fences and gates (Grantor must provide Grantee means to unlock gates) with an embedment depth of less than twenty-four (24) inches, irrigation and drain piping crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance, and residential level (200 amp or less) electrical service line(s) crossing above the Water System Facilities with a twenty-four (24) inch minimum clearance (electrical line is required to be placed in a conduit for a minimum length of twenty (20) feet centered over the Water System Facilities and crossing at substantially right angles to the Water System Facilities) provided, however, that the exercise of such rights, in the reasonable opinion of Grantee, does not impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, repair and reasonable access. Grantor must request a locate from Grantee prior to installation to ensure proper distance from Grantee’s Water System Facilities.

**b) Restrictions on Grantor.** Within the Easement Area, unless otherwise approved in advance in writing by the Grantee, Grantor agrees not to construct or permit others to use, construct, install, store, plant, change grade, or create any improvements, structures, impoundments, or stockpile any materials that in the sole opinion of Grantee will impair, injure, or interfere with, now or in the future, any of Grantee’s rights in the Easement including, but not limited to, Grantee’s rights of operation, maintenance, and reasonable access.

Grantor agrees not to store any materials including hazardous materials, fuel, oil, and chemicals on, over, under, or in the Easement Area. Grantor agrees not to store personal property, including but not limited to, derelict personal property, refuse piles, vehicles, equipment, or machinery in the Easement Area.

Grantor agrees not to plant trees within the Easement Area and to limit any plants requiring rooting depths or cultivation within the Easement Area to avoid any ground disturbance or excavation exceeding twenty-four (24) inches in depth.

Grantor agrees not to plant trees or other plants within 10 feet of any above-ground portion of the Water System Facilities. Grantor agrees not to obstruct access to Grantee’s above-ground Water System Facilities.
Grantor agrees not to change the grade within the Easement Area or drainage patterns within the Easement Area or adjacent to the Easement Area during the term of this Easement by adding, removing, or displacing any more than six (6) inches of material from the surface. Grantee agrees to provide as-built drawings showing existing grades for elevation reference purposes. Grantor also agrees not to impair any lateral or sub-adjacent support for the Water System Facilities within the Easement Area.

Grantor agrees not to install or permit others to install within the Easement Area any utilities which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep.

Grantor agrees not to install or permit others to install within the Easement Area electric utilities, service lines, or transformers above the 200-amp residential service level which require mechanical ground disturbance or excavation greater than twenty-four (24) inches deep. If Grantor desires to cross or longitudinally use the Easement Area, Grantor agrees to apply to Grantee in writing, provide drawings with specifications for any installation of an electric utility, service line, or transformer greater than twenty-four (24) inches deep, undergo a review and approval process, and must receive written permission from Grantee. Electrical conductors parallel to the Water System Facilities need to be placed in conduit agreeable to the Grantee and shall be no greater than twenty-four (24) inches deep.

Grantor agrees not to place or permit others to place a load of any kind over the Water System Facilities where the weight of the load could cause damage of any type to the Water System Facilities.

Grantor agrees not to impound water, change drainage patterns or create ponds, reservoirs, structures, or facilities designed to hold water over the Easement Area, unless the prior written consent of Grantee is provided.

Within the Easement Area, Grantor agrees that periodic easement encroachment review by Grantees may be performed, and Grantor agrees to remove any item unacceptable under this Easement or any other item deemed detrimental to the Water System Facilities in the sole discretion of the Grantees within thirty (30) days of notification by Grantees. Should Grantor fail to remedy the situation in the time frame provided, Grantees may remove said encroachment and charge the cost of such removal to the Grantor on a time and materials basis.

c) **Restoration of Easement Following Construction.** At Grantees’ sole cost and expense, and except where modifications to the Property are otherwise agreed to in this Agreement, Grantees shall restore the Easement Area to the same or better condition as existed in the Easement Areas as applicable prior to the commencement of such work.
Upon completion of construction and/or any subsequent maintenance activities of the herein described facility, including the use of Grantee for temporary construction and/or ingress and egress purposes, Grantee agrees to restore said land, as near as practicable to its original condition, unless otherwise agreed to in writing by the Grantor, provided, however, that all such restoration efforts shall comply with any applicable City, County, and State of Oregon codes.

Grantees shall not fence or otherwise obstruct free and open access to and travel upon the Property without written authorization from the Grantor, with the exception of construction and silt fence during construction and restoration. Grantees shall not install any surface structures unless specifically mentioned herein.

7. **Indemnification.** To the extent permitted by the Oregon Constitution and subject to the Oregon Tort Claims Act (ORS 30.260 to 30.300), Grantees shall indemnify, defend, and hold harmless Grantor and its members, managers, employees, agents, and representatives (collectively, “Indemnified Parties”) from and against any injury, expense, damage, liability, or claim, including, but not limited, to reasonable attorney fees, incurred by any Indemnified Party, arising directly or indirectly from the rights granted by Grantor to Grantees hereunder or any act or omission by Grantees or any Grantees’ Party. Grantees assume all risk arising out of their activities and use of the Easement by it and the Grantees Parties.

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- **City of Hillsboro**
  - Attn: Water Department Manager
  - 150 E. Main Street
  - Hillsboro, Oregon 97123

- **Tualatin Valley Water District**
  - Attn: District Recorder
  - 1850 S.W. 170th Avenue
  - Beaverton, Oregon 97003

- **Chris K. Zielinski and Jadwiga Zielinski**
  - 19609 SW Tile Flat Road
  - Beaverton, OR 97007

The notice shall provide a detailed statement(s) of the alleged default. If the default is not cured within 15 days from the date of notice, or if the defaulting Party has not commenced to diligently commence cure for a matter that requires more than 15 days, then the non-defaulting Party(ies) may commence litigation and seek all remedies available at law or in

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Page 5 – WATER SYSTEM FACILITIES EASEMENT
equity. If the Easement is terminated as a result of litigation, Grantees shall, at their sole cost and expense, return the Easement Area to Grantor in the same or better condition as existed prior to the grant of the Easement.

9. **Binding Effect.** This Easement is binding upon, inures to the benefit of and may be enforced by the Parties and their respective successors and assigns. Grantees may assign or transfer their interests without consent of Grantor. Grantee may use agents, employees, contractors, and other authorized persons for the purposes of exercising Grantees’ rights and obligations under this Easement, provided no third-party beneficiary rights are created by this Easement. This Easement shall be construed in accordance with Oregon law.

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[SPACE LEFT INTENTIONALLY BLANK]

[SIGNATURES TO FOLLOW]
GRANTOR
Chris K. Zielinski

By: __________________________
Name: ________________________
Its: _________________________

GRANTEE
Tualatin Valley Water District, a domestic water supply district

By: __________________________
Name: ________________________
Its: _________________________

GRANTOR
Jadwiga Zielinski

By: __________________________
Name: ________________________
Its: _________________________

GRANTEE
City of Hillsboro, a municipal corporation

By: __________________________
Name: ________________________
Its: _________________________

[Acknowledgments follow on next page]
STATE OF OREGON )
 ) ss.
County of Washington )

This instrument was acknowledged before me on ____________, 20__, by
Chris K. Zielinski.

______________________________
NOTARY PUBLIC for Oregon
My Commission Expires: ____________

STATE OF OREGON )
 ) ss.
County of Washington )

This instrument was acknowledged before me on ____________, 20__, by
Jadwiga Zielinski.

______________________________
NOTARY PUBLIC for Oregon
My Commission Expires: ____________

STATE OF OREGON )
 ) ss.
County of Washington )

This instrument was acknowledged before me on ____________, 20__, by
______________________________
as ___________________________ of
Tualatin Valley Water District, a domestic water supply district organized under ORS
Chapter 264.

______________________________
NOTARY PUBLIC for Oregon
My Commission Expires: ____________

Page 8 – WATER SYSTEM FACILITIES EASEMENT
STATE OF OREGON  
)  
) ss.  
County of Washington  
)  
This instrument was acknowledged before me on ________________, 20__, by  
as  
City of Hillsboro, an Oregon municipal corporation.  

NOTARY PUBLIC for Oregon  
My Commission Expires: ________________
EXHIBIT A

Willamette Water Supply
August 24, 2018

Chris K. Zielinski and
Jadwiga Zielinski
Tax Map No. 2S201 00800

PARCEL 1 – PERMANENT UTILITY EASEMENT

A parcel of land lying in the Section 1, Township 2 South, Range 2 West of the Willamette Meridian, Washington County, Oregon and being a portion of that property conveyed Chris K. Zielinski and Jadwiga Zielinski, recorded January 31, 2011 as Document No. 2011-009068, in the Washington County Book of Records, said parcel being that portion of said property included in a strip of land 50.00 feet in width, lying 25.00 feet on each side of the following described Pipeline Centerline:

Beginning at Engineer’s Centerline Station 807+72.00, said point being N 88°16’49” E, 3197.30 feet from the West 1/4 corner of Section 6, Township 2 South, Range 1 West of the Willamette Meridian;

Thence along said pipeline the following courses:
S 89°29’59” W, 189.70 feet to Station 809+61.70;
thence S 83°03’43” W, 100.59 feet to Station 810+62.29;
thence S 85°38’46” W, 147.71 feet to Station 812+10.00;
thence S 71°15’21” W, 55.55 feet to Station 812+65.55;

thence S 89°18’27” W, 1151.34 feet to Station 824+16.88;
thence N 45°57’23” W, 129.72 feet to Station 825+46.60;
thence S 88°46’47” W, 441.22 feet to Station 829+87.82;
thence S 89°29’07” W, 906.98 feet to Station 838+94.79;
thence S 85°10’41” W, 149.31 feet to Station 840+44.10, said point being N 19°22’34” W, 105.21 feet from said West 1/4 corner of Section 6;
thence continuing along said pipeline S 79°51’57” W, 34.86 feet to Station 840+78.97;
thence S 76°09’13” W, 93.90 feet to Station 841+72.87;
thence S 71°04’33” W, 82.23 feet to Station 842+55.09;
thence S 68°42’19” W, 756.34 feet to Station 850+11.44;
thence S 69°44’05” W, 88.45 feet to Station 850+99.89;
thence N 68°25’58” W, 61.32 feet to Station 851+61.20;
thence N 32°20’49” W, 105.87 feet to Station 852+67.07;
thence N 30°20’05” W, 916.82 feet to Station 861+83.90;
thence N 29°58’27” W, 227.75 feet to Station 864+11.64;
thence N 74°58’27” W, 35.00 feet to Station 864+46.65;
thence N 29°58’27” W, 162.22 feet to Station 866+08.86;
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thence N 39°09’05” W, 561.37 feet to Station 873+27.12;
thence N 40°04’53” W, 358.16 feet to a point of curvature at Station 876+85.28;
thence along the arc of a 5034.50 foot radius curve to the left with a central angle of 4°12’40” a curve distance of 370.02 feet (the chord of which bears N 42°11’13” W, 369.94 feet) to a point of tangency at Station 880+55.30 PT;
thence N 44°17'33" W, 144.60 feet to Station 881+99.90;
thence N 46°04'20" W, 126.52 feet to Station 883+26.42;
thence N 49°38'24" W, 126.52 feet to Station 884+52.94;
thence N 51°25'11" W, 99.53 feet to Station 885+52.47;
thence N 57°45'20" W, 84.86 feet to Station 886+37.33;
thence N 70°25'37" W, 84.86 feet to Station 887+22.19; said point being N 51°41'57" W, 50.68 feet from the Northeast corner of the Solomon F. Shattuck D.L.C. number 51;
thence continuing along said pipeline N 83°05'54" W, 84.86 feet to Station 888+07.05;
thence N 89°26'02" W, 1401.57 feet to Station 902+08.62;
thence N 44°26'02" W, 27.23 feet to Station 902+35.85;
thence N 0°55'28" E, 224.95 feet to Station 904+60.80;
thence N 25°53'14" W, 150.00 feet to Station 906+10.80;
thence N 0°55'28" E, 94.19 feet to Station 907+04.99 and the Terminus of said pipeline description, said terminus also being N 2°51'50" W, 508.09 feet from the Southeast corner of the John Landess D.L.C. number 37.

EXCEPT THEREFROM that portion lying within the right-of-way of SW Tile Flat Rd (CR 3279).

The parcel of land to which this description applies contains 19,499 square feet (0.48 acre), more or less.

Basis of Bearings is the Oregon Coordinate Reference System (OCRS), Portland Zone.

PARCEL 2 – TEMPORARY CONSTRUCTION EASEMENT

That portion of said Zielinski property included in a strip of land 50.00 feet in width, lying on the northeasterly side of the Pipeline Centerline described in Parcel 1 from Station 883+28.46 to Station 886+00.00:

EXCEPT THEREFROM that portion lying within the above described Parcel 1.

The parcel of land to which this description applies contains 6,157 square feet (0.14 acre), more or less.
EXHIBIT B

66" WATER PIPELINE

PARCEL 1 PERMANENT UTILITY EASEMENT ACQUISITION AREA = 19,499 S.F. (0.48 ac)

PARCEL 2 TEMPORARY CONSTRUCTION EASEMENT ACQUISITION AREA = 6,157 S.F. (0.14 ac)

WILLAMETTE WATER SUPPLY PROGRAM
PIPELINE MAIN STEM, SECTION 5.2

FILE No: TAX LOT: 800
TAX MAP: T2S R2W Sec01

ACQUISITION MAP PAGE 1 OF 1

SURVEY & MAPPING
2020 SW 4TH AVE. SUITE 300 PORTLAND, OR 97201
PH: (503) 235-5000
I have read the Preliminary Report dated April 11, 2019 covering the property described in your above numbered escrow. I know of no other matters pertaining to the condition of title other than stated in this report. Further, we approve the legal description as being the property which is the subject of this escrow.

I hereby acknowledge receipt of a copy of said Preliminary Report.

IT IS UNDERSTOOD BY THE PARTIES SIGNING THE ABOVE INSTRUCTIONS OR THOSE ESCROW INSTRUCTIONS WHICH ARE ATTACHED HERETO THAT SUCH INSTRUCTIONS CONSTITUTE THE WHOLE AGREEMENT BETWEEN THIS FIRM AS AN ESCROW AGENT AND YOU AS A PRINCIPAL TO THE ESCROW TRANSACTION. THESE INSTRUCTIONS MAY NOT INCLUDE ALL OF THE TERMS OF THE AGREEMENT WHICH IS THE SUBJECT OF THIS ESCROW. READ THESE INSTRUCTIONS CAREFULLY, AND DO NOT SIGN THEM UNLESS THEY ARE ACCEPTABLE TO YOU.

IN WITNESS WHEREOF, the undersigned have executed this document on the date(s) set forth below.

SELLER(S):

Chris K. Zielinski

Jadwiga Zielinski

Chicago Title Company of Oregon

By: [Signature]

Date

Date

Date
RESOLUTION NO. 20-18

A RESOLUTION DECLARING PUBLIC NECESSITY TO ACQUIRE PERMANENT AND TEMPORARY CONSTRUCTION EASEMENTS OVER, UPON, UNDER AND THROUGH REAL PROPERTY FOR PIPELINE SECTION PLM_5.2 FOR THE WILLAMETTE WATER SUPPLY SYSTEM.

WHEREAS, the above-entitled matter came before the Board of Commissioners of the Tualatin Valley Water District (TVWD) at its regular meeting on July 18, 2018; and

WHEREAS, by action of the Board of Commissioners (Board), TVWD has entered into the Agreement for Design and Construction of the Willamette Water Supply Program with the City of Hillsboro dated June 16, 2015 (Agreement). The purpose of the Agreement is to permit, design, finance and construct the Willamette Water Supply System (Willamette Program); and

WHEREAS, the Agreement provides that TVWD is the lead agency and authorized on behalf of TVWD and Hillsboro to acquire interests in real property necessary for the Willamette Program; and

WHEREAS, the Willamette Program includes, but is not limited to, the acquisition of properties to locate, design and construct an expanded and improved water intake on the Willamette River in the City of Wilsonville currently owned by TVWD and the City of Wilsonville, along with a new raw water pipeline, potable water treatment plant, finished water pipelines, pumping, storage and other necessary water system facilities to enable TVWD to utilize existing water rights to provide water system ownership and reliability to TVWD and Hillsboro water system users; and

WHEREAS, TVWD has authority under ORS 264.240 and Oregon Revised Statutes Chapter 35 to acquire real property by purchase or through eminent domain proceedings; and

WHEREAS, the Board determines, consistent with the powers and purposes of TVWD, that it is necessary for the economic well-being, public health, safety and welfare of TVWD, and members of the public served by TVWD, to acquire fee title to necessary properties as well as necessary rights-of-way and easements to implement the Willamette Program; and

WHEREAS, after investigation of various routes for a water pipeline and related water system facilities for Pipeline Section PLM_5.2, and the consideration of the most effective and economic method of service delivery, the Board has determined that permanent and temporary construction easements over the properties identified on Exhibits 1-3, attached hereto and incorporated by reference, are best suited and necessary for location of these facilities for the Willamette Program and that this use is planned and located in a manner which is most compatible with the greatest public benefit and causes the least private injury; and

WHEREAS, the Board finds that declaration by resolution to acquire the easement interests in the properties for the pipeline and related water system facilities is necessary and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The above recitals shall form an integral part of this resolution and shall have the same force and effect as if fully stated herein.
Section 2: It is necessary for the preservation of economic well-being, public health, safety and welfare of TVWD and Hillsboro and members of the public served by TVWD and Hillsboro, that TVWD commence the acquisition process for the easement interests in the properties for the Willamette Program Pipeline Section_5.2 as shown on Exhibits 1-3, attached hereto and incorporated by reference, through exercise of the power of eminent domain.

Section 3: That TVWD staff and counsel are authorized to retain real estate appraisers, negotiators and other consultants, with said appraisals to be prepared under the auspices of TVWD counsel, for initiation of proceedings as described below.

Section 4: TVWD shall, in good faith, attempt to negotiate necessary agreements to acquire the easement interests in the properties with the affected property owners and pay just compensation in accordance with applicable law. TVWD staff and counsel, including consultants and agents, are authorized to engage in and complete negotiations with the property owners.

Section 5: The Board recognizes that formal litigation may be necessary. TVWD staff and counsel shall report back to the Board to obtain authorization to file a complaint in condemnation and to take other steps as they determine necessary and prosecute to final determination such action to acquire title to the identified easements described herein if negotiations fail.

Section 6: That upon the trial of any suit or action instituted to acquire the property, the attorneys acting for and on behalf of the TVWD are authorized to make such stipulation, agreement or admission as in their judgment may be for the best interest of TVWD and to take possession of the property at such time as appropriate in their judgment without necessity of further Board approval.

Approved and adopted at a regular meeting held on the 18th day of July 2018.

_______________________________      ________________________________
Bernice Bagnall, Acting President          Dick Schmidt, Secretary
### Easements needed for PLM 5.2

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### Diagram

- **LOT 4**
- **TRACT B**
- **LOT 5**

The diagram shows the proposed 66" water transmission line with easements needed for PLM 5.2.

**Legend**
- **PLM_5.2 WATER TRANSMISSION LINE**
- **Temporary Construction Easement**
- **Permanent Easement**

**Scale:** 1" = 1’-0” on this sheet, adjust scales accordingly.
### Easements needed for PLM 5.2

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**Legend**
- **PLM_5.2 Delineation**: Proposed 66" Water Transmission Line
- **Temporary Easement**: (SF)
- **Permanent Easement**: (SF)

**Notes:**
- Verify Scale: 1" = 20'-0" if not one inch on this sheet, adjust scales accordingly.
- Exh: EXHIBIT - 3

**General Notes:**
- PLM_5.2 EASEMENT
- GENERAL
- VERIFIED SCALE

**Project Information:**
- DRAWN: B. Hughes
- CHECKED: T. Hunziker
- APVED: B. Hughes

**Date:**
- 07/11/18

**Lot Information:**
- Lot 1: 7.17 ACRES
- Lot 2: 2.65 ACRES
- Lot 3: 22.86 ACRES
RESOLUTION NO. 21-19

A RESOLUTION APPROVING THE INTERGOVERNMENTAL AGREEMENT BETWEEN WASHINGTON COUNTY, TUALATIN VALLEY WATER DISTRICT AND THE CITY OF HILLSBORO FOR THE WILLAMETTE WATER SUPPLY PROGRAM – WATER SYSTEM FACILITIES RIGHT-OF-WAY PERMITS.

WHEREAS, Washington County, by and through its Department of Land Use and Transportation, (County) plans to make significant roadway improvements to various County roads (Road Work); and

WHEREAS, TVWD as Lead Agency (District) and the City of Hillsboro, as a Partner (City), potentially along with other municipal water supply agencies, are participating in the Willamette Water Supply Program (WWSP) to bring municipal drinking water supplies from the Willamette River to their respective water service territories; and

WHEREAS, a large component of the WWSP Waterline Work is the design and construction of large diameter transmission pipelines and related improvements that will be included in design and construction projects for County Road Work, and the parties have executed Coordination Agreements for those joint projects; and

WHEREAS, there are other components of the WWSP Waterline Work that will be separately performed by WWSP in and along County right-of-way, and the parties desire to enter into an agreement to achieve efficiencies and savings in the review and issuance of permits by County; and

WHEREAS, pursuant to ORS 190.003 to 190.010, the County, District and City desire to enter into the Intergovernmental Agreement Between Willamette Water Supply Program and Washington County For Water System Facilities Right-of-Way Permits, attached hereto as Exhibit 1 and incorporated by reference (Agreement) and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The Intergovernmental Agreement Between Willamette Water Supply Program and Washington County For Water System Facilities Right-of-Way Permits, attached hereto as Exhibit 1 and incorporated by reference, is hereby approved.

Section 2: The Chief Executive Officer is authorized to execute and implement the Agreement.

Section 3: The Board recognizes that there may be corrections or edits to the Agreement and the Chief Executive Officer is authorized to accept amendments and execute them on behalf of the District so long as the amendments do not substantially change the Agreement attached hereto, and such amendments are approved by the General Counsel.
Approved and adopted at a regular meeting held on the 19th day of June.

___________________________  ______________________________
Bernice Bagnall, President      Jim Doane, Acting Secretary
INTERGOVERNMENTAL AGREEMENT
Between
Willamette Water Supply Program
And
Washington County
For Water System Facilities Right-of-Way Permits

This Agreement is entered into by and between Washington County (County), a political subdivision of the State of Oregon, Tualatin Valley Water District (TVWD) and City of Hillsboro (City). TVWD and City are jointly referred to herein as the Willamette Water Supply Program (WWSP). County, TVWD, and City may be referred to individually as a "Party", jointly as "Parties" or collectively as "the Parties".

RECITALS

WHEREAS, WWSP is constructing a water supply pipeline and related appurtenances (Water System Facilities) from the Willamette River in the City of Wilsonville to the Cities of Hillsboro and Beaverton; and

WHEREAS, County and WWSP are partnering on the installation of certain segments of the WWSP Water System Facilities as part of County’s various capital road improvements, and the Parties have coordinated that installation pursuant to other interagency agreements (Coordination Agreements); and

WHEREAS, WWSP desires to independently construct additional Water System Facilities that are not already part of the Coordination Agreements in public rights-of-way managed by Washington County through its Department of Land Use & Transportation (LUT); to perform Water System Facilities-related road restoration activities in accordance with County specifications and County-approved plans; and to reimburse County for County costs incurred in conjunction with WWSP construction permits and related road restoration work; and

WHEREAS, WWSP has obtained or will obtain any necessary land use approval(s) from County for Water System Facilities to be located in County rights-of-way in unincorporated areas or from the applicable city for Water System Facilities in County rights-of-way located within a city, in addition to any other required local, state, or federal agency permits; and

WHEREAS, the Parties desire to enter into this agreement to establish a consistent and predictable methodology for plan review and comment, permitting, and inspection of WWSP Water System Facilities and related road restoration work that are not already part of Coordination Agreements.
TERMS

NOW, THEREFORE, pursuant to the authority for the Parties to enter into Intergovernmental Agreements as provided in ORS Chapter 190, and the consideration of the mutual promises contained herein, the Parties agree as follows:

1. FUTURE RIGHT-OF-WAY PERMITS AND APPLICATIONS TO SUPPLEMENT THIS AGREEMENT

WWSP shall submit to LUT a complete Right-of-Way Permit Application, including construction plans for the Water System Facilities installation and related road restoration work, for each proposed WWSP project to be installed by WWSP in County rights-of-way. Permit Applications and Right-of-Way Permits issued pursuant to this Agreement (Permits) will become addenda to this Agreement as if incorporated fully herein. Permits generally will contain the requirements and conditions as shown in "Exhibit A" but with consideration and modification of specific conditions presented by the particular project.

2. COUNTY PLAN REVIEW AND PERMIT ISSUANCE

a. Following LUT approval of WWSP construction plans associated with each Permit Application and provision of a surety from WWSP as described in Section 3 of this Agreement, LUT will issue a Permit to WWSP to construct the therein-described WWSP Water System Facilities and to complete the related road restoration work therein described.

b. Upon receipt of a complete Right-of-Way Permit Application, County will respond to WWSP within thirty (30) days of receiving the application. County’s response may be a request for additional information, request for revisions to the permit plans and/or related documents, or notification of proposed Permit issuance. Prior to Permit issuance, WWSP will have a reasonable opportunity for review and comment. Upon receiving additional information or comment, County will respond within fifteen (15) days with a request for additional information, request for revisions to the permit plans and/or related documents, or notification of Permit issuance. County will strive to provide WWSP with notification of Permit issuance with no more than forty-five (45) days of total County review time; however, County will not issue Permits if WWSP has failed to provide adequate information to assure compliance with applicable County requirements. County shall have no liability to WWSP or WWSP’s agents or contractors if a Permit is not issued within forty-five (45) days of receipt of a Right-of-Way Permit Application.

c. Each issued Permit will include a list of standard conditions to which WWSP shall adhere. In addition to those standard conditions, and based on the scope and scale of the Water System Facilities construction impacts to County roadways and the people of Washington County, one or more of the following special requirements may be placed in the issued Permits at County discretion:

   1. Full-time on-site inspector working under the guidance and direction of WWSP staff; said inspector to be selected and compensated by WWSP.
2. Full- or part-time Traffic Control Supervisor present at work site working under the guidance and direction of WWSP staff; said supervisor to be selected and compensated by WWSP.

3. Additional geotechnical testing during construction beyond that required by Oregon Standard Specifications for Construction.

4. WWSP to install and maintain project signage at each end of each county road segment where Water System Facilities construction or related road restoration work is occurring; signs to include contact information for WWSP.

5. Public meetings, open houses and/or a social media presence by WWSP in advance of and/or during construction.

6. Provide a single WWSP point of contact for public concerns.

7. Obtain other agency permits including but not limited to: signal shut-down authorization (LUT), road closure authorizations (LUT; also requires Board of County Commissioners approval for closures lasting longer than thirty (30) days), noise ordinance variances (County Health & Human Services Department or applicable city), and erosion control/site development permit (Clean Water Services or applicable city).

8. Present to Washington County Board of Commissioners Water System Facilities construction plans and/or status.

The list above is not meant to be a comprehensive list but examples of the type of requirements that may be added to issued Permits.

d. Any failure to adhere to the requirements in the issued Permit is a violation and may result in a stop work order. The County will not be responsible for costs to WWSP or WWSP contractors associated with an issued stop work order or costs to remedy stop work orders.

3. SURETY FOR ROAD RESTORATION WORK

a. Prior to issuance of each Permit, WWSP shall provide County an acceptable surety or deposit equal to the full cost of completing the Water System Facility-related road restoration costs within County rights-of-way as described in each Permit Application. County will consult with WWSP regarding the appropriate surety or deposit amount, to be based on the estimated road restoration costs; however, County retains sole discretion over final determination of the required surety or deposit amount.

b. WWSP may act as its own surety provider. In that event:

1. Form of Surety: WWSP shall provide documentation acceptable to County, such as a letter from the Chief Financial Officer of WWSP’s managing agency and/or supporting budget documents, indicating that WWSP has appropriated funds equal to the full
amount necessary to complete the Water System Facility-related road restoration work as detailed in each Permit (Appropriation).

2. Disbursements:
   
i. WWSP will make no disbursements from the Appropriation other than for planned road restoration without prior written authorization from the Director of Land Use & Transportation (LUT Director) or designee indicating the amount that may be disbursed. This provision is intended to facilitate potential reductions in the amount of the required surety as road restoration work progresses in a matter satisfactory to County but in no way obligates the County to approve any requested reductions.

   ii. Any WWSP request for a disbursement or for a reduction in the amount of Appropriation shall be made in writing to the LUT Director or designee, who shall consider the reasonable cost and amount of work remaining to be performed; however, the LUT Director or designee reserves the sole right to determine the amount of Appropriation to be maintained.

   iii. In no event shall the amount of Appropriation be reduced to less than 25% of the original amount so appropriated, as determined by provision 3.b.1. of this Agreement, until the required road restoration work is complete and the Permit has been successfully closed out by County, at which time any remaining Appropriation may be otherwise disbursed by WWSP.

   iv. In the event of a County claim pursuant to provision 4 of this Agreement, WWSP shall make available to County the amount of the Appropriation requested by County within thirty (30) days of County's written request in order for County to complete the required road restoration work or satisfy any other provision of the Permit.

   v. Upon such a claim, WWSP is to make the amount available to County without regard as to the merits of County's claim. County's claim is paramount to all Parties including WWSP. Any dispute as to the merits of County's claim shall be determined separately between WWSP and County under the dispute resolution processes of Section 7.

3. Periodic Review: County may at any time, upon reasonable notice, request a statement from WWSP's managing agency as to the amount of the remaining Appropriation available pursuant to this section.

c. WWSP shall maintain the Appropriation or surety specified in each Permit, as it may be adjusted per provision 3.b.2. of this Agreement, for the Water System Facility-related road restoration costs, with first claim and priority to County, until the LUT Director or designee releases the surety in
writing upon successful completion and County acceptance of the required road restoration work.

d. If WWSP elects to provide a surety bond from a third party, the bond form shall be accepted by the County if it is commercially reasonable and provided by a company authorized to conduct surety business in the State of Oregon.

4. WWSP FAILURE TO COMPLETE PROJECT ROAD RESTORATION WORK

a. Prior to submitting any claim against the surety required by section 3, County shall provide notice in writing to WWSP of its intent to submit the claim. Such notice shall state with specificity the Water System Facility-related road restoration work or required temporary restoration work that has not been completed and, except in the case of an emergency, shall provide WWSP with thirty (30) days to complete such work. In the case of an emergency, which shall include any danger or hazard to the traveling public, including, but not limited to, any unplanned road or lane closure or any other obstruction, encroachment, or threatened encroachment to the public road or rights-of-way, as determined by County, WWSP shall immediately complete such work necessary to abate the emergency conditions as soon as practicable following notice from the County.

b. If County submits a claim for the surety, or part thereof, in order to remedy a failure of WWSP to complete permitted Water System Facility-related road restoration work or required temporary restoration work, such claim shall be made in writing to the holder of the surety and WWSP.

c. WWSP shall be liable for any and all loss or damage resulting from WWSP failure to timely complete the Water System Facility-related road restoration work in accordance with each Permit, including the expense to bring the road restoration work (both temporary and permanent) into compliance with County’s requirements outlined therein.

d. WWSP further agrees that in the event that any suit or action is pursued by County to enforce any provision of this Agreement or a subsequent Permit, including any suit or action to obtain release of the surety, the prevailing party shall be entitled reasonable attorney fees at trial and on appeal. Venue for any such action shall be the Washington County Circuit Court. This agreement is in addition to, and not in lieu, of any other enforcement action available to County including Permit revocation and citation.

5. WWSP REIMBURSEMENT OF COUNTY EXPENSES RELATED TO WATER SYSTEM FACILITIES PERMITTING

a. County shall invoice WWSP quarterly for reimbursement of County costs associated with engineering plan review, inspection, permit processing, coordination, legal review, and administration directly related to WWSP Permits under this Agreement, except that County will not assess WWSP for permit-related activities performed by LUT staff at the Principal level or higher.
b. Except as otherwise provided herein, County staff time and other permit-related County costs will be charged at “cost,” as defined in the Washington County Fee Schedule adopted by the Board of County Commissioners.¹

c. County invoices shall be itemized by permitted Water System Facilities segments or projects (based on issued Permits) and include a breakdown of hours by person, fully burdened rates, applied indirect cost, and receipts for any materials or equipment. Prior to Permit issuance, County shall provide WWSP a preliminary estimate of anticipated County costs for each Permit using the Permit Cost Estimation Sheet, which shall be attached to the Permit. The Parties acknowledge that actual County costs may vary from the preliminary estimates.

6. AUTHORITY

a. WWSP hereby authorizes its Program Director or designee to execute the required Permit Applications on behalf of WWSP and to provide the requested surety.

b. County hereby authorizes its LUT Director or designee to issue the required Permits on behalf of County.

7. GENERAL PROVISIONS

The Parties acknowledge the following:

a. This Agreement shall apply only to those portions of WWSP’s facilities that are not addressed by the existing Coordination Agreements or future Coordination Agreements, if any.

b. Waiver by any Party of the strict performance of any provision of this Agreement or the Permits issued pursuant to this Agreement shall not be a waiver of or prejudice to any other Party’s right to require strict performance of the Agreement or Permits in the future.

c. If any provision of this Agreement or a subsequent Permit shall for any reason be held invalid or unconstitutional, the remainder of the Agreement or Permit shall remain in full force and effect.

d. If any dispute arises out of this Agreement and cannot be resolved by the respective Project Managers, the County LUT Director, or designee, and WWSP Program Director, or designee, will attempt to resolve the issue. If the County LUT Director and WWSP Program Director are not able to resolve the dispute, the Parties will submit the matter to mediation, each party paying its own costs and sharing equally in common costs. If any dispute is not resolved by mediation, the

¹ Staff time is charged at a fully burdened rate. Cost = \((\text{Total hours spent} \times \text{Pay rate} \times \text{Factor encompassing indirect costs}) + \text{Actual cost of any additional materials and equipment directly chargeable for project}\).
Parties may agree to resolve it through arbitration or may utilize any other legal process or remedy allowed by law.

e. Subject to the foregoing, any party may institute legal action to cure, correct, or remedy any default to enforce any covenant or agreement herein or to enjoin any threatened or attempted violation of this Agreement. All legal actions shall be initiated in Washington County Circuit Court. The Parties, by signature of their authorized representatives below, consent to the personal jurisdiction of that court.

8. INDEMNIFICATION

This Agreement is for the benefit of the Parties only. Each Party agrees to hold harmless and indemnify the others, and their elected officials, employees, agents, and contractors from and against all claims, demands, and causes of action and suits of any kind or nature resulting from the negligent or wrongful acts, actions, or omissions of the indemnifying Party and its respective elected officials, employees, agents, and contractors in the performance of their respective responsibilities and duties under this Agreement and any subsequent Permits, to the extent applicable, to which the above indemnification is subject and shall not exceed the limits of the Oregon Tort Claims Act (ORS 30.260 through 30.300) and the Oregon Constitution.

9. EFFECTIVE DATE, EXTENSION, AND TERMINATION

a. This Agreement shall become effective on the last date signed by the Parties and shall continue thereafter for a term of ten (10) years, unless extended by the Parties. This Agreement may be renewed or extended for a period of up to ten (10) years by mutual consent of the Parties. Any Party desiring to renew or extend the term of this Agreement shall provide written notice to the other Parties of the intent to renew and extend sixty (60) days prior to the natural termination of the current term. Such renewal or extension shall be automatic if no objection is received from any other Party within 30 (thirty) days of receipt of notice.

b. Any Party may terminate this Agreement on July 1 of any year, by providing written notice of intent to terminate the Agreement to the other Parties on or before April 1 of that year in which the requesting Party wants to terminate. In addition, County may notify WWSP upon sixty (60) days written notice that this Agreement is terminated as to any future Permit Applications. In the event of termination, the Parties agree to work in good faith to close the obligations related to this Agreement and issued Permits. Early termination of this Agreement pursuant to this section shall not invalidate or otherwise modify any Permit issued prior to the termination date.

c. Notwithstanding the foregoing, termination of this Agreement shall not terminate WWSP’s obligations to continue to provide surety amounts for County Permits approved prior to the effective date of termination.

d. County may extend an issued Permit, subject to approval of the LUT Director.
WHEREAS, all the aforementioned is hereby agreed upon by the Parties and executed by the duly authorized signatures below:

**Tualatin Valley Water District (WWSP managing agency):**

________________________________________________ __________________________
Signature       Date

________________________________________________ __________________________
Printed Name       Title

Address: _________________________________________________________________________

**City of Hillsboro:**

________________________________________________ __________________________
Signature       Date

________________________________________________ __________________________
Printed Name       Title

Address: _________________________________________________________________________

**Washington County, Oregon:**

________________________________________________ __________________________
Signature       Date

________________________________________________ __________________________
Printed Name       Title

Approved as to form:

________________________________________________
County Counsel
1. Comply with these General Conditions unless otherwise allowed, in writing, or modified by the Special Conditions or Special Provisions contained within this permit.

2. This permit does not authorize any activity on privately owned property or public rights-of-way not under the control and jurisdiction of Washington County.

3. Failure to comply with any term or condition of this permit shall be cause for the County to revoke, annul, terminate, suspend, revise or amend this permit or issue code violation citation or take any legal action necessary to correct the violation. All costs associated with work stoppage or revocation as provided herein are the responsibility of the Permittee.

4. Follow the direction of Washington County if actual site conditions warrant the need to modify any previously approved construction, traffic control, or erosion control plan. Washington County reserves the right to make changes to the permit and approved supplementary documents including any and all plans at any given time. If submitted plans were prepared by an engineer, submit as built plans to Washington County at project completion.

5. Obtain County approval prior to modifying the scope of the permitted work.

6. Communicate and coordinate, as needed, with adjacent residents, businesses, and other service providers (i.e. utilities, transit providers, garbage haulers, etc.) that may be impacted by the work associated with this permit.

7. Comply with all applicable city, county, state and federal laws and regulations associated with the performance of the work authorized by this permit. Laws and regulations listed in these General Conditions or the Special Provisions are for courtesy purposes only. These listings are not intended to be comprehensive. It is the responsibility of the Permittee and those performing the work to be knowledgeable about all applicable laws and regulations.

8. Washington County has the authority to designate the location where lines, fixtures and facilities may be located, and subject to ORS 758.025 may order the location of any such line, fixture or facility to be changed when deemed expedient by the County. Any line, fixture or facility erected or remaining in a different location upon such road than that designated in any order of the County is a public nuisance and may be abated accordingly.

9. Obtain any other permits, licenses, or authorizations required by other utilities, public agencies, or organizations for performing work authorized under this permit.

10. ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0100. You may obtain copies of the rules by calling the center. The telephone number for the Oregon Utility Notification Center is (503) 232-1987, (800) 332-2344, or 811. You can also visit www.digsafelyoregon.com for more information. The Oregon Utility Notification Center One Call locates telephone number in the greater Portland Metropolitan area is (503) 246-6699.

11. Permittee shall contact the County, using one of the three Contact Options below, at least one (1) business day prior to the following milestones:
   a) Start of construction – For notification purposes only. Formal inspection not required to commence construction. Indicate that inspection request is for start of construction.
   b) Concrete form inspection – Concrete shall not be placed until forms have passed formal inspection.
   c) Pre-paving inspection – Paving shall not be performed until site has passed formal inspection.
   d) A break in construction greater than three (3) days (excluding holidays and weekend) – For notification purposes only.
   e) Completion of construction – Use “Final” inspection code to request inspection after all permitted work is complete.

   Contact Options:
   1) Phone: (503) 846-3699
   2) Online: www.co.washington.or.us/piro
   3) Mobile: www.co.washington.or.us/pirm

   Be prepared to have your permit number and inspection code available for entry into the automated system(s).

12. Thirty (30) days prior to the expiration of the permit the Permittee shall contact the County at 503-846-7623 and provide an update and status of the permitted work, if the work has not been completed. If the work will not be completed prior to permit expiration, the Permittee shall request an extension for the permit or risk having to re-apply for a new permit with new fees and requirements associated with the work.

13. Construct the permitted activity with materials, equipment, labor, and workmanship to meet or exceed the relevant specifications established in the Washington County Road Design and Construction Standards (Ordinance #738 as adopted January 27, 2011), the 2015 Oregon Standard Specifications for Construction, and any special conditions or provisions established by this permit. Ensure quality control is maintained for all work performed and correct any work that does not meet the minimum standards and specifications.
Exhibit A

GENERAL CONDITIONS
For Permits To Work in Washington County Right-of-Way

14. Establish and maintain work zone traffic control in compliance with the Oregon Temporary Traffic Control Handbook for Operations of Three Days or Less (December 2011) any time vehicle or pedestrian traffic is influenced by the work. For work requiring devices in place longer than three (3) days, a site specific traffic control plan based on the principles in Part 6 of the MUTCD, the Oregon Supplement and ODOT's 2015 Standard Drawings TM800 – TM871, is required. All traffic control devices shall meet or exceed the NCHRP 350 requirements for crashworthiness. Completed signal shut down requests must be received by the County a minimum of 3 working days prior to any proposed signal shut down.

15. Accommodate all road users at all times including motorists, bicyclists, pedestrians, and those with disabilities or impairments. Install and maintain additional temporary signing and traffic control devices for the control of non-motorized vehicles and pedestrians where a reasonable volume of these users are expected and where work is expected to last longer than one hour. Maintain safe accessibility or provide suitable alternate routes in, through, or around work areas.

16. Limit work & activity (construction, restoration, erosion control, etc) to no more than 1,000 lineal feet at any one time.

17. Impact no more than one consecutive intersection at a time.

18. Do not store or park any equipment, vehicles, or materials in the right-of-way overnight unless approved by Washington County.

19. Utilize construction materials and methods to maintain at least one travel lane at all times. Adjust work zone to ensure no vehicles are stopped, held or restricted for more than fifteen (15) minutes. Lane restrictions may be allowed in accordance with an approved traffic control plan and according to the following table:

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<th>Day preceding a holiday</th>
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<tr>
<td>Collector/ Neighborhood Route</td>
<td>Early Start Time: 8:30 a.m. Latest End Time: 4:00 p.m.</td>
<td>Latest End Time: 12:00 p.m.</td>
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<td>Local</td>
<td>Early Start Time: 8:00 a.m. Latest End Time: 5:00 p.m.</td>
<td>Latest End Time: 12:00 p.m.</td>
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20. Suspend work on the following holidays: New Year’s Day (Jan 1), Martin Luther King Day (3rd Mon in Jan), President’s Day (3rd Mon in Feb), Memorial Day (last Monday in May), Independence Day (Jul 4), Labor Day (1st Monday in Sept), Veteran’s Day (Nov 11) Thanksgiving (4th Thursday & 4th Friday in Nov), Christmas Day (Dec 25).

When a holiday falls on a Saturday, the observed holiday is the preceding Friday. When a holiday falls on a Sunday, the observed holiday is the following Monday.


Ensure all equipment is clean and leak free with sufficient and appropriate spill prevention and clean up materials on site and the personnel involved with the permitted activity are familiar with and proficient in the use of these materials. When not being actively used for the permitted activity, remove construction equipment from the right-of-way. Do not park, re-fuel, or service equipment or store hazardous materials directly over or uphill from catch basins, drainage inlets, manholes or within 150 feet of any wetland, waterway, or resource water. When reasonably available, re-fuel over an impervious surface and use absorbent pads to collect spilled fuel.

Install and maintain appropriate erosion and sediment control devices, in accordance with an approved Erosion and Sediment Control Plan (ESCP) to ensure that all catch basins, drainage inlets, manholes, wetlands, waterways, and resource waters are sufficiently protected from erosion and sediment. In the absence of a formal ESCP, comply with Clean Water Services’ Erosion Prevention and Sediment Control Standards.

22. Preserve and protect all public and private infrastructure ensuring that these facilities continue to properly function during the course of the permitted activity, including, but not limited to, underground storm drainage systems, open drainage systems, culverts, roof drains, field inlets and drains, irrigation systems, traffic control devices, and illumination.

23. Restore all existing infrastructure, affected by the permit activity, to original or better condition. Restoration includes, but is not limited to, the road surface, base and subgrade, pavement markings, drainage facilities, signs, safety appurtenances, bicycle and pedestrian facilities, vegetation or landscaping and any other feature affected by the activity. Restoration of the right-of-way shall be completed in a timely manner and to the County’s satisfaction.

24. Re-establish surfaces to their pre-existing grade at the end of each work day. For Asphaltic surfaces or Portland cement concrete, interim re-establishment shall be with either hot mix or cold mix asphaltic concrete and shall be in place for no longer than fourteen (14) calendar days. Beyond fourteen (14) calendar days, permanent right-of-way restoration shall be used unless approved by the County. STEEL PLATES are NOT an acceptable interim solution unless prior approval has been obtained through Washington County.
25. Installation of underground utilities or any other buried appurtenance shall be at least thirty (30) inches below grade. All mechanically extracted, cylindrical cores, up to 8” diameter, taken from the paved section of roadway shall be restored according to the County’s “Core Hole” Detail.

26. Concrete panels shall not be cut without express written permission from Washington County. If concrete panels, curbs, sidewalks or driveways are disturbed or damaged, replacement of full panels, to the nearest cold joint, shall be required. Prior to pouring concrete. Permittee shall submit concrete mix design for review and approval by Washington County and arrange for a form inspection.

27. Preserve and protect survey monuments, public land corners and any accessory associated with these features. If interference, removal, or destruction is necessary, comply with ORS 209.140 through ORS 209.155. Additionally, utility infrastructure may not be placed within one foot of a survey monument location noted on a subdivision or partition plat, in accordance with ORS 92.044. The Washington County Surveyor can be reached at (503) 846-8723.

28. Comply with Washington County’s Noise Control Ordinance established in Chapter 8.24 of the County’s Code of Ordinances. Acquire a variance to the noise ordinance, when needed.

29. Interaction with the County, other agencies, service providers and the public shall be in a professional, courteous and timely manner.

30. Maintain a complete set of the permit, approved plans, traffic control plans, erosion control plans, and any conditions or special provisions at the job site and have them available for review, upon request.

31. Grant the County immediate access to the permitted work area. The Permittee shall appoint and assign a foreman or competent person that shall be available as the County’s point of contact while work is being performed. If this foreman or competent person is unavailable while work is being performed, the Permittee shall provide the County with an alternate. The County reserves the right to enter the work area covered under this permit for any reason.

32. Permits are valid for one year from date of issuance and all work must be completed in that time period. Expired permits, without an approved final inspection, may have a notice placed in their property record related to the permit status.

33. If the requirements for this permit have not been met, there may be a denial or delay with the issuance of other permits.

34. Guarantee all permitted work for a minimum of one year from date of completion. County may require a cash deposit during the guarantee period depending on the type of work. In the event that the Permittee fails to perform warranty work in a timely manner to the satisfaction of Washington County, the deficient work may be corrected, mitigated, or abated by the County. Permittee shall be responsible for all expenses associated with work done by the County to correct, mitigate, or abate a deficiency.

35. Additional fees may be required if there is a substantial change in the scope of work which requires further review by Washington County or if more than three site visits are needed for inspection purposes. Additional inspection fees will be charged in accordance with the adopted fee schedule.

36. Include the permit number in all written and verbal correspondence with the County.

37. Comply with the Right-of-Way Permit Insurance Requirements (i.e. Tier 1, Tier 2, or Tier 3) determined for this permit.
A RESOLUTION AUTHORIZING TRANSFER OF REAL PROPERTY INTERESTS BY TUALATIN VALLEY WATER DISTRICT TO THE WILLAMETTE WATER SUPPLY SYSTEM COMMISSION.

WHEREAS, since 2015 the Tualatin Valley Water District (TVWD) and the City of Hillsboro (Hillsboro) have acquired real property interests in various properties by fee title, easements, licenses, leases and permits from governmental entities and private land owners for the location and placement of the Willamette Water Supply System facilities; and

WHEREAS, TVWD, Hillsboro and the City of Beaverton (Beaverton) have entered into the Willamette Water Supply System Intergovernmental Agreement (Agreement) creating the Willamette Water Supply System Commission (WWSS Commission) effective July 1, 2019; and

WHEREAS, Sections 9.2, 9.3 and Exhibit 8 of the Agreement provide for transfer of these various real property interests from TVWD and Hillsboro to the WWSS Commission; and

WHEREAS, the TVWD Board of Commissioners wishes to direct the Chief Executive Officer to make such transfers to the WWSS Commission as necessary and proper considering the circumstances and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: Pursuant to Sections 9.2, 9.3 and Exhibit 8 of the Willamette Water Supply System intergovernmental agreement effective July 1, 2019, the Chief Executive Officer is authorized and directed to execute all documents necessary to convey, transfer and assign all real property interests from Tualatin Valley Water District to the Willamette Water Supply System Commission.

Section 2: The description of the documents for conveyance, transfer or assignment of real property interests in Section 1 is general in nature, and the Chief Executive Officer is authorized and directed to execute documents in the form approved by the District’s General Counsel.

Section 3: The Board recognizes that the timing for execution of documents for some conveyances, transfers or assignments may need to be at different intervals, and therefore, the Chief Executive Officer is granted discretion as to timing of conveyance in order to meet the requirements of the WWSS Commission.

Approved and adopted at a regular meeting held on the 17th day of July 2019.

Bernice Bagnall, President

Todd Sanders, Secretary
RESOLUTION NO. 23-19

A RESOLUTION DESIGNATING REGISTERED AGENT, TRANSFERRING DUTIES AND GRANTING SIGNATURE AUTHORITY TO TOM HICKMANN AS CHIEF EXECUTIVE OFFICER.

WHEREAS, the Board of Commissioners selected Tom Hickmann to be the next Chief Executive Officer of the Tualatin Valley Water District effective August 1, 2019; and

WHEREAS, the purpose and intent of this resolution is to fully vest the new Chief Executive Officer with all duties, authorities and powers currently delegated to the current Chief Executive Officer so that the transition on August 1, 2019 is full, complete and timely; and

WHEREAS, the Board of Commissioners at all times retains the right to change these duties, authorities and powers, and being fully advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: Pursuant to ORS 198.340, Tom Hickmann, CEO, is hereby designated as the Registered Agent for the District and the Registered Office is the District’s Administrative Headquarters located at 1850 SW 170th Avenue, Beaverton, Oregon, 97003.

Section 2: That as the Chief Executive Officer, Tom Hickmann is appointed to replace Mark Knudson and authorized and empowered to perform all duties and tasks on behalf of the District previously delegated to Mr. Knudson including, but not limited to, banking and financial matters, administrator of employee retirement and benefits, investments, payments of obligations and debt, award of contracts and designation as the Public Contracting Officer and other matters requiring signature or authorization by the CEO.

Section 3: As Chief Executive Officer, Tom Hickmann is appointed to replace Mark Knudson in all appointments held by Mark Knudson by virtue of the office of CEO.

Section 4: The Board President and CEO are authorized to sign appropriate documents following approval by District legal counsel to effectuate the provisions of this resolution.

Section 5: This resolution is effective August 1, 2019.

Approved and adopted at a regular meeting held on the 17th day of July 2019.

________________________________________  _____________________________
Bernice Bagnall, President                 Todd Sanders, Secretary
RESOLUTION NO. 24-19

A RESOLUTION ESTABLISHING WATER RATES AND OTHER SERVICE CHARGES FOR THE TUALATIN VALLEY WATER DISTRICT WITH AN EFFECTIVE DATE OF NOVEMBER 1, 2019.

WHEREAS, a public hearing was held by the Board of Commissioners of the Tualatin Valley Water District on August 21, 2019 to consider increases in water rates and related fees to be paid for District operations, the purchase of water and capital improvements; and

WHEREAS, pursuant to the provisions of ORS 264.312, notice of said public hearing and the purpose thereof was given by mailing a notice of hearing to the customers of the District in accordance with the requirement of said statute; and

WHEREAS, based on the recommendations of the administrative staff of the District and the testimony heard, received and considered by the Board from such public hearing, the Board of Commissioners finds that:

(1) It is necessary to adopt fixed and volume rates for water services provided by the District, and related fees and charges, to provide resources to fund the costs of operating the District, fund necessary capital improvements and to support the development of new water supplies; and

(2) The adopted budget for the 2019-2021 biennium, six-year capital improvement plan and District Financial Plan identify current and future resources needed to continue implementation of the Willamette Water Supply System, and construct improvements to the District’s water system infrastructure for seismic and system reliability purposes; and

(3) The District purchases most of its water supply for distribution within the District from the City of Portland, Oregon, and acquires substantially the remainder of its supply as a partner in the Joint Water Commission.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: This resolution takes effect November 1, 2019. The rates and charges shown in Exhibit A and Exhibit B, attached hereto and by this reference incorporated herein, are hereby adopted by the District.

Section 2: The District hereby shall make a copy of this resolution available to the public at the office of the District and through other media.

Approved and adopted at a regular meeting held on the 18th day of September 2019.

_________________________________________  _____________________________
Bernice Bagnall, President                  Todd Sanders, Secretary
**TUALATIN VALLEY WATER DISTRICT**  
**EXHIBIT A - WATER RATES**

**VOLUME WATER CHARGE:**  
Effective 11/1/2019  
Effective 11/1/2020

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Volume charges shall be at contractual rates.

**FIXED CHARGES (FOR ALL CLASS CODES):**

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<th>SERVICE SIZE</th>
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<td>F 1/8&quot;</td>
<td>$16.40</td>
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<td>F 3/4&quot;</td>
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<td>F 1-1/2&quot;</td>
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<td>F 2&quot;</td>
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<td>$164.60</td>
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<td></td>
<td>F 10&quot;</td>
<td>$630.23</td>
<td>$1,260.46</td>
</tr>
</tbody>
</table>

Note: If snowbird customers do not request a service turn-on from the District and there has been movement on the meter, the District will apply fixed charges for the entire 2-month billing cycle.

Private fire services are charged at the service size as determined by the nominal size of the backflow prevention assembly unless otherwise established by the District’s Chief Engineer based on engineering equivalence. For service sizes not listed above, the next larger service size will be used.
# Tualatin Valley Water District
## Exhibit B - Other Services Charges & Penalties

*Effective 11/1/2019*

### 1. Water Service on or Off at Customer's or Owner's Request
   - First call -- during office hours, Monday through Friday except for snowbird turn off. N/C
   - Leaks or emergencies beyond customer control -- during office hours or after hours or weekends N/C
   - Service on and off, second call during office hours $100
   - Service on and off, second call after hours (an additional) $85
   - All snowbird turn offs $95

### 2. Water Service on and Off for Non-Payment
   - Service on and off, during office hours, Monday through Friday $100
   - After hours or weekend service on and off (an additional) $85
   - Broken promise turn off $100

### 3. Additional Charges, If Necessary, to Enforce Payment of Bill or Charges
   - Removal of meter $185
   - Reinstallation of meter N/C
   - Installation or removal of locking device-first occurrence $100
   - Installation or removal of locking device-second occurrence $115
   - Installation or removal of locking device-third occurrence $220
   - Repair of breakage/damage to locking mechanism (curb stops, etc.) Time & Materials
   - Service off water at main or reinstating service Time & Materials
   - Check returned by bank for non-payment (NSF) $33
   - Meter tampering and/or using water without authority $60
   - Penalty for incorrect financial institution account information
     - First two times no charge. Charge per incident, third time and above. $25

### 4. Illegal Use of Water
   - $150
   - (plus water usage billed at current rates)

### 5. Illegal Use of Fire Line
   - First occurrence N/C
   - Second occurrence (plus estimated water usage billed at Block 1 rate) $150
   - Third occurrence (plus estimated water usage billed at Block 1 rate) $1,000
   - All subsequent occurrences subject to final remedies determined by CEO or designee on a case-by-case basis per District Rules and Regulations (plus estimated water usage billed at Block 1 rate)

### 6. Decreasing or Increasing Size of Meter
   - Time & Materials
   - (plus any applicable system development charges)

### 7. Testing Water Meters at Customer's or Owner's Request
   - Testing on premises (5/8” – 3/4” – 1”) $185
   - Removal of meter for testing (5/8” – 3/4” – 1”) $400
   - Testing of meters larger than 1” Time & Materials
8. Usage of meter key
   a. Deposit refundable with key return $25 Deposit

9. Removal of meter during construction
   a. Removal of meter $185
   b. Loss of meter (see Meter & Service Installation Charges) Based on Meter Size

10. Fire hydrant fees
    a. Repair of breakage/damage Time & Materials
    b. Hydrant permit (tanks ≤1000 gallons) $360
    c. Hydrant permit (tanks 1001-2000 gallons) $1,085
    d. Off-site tank inspection (does not include permit) $95
    e. Penalty for unauthorized hydrant use (within a 12-month period):
       First offense $1,000
       Second offense $2,000
       Third offense $4,000
    f. Penalty for using non-approved (uninspected) tank (within a 12-month period) $2,000

    Daily hydrant meter fees:
    g. Administrative Fee $510
    h. Daily Fee for 1-inch meter $0.10
    i. Daily Fee for 2-inch meter $0.20
    j. Daily Fee for 3-inch meter $1.20
    k. Hydrant meter deposit (refundable less damages):
       1-inch $500
       2-inch $1,000
       3-inch $2,000

11. Backflow prevention device testing
    Device testing
       a. Initial test fee per device $110
       b. All subsequent tests are the responsibility of the owner -- to be done annually by a State Certified Backflow Tester of their choice

    Gold plan
       Annual fee per device dependent on customer agreement to have the District schedule & perform required annual test. Test performed by District contractor & includes $50 annually in minor repairs to existing device to achieve passing test.
       $35

    Enforcement fee
       Annual fee per device. Applies if customer hasn’t completed annual test by required date and is scheduled for shutoff. Test performed by District contractor in lieu of shutoff. Fee does not include cost of repairs that may be required.
       $50

    Service on and off for non-compliance of annual testing and reporting.
       a. Service on and off, during office hours, Monday through Friday $100
       b. After hours or weekend service on and off (an additional) $85
12. Flow testing of fire hydrants
   a. Request for flow test, we have existing information within last 3 years, and no significant changes have occurred. $30
   b. No existing fire flow information. Modeled fire flow is ok. $105
   c. No existing information. Full test is requested. $565
   d. Extended pressure test (if requested as part of full flow test). $695
   e. Extended pressure test without an additional flow test. $470

13. Plan review fees (see Resolution 25-18)

14. SDC finance contract and recording fee
    $500

15. Temporary irrigation meter
    $2,305

16. Public records request fees
   a. Staff time - no cost for first half hour of staff time (rate per hour) $35
   b. Staff time to transcribe a recording (rate per hour) $35
   c. Attorney time for reviewing and redacting records (billed in tenths of an hour) Actual cost
   d. Certified copy service (rate per certification) $5

Photocopies:
   e. Black and white - 8 1/2" x 11" (price per sheet of paper) $0.02
   f. Black and white - 8 1/2" x 14" and larger (price per sheet of paper) $0.05
   g. Color - 8 1/2" x 11" (price per page) $0.05
   h. Color - 8 1/2" x 14" and larger (price per page) $0.15
   i. Data media (e.g., CD or DVD) Actual cost
   j. Mailing and postage supplies Actual cost

Other billing charges
   Any other services performed by District personnel for which there is not a fee specified in this Resolution shall be charged at the employee’s salary plus the cost of other personnel expenses for the actual time spent on the service (minimum 0.25 hours); plus the cost for materials and District equipment used including overhead rates and any deposits required by the District.

Carrying charges
   Bills issued by TVWD which remain unpaid for over thirty (30) days may be subject to a carrying charge at a rate of 9% per year on the unpaid balance.

Fee Waivers
   The Chief Executive Officer (CEO) or designee may waive all or a portion of the Other Service Charges & Penalties in Exhibit B if the CEO or designee determines that it is in the equitable and best interest of the District considering the particular circumstances involved in each case.
Meter and Service Installation Charges By Meter Size

<table>
<thead>
<tr>
<th>METER SIZE</th>
<th>Service Install*</th>
<th>Refundable**</th>
<th>Meter Fee</th>
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<tbody>
<tr>
<td>5/8&quot;</td>
<td>$315</td>
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<td>$315</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>$970</td>
<td>$220</td>
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</tr>
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<td>1&quot;</td>
<td>$2,415</td>
<td>$335</td>
<td>$335</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>$3,015</td>
<td>$0</td>
<td>$590</td>
</tr>
<tr>
<td>2&quot;</td>
<td>$3,015</td>
<td>$0</td>
<td>$720</td>
</tr>
</tbody>
</table>

* Per District water system standards all meters to 1" in size require a 1" service line.
** Amount refundable applies only if TVWD is able to install its services before other utilities.

<table>
<thead>
<tr>
<th>METER SIZE</th>
<th>Service Install*</th>
<th>Meter Fee</th>
<th>Dig-ins Banked Dig-ins</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/8&quot;</td>
<td>$315</td>
<td>$315</td>
<td>$315</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>$2,415</td>
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<tr>
<td>1&quot;</td>
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<tr>
<td>1-1/2&quot;</td>
<td>$3,015</td>
<td>$590</td>
<td>N/A</td>
</tr>
<tr>
<td>2&quot;</td>
<td>$3,015</td>
<td>$720</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Per District water system standards all meters to 1" in size require a 1" service line.
All new meters include Automatic Meter Reading (AMR) capability.
Dig-ins are defined as a service tap in an existing main in an existing street.
Subdivisions are defined as undeveloped streets where mains will be installed.
Banked dig-ins are defined as one excavation with more than one service tap.
Fees for Banked Dig-Ins for meters larger than 1" will be determined on a case by case basis by the District’s Engineering Department.
RESOLUTION NO. 25-19

A RESOLUTION DECLARING PUBLIC NECESSITY TO ACQUIRE PERMANENT EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS ON TAX LOT 2S106B000500 FOR PIPELINE SECTION PLM_5.2 FOR THE WILLAMETTE WATER SUPPLY SYSTEM.

WHEREAS, the above-entitled matter came before the Board of Commissioners of the Tualatin Valley Water District (“TVWD”) at its regular meeting on September 18, 2019; and

WHEREAS, TVWD has authority under ORS 264.240 and ORS Chapter 35 to acquire real property by purchase or through eminent domain; and

WHEREAS, on or about June 16, 2015, TVWD entered into an intergovernmental agreement under ORS chapter 190 with the City of Hillsboro (“Design and Construction Agreement”) to permit, design, finance and construct the Willamette Water Supply System, as set forth in the Design and Construction Agreement; and

WHEREAS, the Design and Construction Agreement vested TVWD with authority to acquire real property interests for the Willamette Water Supply System; and

WHEREAS, on July 18, 2018, the TVWD Board of Commissioners (“Board”) approved Resolution 20-18 declaring public necessity to acquire certain permanent easements and temporary construction easements for pipeline section PLM_5.2 of the Willamette Water Supply System by the power of eminent domain; and

WHEREAS, among other items, Resolution 20-18 declared that it is necessary for the economic well-being, public health, safety and welfare of TVWD, and members of the public served by TVWD, to acquire fee title to necessary properties as well as necessary rights-of-way and easements to implement the Willamette Water Supply System; and

WHEREAS, Resolution 20-18 also declared that certain permanent and temporary construction easements on private property, including Tax Lot 2S106B000500, are necessary for the location of pipeline section PLM_5.2, and that such use was planned and located in a manner that was most compatible with the greatest public benefit and the least private injury; and

WHEREAS, subsequent to the approval of Resolution 20-18, various design changes were necessary for the location and operation of pipeline section PLM_5.2; and

WHEREAS, such design changes have modified the property interests needed on Tax Lot 2S106B000500 to accommodate pipeline section PLM_5.2; and

WHEREAS, the Willamette Water Supply System Intergovernmental Agreement (“Commission Agreement”) between TVWD, the City of Hillsboro and the City of Beaverton created the Willamette Water Supply System Commission (“Commission”), an ORS chapter 190 intergovernmental entity, effective July 1, 2019, to design, locate, construct, own, operate and maintain the Willamette Water Supply System, as set forth in the Commission Agreement; and
WHEREAS, pursuant to Commission Resolution No. WWSS-02-19, the Commission designated TVWD as its Managing Agency and vested TVWD with authority to continue to acquire real property interests on behalf of the Commission for the Willamette Water Supply System; and

WHEREAS, the TVWD Board reaffirms that it is necessary for the economic well-being, public health, safety and welfare of TVWD, and members of the public served by TVWD and the Commission through the Willamette Water Supply System, to acquire fee title to certain real property, as well as necessary rights-of-way, easements and other property interests, in order to design, construct, locate, operate and implement the Willamette Water Supply System; and

WHEREAS, the TVWD Board has determined that permanent and temporary construction easements on Tax Lot 2106B000500 are necessary for the construction, location and operation of the Willamette Water Supply System, and in particular, the water pipeline and related water system facilities for pipeline section PLM_5.2, and that such use is planned and located in a manner that is most compatible with the greatest public benefit and the least private injury; and

WHEREAS, such permanent and temporary construction easements on Tax Lot 2S106B000500 are depicted for illustration purposes only on Exhibit B and are described on Exhibit A attached hereto and incorporated by reference (“Property Interests”), with final easement documents as determined by the Willamette Water Supply Program and its consultants, on behalf of TVWD, to be reasonably necessary to accommodate the design and operation of the Willamette Water Supply System; and

WHEREAS, the TVWD Board finds that declaration by resolution to acquire the Property Interests is necessary, and being fully advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The above recitals shall form an integral part of this resolution and shall have the same force and effect as if fully stated herein.

Section 2: It is necessary for the preservation of economic well-being, public health, safety and welfare of TVWD, and members of the public served by TVWD and the Commission through the Willamette Water Supply System, that TVWD acquire the Property Interests through exercise of the power of eminent domain.

Section 3: TVWD staff (which, as used herein, includes the Willamette Water Supply Program) and counsel are authorized to retain appraisers, negotiators and consultants for eminent domain proceedings.

Section 4: TVWD staff and counsel are authorized to negotiate agreements to acquire the Property Interests as they deem necessary and pay just compensation and, if applicable, compensable damages, in accordance with applicable law.

Section 5: TVWD staff and counsel are authorized to file a complaint in condemnation and take other steps as they determine necessary, and to prosecute to final determination such action to acquire title to the Property Interests. Upon the trial of any suit or action instituted to acquire the Property Interests, TVWD staff and counsel are authorized to make such stipulation, agreement or
admission as in their judgment may be in the best interest of TVWD and to take possession of the Property Interests at such time as appropriate in their judgment without necessity of further TVWD Board approval.

Approved and adopted at a regular meeting held on the 18th day of September 2019.

_________________________________   ______________________________________
Bernice Bagnall, President                 Todd Sanders, Secretary
PARCEL 1 – PERMANENT UTILITY EASEMENT

A parcel of land lying in the Section 6, Township 2 South, Range 1 West of the Willamette Meridian, Washington County, Oregon and being a portion of that property conveyed Ed Bartholemy, recorded October 21, 2014 as Document No. 2014–066989, in the Washington County Book of Records, said parcel being that portion of said property included in a strip of land variable in width, lying on the northerly side of the following described Control Centerline:

Beginning at Centerline Station 807+72.00, said point being N 88°16'49" E, 3197.30 feet from the West 1 / 4 corner of Section 6, Township 2 South, Range 1 West of the Willamette Meridian; Thence along said centerline the following courses:

S 89°29'59" W, 189.70 feet to Station 809+61.70;

thence S 83°03'43" W, 100.59 feet to Station 810+62.29;

thence S 85°38'46" W, 147.71 feet to Station 812+10.00;

thence S 71°15'21" W, 55.55 feet to Station 812+65.55;

thence S 89°18'27" W, 1151.34 feet to Station 824+16.88;

thence N 45°57'23" W, 129.72 feet to Station 825+46.60;

thence S 88°46'47" W, 441.22 feet to Station 829+87.82;

thence S 89°29'07" W, 906.98 feet to Station 838+94.79;

thence S 85°10'41" W, 149.31 feet to Station 840+44.10, said point being N 19°22'34" W, 105.21 feet from said West 1 / 4 corner of Section 6;

thence continuing along said centerline S 79°51'57" W, 34.86 feet to Station 840+78.97;

thence S 76°09'13" W, 93.50 feet to Station 841+72.87;

thence S 71°04'33" W, 82.23 feet to Station 842+55.09;

thence S 68°42'19" W, 756.34 feet to Station 850+11.44;

thence S 69°44'05" W, 88.45 feet to Station 850+99.89;

thence N 68°25'58" W, 61.32 feet to Station 851+61.20;

thence N 32°20'49" W, 105.87 feet to Station 852+67.07;

thence N 30°20'05" W, 916.82 feet to Station 861+83.90;

thence N 29°58'27" W, 227.75 feet to Station 864+11.64;

thence N 74°58'27" W, 35.00 feet to Station 864+46.65;

thence N 29°58'27" W, 162.22 feet to Station 866+08.86;

thence N 33°01'07" W, 96.75 feet to Station 867+05.61;

thence N 8°01'36" E, 35.07 feet to Station 867+40.68;

thence N 38°22'58" W, 25.07 feet to Station 867+65.75;

thence N 39°09'05" W, 561.37 feet to Station 873+27.12;

thence N 40°04'53" W, 358.16 feet to a point of curvature at Station 876+85.28;

thence along the arc of a 5034.50 foot radius curve to the left with a central angle of 4°12'40" a curve distance of 370.02 feet (the chord of which bears N 42°11'13" W, 369.94 feet) to a point of tangency at Station 880+55.30 PT;

thence N 44°17'33" W, 144.60 feet to Station 881+99.90;

thence N 46°04'20" W, 126.52 feet to Station 883+26.42;

thence N 49°38'24" W, 126.52 feet to Station 884+52.94;
EXHIBIT A

Willamette Water Supply  
September 9, 2019

Ed Bartholemy  
Tax Map No. 2S106B 00500

thence N 51°25'11" W, 99.53 feet to Station 885+52.47;  
thence N 57°45'20" W, 84.86 feet to Station 886+37.33;  
thence N 70°25'37" W, 84.86 feet to Station 887+22.19; said point being N 51°41'57" W, 50.68 feet from the Northeast corner of the Solomon F. Shattuck D.L.C. number 51;  
thence continuing along said centerline N 83°05'54" W, 84.86 feet to Station 888+07.05;  
thence N 89°26'02" W, 1401.57 feet to Station 902+08.62;  
thence N 44°26'02" W, 27.23 feet to Station 902+35.85;  
thence N 0°55'28" E, 224.95 feet to Station 904+60.80;  
thence N 25°53'14" W, 150.00 feet to Station 906+10.80;  
thence N 0°55'28" E, 94.19 feet to Station 907+04.99 and the Terminus of said centerline description, said terminus also being N 2°51'50" W, 508.09 feet from the Southeast corner of the John Landess D.L.C. number 37.

The widths of the strip of land above referred to are as follows:

<table>
<thead>
<tr>
<th>CONTROL CENTERLINE STATION</th>
<th>WIDTH ON NORTHERLY SIDE OF CENTERLINE</th>
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</thead>
<tbody>
<tr>
<td>From 822+28.36</td>
<td>118.00 feet in a straight line to 25.00 feet</td>
</tr>
<tr>
<td>To 827+50.00</td>
<td></td>
</tr>
</tbody>
</table>

EXCEPT THEREFROM that portion lying within the right-of-way of SW Scholls Ferry Rd (CR 3278).

The parcel of land to which this description applies contains 18,240 square feet (0.42 acre), more or less.

Basis of Bearings is the Oregon Coordinate Reference System (OCRS), Portland Zone.
EXHIBIT A

Willamette Water Supply
September 9, 2019

Parcel 2 – Temporary Construction Easement

That portion of said Bartholemy property included in a strip of land variable in width, lying on the northerly side of the Control Centerline described in Parcel 1:

The widths of the strip of land above referred to are as follows:

<table>
<thead>
<tr>
<th>Control Centerline Station</th>
<th>Width on Northerly Side of Centerline</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 821+53.36 To 823+53.36</td>
<td>179.00 feet</td>
</tr>
<tr>
<td>From 823+53.36 To 827+50.00</td>
<td>142.74 feet in a straight line to 50.00 feet</td>
</tr>
</tbody>
</table>

Except therefrom that portion lying within the right-of-way of SW Scholls Ferry Rd (CR 3278) and the above described Parcel 1.

The parcel of land to which this description applies contains 23,952 square feet (0.55 acre), more or less.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JAN. 14 2003
JOSEPH W. HURLIMAN
58960LS

RENEWAL: 7/01/21
SIGNED: 9/9/2019
EXHIBIT B

FILE No: WILLAMETTE WATER SUPPLY PROGRAM
SUBMITTAL DATE: PIPELINE MAIN STEM, SECTION 5.2
TAX LOT: ACQUISITION MAP
ADDRESS: PAGE 1 OF 1
TAX MAP: T2S R1W Sec06B

WILLAMETTE WATER SUPPLY PROGRAM
PIPELINE MAIN STEM, SECTION 5.2

1":100'

PARCEL 1 PERMANENT
UTILITY EASEMENT
ACQUISITION
AREA = 18,240 S.F.
(0.42 ac)

PARCEL 2 TEMPORARY
CONSTRUCTION EASEMENT
ACQUISITION
AREA = 23,952 S.F.
(0.55 ac)

ACQUISITION MAP
PAGE 1 OF 1

SURVEY & MAPPING
2020 SW 4TH AVE. SUITE 300 PORTLAND, OR 97201
PH: (503) 235-5000

FILE No: ACQUISITION MAP
SUBMITTAL DATE: WILLAMETTE WATER SUPPLY PROGRAM
TAX LOT: PIPELINE MAIN STEM, SECTION 5.2
ADDRESS: PAGE 1 OF 1
TAX MAP: T2S R1W Sec06B

1":100'

PARCEL 1 PERMANENT
UTILITY EASEMENT
ACQUISITION
AREA = 18,240 S.F.
(0.42 ac)

PARCEL 2 TEMPORARY
CONSTRUCTION EASEMENT
ACQUISITION
AREA = 23,952 S.F.
(0.55 ac)
A RESOLUTION DECLARING PUBLIC NECESSITY TO ACQUIRE PERMANENT EASEMENTS AND TEMPORARY CONSTRUCTION EASEMENTS ON TAX LOT 2S20100800 FOR PIPELINE SECTION PLM_5.2 FOR THE WILLAMETTE WATER SUPPLY SYSTEM.

WHEREAS, the above-entitled matter came before the Board of Commissioners of the Tualatin Valley Water District (“TVWD”) at its regular meeting on September 18, 2019; and

WHEREAS, TVWD has authority under ORS 264.240 and ORS Chapter 35 to acquire real property by purchase or through eminent domain; and

WHEREAS, on June 16, 2015, TVWD entered into an intergovernmental agreement under ORS chapter 190 with the City of Hillsboro (“Design and Construction Agreement”) to permit, design, finance and construct the Willamette Water Supply System, as set forth in the Design and Construction Agreement; and

WHEREAS, the Design and Construction Agreement vested TVWD with authority to acquire real property interests for the Willamette Water Supply System; and

WHEREAS, on July 18, 2018, the TVWD Board of Commissioners (“Board”) approved Resolution 20-18 declaring public necessity to acquire certain permanent easements and temporary construction easements for pipeline section PLM_5.2 of the Willamette Water Supply System by the power of eminent domain; and

WHEREAS, among other items, Resolution 20-18 declared that it is necessary for the economic well-being, public health, safety and welfare of TVWD, and members of the public served by TVWD, to acquire fee title to necessary properties as well as necessary rights-of-way and easements to implement the Willamette Water Supply System; and

WHEREAS, Resolution 20-18 also declared that certain permanent and temporary construction easements on private property, including Tax Lot 2S20100800 (the “Property”), are necessary for the location of pipeline section PLM_5.2, and that such use was planned and located in a manner that was most compatible with the greatest public benefit and the least private injury; and

WHEREAS, on July 17, 2019, the Board approved Resolution 20-19, reaffirming public necessity to acquire permanent easements and temporary construction easements for pipeline section PLM_5.2 of the Willamette Water Supply System by the power of eminent domain and authorizing condemnation proceedings; and

WHEREAS, subsequent to the approval of Resolution 20-19, the scope of the interests needed on the Property was modified to accommodate the design and operation of pipeline section PLM_5.2;

WHEREAS, the Willamette Water Supply System Intergovernmental Agreement (“Commission Agreement”) between TVWD, the City of Hillsboro and the City of Beaverton created the Willamette Water Supply System Commission (“Commission”), an ORS chapter 190 intergovernmental entity,
effective July 1, 2019, to design, locate, construct, own, operate and maintain the Willamette Water Supply System, as set forth in the Commission Agreement; and

WHEREAS, pursuant to Commission Resolution No. WWSS-02-19, the Commission designated TVWD as its Managing Agency and vested TVWD with authority to continue to acquire real property interests on behalf of the Commission for the Willamette Water Supply System; and

WHEREAS, the TVWD Board reaffirms that it is necessary for the economic well-being, public health, safety and welfare of TVWD, and members of the public served by TVWD and the Commission through the Willamette Water Supply System, to acquire fee title to certain real property, as well as necessary rights-of-way, easements and other property interests, in order to design, construct, locate, operate and implement the Willamette Water Supply System; and

WHEREAS, the TVWD Board has determined that permanent and temporary construction easements on the Property are necessary for the construction, location and operation of the Willamette Water Supply System, and in particular, the water pipeline and related water system facilities for pipeline section PLM_5.2, and that such use is planned and located in a manner that is most compatible with the greatest public benefit and the least private injury; and

WHEREAS, such permanent and temporary construction easements on the Property are described on Exhibit A and depicted for illustration purposes only on Exhibit B attached hereto incorporated by reference (“Property Interests”), with final easement documents as determined by the Willamette Water Supply Program and its consultants, on behalf of TVWD, to be reasonably necessary to accommodate the design and operation of the Willamette Water Supply System; and

WHEREAS, the TVWD Board finds that declaration by resolution to acquire the Property Interests is necessary, and being fully advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The above recitals shall form an integral part of this resolution and shall have the same force and effect as if fully stated herein.

Section 2: It is necessary for the preservation of economic wellbeing, public health, safety and welfare of TVWD, and members of the public served by TVWD and the Commission through the Willamette Water Supply System, that TVWD acquire the Property Interests through exercise of the power of eminent domain.

Section 3: TVWD staff (which, as used herein, includes the Willamette Water Supply Program) and counsel are authorized to retain appraisers, negotiators and consultants for eminent domain proceedings.

Section 4: TVWD staff and counsel are authorized to negotiate agreements to acquire the Property Interests as they deem necessary and pay just compensation and, if applicable, compensable damages, in accordance with applicable law.
Section 5: TVWD staff and counsel are authorized to file a complaint in condemnation and take other steps as they determine necessary, and to prosecute to final determination such action to acquire title to the Property Interests. Upon the trial of any suit or action instituted to acquire the Property Interests, TVWD staff and counsel are authorized to make such stipulation, agreement or admission as in their judgment may be in the best interest of TVWD and to take possession of the Property Interests at such time as appropriate in their judgment without necessity of further TVWD Board approval.

Approved and adopted at a regular meeting held on the 18th day of September 2019.

_________________________________________  _____________________________
Bernice Bagnall, President                   Todd Sanders, Secretary
EXHIBIT A

Willamette Water Supply
August 24, 2018

Chris K. Zielinski and
Jadwiga Zielinski
Tax Map No. 2S201 00800

PARCEL 1 – PERMANENT UTILITY EASEMENT

A parcel of land lying in the Section 1, Township 2 South, Range 2 West of the Willamette Meridian, Washington County, Oregon and being a portion of that property conveyed Chris K. Zielinski and Jadwiga Zielinski, recorded January 31, 2011 as Document No. 2011-009068, in the Washington County Book of Records, said parcel being that portion of said property included in a strip of land 50.00 feet in width, lying 25.00 feet on each side of the following described Pipeline Centerline:

Beginning at Engineer’s Centerline Station 807+72.00, said point being N 88°16’49” E, 3197.30 feet from the West 1/4 corner of Section 6, Township 2 South, Range 1 West of the Willamette Meridian;

Thence along said pipeline the following courses:
S 89°29’59” W, 189.70 feet to Station 809+61.70;
thence S 83°03’43” W, 100.59 feet to Station 810+62.29;
thence S 85°38’46” W, 147.71 feet to Station 812+10.00;
thence S 71°15’21” W, 55.55 feet to Station 812+65.55;
thence S 89°18’27” W, 1151.34 feet to Station 824+16.88;
thence N 45°57’23” W, 129.72 feet to Station 825+46.60;
thence S 88°46’47” W, 441.22 feet to Station 829+87.82;
thence S 89°29’07” W, 906.98 feet to Station 838+94.79;
thence S 85°10’41” W, 149.31 feet to Station 840+44.10, said point being N 19°22’34” W, 105.21 feet from said West 1/4 corner of Section 6;

thence continuing along said pipeline S 79°51’57” W, 34.86 feet to Station 840+78.97;
thence S 76°09’13” W, 93.90 feet to Station 841+72.87;
thence S 71°04’33” W, 82.23 feet to Station 842+55.09;
thence S 68°42’19” W, 756.34 feet to Station 850+11.44;
thence S 69°44’05” W, 88.45 feet to Station 850+99.89;
thence N 68°25’58” W, 61.32 feet to Station 851+61.20;
thence N 32°20’49” W, 105.87 feet to Station 852+67.07;
thence N 30°20’05” W, 916.82 feet to Station 861+83.90;
thence N 29°58’27” W, 227.75 feet to Station 864+11.64;
thence N 74°58’27” W, 35.00 feet to Station 864+46.65;
thence N 29°58’27” W, 162.22 feet to Station 866+08.86;
thence N 33°01’07” W, 96.75 feet to Station 867+05.61;
thence N 8°01’36” E, 35.07 feet to Station 867+40.68;
thence N 38°22’58” W, 25.07 feet to Station 867+65.75;
thence N 39°09’05” W, 561.37 feet to Station 873+27.12;
thence N 40°04’53” W, 358.16 feet to a point of curvature at Station 876+85.28;
thence along the arc of a 5034.50 foot radius curve to the left with a central angle of 4°12’40” a curve distance of 370.02 feet (the chord of which bears N 42°11’13” W, 369.94 feet) to a point of tangency at Station 880+55.30 PT;
EXHIBIT A

Willamette Water Supply
August 24, 2018

Chris K. Zielinski and
Jadwiga Zielinski
Tax Map No. 2S201 00800

thence N 44°17'33" W, 144.60 feet to Station 881+99.90;
thence N 46°04'20" W, 126.52 feet to Station 883+26.42;
thence N 49°38'24" W, 126.52 feet to Station 884+52.94;
thence N 51°25'11" W, 99.53 feet to Station 885+52.47;
thence N 57°45'20" W, 84.86 feet to Station 886+37.33;
thence N 70°25'37" W, 84.86 feet to Station 887+22.19; said point being N 51°41'57" W, 50.68
feet from the Northeast corner of the Solomon F. Shattuck D.L.C. number 51;
thence continuing along said pipeline N 83°05'54" W, 84.86 feet to Station 888+07.05;
thence N 89°26'02" W, 1401.57 feet to Station 902+08.62;
thence N 44°26'02" W, 27.23 feet to Station 902+35.85;
thence N 0°55'28" E, 224.95 feet to Station 904+60.80;
thence N 25°53'14" W, 150.00 feet to Station 906+10.80;
thence N 0°55'28" E, 94.19 feet to Station 907+04.99 and the Terminus of said pipeline
description, said terminus also being N 2°51'50" W, 508.09 feet from the Southeast corner of the
John Landess D.L.C. number 37.

EXCEPT THEREFROM that portion lying within the right-of-way of SW Tile Flat Rd (CR
3279).

The parcel of land to which this description applies contains 19,499 square feet (0.48 acre), more
or less.

Basis of Bearings is the Oregon Coordinate Reference System (OCRS), Portland Zone.

PARCEL 2 – TEMPORARY CONSTRUCTION EASEMENT

That portion of said Zielinski property included in a strip of land 50.00 feet in width, lying on the
northeasterly side of the Pipeline Centerline described in Parcel 1 from Station 883+28.46 to
Station 886+00.00:

EXCEPT THEREFROM that portion lying within the above described Parcel 1.

The parcel of land to which this description applies contains 6,157 square feet (0.14 acre), more
or less.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JAN. 14, 2003
JOSEPH W. HURLIMAN
58960LS

RENEWAL: 7/01/19
SIGNED: 6/24/2018
EXHIBIT B

WILLAMETTE WATER SUPPLY PROGRAM
PIPELINE MAIN STEM, SECTION 5.2

FILE No: SUBMITTAL DATE: ACQUISITION MAP
TAX LOT: 800 PAGE 1 OF 1
TAX MAP: T2S R2W Sec01

PARCEL 1 PERMANENT
UTILITY EASEMENT
ACQUISITION
AREA = 19,499 S.F.
(0.48 ac)

PARCEL 2 TEMPORARY
CONSTRUCTION EASEMENT
ACQUISITION
AREA = 6,157 S.F.
(0.14 ac)
RESOLUTION NO. 27-19

A RESOLUTION APPROVING THE INTERGOVERNMENTAL AGREEMENT BETWEEN TUALATIN VALLEY WATER DISTRICT, THE CITY OF WILSONVILLE AND THE WILLAMETTE WATER SUPPLY SYSTEM COMMISSION FOR THE RAW WATER FACILITIES PROJECT (RWF_1.0).

WHEREAS, Tualatin Valley Water District (TVWD) and the City of Wilsonville jointly own real property and water system facilities commonly known as the Willamette River Water Treatment Plant which includes a water intake facility; and

WHEREAS, the Willamette Water Supply System Commission (WWSS Commission) desires to construct improvements to the raw water intake and pump station to enlarge and upgrade the water intake facilities to a capacity of 150 million gallons per day and construct a large diameter water supply transmission line and related improvements, collectively known as the Raw Water Facilities Project (Project); and

WHEREAS, the Project will occupy portions of the Willamette River Water Treatment Plant and adjacent Wilsonville park property, which property is jointly owned by TVWD and Wilsonville; and

WHEREAS, the Parties have negotiated an Agreement regarding the terms and conditions for construction of the Project and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The Intergovernmental Agreement Between the City of Wilsonville, Tualatin Valley Water District and the Willamette Water Supply System Commission Raw Water Facilities Project (RWF_1.0), attached hereto as Exhibit 1 and incorporated by reference, is hereby approved.

Section 2: The Chief Executive Officer is authorized to execute the Agreement and other necessary documents to implement the Agreement.

Section 3: The Board recognizes that there may be corrections or edits to the Agreement, and the Chief Executive Officer is authorized to accept amendments and execute them on behalf of TVWD so long as the amendments do not substantially change the Agreement attached hereto and such amendments are approved by the General Counsel.

Approved and adopted at a regular meeting held on the 16th day of October 2019.

__________________________________________  _______________________________________
Bernice Bagnall, President                        Todd Sanders, Secretary
INTERGOVERNMENTAL AGREEMENT

BETWEEN

THE CITY OF WILSONVILLE AND
THE WILLAMETTE WATER SUPPLY SYSTEM COMMISSION

RAW WATER FACILITIES PROJECT (RWF_1.0)

THIS INTERGOVERNMENTAL AGREEMENT (this "Agreement") is made and entered into between the City of Wilsonville, a political subdivision of the State of Oregon, acting by and through its City Council ("Wilsonville"), and the Willamette Water Supply System Commission, an Oregon intergovernmental entity organized under ORS Chapter 190 (the "WWSS Commission"). Wilsonville and the WWSS Commission are referred to herein individually as a "Party" and jointly as the "Parties." Tualatin Valley Water District, a domestic water supply district organized under ORS Chapter 264, acting by and through its Board of Commissioners ("TVWD"), is a co-owner of the "WRWTP/Park Property," as defined below, and is therefore also a necessary party to this Agreement.

RECITALS

A. WHEREAS, ORS Chapter 190 authorizes units of local government to enter into intergovernmental agreements for the performance of any or all activities and functions that a party to such an agreement has the authority to perform; and

B. WHEREAS, TVWD, the City of Hillsboro ("Hillsboro"), and the City of Beaverton ("Beaverton") entered into an intergovernmental agreement creating the WWSS Commission to set forth the terms for the joint ownership, financing, design, permitting, construction, operation, maintenance, repair, and replacement of the Willamette Water Supply System ("WWSS") in a prudent, economic, and efficient manner to provide high quality water to their respective municipal water supply systems; and

C. WHEREAS, TVWD, Hillsboro, Beaverton, and the Cities of Wilsonville, Sherwood, and Tigard have entered into the Willamette Intake Facilities Intergovernmental Agreement, dated April 18, 2018 ("WIF Agreement"), creating an ORS Chapter 190 intergovernmental entity for the ownership, management, and operation of the Willamette Water Supply Facilities, as those facilities are defined in the WIF Agreement ("WIF"), and to provide for design and construction to upgrade and expand the Willamette Intake Facilities; and

D. WHEREAS, TVWD, Hillsboro, and Wilsonville entered into a Ground Lease for the Raw Water Pipeline, dated March 21, 2018 ("Ground Lease"), and a Pipeline Easement, signed March 26, 2018 but not recorded ("Pipeline Easement"), that will allow the Willamette Intake Facilities to connect via pipeline over the real property owned by TVWD and Wilsonville to the WWSS raw water pipeline located in and along Wilsonville right-of-way. The Pipeline Easement will be recorded in the future with the as-built conditions; and

E. WHEREAS, Wilsonville and TVWD entered into a Willamette Water Supply System Intake Facility Agreement and the First Amendment to Agreement Regarding Water Treatment Plant Design, Construction, Operation, and Property Ownership, both documents dated March 21, 2018, which provide, among other things, placement of the raw water pipeline, electric duct bank, and appurtenant structures; and
F. WHEREAS, the WWSS Commission oversees the Willamette Water Supply Program (“WWSP”) and has designated the WWSP to exercise the responsibilities and obligations for the planning and design of WWSS projects; and

G. WHEREAS, the WWSS Commission desires to construct improvements to a raw water intake and pump station and construct a large diameter water supply transmission line and related improvements (“Project Work”) and the Project Work will occupy portions of the Willamette River Water Treatment Plant (“WRWTP”) and adjacent Wilsonville public park property (“Park”), which property is currently owned by Wilsonville and TVWD (collectively, “WRWTP/Park Property”); and

H. WHEREAS, as co-owners of the WRWTP/Park Property, Wilsonville and TVWD must agree to the use of the WRWTP/Park Property, as described herein; and

I. WHEREAS, TVWD is also the managing agent of the WWSS Commission and has advocated to Wilsonville to allow for this use of the WRWTP/Park Property by the WWSS; and

J. WHEREAS, WWSP has entered into a contract with a construction contractor that includes the Project Work (“RWF_1.0 Contract”) with a layout plan and scope of work that must be approved, in writing, by Wilsonville, due to its location on WRWTP/Park Property; and

K. WHEREAS, in conjunction with the construction of the Project Work, the WWSS Commission wishes to move two of Wilsonville’s existing WRWTP raw water pumps, which Wilsonville is willing to allow as long as the WWSS Commission provides an inspection of the pumps and restores them back in place in good and efficient operating condition, as more particularly described below; and

L. WHEREAS, it is the mutual desire of the Parties to enter into this Agreement to allow the Project Work on WRWTP/Park Property, in exchange for the consideration set forth below, including relocation of the existing WRWTP pumps described below, on behalf of Wilsonville;

**AGREEMENT**

NOW, THEREFORE, in consideration of the terms, conditions, and covenants set forth below and the recitals set forth above, which are incorporated into this Agreement as if fully set forth herein, the Parties agree as follows:

**ARTICLE I - PROJECT GOALS**

1.1 The Parties are coordinating the design and construction of the Project Work on the WRWTP/Park Property.

1.2 The Project Work is intended to achieve the following overall goals (“Project Goals”):

   1.2.1 Wilsonville: To review and approve the Project Work to ensure it does not unreasonably disturb the WRWTP/Park Property, operation of the WRWTP, or other Wilsonville work in those areas.

   1.2.2 WWSS Commission: Through the WWSP, to design and construct portions of the water transmission facilities and pipeline constructed to further the objectives of the WWSS Commission in increasing water
supply, reliability, redundancy, and resiliency to its member service areas. The Project Work under this Agreement is part of that effort. For purposes of this Agreement, all rights and responsibilities of WWSP identified herein shall be deemed to be the rights and responsibilities of the WWSS Commission.

1.3 The Parties acknowledge that the Project Work cannot interfere in any way with the ability of the WRWTP to produce safe, reliable, and uninterrupted drinking water.

ARTICLE II - PROJECT DESCRIPTION

2.1 The Project Work primarily consists of design and construction of raw water facilities and a large-diameter water transmission line and appurtenances according to design, plans, and technical specifications, as depicted in Exhibit 1, RWF Project Overall Site Plan and Other Ancillary Improvements.

2.2 Because two of the existing raw water pumps at WRWTP are being relocated as part of the Project Work, WWSP will provide an inspection of the existing pumps and refurbish as needed to fully restore pumps to good operational condition, at no cost to Wilsonville. WWSP will work with its consultant, pump suppliers, and others, as needed, to determine the feasibility of adding resiliency improvements for the existing pumps, such as a seismic clip for the pump column and anchorage for the pump and motor. It is assumed these improvements will be designed by the pump supplier. WWSP will design and construct new discharge butterfly valves and dismantling joints on the discharge of the two relocated existing WRWTP pumps for resiliency. WWSP will also compensate Wilsonville $50,000 for two new pump inlet baskets (payment to be made within ninety (90) days of the date of this Agreement). Repairs and reinstallation will be fully warranted for two (2) years. The foregoing is collectively referred to hereinafter as the “Relocation Work.”

2.3 One set of contract documents will be used for the Project Work, including the Relocation Work.

2.4 The use of Water Infrastructure Finance and Innovation Act (“WIFIA”) funding is anticipated for the Project Work. WIFIA funding requires compliance with certain conditions, including, but not limited to, Davis-Bacon and related acts, American Iron and Steel Act, Disadvantaged Business Enterprises Program, regulations governing debarment and suspension, Equal Employment Opportunity Executive Order, civil rights laws, Drug-Free Workplace Act, and restrictions on lobbying. Project Work will be constructed under a single construction contract complying with the requirements of WIFIA funding. WWSP will be solely responsible for compliance with all of the foregoing. Because the Relocation Work is part of the Project Work, some WIFIA requirements may be coincidentally applied but compliance and costs associated therewith will be the sole responsibility of WWSP.

ARTICLE III - PROJECT CONSIDERATION

3.1 In consideration for allowing the Project Work to include relocation of two existing WRWTP pumps, WWSP will make all of the above-described Relocation Work at no charge to Wilsonville.

3.2 Additional consideration provided by the WWSS Commission for this Agreement includes:
• Construction of a new H20 rated 12-foot wide paved pedestrian path in the Park;
• Construction of a path to the river and river view path;
• Construction of a new river overlook area;
• Installation of pedestrian trail lighting on Morey Lane along the upper site area;
• Installation of 4-inch fiber conduit, per Public Works standards, the length of the WRWTP/Park Property, with pull boxes parallel to the Project Work duct bank;
• Reconstruction of the Arrowhead Creek stormwater outfall from point of connection to the outfall, including downstream energy dissipation;
• Planting of landscape outside of the WWSS Commission fence on the upper site;
• Installation of an 8-inch domestic waterline that connects at Brockway Drive and the future 5th and Kinsman Road waterline; and
• Design and installation of a new key card kiosk at the WRWTP entry gate on the east side of the drive area that will provide access for both the WWSS Commission and Wilsonville.

3.3 As additional consideration for allowing WWSP to construct on WRWTP/Park Property, WWSP must also meet all of the Wilsonville Development Review Board (DRB) conditions of approval, as agreed to and set forth in the DRB conditions of approval.

ARTICLE IV - WWSP OBLIGATIONS FOR DESIGN

4.1 WWSP has designated Jenn Minton, P.E., as WWSP Project Manager for the Project Work and the WWSP representative responsible for coordination of the Project Work with Wilsonville pursuant to this Agreement. Mike Britch, P.E., will be the WWSP Principal Engineer for the Project Work.

4.2 WWSP will perform or cause to be performed all tasks needed to design and construct the Project Work, including preparation of plans/drawings, standard details, technical specifications, contractor’s estimate, and other documents required for completion of the contract documents and design milestones described in Exhibit 2. WWSP will provide Wilsonville ten (10) business days to complete a design review of the Project Work at the following significant milestone: 90 percent design documents. WWSP will consider and incorporate Wilsonville review comments that do not significantly impact Project Work costs or schedule. If WWSP disagrees with the Wilsonville comments and Wilsonville still desires to have the comments addressed or included, the Parties will utilize the mediation process set forth in the Ground Lease.

4.3 WWSP will coordinate and will cause its consultants to coordinate with Wilsonville and its consultants, including attendance at all design team meetings, permit team
meetings, real estate meetings, public information/outreach meetings, and other scheduled meetings. The Wilsonville Project Representative and WWSP Project Manager will mutually determine the type, frequency, and timing of meetings to meet the needs of a well-coordinated project.

4.4 WWSP will share and coordinate updates on the Project Work schedule with the Wilsonville Project Representative.

4.5 WWSP will provide necessary design coordination to advance the design and construction of the Project Work to achieve the key milestones described in Exhibit 2.

4.6 WWSP will prepare the bid package for the Project Work, inclusive of the ‘front-end’ documents, including bidding information, bid forms, contract forms, standard general conditions, special provisions, technical specifications, design plans, and others as required for successful bidding and construction of the Project Work (collectively, “Contract Documents”). The Relocation Work will be included in the Project Work bid package.

4.7 WWSP will provide and pay for key card access at the new south personnel gate from the WRWTP Park and into the raw water pump station that will provide access for both the WWSS Commission and Wilsonville. The access point will have a hard key as a manual override as part of the design.

4.8 WWSP will prepare the draft Contract Documents and provide them to Wilsonville for review and comment. WWSP will incorporate or otherwise respond to Wilsonville’s review comments in a manner acceptable to both Parties’ Project Managers.

4.9 WWSP will administer the Project Work bidding and solicit bids in compliance with all public contracting laws and in compliance with the agreement for the RWF_1.0 Contract.

4.10 WWSP will perform the design and design coordination for all Project Work.

4.11 WWSP will design, construct, and pay for all of the items listed in Article III - Project Consideration.

4.12 As required in Section 5 of the Pipeline Easement, WWSP will design the raw water pipeline and an ancillary pipe/duct to have a minimum of eight feet of cover. Notwithstanding the foregoing, Wilsonville agrees that if WWSP replaces certain existing Wilsonville pipelines with new pipe, encased in a steel casing extended a minimum one foot beyond the edge of trench, then in that specific area, as shown on Exhibit 1, the raw water pipeline may cross over the top of the newly encased Wilsonville pipeline(s) at a depth of less than eight feet but not less than five feet. Additionally, when WWSP completes its proposed design for related duct banks, it may request that it be allowed to place the duct banks at a lesser depth, and Wilsonville will consider that request upon review of the final plans.

ARTICLE V - WILSONVILLE OBLIGATIONS

5.1 Wilsonville hereby designates Delora Kerber, P.E., as Wilsonville Project Representative responsible for coordination of the Project Work with WWSP and WRWTP pursuant to this Agreement. Patty Nelson is Wilsonville’s Principal
Engineer, responsible for Design Documents and construction oversight of the Relocation Work.

5.2 Wilsonville will review and approve the design, drawings, and specifications WWSP provides for the Relocation Work.

5.3 By executing this Agreement, Wilsonville grants to WWSP and any WWSS Commission consultants and contractors a right-to-rely on the information provided by Wilsonville under this Agreement.

5.4 Wilsonville is planning an independent expansion of the existing WRWTP. The Wilsonville WRWTP Expansion Work is not part of the Project Work. See Section 9.9.

ARTICLE VI - JOINT OBLIGATIONS FOR DESIGN

6.1 To minimize Project delays or cost increases, the Parties agree to work together diligently to identify and jointly resolve any design or constructability issues with the Project Work at the earliest possible stage of the design process. When such issues arise, the Parties agree to work together to find mutually acceptable solutions in furtherance of the stated Project Goals.

6.2 The location of any pipeline, pipeline appurtenances, and other facilities related to the Project Work shall be mutually agreed to by both Parties during the design of the Project and before any construction can occur.

6.3 The Parties will provide each other reasonable amounts of information not otherwise required by this Agreement, and will coordinate and attend regular design coordination meetings, regular permit team meetings, public information and outreach team meetings, and other meetings as required for successful coordination and completion of the Project. The Parties’ Project Managers will determine the anticipated frequency and timing of meetings depending on the needs of the Project.

6.4 The Parties will jointly perform a constructability review of the Contract Documents at 90 percent design completion of the Project Work and incorporate comments into final Contract Documents.

6.5 The Parties will work collaboratively in developing Project Work schedules, milestones, reviews, health and safety plans, Project performance metrics, and other activities as required for the successful coordination and completion of the Project Work.

ARTICLE VII - WWSP OBLIGATIONS FOR CONSTRUCTION

7.1 WWSP has designated Rod Warner as WWSP Construction Manager. The WWSP Construction Manager shall be the designated point of contact with the Wilsonville Project Representative and the Wilsonville Principal Engineer. Mike Britch, P.E., will be the WWSP Principal Engineer and the WWSP representative to handle dispute resolution for this Project.

7.2 WWSP will be responsible for the overall management and administration of the construction contract for the Project Work.
7.3 WWSP will be responsible for inspection, construction management, and administration for the Project Work.

7.4 WWSP will be responsible for the Relocation Work, to be included in the Project Work, at no cost to Wilsonville, as described in Section 2.2.

7.5 WWSP will include the Wilsonville Project Representative and Wilsonville Principal Engineer in regular construction coordination meetings, public information and outreach meetings, and other meetings as required for successful coordination and completion of the Project.

7.6 WWSP will review shop drawings, contractor and subcontractor submittals, requests for information (RFI), and other requested clarifications related to construction of the Project Work.

7.7 WWSP is solely responsible for managing the Project Work construction schedule, including established milestones. WWSP will provide its construction contractor’s baseline schedule and monthly schedule updates for Wilsonville review and comments. WWSP will consider and incorporate Wilsonville review comments that do not significantly impact Project Work costs or schedule. WWSP will closely coordinate with Wilsonville on Project Work that may impact the operation of the WRWTP.

7.8 WWSP will receive, catalog, and route to Wilsonville RFIs, requests for substitutions, submittals, and any other documents pertaining to the Relocation Work for review and comment within five (5) business days, using e-Builder as administered by WWSP for the Parties. WWSP will defer to Wilsonville for the disposition and/or response for all RFIs, substitutions, and submittals related solely to the Relocation Work. Access to all Project Work documents, including, but not limited to, submittals, RFIs, contract correspondence, quality control and assurance requirements, daily reports, and photos, will be available to the Parties through e-Builder.

7.9 WWSP will cause the construction contractor to name and endorse WWSP, the WWSS Commission, Wilsonville, and their elected or appointed officials, staff, employees, consultants, and agents, as additional insureds on all policies provided by the construction contractor under the contract. The endorsements to policies shall provide for not less than thirty (30) days’ written notice of cancellation. WWSP will provide Wilsonville a copy of the certificates for its records. WWSP will cause the construction contractor to extend indemnity and hold harmless provisions given to WWSP to Wilsonville, its members, officers, boards, employees, consultants, and agents.

7.10 WWSP will have overall responsibility for Project administration and inspection of the Project Work and at all times be responsible to monitor and manage the construction contractor's work as provided in the construction Contract Documents. WWSP will consistently communicate and direct the contractor performing the Relocation Work with the decisions of the Wilsonville Principal Engineer. WWSP will have sole and total decision-making authority on Project Work, except for Project Work that impacts the operation of the WRWTP, including the operation of the existing pumps, in which case WWSP will coordinate with Wilsonville.
7.11 If Wilsonville’s Project Representative, or her designated onsite inspector, or the Wilsonville Principal Engineer, observes a situation reasonably believed to involve safety issues that threaten life, bodily harm, environmental harm, or damage to the WRWTP, Wilsonville will notify the WWSP Construction Manager of the need to stop the Project Work based on those observations. The WWSP Construction Manager will immediately stop the Project Work at the request of Wilsonville. WWSP’s Construction Manager has the authority to issue a stop work order at any time and will notify Wilsonville’s Project Representative, Principal Engineer, or the designated onsite supervisor as soon thereafter as reasonably possible.

7.12 WWSP will be responsible to ensure that the Relocation Work is installed in accordance with the Contract Documents and will handle any disagreements, disputes, delays, or claims with the construction contractor related to or as a result of the Relocation Work, as provided by Section 12.6. Wilsonville agrees to cooperate with WWSP in handling any claims related to the Relocation Work. WWSP will fully warrant the installation and good working condition of the pumps for two (2) years from the date of a full installation inspection and written approval by the City.

7.13 WWSP will not authorize or consent to construction contractor’s changes to key milestones, as shown in Exhibit 2, without written approval by Wilsonville, except in the case of a force majeure as defined in the Contract Documents.

7.14 After the Relocation Work has been accepted by Wilsonville and the relocated pumps have been fully operational for two (2) years, WWSP will assign any remaining rights under performance and payment bonds or warranties with respect to the two existing pumps to Wilsonville.

7.15 Upon the completion of the construction and completion of record drawings, WWSP will deliver one set of redline as-built drawings for the Project Work to Wilsonville. WWSP will be responsible for producing record drawings for the Project Work.

7.16 WWSP, its consultants, and its construction contractor shall coordinate with Wilsonville and its consultants, including jointly attending regular construction coordination meetings, regular permitting and environmental meetings, real estate meetings, public information and outreach meetings, and other meetings as required for successful coordination and completion of the Project Work. The WWSP Construction Manager and Wilsonville Project Representative shall mutually determine the anticipated frequency and timing of meetings depending on the needs of the Project.

7.17 WWSP’s contractor will be responsible for providing controlled access to the WRWTP during construction. WWSP’s contractor will limit access to the Park by the public for public safety reasons during the construction as needed. Time frames for limited access will be defined in the final approved version of the land use application or as otherwise modified.

7.18 WWSP will be responsible for maintenance of Park areas that are closed to the public during construction during the closure period. This requirement applies to lands that are not directly affected by the construction activities that will be replaced at the completion of construction. Maintenance requirements will be generally consistent with Wilsonville’s Parks & Recreation Department historical practices.
7.19 WWSP will plan and execute outages as needed for the Project Work. Provisions will be made for operation of the plant, utilizing bypass pumping or other methods, if the duration of a planned outage exceeds the agreed upon timeframe established in a collaborative manner and documented in the Contract Documents.

7.20 WWSP will provide materials testing, independent of construction contractor testing requirements of the Contract Documents, and construction inspection for Project Work.

7.21 WWSP understands that Wilsonville’s 5th to Kinsman Project may be occurring at the same time as some of the Project Work. A portion of the 5th and Kinsman Project will reconstruct portions of Arrowhead Creek Way and Industrial Way (collectively, “Arrowhead Way”), during which time the existing roadways will not be available for construction access for the Project Work. During those overlapping times, WWSP will be required to obtain and construct an alternative construction access for the Project Work. The City Engineer will provide WWSP with at least ninety (90) days’ prior notice of the dates when the Arrowhead Way access will not be available for WWSP use.

ARTICLE VIII - WILSONVILLE OBLIGATIONS FOR CONSTRUCTION PHASE

8.1 Wilsonville hereby designates Delora Kerber, P.E., as the Wilsonville Representative responsible for coordination of the Project Work with WWSP and WRWTP pursuant to this Agreement and the Wilsonville Representative to handle dispute resolution for this Project. Patty Nelson is Wilsonville’s Principal Engineer responsible for the coordination of the Relocation Work. In addition to the Representative and Principal Engineer, Wilsonville may have a full time construction oversight inspector on site (On-Site Inspector) and, if Wilsonville elects to do so, Wilsonville will supply the WWSP Construction Manager with contact information for the On-Site Inspector.

8.2 Wilsonville will cause its contract operator for the WRWTP to coordinate and cooperate with WWSP and its representatives and contractor to achieve timely and efficient delivery, commissioning, and startup of the Project Work as long as the construction work does not hinder the ability of the WRWTP to produce safe and reliable drinking water.

8.3 Wilsonville will coordinate with WWSP on any disagreements, disputes, delays, or claims with the construction contractor related to or as a result of the Relocation Work, as provided by Section 12.6.

8.4 Wilsonville will provide a raw water source for use by WWSP during construction for testing of the Project Work. Raw water for pump testing and other related system commissioning and startup activities for Project Work will be returned to the caisson or to the stormwater outfall to Arrowhead Creek. Any discharge to Arrowhead Creek must be in compliance with City of Wilsonville stormwater discharge requirements.

8.5 Wilsonville shall participate in WWSP monthly health and safety meetings.

8.6 Wilsonville will provide review of RFIs and other requested clarifications related to the Relocation Work. Wilsonville shall provide a response to WWSP as set forth in Section 7.8.
8.7 Wilsonville may require additional or corrective work to be completed for the Relocation Work if, in the sole judgment of Wilsonville, the work is not complete in accordance with the Contract Documents. If Wilsonville determines the Relocation Work is not in compliance with the Contract Documents, the Wilsonville Principal Manager shall inform WWSP at the earliest opportunity following discovery, and WWSP will require its construction contractor to perform corrective actions as necessary. The method of enforcement will be agreed upon and the cost of enforcement will be paid by WWSP.

8.8 Wilsonville will determine, in its reasonable discretion, when the Relocation Work has achieved substantial completion and final completion, as defined in the Contract Documents. The Wilsonville Project Representative and Principal Engineer shall jointly provide a construction punch list for the Relocation Work to WWSP upon substantial completion of the Relocation Work and participate with the WWSP Project Manager for inspection and final completion of the Relocation Work.

8.9 WWSP is responsible to properly install the relocated pumps, in accordance with the Contract Documents, and for the pumps to be in good working order and operational condition. Wilsonville must review and approve any change orders or work change directives relating to the Relocation Work prior to issuance to the construction contractor. Within five (5) business days of receiving the proposed change order or work change directive, Wilsonville will notify WWSP in writing of any concerns or disputes with a proposed change order or work change directive. WWSP may proceed to direct its construction contractor to perform work only if it deems an emergency or other circumstance requires immediate action to prevent adverse health and safety conditions. In such a case, Wilsonville reserves all rights to make a claim against WWSP for any damages suffered as a result thereof. WWSP may be liable to Wilsonville for any contract delays as a result thereof or for any other damages or claims by Wilsonville. Wilsonville will be entitled to seek relief directly from WWSP, and WWSP will be required to seek relief from the contractor if the damage was caused by the contractor’s work.

8.10 Wilsonville will coordinate and meet with WWSP to resolve any disagreements, disputes, delays, or claims related to, or as a result of, the Relocation Work, as provided by Section 12.6.

8.11 Wilsonville and its consultants shall coordinate with WWSP, its construction contractor, and its consultants, including jointly attending regular construction coordination meetings, regular permitting and environmental meetings, real estate meetings, public information and outreach meetings, and other meetings as required for successful coordination and completion of the Project Work. Wilsonville and the WWSP Construction Manager shall mutually determine the anticipated frequency and timing of meetings depending on the needs of the Project Work.

8.12 Wilsonville will support a request to WIF to allow a WWSP contractor to install a water quality panel in the raw water pump station and associated instruments to monitor raw water quality. The type and size of the panel will be agreed upon by WWSP and Wilsonville.

8.13 Wilsonville will support a request to WIF to allow WWSP to tie into the existing electrical system to make provisions for added resiliency. The tie in will allow the WWSS to provide backup power to the WIF infrastructure, including air burst system, raw water pump station building lighting and heating, and raw water pump station
security, in case of WRWTP power loss. Backup power will not be provided to WRWTP infrastructure downstream of the system separation point, as defined in the WIF agreement. Backup power will be provided by using a transfer switch. In the event of an emergency, the WWSS Commission will notify Wilsonville that the transfer switch is being used to provide backup power as soon as practicable.

8.14 Wilsonville will allow a WWSP contractor, and support a request to WIF where applicable, to install security cameras and key card access readers for security purposes in locations including, but not limited to, the interior and exterior of the raw water pump station building, the bike path, and the upper site. WWSP will provide Wilsonville with card keys for the readers and access to the data/video from the security cameras.

ARTICLE IX - JOINT OBLIGATIONS FOR CONSTRUCTION

9.1 The Parties shall mutually determine the anticipated frequency and timing of meetings depending on the needs of the Project Work.

9.2 The Parties will coordinate and work collaboratively in developing Project Work milestones, constraints, work sequences, construction administration requirements, quality control and assurance requirements, and other activities as required for successful coordination and completion of the Project Work.

9.3 To minimize potential Project Work schedule delays, construction contractor cost increases, or other Project Work issues, the Parties agree to work together diligently to identify and jointly resolve any construction issues at the earliest possible stage, including those issues that involve the construction contractor. When such issues arise, the Parties agree to work together to find mutually acceptable solutions in furtherance of the Project Goals. WWSP will lead the resolution with the construction contractor as mutually agreed by the Parties.

9.4 The Parties agree the operation of the WRWTP will take precedence over any and all Project Work construction activities.

9.5 The Parties agree to include health and safety requirements in the Contract Documents that meet the objectives of both Parties.

9.6 The construction contractor is required to develop and maintain a Project Work baseline schedule on which the WWSP Construction Manager and Wilsonville Project Representative shall collaboratively review and comment. Each Party shall allow the other Party to comment on schedule revisions.

9.7 WWSP will generally take the lead on managing complaints, including, but not limited to, general public complaints and complaints related to environmental and/or land use permitting. Notwithstanding the foregoing, Wilsonville reserves the right to report environmental, land use, or permit violations. If WWSP is violating land use or permitting requirements by Wilsonville, Wilsonville reserves the right to issue a stop work order.

9.8 The Parties agree to the following guidelines for handling public/media interactions:

9.8.1 Social media includes all means of communicating or posting information or content of any sort on the Internet, including to one’s own or someone
9.8.2 Wilsonville and WWSP each agree to allow the other to review its social media content related to Project Work before posting it.

9.9 The Parties acknowledge Wilsonville’s WRWTP Plant Expansion Project will be occurring at the same time as the Project Work and agree to coordinate their construction schedules to avoid disruption or delay of either Party’s work. The Parties also acknowledge that the WRWTP Plant Expansion Project must take priority. Therefore, in the event of any critical construction conflict or delay that Wilsonville determines, in good faith, cannot be reasonably resolved to avoid such conflict or delay, the WWSP Project Work will be required to stand down as necessary to allow the WRWTP Project to timely proceed or to produce safe, reliable, and uninterrupted drinking water at all times.

9.10 The Parties agree to coordinate on outreach efforts such as signage, groundbreaking, and ribbon cutting.

ARTICLE X - COMPENSATION FOR CONSTRUCTION

10.1 All costs related to Wilsonville’s inspection, oversight, and supervision of Project Work shall be paid for by WWSP at actual cost plus eight percent (8%), consistent with the Ground Lease, and will be paid by WWSP within thirty (30) days after receipt of an invoice for the same from Wilsonville.

ARTICLE XI - JOINT FUTURE OBLIGATIONS AFTER CONSTRUCTION

11.1 Following final completion of the Project Work, it shall be the WWSS Commission’s responsibility to maintain stormwater facilities from WWSP’s point of connection to, and including, the outfall at Arrowhead Creek. WWSP will also maintain key card access readers at the raw water pump station gate and south WRWTP personnel gate. The WWSS Commission will discharge raw water through the outfall to support ongoing maintenance activities. Actual discharge will be in compliance with the City of Wilsonville’s discharge requirements.

11.2 The WWSS Commission will obtain an irrigation meter from Wilsonville to pay for water usage and will maintain the new irrigation system inside the fence at the upper site and continue to use the connections to Wilsonville’s potable water supply following construction for longer-term operation of the irrigation system. Temporary irrigation, of limited duration of two years, as required for plant mitigation outside of the fence at the upper site, will also be metered, paid for, and maintained by WWSP.

11.3 The WWSS Commission will maintain all landscaping it installs (or that is replaced by either the WWSS Commission or Wilsonville) outside of the WWSS Commission fence, as shown on the Project Work plans.

11.4 Following final completion, it shall be Wilsonville’s responsibility to maintain the Park pedestrian path, path to the river, river view path, river overlook area, pedestrian trail lights, entry gate key card kiosk, 8-inch redundant domestic water line, and the 4-inch fiber conduit.
ARTICLE XII - GENERAL PROVISIONS

12.1 *Laws of Oregon.* The Parties agree to abide by all applicable laws and regulations regarding the handling and expenditure of public funds. This Agreement shall be governed by the laws of the State of Oregon. Jurisdiction will be in Clackamas County Circuit Court. The construction contract shall contain all required public contract provisions of ORS Chapter 279A and 279C.

12.2 *Default.* Either Party will be deemed to be in default if it fails to comply with any term, condition, or covenant in this Agreement. The Parties agree time is of the essence in the performance of this Agreement. The non-defaulting Party will provide the defaulting Party with written notice of default and allow thirty (30) days within which to cure or diligently commence to cure the defect within a reasonable time. If a defaulting Party fails to cure or fails to diligently commence to cure the default, the non-defaulting Party may elect to terminate this Agreement. In the event this Agreement is terminated, the Parties will pay for costs incurred for satisfactorily completed and authorized work up to the time of termination. Each Party will be liable for all costs and damages arising from its individual default. If a default causes a delay to the non-defaulting Party’s construction schedule that results in actual additional costs, including but not limited to delay damages, the defaulting Party will be responsible for all cost increases and related damages, plus the non-defaulting Party’s construction schedule will take priority for the purposes of avoiding or minimizing additional delay and allowing the non-defaulting Party to retain the original schedule, and the defaulting Party’s construction may need to be delayed.

12.3 *Indemnification.* This Agreement is for the benefit of the Parties only and there are no third-party beneficiaries. Subject to the limitations related to government agencies under the Oregon Constitution, each Party agrees to indemnify and hold the other harmless, including their respective officers, employees, agents, and representatives, from and against all claims, demands, causes of action, and suits of any kind or nature for personal injury, death, or damage to persons or property on account of any acts or omissions arising out of this Agreement. Indemnification is subject to and shall not exceed the limits of liability of the Oregon Tort Claims Act (ORS 30.260 through 30.300). In addition, each Party shall be solely responsible for any contract claims, delay damages, permit compliance, permit violations, or similar items arising from or caused by the action or inaction of the Party.

12.4 *Documents Are Public Records.* All records, reports, data, documents, systems, and concepts, whether in the form of writings, figures, graphs, or models, that are prepared or developed in connection with the Project Work shall be subject to the applicable provisions of the Oregon public records law.

12.5 *Modification of Agreement.* No waiver, consent, modification, or change of terms of this Agreement shall bind either Party unless in writing, signed by both Parties. Such waiver, consent, modification, or change, if made, shall be effective only in specific instances and for the specific purpose given.

12.6 *Dispute Resolution.*

12.6.1 *Mediation.* Should any dispute arise between the Parties, the Parties agree to meet informally to negotiate the problem, upon notice from one Party to the other specifying the dispute that needs to be resolved. If such informal negotiation fails, the Parties will mediate the dispute using a
professional mediator, and the Parties will split the cost of the mediator. A Party desiring mediation shall provide the other Party with a written notice (the "Request to Mediate"), which shall set forth the nature of the dispute. The Parties will cooperate in good faith to select the mediator within seven (7) days of either Party requesting mediation, and may adopt any procedural format that seems appropriate for the particular dispute. Mediation should be scheduled within fourteen (14) days of selection of the mediator, or as soon as possible, based on availability.

In the event the Parties cannot agree on a mediator, the Parties will ask any circuit court judge to appoint a mediator. The mediator will then set the ground rules for the mediation. In the event a written settlement agreement cannot be reached by the Parties within thirty (30) days from the date of the Request to Mediate, or such longer time frame as may be agreed upon, in writing, by the Parties, then the Parties may either agree to binding arbitration or, if the Parties do not agree, then either Party may seek legal relief through the circuit court in Clackamas County.

12.6.2 **Arbitration.** If the Parties agree to arbitration, selection of the arbitrator, time frame for arbitration, and ground rules for arbitration will be agreed upon at that time. Any arbitrator or arbitrators selected must have a minimum of ten (10) years' of municipal law experience, unless the Parties mutually agree, in writing, otherwise.

12.6.3 **Injunctive Relief and Specific Performance.** Notwithstanding Subsection 12.6.1 or 12.6.2, even if the Parties agree to mediation or arbitration, either Party may still request immediate equitable remedies of either specific performance or injunctive relief to occur while mediation or arbitration is pending or ongoing. The Parties will otherwise agree to abate the court case pending resolution.

12.7 **Remedies.** Subject to the provisions of Article X - Compensation for Construction, and the dispute resolution process set forth in Section 12.6, any Party may institute legal action to cure, correct, or remedy any default, to enforce any covenant or agreement, or to enjoin any threatened or attempted violation of this Agreement. All legal actions shall be initiated in Clackamas County Circuit Court. The Parties, by signature of their authorized representative below, consent to the personal jurisdiction of those courts.

12.8 **Severability.** If any term(s) or provision(s) of this Agreement or the application thereof to any person or circumstance shall, to any extent, be determined by a court to be invalid or unenforceable, the remainder of this Agreement and the application of those terms and provisions shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

12.9 **Nondiscrimination.** No person shall be denied or subjected to discrimination in receipt of the benefits of any services or activities made possible by or resulting from this Agreement on the grounds of race, color, religion, gender, sexual orientation, national origin, disability, age, or marital status. Any violation of this provision shall be considered a material defect and shall be grounds for cancellation, termination, or suspension, in whole or in part, by Wilsonville or WWSP.
12.10 **Excused Performance.** In addition to the specific provisions of this Agreement, no default shall be deemed to have occurred where delays or default is due to war, insurrection, strikes, walkouts, riots, floods, drought, earthquakes, fires, casualties, acts of God, governmental restrictions imposed or mandated by governmental entities other than the Parties, enactment of conflicting state or federal laws or regulations, new or supplementary environmental regulation, litigation, or similar bases for excused performance that are not within the reasonable control of the Party to be excused.

12.11 **Integration.** This Agreement contains the entire agreement between the Parties with respect to the subject matter herein. Notwithstanding the foregoing, this Agreement is not intended to supersede any provision of the WIF Agreement, the Ground Lease, or the Pipeline Easement.

12.12 **Assignment/Additional Parties.** This Agreement may be assigned by either Party subject to the consent of the non-assigning Party, which consent shall not be unreasonably withheld.

12.13 **Access to Books, Records, and Accounting.** WWSP will maintain books, records, and reports of the Project Work showing all income, receipts, expenses, and costs. These records shall be maintained for a period of three (3) years following Final Completion. All such books, records, and reports may be examined and copies made by Wilsonville at reasonable times upon reasonable notice.

### ARTICLE XIII - TERM OF AGREEMENT

13.1 The term of this Agreement shall be from the date of execution through the end of the Project Work warranty period, two (2) years following final acceptance of the Project Work, unless mutually agreed to by both Parties, in writing. Notwithstanding the above, the ongoing maintenance responsibilities described in Article XI – Joint Future Obligations After Construction remain enforceable obligations under this Agreement (including the default, remedy, venue, and attorneys’ fees provisions) after the term expires.

13.2 This Agreement may be amended or extended for periods of up to one (1) year at a time by mutual written consent of the Parties, subject to the provisions of this Agreement.

IN WITNESS WHEREOF, the Parties hereto have set their hands as of the day and year hereinafter written. This Agreement is effective upon the date of the final signature.

**CITY OF WILSONVILLE, OREGON**

By: __________________________  __________________________

Bryan Cosgrove  Barbara A. Jacobson, City Attorney

As Its: City Manager

Dated: __________________________
TUALATIN VALLEY WATER DISTRICT

By: ________________________________
Name: ________________________________
As Its: Chief Executive Officer
Dated: ________________

WILLAMETTE WATER SUPPLY SYSTEM COMMISSION, OREGON

By: ________________________________
Name: ________________________________
As Its: ________________________________
Dated: ________________
<table>
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<tr>
<th>Project</th>
<th>100% Draft Final Design</th>
<th>100% Final Design</th>
<th>Construction Start</th>
<th>Construction End</th>
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(1) Construction end represents achievement of final completion
RESOLUTION NO. 28-19

ACTING AS THE LOCAL CONTRACT REVIEW BOARD, A RESOLUTION DECLARING AN EXEMPTION FROM COMPETITIVE BIDDING FOR THE FARMINGTON ROAD BOOSTER PUMP STATION AND DISCHARGE MAIN PROJECT AND AUTHORIZE PROCEEDING WITH A CONSTRUCTION MANAGER/GENERAL CONTRACTOR CONTRACT.

WHEREAS, this matter came before the Board of Commissioners of the Tualatin Valley Water District, acting as the Local Contract Review Board, hereinafter referred to as the Board; and

WHEREAS, the District owns the properties at 20865-20925 SW Farmington Road to serve as a turnout for the Willamette Water Supply System, fluoride injection facility and pump station to provide resilient service to the Cooper Mountain area; and

WHEREAS, the District has included the funding for the Farmington Road Booster Pump Station and Discharge Main Project in the District’s existing Capital Improvement Program budget; and

WHEREAS, the District has evaluated four potential project delivery options, including Design-Bid-Build, Construction Management/General Contractor, Design-Build and Progressive Design-Build; and

WHEREAS, based on an evaluation, Construction Manager/General Contractor would bring the best value to the District and meet the District’s requirements on the project cost and schedule; and

WHEREAS, the District has developed findings required by Oregon Revised Statute 297C.335 for an exemption from competitive bidding for the Farmington Road Booster Pump Station and Discharge Main Project, as described in Exhibit 1, attached hereto and incorporated by reference, that the exemption is unlikely to encourage favoritism in the awarding of the contract or substantially diminish competition for the contract and that awarding a contract under the exemption will likely result in cost savings and other substantial benefits to the District; and

WHEREAS, the Local Contract Review Board has advertised for and conducted a public hearing under Oregon Revised Statute 297C.335 to provide opportunity for comments on the Findings as described in Exhibit 1.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT, ACTING AS THE LOCAL CONTRACT REVIEW BOARD, THAT:

Section 1: The Board hereby adopts the Findings attached as Exhibit 1 and grants the exemption from competitive bidding for Farmington Road Booster Pump Station and Discharge Main Project.

Section 2: The Board hereby directs and authorizes the Public Contracting Officer to take all action to adopt the Construction Manager/General Contractor delivery method for the Farmington Road Booster Pump Station and Discharge Main Project.
Approved and adopted at a regular meeting held on the 20th Day of November 2019.

__________________________________________  ____________________________________________
Bernice Bagnall, President                  Todd Sanders, Secretary
EXHIBIT 1

FINDINGS FOR AN EXEMPTION FROM COMPETITIVE BIDDING

FOR FARMINGTON ROAD BOOSTER PUMP STATION AND DISCHARGE MAIN PROJECT

Oregon Revised Statute (ORS) 279C.300 requires all local contracting agency public improvement contracts to be procured by a competitive bidding process unless an exemption is granted from the Local Contract Review Board (LCRB) under ORS 279C.335. ORS 279C.335 (2) requires the contracting agency to develop the findings that:

a) The exemption is unlikely to encourage favoritism in awarding public improvement contracts or substantially diminish competition for public improvement contract; and
b) Awarding a public improvement contract under the exemption will likely result in substantial cost savings and other substantial benefits to the contracting agency.

In making these findings, ORS 279C.335(2)(b) requires that the LCRB must consider the type, cost and amount of the contract and, to the extent applicable to the particular public improvement contract, the items under ORS 279C.335(2)(b)(A-N). The TVWD Board of Commissioners is the LCRB who must approve the exemption.

This document presents information the LCRB will consider in its finding to exempt the Farmington Road Booster Pump Station and Discharge Main Project from competitive bidding and to use a Construction Manager/General Contractor (CM/GC) method of delivery.

Project Background

TVWD is undertaking the Farmington Road Booster Pump Station (PS) and Discharge Main Project to provide reliable water supply to customers in the Cooper Mountain area. Farmington Booster PS and Discharge Main is a planned pump station, and fluoride injection facility to be located at the corner of SW 209th Avenue and SW Farmington Road in Beaverton, Oregon. The District purchased the property for this project in December of 2017. The pump station will have the ability to take water from both the 385 pressure zone and the Willamette Water Supply System (WWSS). The pump station will provide a second, more resilient system to provide water supply to the 800 pressure zone, and will allow other improvements to be made to maintain the other facilities which pump to Cooper Mountain. Those facilities are aging, and cannot be taken out of service until a secondary feed is in place.

Construction of the Pump Station and Discharge Main will likely include the following:

- Clearing of the site at SW 209th and Farmington; with frontage improvements
- Construction of a new pump station capable of pumping approximately 7 million gallons per day (mgd) to the 800 pressure zone in the Cooper Mountain area
- Fluoride Injection and controls for the incoming WWSS
- Water quality monitoring
- Site security
- Waterline installation to connect to the existing system at the Cooper Mountain Reservoir site; approximately 10,000 feet of piping
- Improvements to the site and storm water management
Construction of the project is scheduled to be completed in June 2021 and is estimated to cost approximately $10 million.

TVWD has evaluated four (4) potential project delivery options, including the Design-Bid-Build method and three alternative methods (Construction Management/General Contractor (CM/GC), Design-Build and Progressive Design-Build). The evaluation identifies CM/GC as the preferred delivery method to meet TVWD’s requirements on this project, which include cost and schedule.

TVWD plans to select the CM/GC for the project through a one-step process, which will be a combination of qualification-based and price-driven selections. TVWD has already selected Keller Associates as the Engineering Consultant for this project. As the Engineering Consultant, Keller Associates will advise TVWD on CM/GC matters. According to the current schedule, TVWD will advertise the project and select the CM/GC team no later than January 2020. The CM/GC team will have experience in similar projects and will have to be a licensed construction firm in good standing with the State of Oregon.

**Summary of Findings**

With regard to ORS 279C.335, the LCRB will consider the following findings in its decision to exempt the Project from competitive bidding and use the CM/GC method of delivery:

a) **The exemption is unlikely to encourage favoritism in the awarding of the public improvement contract or substantially diminish competition for the public improvement contract.**

The CM/GC team will be selected through a competitive one-step process that fosters competition and focuses on qualifications and delivering best value to TVWD. TVWD will issue a Request for Qualification (RFQ) in a manner that will attract a CM/GC team that has the specialized knowledge, capacity, and skills for the project.

There are a sufficient number of firms that are qualified for the project and are available to respond to the RFQ. A solicitation of interest letter has been sent to potential respondents and a Request for Letters of Interest (RLOI) for the Farmington Road Booster Pump Station and Discharge Main Project was also published in the Daily Journal of Commerce (DJC) on October 18, 2019 to attract firms that are unaware of the project. Twelve firms responded to the interest letter or the RLOI and expressed interest in the project.

TVWD will use Water Design-Build Council (WDBC) guidance documents for the RFQ, assuring best industry practices are followed and to maintain interest in the project. The RFQ will be published in the DJC and posted on TVWD’s website to attempt to notify all potential respondents.

TVWD will take measures to ensure open competition will occur. Strict adherence to pre-defined scoring criteria in the procurement document will be followed. Scoring criteria will include the experience of the CM/GC team and project personnel; understanding of the technical and work requirements for the project; approach for managing and minimizing project risks; ability to deliver the project according to the schedule; approach to safety; and consideration of design support costs or fees. Review of proposals and scoring will be performed by TVWD staff.

*Findings: The pool of potential CM/GC teams and the selection process to be used by TVWD make the exemption unlikely to encourage favoritism in the awarding of the public improvement project or substantially diminish competition for the public improvement contract.*

Findings for an exemption from competitive bidding for Farmington Road BPS & Discharge Main Tualatin Valley Water District
b) **Awarding a public improvement contract under the exemption will likely result in substantial cost savings and other substantial benefits to TVWD**

The CM/GC method allows contractor input and collaboration of the contractor in the early design phase of the project to provide innovative solutions, constructability opinions and realistic construction-pricing and scheduling. Along with value engineering, it gives TVWD opportunities to make cost-benefit decisions and to reduce project costs. The CM/GC team will secure some aspects of work (e.g., equipment such as pumps) through competitive bids early in the project to avoid price escalation and schedule delays during the construction period. The CM/GC method also allows TVWD to award early construction package and/or negotiate the Guaranteed Maximum Price (GMP) contract prior to completion of the overall design so that the CM/GC team can eliminate price uncertainty and/or mitigate some risk of future price escalation. The CM/GC team can utilize the process and construction narratives instead of detailed specifications for construction, which can reduce the project schedule and overall project cost.

The CM/GC delivery method can also provide cost savings for overall professional engineering services. By utilizing the CM/GC delivery method, preparation of final bidding documents and bidding services from the engineer is not required, and the level of detail in the design documents can be reduced due to close collaboration within the CM/GC team.

Additionally, a collaborative decision-making process in the CM/GC method gives the potential to reduce construction claims and minimize TVWD’s risks. By contracting with the CM/GC early in design, constructability feedback will be received early allowing for reduction of risks associated with claims. The collaborative approach and partnerships between TVWD, the Engineering Consultant, and the CM/GC team also allows for additional focus on safety which can improve safety for TVWD, the CM/GC team, the public as well as all other parties affected by the project. This collaborative approach brings the best value to TVWD.

**Finding:** Awarding the project under the exemption will likely provide great opportunities for cost savings and other substantial benefits to TVWD. The exemption provides a collaborative work approach between the engineer and contractor during the design and throughout the project under the CM/GC delivery method. This could result in substantial cost savings associated with cost-benefit decisions being made by the collaborative team and early construction or securing work earlier to avoid price escalation. Overall collaboration in the CM/GC delivery method could also reduce the project schedule and engineering design cost, minimize TVWD’s risks, and enhance safety to the public, CM/GC team, and TVWD staff.

**Responses to Items under ORS 279C.335(2)(b)**

Pursuant to ORS 279C.335(2)(b), the LCRB must consider the type, cost and amount of the contract and, to the extent applicable to the particular public improvement contract. Findings to be considered by the LCRB for the Farmington Road Booster Pump Station and Discharge Main Project are the items under ORS 279C.335(2)(b)(A-N) are as follows:

a) **How many persons are available to bid?**

TVWD will ensure maximum competition and fair opportunity for the project. A solicitation of interest letter will be sent to potential candidates for a role on the CM/GC project. TVWD will issue a Request for Qualification (RFQ) for the CM/GC team. The RFQ will be written in manner to attract a CM/GC team that has the specialized knowledge, capacity, and skills for the project within the State of
Oregon, the Pacific Northwest and nationally. The RFQ will be published in the Daily Journal of Commerce and posted in the TVWD’s website to attempt to notify all potential respondents.

Potentially qualified firms that may respond to TVWD for the project or have expressed their interest are listed below. A CM/GC team can be a single contractor or a joint venture of contractors, or team in different ways to respond to the RFQ. A solicitation of interest letter has been sent to 10 potential respondents and Request for Letters of Interest (RLOI) for the Farmington Road Booster Pump Station and Discharge Main Project was also published in the Daily Journal of Commerce (DJC) on October 18, 2019 to attract firms that are unaware of the project. The following 12 firms responded and expressed interest in the project.

1. C&M Excavation
2. Emery and Sons
3. Ferrari Enterprises
4. JW Fowler
5. K&E Excavation
6. Kerr Contractors
7. Landis and Landis
8. McClure and Sons
9. Moore Excavation
10. Nutter Corporation
11. Slayden Construction
12. Tapani

b) The construction budget and the projected operating costs for the completed project

The estimated construction cost for the project is approximately $10 million. Operational costs for the project are estimated to be $50,000 annually. Implementation of the project will not increase the need for TVWD operations staff, but has the potential to reduce routine costs because of improved pumping efficiencies. Through the “fast-track” process, the CM/GC method can reduce overall project schedule by reducing delays caused by long order times such as pumps and motor controlled valves. This reduces the capital cost by reducing time-related overhead charges.

c) Public benefits that may result from granting the exemption

A qualification-based selection in an alternative delivery method enables competition among the most qualified contractors and results in a high-quality project to better meet the public and TVWD’s needs.

Potential cost savings from the CM/GC method is a benefit to TVWD rate payers. Public benefits can also be achieved from the short construction schedule. By utilizing the CM/GC method a new Farmington Road Booster Pump Station and Discharge Main can be delivered sooner to serve the area with a more reliable and resilient water supply. Along with a reduced construction schedule and collaborative work approach the CM/GC provides the potential to minimize the construction impact on the local community.

d) Whether value engineering techniques may decrease the cost of the project

The CM/GC method allows TVWD to utilize value engineering to potentially achieve greater cost savings during the design phase, before design decisions are finalized and before the Guaranteed Maximum Price (GMP) is established for construction. The value engineering is planned to be

Findings for an exemption from competitive bidding for Farmington Road BPS & Discharge Main Tualatin Valley Water District
performed at the 30% design milestone. The review will be performed by the Engineering Consultant (Keller), TVWD staff, and may potentially utilize additional independent reviewers external to the project team, along with CM/GC team participation. Through the collaborative process, the CM/GC team will provide input on innovative solutions, constructability opinions, and realistic construction-pricing that allows opportunities for TVWD to make cost-benefit decisions and reduce the overall project cost. It is anticipated that the selected CM/GC team will seek competition on various components of the work which may also assist in providing value and decreasing the overall cost of the project.

e) **The cost and availability of specialized expertise that is necessary for the project**

The project requires the specialized CM/GC team to have experience in design and construction of a pump station and ductile iron pipeline and have knowledge of permitting requirements. In addition, the CM/GC team will understand the importance of coordinating the project construction work to meet TVWD operational needs and will be capable of addressing geotechnical and construction issues. TVWD’s overall project scope is to build a 7 MGD pump station, a fluoride injection station, and a 10,000-foot long discharge main. Major construction elements and equipment may be competitively bid with TVWD reviewing bids as part of the development of the GMP. This will ensure competitive costs for the project. The overall cost will be similar to or lower than a Design-Bid-Build project total cost. Firms listed above will need to show that they possess the specialized expertise necessary for the project.

The cost and availability of specialized expertise won’t affect the CM/GC method. Procurement of the CM/GC team based on qualifications, delivery approach, and initial pre-construction costs will enable TVWD to retain a well-qualified team and obtain competitive pricing.

f) **Any likely increases in public safety**

TVWD requires construction contractors performing the work with TVWD to have successful performance records for safety and protection of the contractors, neighbors, the owners, and the public who will be affected by the project. In addition, clean and safe water supply from existing facilities, which will need to remain in operation, to the customers and the public must be assured during the construction and when the new pump station is being tested and placed in service.

The CM/GC method allows TVWD to evaluate the CM/GC team’s safety record and to consider historical performance of the CM/GC teams in previous similar projects as a selection criterion. One evaluation criteria would be the Experience Modification Ratio (EMR) for the CM/GC team and key subcontractors. Using the CM/GC method, TVWD is able to work closely with the CM/GC team to ensure appropriate safety measures are embedded in the design and construction and all the TVWD and public safety concerns are addressed.

g) **Whether granting the exemption may reduce risks to TVWD or the Public that are related to the public improvement**

The CM/GC method will put TVWD in a better position to complete the project on schedule while minimizing its risks, costs, and reduced staff time compared to the DBB method.

The CM/GC method allows the contractor’s input and collaboration of designer and contractor in the early design phase, which enables the contractor to understand the project from the beginning, to develop constructible solutions during the design, and to reduce the potential conflicts, issues and
disputes during construction. It also mitigates the risk of project uncertainty when design translates into construction and the risk of service interruption when the construction is underway.

The CM/GC method also allows TVWD to work closely with the CM/GC team to ensure public safety and reduce risks.

h) Whether granting the exemption will affect the sources of funding for the public project

The project is funded from the TVWD capital improvement fund which is supported by revenue generated from water sales. Granting the exemption will not affect the sources of funding.

i) Whether granting the exemption will better enable TVWD to control the impact that market conditions may have on the cost of and time necessary to complete the project

Granting the exemption will better enable TVWD to control the impact of market conditions on costs. The current construction market for public projects has been impacted by the significant increase in commercial construction. There has been a substantial rise of labor and material costs in recent years. Compared with the DBB method, the CM/GC method provides TVWD with the flexibility to reduce the impact of market conditions, especially in the current price-increasing market.

The CM/GC method allows the selected CM/GC team to secure some aspects of work (e.g., equipment, site civil) through competitive bids early on in the project, which can reduce price uncertainty and avoid price escalation during the construction period. The CM/GC method also permits TVWD to partner with the CM/GC team to award an early construction package prior to completion of the overall design. The CM/GC team intends to establish the GMP before the completion of the final design and TVWD can negotiate the GMP contract to have the CM/GC team to bear/share some risks of future price escalation. In addition, the CM/GC team can utilize the process and construction narratives instead of detailed specifications for construction if permitted by TVWD in its discretion, which can reduce the project schedule and lessen the impact of price increases.

j) Whether granting the exemption will better enable TVWD to address the size and technical complexity of the project

CM/GC can address the size and technical complexity of the project more effectively than the DBB method because of the qualification based selection of the CM/GC team and better collaboration between the designer and contractor. The technical complexity of the project is due primarily to geotechnical site conditions, the limited work area, the condensed project schedule, and the criticality of the Farmington Road Booster Pump Station and Discharge Main Project in the water distribution system. It requires the contractor to be capable of managing all of these complicated issues. The CM/GC method will allow TVWD to retain a highly qualified contractor with sufficient experience and knowledge to manage, supervise, and perform the work to meet the project’s needs.

k) Whether the project involves new construction or renovates or remodels an existing structure

The project will install a new pumping facility, new project piping, ancillary facilities, and a long discharge main. Existing piping will be modified with this project.

l) Whether the project will be occupied or unoccupied during construction

The pump station project site is currently unoccupied and will be unoccupied during construction. The proposed 10,000 foot long discharge main route is currently occupied by other piping, traffic, and by other items typically found in the right-of-way (ROW), and will connect to piping at an occupied site that needs to remain online throughout construction. The CM/GC team will need to coordinate with
other agencies and TVWD for site access, safety of all, and protection of existing utilities and ancillary facilities.

m) **Whether the project will require a single phase of construction work or multiple phases of construction work to address specific project conditions**

Construction of this project may be completed in a single phase or in several small phases. An advantage of CM/GC is the ability to bid multiple packages if it is beneficial to do so. TVWD has a schedule showing several phases of work that can deliver the project on time. These phases of work include ordering parts, pipeline construction, and facility construction.

The CM/GC method allows the contracting team to layout the project roadmap and develop the schedule early on to ensure that construction is being performed within TVWD’s desired time frame. This will also be beneficial when scheduling the work to connect to the WWSS pipeline to have a single traffic shutdown on SW 209th where there will need to be two 30-inch pipeline crossings.

n) **Whether TVWD will use TVWD personnel, consultants, and legal counsel that have the necessary expertise and substantial experience in alternative contracting methods to assist in developing the alternative contracting method that the TVWD will use to award the project contract and to help negotiate, administer and enforce the terms of the project contract**

The TVWD staff have limited experience using the CM/GC method to deliver prior projects. TVWD has completed a progressive design build project with great success. An engineering consultant (Keller Associates) has been hired to prepare the overall project design, and can assist with the CM/GC process as a third-party with experience in alternative delivery. Legal assistance may be provided by TVWD in house counsel or by an independent legal firm with the appropriate expertise in the event that it is needed.

*Finding: The Board finds that the criteria of ORS 279C.335(2)(b)(A-N) are satisfied through the foregoing discussion.*

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Findings for an exemption from competitive bidding for Farmington Road BPS & Discharge Main
Tualatin Valley Water District
RESOLUTION NO. 29-19


WHEREAS, the Board of Commissioners annually sets its regular meeting calendar by resolution, and hereby being fully advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE TUALATIN VALLEY WATER DISTRICT THAT:

Section 1: The regular meetings shall be held the third Wednesday of each month at 7:00 p.m.

Section 2: Meeting dates may be changed by a motion of the Board.

Section 3: The meetings are to be held at the Tualatin Valley Water District, Administrative Office, located at 1850 SW 170th Avenue, Beaverton, Oregon 97003.

Section 4: In accordance with ORS 192.640, public notice requirements, all meetings will be advertised as required.

Approved and adopted at a regular meeting held on the 18th day of December 2019.

_________________________________  ________________________________
Bernice Bagnall, President                 Jim Doane, Acting Secretary