

**Willamette Intake Facilities Commission  
Board Meeting Agenda  
Monday, July 30, 2018 | 6:00 – 8:00 PM**

**Tualatin Valley Water District – Board Room  
1850 SW 170th Avenue  
Beaverton, OR 97003**

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To prepare to address the Willamette Intake Facilities Board, please fill out the Public Comment Form located on the table near the main door to the meeting room. You are not required to give your address when speaking to the Board, only your name.  
\*\*Assistive Listening Devices (ALD) are available upon request 48 hours prior to the day of the meeting by calling (503) 941-4580.\*\*

**All testimony is electronically recorded.**

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The Board and other attendees dine at 5:30 p.m.

**CALL TO ORDER**

1. **GENERAL MANAGER'S REPORT** (Brief presentation on current activities relative to the WIF Commission)

2. **PUBLIC COMMENT**

This time is set aside for persons wishing to address the Board on items on the Consent Agenda and matters not on the agenda. Additional public comment will be invited on agenda items as they are presented. Each person is limited to five minutes, unless an extension is granted by the Board. Should three or more people testify on the same topic, each person will be limited to three minutes.

3. **CONSENT AGENDA** (The entire Consent Agenda is normally considered in a single motion. Any Commissioner may request that an item be removed for separate consideration.)

A. Approve the April 30, 2018 inaugural meeting minutes.

4. **BUSINESS AGENDA**

A. Approve Board Rules

5. **INFORMATION ITEMS**

A. Management Committee Reports  
(Brief presentations from each member of the Management Committee)

B. Update on the WIF-Related Elements of the RWF 1.0 Project

C. Clarify WIF Commission Role in the Raw Water Facilities Project

i. History of Raw Water Facilities project

ii. WIF engagement going forward

D. Raw Water Facilities Project Plan

- i. Outline
- ii. Strategy to Prepare Plan for WIF Commission Action in October

E. The next Board meeting is scheduled on October 29, 2018, at Tualatin Valley Water District – Board Room.

**6. COMMUNICATIONS AND NON-AGENDA ITEMS**

A. None scheduled.

**ADJOURNMENT**

# MEMO

**Date:** July 30, 2018

**To:** Willamette Intake Facilities Board of Commissioners

**From:** David Kraska, General Manager

**Re:** Willamette Intake Facilities General Manager's Report

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The following items will be covered during the report by the GM:

1. **Safety Minute.** Dave Kraska, will present the safety minute.
2. **Agenda Review.** At a meeting with the Finance and Management Committees earlier this month, we discussed the format of the Agenda relative to the recently drafted WIF Board rules, which are on the agenda for this meeting. It was agreed that the agenda format would be changed in the following ways:
  - a. Add a "General Manager's" report to the beginning of each meeting to provide a brief presentation of current WIF Commission related activities.
  - b. Added a "Public Comment" item to the agenda to provide a defined opportunity for members of the public to address the Board.
  - c. "Communications and Non-Agenda Items" was moved to the end of the agenda to prioritize addressing scheduled topics first.
  - d. "Discussion Items" agenda topic was eliminated as it is not needed in the new format.
  - e. "New Business" was retitled "Business Agenda", but the purpose of this agenda item is unchanged. These are the items that are scheduled for Board action.
  - f. "Advice/Information Items" was retitled "Information Items"; again, without change to the purpose. These are items that do not require Board action.
3. **Willamette River Water Treatment Plant Tour.** Following up on a request stated at the last WIF Board meeting, we will be scheduling a Commissioners' tour of the WRWTP. We will be reaching out in the coming weeks to set the schedule. We anticipate the tour will take place in mid to late September.

## **GM Report to the WIF Board of Commissioners**

July 30, 2018

Page 2

- 4. Kinder Morgan Coordination.** On June 28, 2018, Kinder Morgan conducted a boat tour to view the location of its crossing of the Willamette River. Participants on this tour included Wilsonville Mayor, Tim Knapp, State Representative, Rich Vial, Wilsonville Public Works Director, Delora Kerber, Willamette Water Supply Program Director, David Kraska, WRWTP O&M Supervisor, Kim Reid, and representatives from Kinder Morgan and its emergency spill response team. During this tour, we also saw a demonstration of the booms that Kinder Morgan's spill response team could deploy in the event of a spill or leak from their pipeline.

Coordination with Kinder Morgan continues regarding the potential installation of additional valves on either side of the Willamette River to minimize leakage from the pipeline following a major seismic event. The next meeting with Kinder Morgan is not yet scheduled but is planned to happen shortly after Labor Day.



## Willamette Water Supply

*Our Reliable Water*

### Safety Moment: Heat Illness Prevention

July 30, 2018

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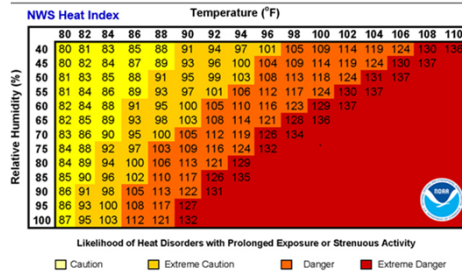
## Heat Illness

- Exposure to heat can cause illness and death. The most serious heat illness is heat stroke, a medical emergency.
- Other heat illnesses include heat exhaustion, heat cramps (muscle cramps) and heat rash. Muscle cramps are often a first symptom of heat illness.
- Take precautions any time temperatures are high and the job involves physical exertion.



## Risk Factors for Heat Illness

- High temperature and humidity (heat index)
- Direct sun
- No breeze or wind
- Low liquid intake
- Heavy physical labor
- Impermeable clothing
- No recent exposure to hot workplaces



Classification	Heat Index	Effect on the body
Caution	80°F - 90°F	Fatigue possible with prolonged exposure and/or physical activity
Extreme Caution	90°F - 103°F	Heat stroke, heat cramps, or heat exhaustion possible with prolonged exposure and/or physical activity
Danger	103°F - 124°F	Heat cramps or heat exhaustion likely, and heat stroke possible with prolonged exposure and/or physical activity
Extreme Danger	125°F or higher	Heat stroke highly likely

## Heat-related Illness: Know the Warning Signs and Symptoms

Muscle cramping might be the first sign of heat-related illness, and may lead to heat exhaustion or heat stroke.

### Heat Exhaustion

Symptoms	What To Do
Heavy sweating	Move to a cooler location.
Weakness	Lie down and loosen your clothing.
Cold, pale, clammy skin	Apply cool, wet cloths to as much of your body as possible.
Fast, weak pulse	Sip water.
Nausea or vomiting, fainting	If you have vomited and it continues, seek medical attention immediately.

### Heat Stroke

Symptoms	What To Do
High body temperature (above 103°F)	Call 911 immediately - this is a medical emergency.
Hot, red, dry or moist skin	Move the person to a cooler environment.
Rapid and strong pulse	Reduce the person's body temperature with cool cloths or even a bath.
Possible unconsciousness	Do NOT give fluids.

Source:  
<https://www.oregon.gov/oha/PH/Preparedness/Prepare/Pages/PrepareForExtremeHeat.aspx#signs>

## Heat Illness Prevention

- Access to Water (1 pint to 1 quart/hr. condition dependent)
- Access to Shade
- Work Planning
- Weather Monitoring and Acclimatization
- Understanding Symptoms and Emergency Response



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## **Willamette Intake Facilities Commission**

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**Willamette Intake Facilities Commission**  
**Board Meeting Minutes**  
**Monday, April 30, 2018**

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**Commissioners present:**

Tualatin Valley Water District (TVWD): Jim Doane  
Beaverton: Marc San Soucie  
Hillsboro: Dave Judah (alt)  
Sherwood: Sean Garland  
Tigard: John Goodhouse  
Wilsonville: Kristin Ackervall (alt)

**Board alternates present:**

TVWD: Dick Schmidt  
Beaverton: Denny Doyle  
Sherwood: Tim Rosener

**Committee Members present:**

TVWD: Mark Knudson, Management Committee  
Paul Matthews, Finance Committee  
Carrie Pak, Operations Committee  
Beaverton: David Donaldson, Management Committee  
Hillsboro: Niki Iverson (alt), Management Committee  
Lee Lindsey, Finance Committee  
Sherwood: Rich Sattler, Operations Committee  
Tigard: Eric Zimmerman, Management Committee  
John Goodrich, Operations Committee  
Wilsonville:

**Managing Agency Staff present:**

Dave Kraska, WIF Commission General Manager  
Clark Balfour, General Counsel, TVWD  
Mike Jacobs, Risk Management Coordinator, TVWD  
Mark McConnell, Building and Grounds Maintenance II, TVWD  
Faye Branton, WIF Commission Recorder

**Other Attendees:**

Bill Van Derveer, Program Manager, WWSP  
Ron Cutter, Brown & Brown Northwest Insurance

No members of the public were present.

**CALL TO ORDER**

Mr. Kraska called the inaugural Willamette Intake Facilities Commission (WIF) meeting to order at 6:01 p.m.

## **Safety Moment**

Mr. Kraska pointed out primary and secondary exits and rally points, should the need to evacuate the building occur.

## **Introductions**

### **1. INITIAL BUSINESS**

#### **A. Election of Officers**

As stated in Article 4.6 of the Intergovernmental Agreement (IGA), the Board shall annually elect from its Members a chair and a vice chair, who shall be officers of the Board.

Election of Chair:

Mr. Kraska distributed a letter from John Godsey, City of Hillsboro, stating his interest in serving as Chair of the WIF Board. There were no other expressions of interest in this position.

Nomination was made by Doyle, seconded by Judah, for John Godsey to serve as Chair of the Willamette Intake Facilities Board. Mr. Godsey was elected unanimously with Commissioners Doane, San Soucie, Judah, Garland, Goodhouse, and Akervall voting in favor.

Election of Vice Chair:

Sean Garland, City of Sherwood, and John Goodhouse, City of Tigard, expressed interest in serving as Vice Chair of the WIF Board. Each commissioner briefly shared his reasons for interest in the Vice Chair position.

Nomination was made by Doane, seconded by San Soucie, for the Board to consider and select between Garland and Goodhouse to serve as Vice Chair. A show of hands vote resulted in a tie of three votes each with Commissioners San Soucie, Garland, and Akervall voting for Garland, and Commissioners Doane, Judah, and Goodhouse voting for Goodhouse. Garland and Goodhouse opted to break the tie via a coin toss. Mr. Garland won the coin toss, received the gavel, and proceeded to conduct the remainder of the meeting as Vice Chair in the absence of Chair Godsey.

#### **B. Acknowledgement of Managing Agency and General Manager**

Mr. Knudson stated that TVWD is established as the WIF managing agency for the first several years of the IGA, and that we are here to acknowledge that TVWD is now assuming and implementing this role, as established in the IGA. He also highlighted Mr. Kraska's qualifications and expressed support for Mr. Kraska to assume the role of functioning as General Manager for the WIF Commission.

### **2. CONSENT AGENDA (The entire Consent Agenda is normally considered in a single motion. Any Commissioner may request that an item be removed for separate consideration.)**

#### **A. None.**

### **3. COMMUNICATIONS AND NON-AGENDA ITEMS**

A. None scheduled. None added.

### **4. DISCUSSION ITEMS** (These items may result in action by the Commission.)

A. Willamette Intake Facilities Commission Orientation

Mr. Kraska presented an orientation of the Willamette Intake Facilities Commission, including overviews of the Willamette Intake Facilities, IGA and Governance, Annual Work Plan, and Status of the RWF\_1.0 project (see attached presentation).

Following the presentation, Mr. Kraska opened the floor for questions and staff provided the following additional information:

- Veolia is the contract operator for the existing Willamette River Water Treatment Plant (WRWTP). Wilsonville, as the contracting agency, has a contract with Veolia. The next renewal date for the Veolia contract is in 2022. Per the IGA, Wilsonville will discuss a contract renewal at that time. If renewed, Veolia's contract, as it pertains to the WIF, can only be until 2026, which is the changeover date.
- The fiscal year is July 1 to June 30.

Will work on the RWF\_1.0 project come under the jurisdiction of this Commission? What is the relationship between the work that has preceded today and today?

The RWF\_1.0 project is part of the Willamette Water Supply Program (WWSP). That Program is owned and run by TVWD and Hillsboro. The Program answers to its Executive Committee, Mark Knudson and Kevin Hanway, and they answer to their Board and Commission, respectively. The WIF Commission oversees the WIF. The IGA specifically delegates the WWSP and TVWD to oversee the design and construction of RWF project. Mr. Balfour will locate where this is specified in the IGA and inform the Board and staff will provide additional background at the next WIF Commission meeting.

### **5. NEW BUSINESS**

A. Consider adopting Resolution No. WIF-01-18, a resolution adopting the Special Districts Insurance Services (SDIS) Joinder to Trust Agreement ("Agreement") and authorize placement of insurance coverage.

Mr. Jacobs presented the SDIS quote covering the insurance requirements outlined in the IGA. The quote has undergone detailed review with the WIF Management and Finance Committees. Mr. Jacobs highlighted that the IGA allows the Commission to acquire insurance based on liability exposure. Coverage for employee, automobile, and pollution insurance is not applicable at this time and, therefore, not included in the quote.

Staff clarified that the Managing Agency's relationship to the Commission is a service contract. As managing agency, TVWD is the Commission's agent rather than an employee. Since the WIF Commission will not have employees, workers compensation coverage is not needed.

Mr. Jacobs provided a summary of requirements and cost to enter the SDIS trust, a self-insured pool. Insurance coverage is based on a calendar year. Therefore, the rate for May through the end of December 2018, will be pro-rated.

Staff confirmed that the quoted schedule of property values line item in the amount of \$8.8M is to cover the current facilities for which the Commission is responsible.

Motion was made by San Soucie, seconded by Doane, to adopt Resolution No. WIF-01-18, a resolution adopting the Special Districts Insurance Services (SDIS) Joinder to Trust Agreement (“Agreement”) and authorize placement of insurance coverage. The motion passed unanimously with Doane, San Soucie, Judah, Garland, Goodhouse, and Akervall voting in favor.

- B. Consider adopting Resolution No. WIF-02-18, a resolution adopting the Willamette Intake Facilities Commission Annual Work Plan and Budget for the 2018-19 fiscal year.

Mr. Kraska summarized the staff report and formula used to calculate the partner cost shares.

In response to a Commissioner request, Mr. Matthews explained reasons for the difference for TVWD’s labor rates relative to rates for the Joint Water Commission (JWC). This was vetted with the Finance Committee. Commissioner will consult with his WIF Finance Committee representative.

Motion was made by Doane, seconded by Judah, to adopt Resolution No. WIF-02-18, a resolution adopting the Willamette Intake Facilities Commission Annual Work Plan and Budget for the 2018-19 fiscal year. The motion passed unanimously with Doane, San Soucie, Judah, Garland, Goodhouse, and Akervall voting in favor.

- C. Consider adopting Resolution No. WIF-03-18, a resolution establishing regular quarterly meeting dates of the Willamette Intake Facilities Board of Commissioners for fiscal year 2018-19.

There was discussion regarding the proposed schedule for the July meeting. It was acknowledged it will be difficult to identify a new date that would work for all calendars.

Motion was made by Judah, seconded by Goodhouse, to adopt Resolution No. WIF-03-18, a resolution establishing regular quarterly meeting dates of the Board of Commissioners for fiscal year 2018-19. The motion passed unanimously with Doane, San Soucie, Judah, Garland, Goodhouse, and Akervall voting in favor.

## **6. ADVICE/INFORMATION ITEMS**

- A. The next Board meeting is scheduled on July 30, 2018, at Tualatin Valley Water District – Board Room.
- B. Commissioner San Soucie suggested the following future Board meeting topics:
  - 1. Facility tour for members of the Commission
  - 2. Update on the Kinder-Morgan situation

## **ADJOURNMENT**

There being no further questions or business, Vice Chair Garland adjourned the meeting at 7:10 PM.

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John Godsey, Chair

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Sean Garland, Vice Chair


DRAFT

## **Willamette Intake Facilities Commission**

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Willamette Intake Facilities Commission Board Meeting Minutes - April 30, 2018  
Attachment referenced on page 3, Discussion Item 4.A.




Willamette Water Supply  
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Willamette Intake Facilities  
Commission Orientation

April 30, 2018

## Outline

- Willamette Intake Facilities Overview
- IGA and Governance Overview
- Annual Work Plan
- Status of the RWF\_1.0 Project

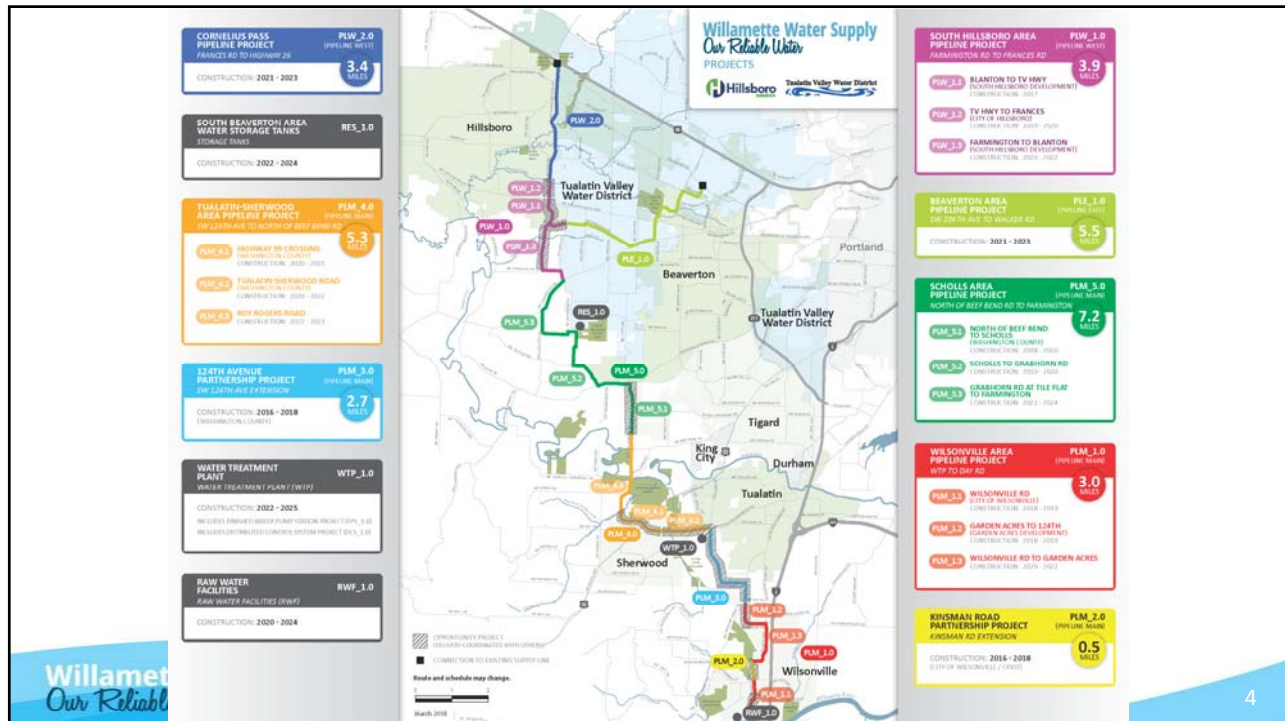


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# WILLAMETTE INTAKE FACILITIES OVERVIEW

Willamette Water Supply  
Our Reliable Water

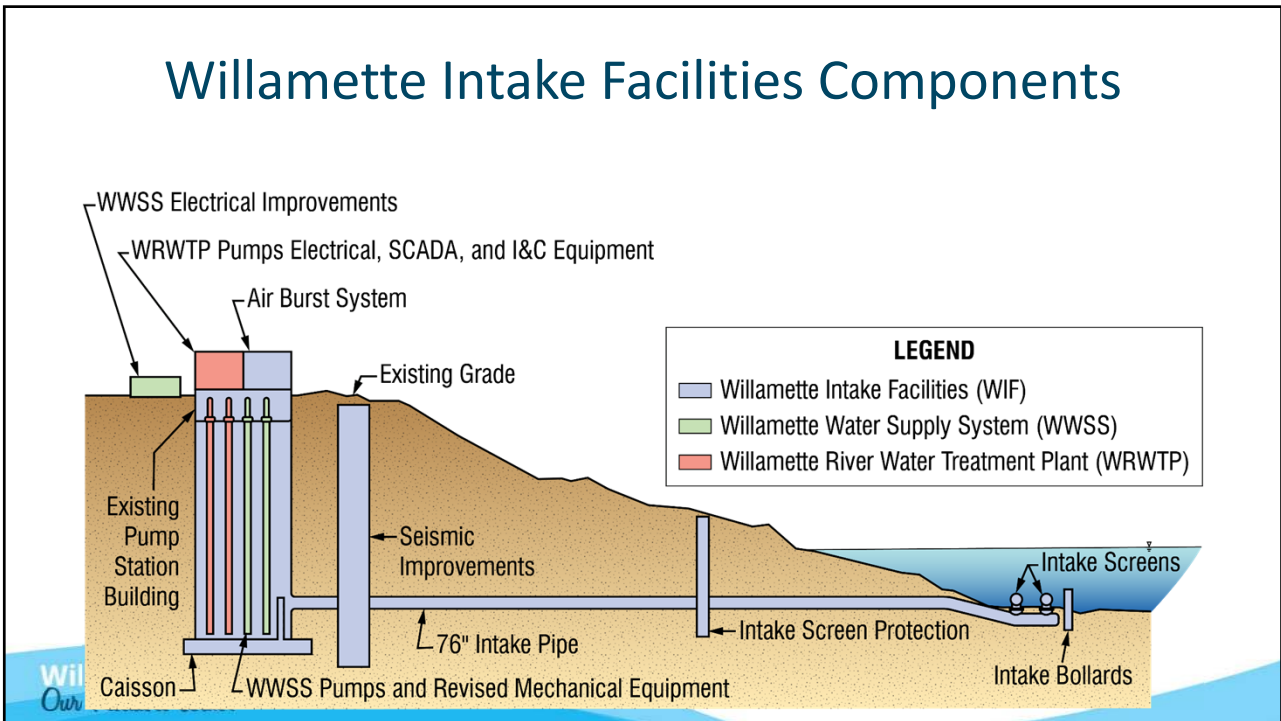




# Willamette Intake Facilities



# Willamette Intake Facilities Components





## Raw Water Pump Station Structure



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# Air Burst System



Compressors



Receiver Tank



Air Burst Valves

## IGA AND GOVERNANCE OVERVIEW

## Willamette Intake Facilities Intergovernmental Agreement

- Sets forth the terms for the joint ownership, management, and operation of the Intake Facilities in a prudent, economic, and efficient manner to provide water to the WRWTP and the WWSS

- Six parties:

Entity	Ownership	Capacity (mgd)
Wilsonville	16.67%	25.0
Tualatin Valley Water District	39.40%	59.1
Sherwood	6.47%	9.7
Tigard	10.00%	15.0
Hillsboro	24.13%	36.2
Beaverton	3.33%	5.0
Totals	100%	150.00

## Willamette Intake Facilities IGA Summary (1/6)

- Creates the WIF Commission, a Chapter 190 entity, to own, operate, maintain, manage, construct, repair and replace the WIF.
- WIF Assets:
  - new screens
  - intake pipe
  - caisson
  - pump station building
  - instrumentation and control
  - seismic improvements
- There is a defined WIF – WRWTP & WWSS system separation point.

## Willamette Intake Facilities IGA Summary (2/6)

- Six-member Board with one alternate each. Each entity has one vote. Member and alternate appointed by boards or councils.
- Board manages the business affairs of the WIF Commission for the mutual benefit of all (powers and duties listed in Section 4.7).
- Board appoints Managing Agency as staff.
- Approving votes require five of six. Unanimous vote required on:
  - joinder of new members
  - amendment of the agreement
  - dissolution of Commission

## Willamette Intake Facilities IGA Summary (3/6)

- TVWD is Managing Agency until 2032:
  - Until 2026, Wilsonville will continue to manage the intake to serve the WRWTP. TVWD will have responsibility for the WIF Commission and all matters related to the expansion project.
  - From 2026 to 2032, TVWD will be the sole Managing Agency responsible for the WIF to deliver water to the WRWTP and the WWSS facilities.
    - Evaluate operating agreements with Veolia prior to 2026
    - Conduct performance evaluation of Managing Agency in 2029
  - Post 2032, the Managing Agency will be appointed to six-year terms with annual review and opportunity for change of Managing Agency through a proposal process.

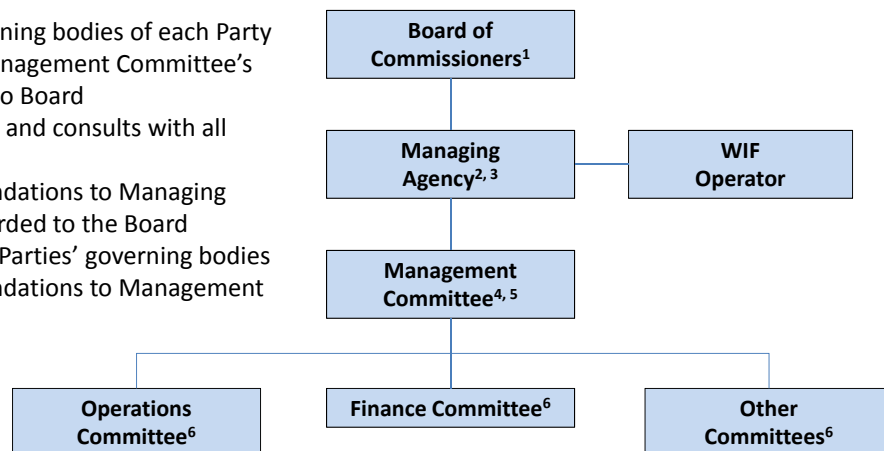
## Willamette Intake Facilities IGA Summary (4/6)

- Various committees are provided:
  - Management Committee
    - CEOs, City Managers, or designees
    - Members serve as liaisons to each respective governing body
    - Provides input and recommendations to the Managing Agency
  - Finance Committee
    - People knowledgeable in municipal finance laws and practices
    - Provides recommendations to the Management Committee
    - Recommends financial procedures to be implemented by the Managing Agency
  - Operations Committee
    - People technically knowledgeable in water system operations or engineering
    - Managing Agency to advise and consult with the Operations Committee
    - Operations Committee to respond to requests from the Management Committee
  - Other committees as needed

## WIF Organization

Notes:

1. Appointed by governing bodies of each Party
2. Provides its and Management Committee's recommendations to Board
3. Provides support to and consults with all committees
4. Provides recommendations to Managing Agency to be forwarded to the Board
5. Serve as liaisons to Parties' governing bodies
6. Provides recommendations to Management Committee



## Willamette Intake Facilities IGA Summary (5/6)

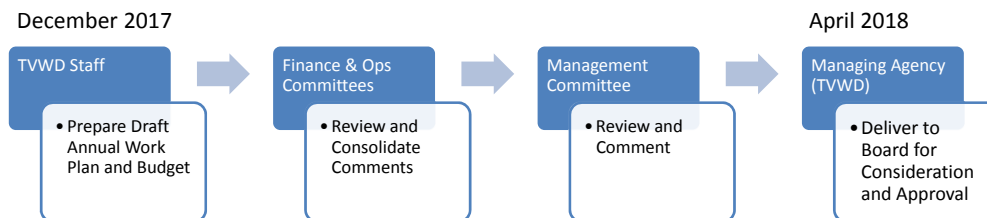
- Easement for facilities. There are two easements:
  - Intake Facilities Easement: From Wilsonville and TVWD, as property owners, to the WIF Commission for the intake facility footprint.
  - Pipeline Easement: From Wilsonville and TVWD to the WWSS (TVWD, Hillsboro, Beaverton and Tigard) for the WWSS facilities from the system separation point through the remainder of the Wilsonville and TVWD property.
- Proportionate reductions if less than 150-mgd. Guarantee of design capacity for TVWD (56.5 MGD), Wilsonville (20 MGD) and Sherwood (5 MGD).

## Willamette Intake Facilities IGA Summary (6/6)

- Each party responsible to bring water rights.
  - TVWD, Tigard, Sherwood rely on Willamette River Water Coalition right
  - Perfection of water rights limited to owned WIF capacity unless otherwise approved by the Board
- Provisions for plans:
  - Operations Plan
    - Complete prior to startup of WWSS
  - Curtailment Plan
  - Emergency Response Plan
  - Capital Improvement Plan

## ANNUAL WORK PLAN

## Annual Work Plan and Budget Preparation





## FY 2018 – 19 Annual Work Plan

- Task List:
  - General Administration
  - Capital Projects Management
  - Annual Work Plan and Budget Development
  - Finance Administration
  - Operations Committee Administration
  - Management Committee Administration
  - Administer WIF Board of Commissioners Meetings

## FY 2018 – 19 Annual Work Plan

- Task 1 – General Administration
  - Administration of Infrastructure Operations and Maintenance
    - Develop overall scope and timing for preparing the various plans
  - Records Management
  - Responding to Requests
    - Public
    - Media
  - Communications and Public Outreach
    - Website creation and management
  - Legislative Updates
    - Monitor and report on legislative activities in the Willamette basin
  - Willamette River Basin Activities Monitoring (future task)

## FY 2018 – 19 Annual Work Plan

- Task 2 – Capital Projects Management
  - Monitor and report on:
    - WWSP RWF\_1.0 improvement projects within the WIF scope
    - Planned WRWTP projects within the WIF scope

## FY 2018 – 19 Annual Work Plan

- Task 3 – Annual Work Plan and Budget Development
  - Prepare Draft Plan and Budget
  - Review and Edit with Operations and Finance Committees
  - Prepare Management Committee Review Draft
  - Prepare Final for Presentation to WIF Board

## FY 2018 – 19 Annual Work Plan

- Task 4 – Finance Administration
  - Develop Financial Procedures
  - Quarterly Invoicing and Financial Reports
  - Insurance
  - Administer Finance Committee Meetings
    - Scheduling
    - Meeting Logistics
    - Draft Agendas
    - Meeting Materials
    - Meeting Facilitation
    - Meeting Notes
  - Annual Audit

## FY 2018 – 19 Annual Work Plan

- Task 5 – Operations Committee Administration
  - Administer Operations Committee Meetings
    - Scheduling
    - Meeting Logistics
    - Draft Agendas
    - Meeting Materials
    - Meeting Facilitation
    - Meeting Notes

## FY 2018 – 19 Annual Work Plan

- Task 6 – Management Committee Administration
  - Administer Management Committee Meetings
    - Scheduling
    - Meeting Logistics
    - Draft Agendas
    - Meeting Materials
    - Meeting Facilitation
    - Meeting Notes

## FY 2018 – 19 Annual Work Plan

- Task 7 – Administer WIF Board of Commissioners Meetings
  - Administer Board Meetings
    - Scheduling
    - Meeting Logistics
    - Draft Agendas
    - Meeting Materials
    - Meeting Facilitation
    - Meeting Notes

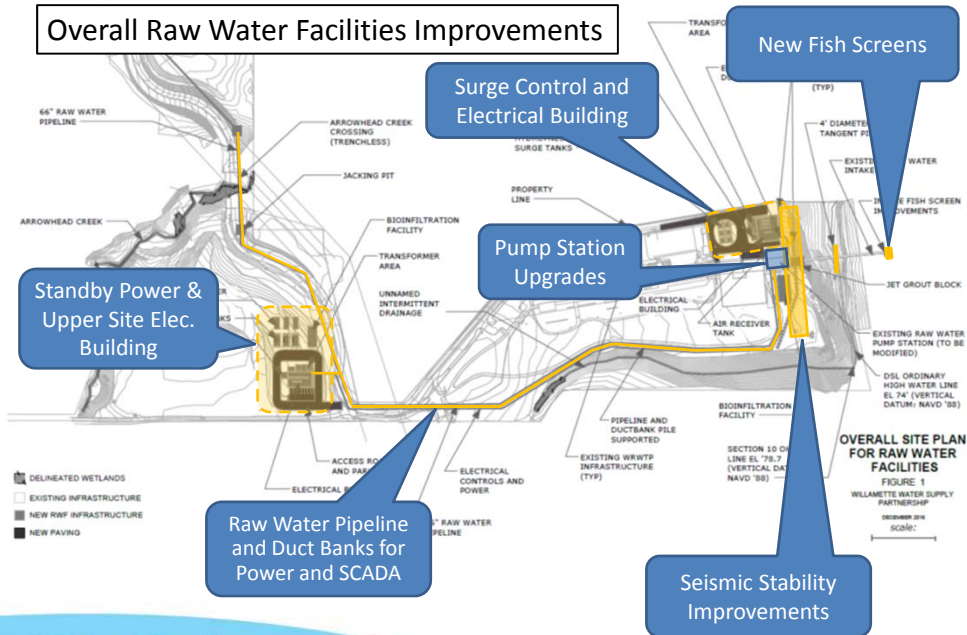
## FUTURE MEETINGS AND TOPICS

## WIF Commission Board Meets Quarterly

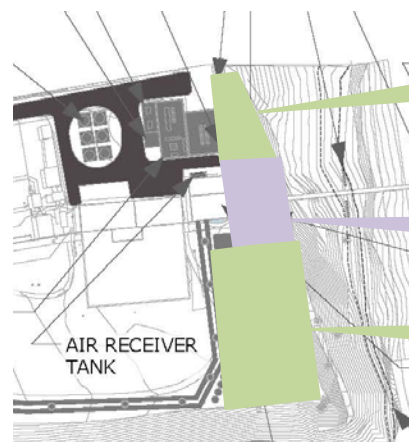
Proposed Meeting Date	Anticipated Topics
April 30, 2018	<ul style="list-style-type: none"> <li>• Election of Officers</li> <li>• WIF Orientation</li> <li>• Insurance Coverage Approval</li> <li>• FY 18-19 Annual Work Plan and Budget Approval</li> </ul>
July 30, 2018	<ul style="list-style-type: none"> <li>• Management Committee Reports – Parties Interests in the WIF</li> <li>• WWSS Raw Water Facilities Project Update</li> <li>• WIF Commission Board Rules</li> </ul>
October 29, 2018	<ul style="list-style-type: none"> <li>• Plans Development Strategy Report</li> <li>• Financial Procedures Update</li> <li>• Insurance Coverage Renewal</li> </ul>
January 28, 2019	<ul style="list-style-type: none"> <li>• Election of Officers</li> <li>• WWSS Raw Water Facilities Project Update</li> </ul>
April 29, 2019	<ul style="list-style-type: none"> <li>• FY 19-20 Annual Work Plan and Budget Approval</li> </ul>

# STATUS OF THE RWF\_1.0 PROJECT

## Overall Raw Water Facilities Improvements



## Seismic Stability Improvements



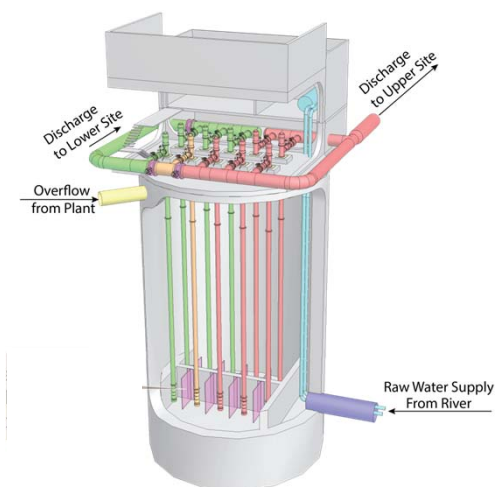
WWSS:  
New Electrical  
Building and Surge  
Control Stability

WIF:  
Existing Caisson  
Stability

WWSS:  
New 66" Raw  
Water Pipeline  
Stabilization

## WIF Structure Capacity Evaluation

- Original facilities: 120-mgd capacity
- Identified demands: 150-mgd combined
- New intake: \$50 M or more
- CFD modeling suggested that 140-mgd capacity is possible
- Performed physical modeling to confirm capacity limits, and identified design deficiencies and possible improvements



## Physical Model: 1/5 Scale of Facility



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## Excellent Results: Vane Grating Baskets Will Provide the Desired Benefits

- Inexpensive improvement will provide reliable operation at low cost
- Allows WIF to achieve 150-mgd without structural modifications



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Our Reliable Water

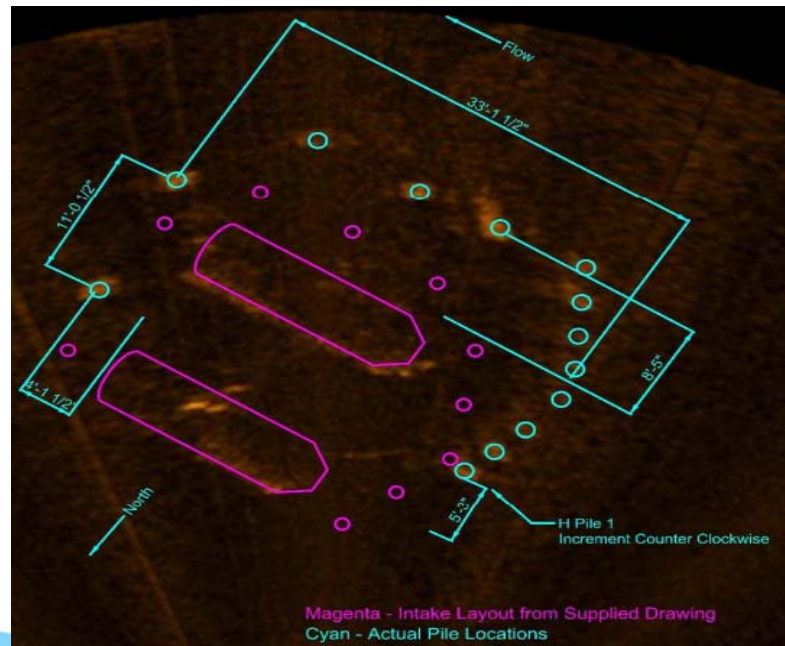


## RWF\_1.0 Schedule Summary

Task	Schedule
Design Notice to Proceed	September 21, 2017
Draft Basis of Design TM	June 14, 2018
CM/GC Notice to Proceed	June 19, 2018
NTP Phase 1 Construction	June 2020
NTP Phase 2 Construction	January 2023

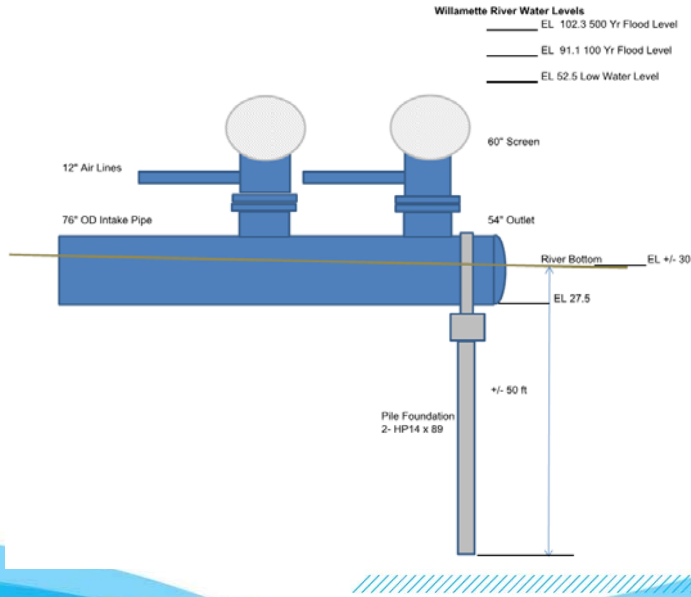
## Sonar of Screen Protection Piles Shows More Room for New Screens

- Actual Location of Protection Piles +/- 1 ft.

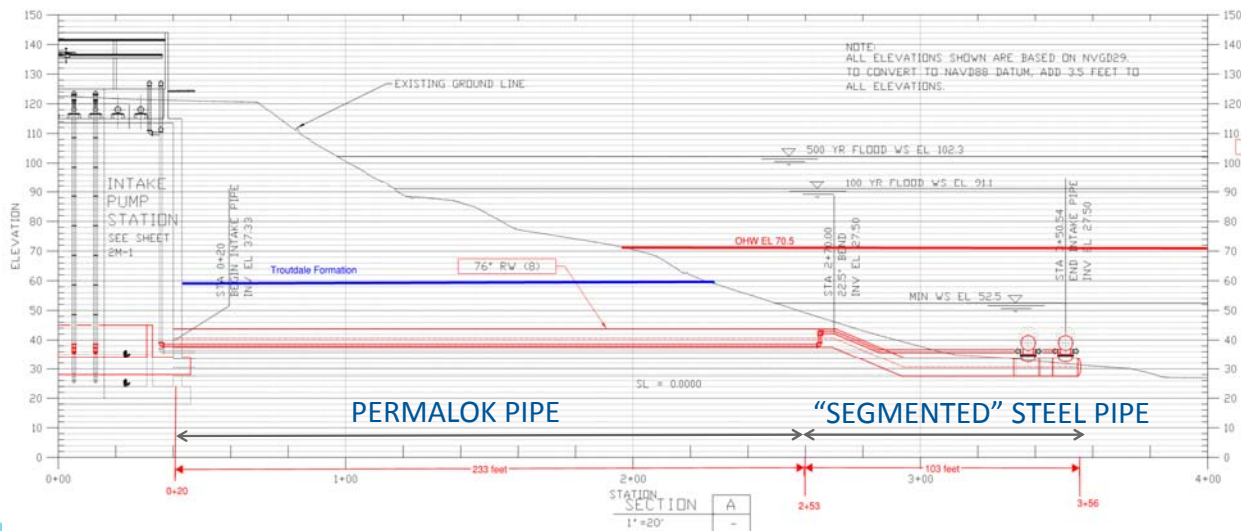


# Screen Evaluation (In-Progress)

- Investigate weight difference between 60" and 78" or 82" Screens
- Evaluate 12" Air Burst Pipe
- Anticipated Movement from Seismic loading



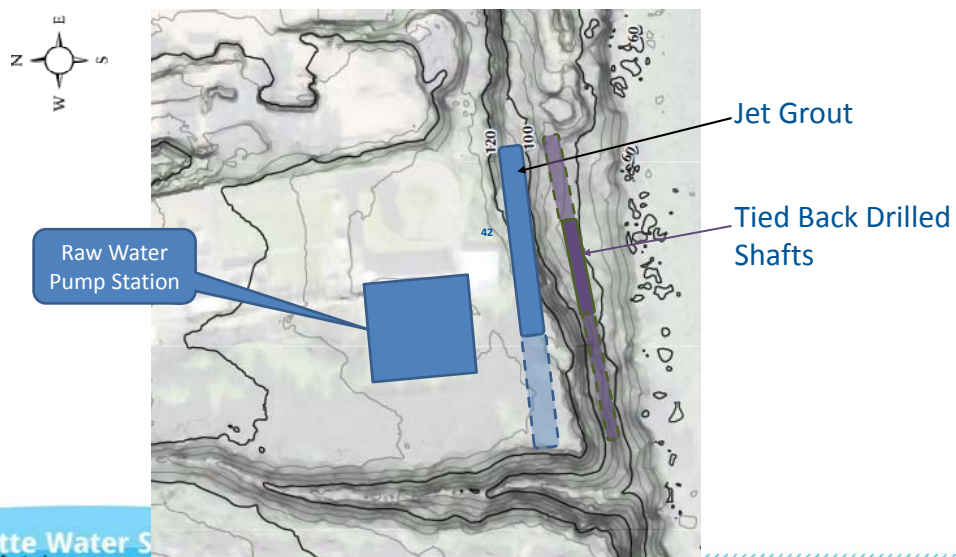
# Intake Pipeline Overview



## Current Status of Intake Pipeline Analysis

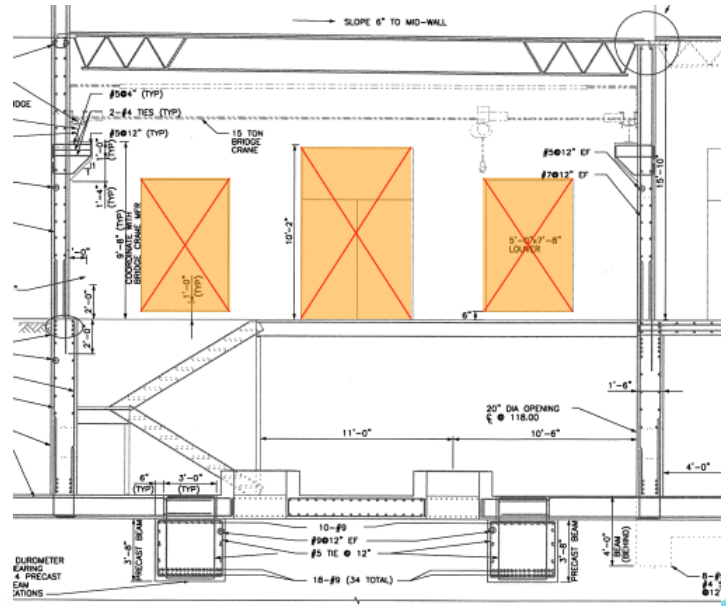
- Segmented Steel Pipe will require retrofit
- Permalok Pipe will (potentially) require modification – assess via 3D finite element analysis model
- Air Pipe evaluation in progress
- Evaluation of the Screen and Segmented Pipe retrofit to be modeled together, forthcoming
- Update all seismic hazard preliminary inputs (GRI data) to SSI analysis once ground mitigation features are determined.

## Alternatives Being Considered for Seismic Wall – Jet Grout and Tied Back Drilled Shafts



# Pump Station Structural Vulnerabilities

- Weak piers between large openings on concrete shear walls



Willamette Water Supply  
Our Reliable Water

END

Willamette Water Supply  
Our Reliable Water

**WIF COMMISSION STAFF REPORT**

**To:** Willamette Intake Facilities Board of Commissioners  
**From:** Clark Balfour, TVWD General Counsel  
**Date:** July 30, 2018  
**Subject:** Adopting Willamette Intake Facilities Board of Commissioners Rules of Conduct

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**Requested Board Action:**

Consider adopting the attached Willamette Intake Facility (WIF) Board of Commissioners Rules of Conduct (Rules).

**Key Concepts:**

- Adoption of Resolution 04-18 will establish the Rules of conduct for the WIF Commission Board.

**Background:**

Section 4.4 of the WIF intergovernmental agreement (IGA) states the following with respect to WIF Commission Board meetings:

Board meetings shall be conducted in accordance with the provisions of the Oregon Public Meeting Law, ORS 192.610 to 192.710. The Board shall hold meetings as needed, generally on a quarterly basis, but in no event less than twice a year. Special meetings may be called by the Chair or by any two Members. The Board shall adopt rules governing the conduct of its proceedings.

The attached Rules were prepared to meet the requirements of the WIF IGA and Oregon Public Meeting Law. Local government entities typically adopt rules to govern the conduct of governing body meetings and appointed committees. The attached Rules for the WIF Commission are submitted for Commission review and approval. They can be amended anytime by resolution.

**Budget Impact:**

None.



**Staff Contact Information:**

Clark Balfour; TVWD General Counsel; 503-848-3061; clark.balfour@tvwd.org

**Attachments:**

Rules of Conduct

**Management Staff Initials:**

General Manager		TVWD General Counsel	
TVWD Chief Engineer	N/A	TVWD Chief Financial Officer	N/A

## **Willamette Intake Facilities Commission**

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**RESOLUTION WIF-04-18**

**A RESOLUTION ADOPTING WILLAMETTE INTAKE FACILITIES BOARD OF COMMISSIONERS RULES OF CONDUCT**

WHEREAS, Article 4.4 of the Willamette Intake Facilities Intergovernmental Agreement requires the Board of Commissioners to conduct meetings in accordance with the provisions of the Oregon Public Meeting Law, ORS 192.610 to 192.710, to hold meetings as needed, generally on a quarterly basis, but in no event less than semi-annually and to adopt rules governing the conduct of those meetings; and

WHEREAS, the Board of Commissioners wishes to adopt the Rules of Conduct as set forth on Exhibit 1, attached hereto and incorporated by reference and being advised.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE WILLAMETTE INTAKE FACILITIES COMMISSION:

Section 1: The Rules of Conduct attached hereto as Exhibit 1 and incorporated by reference are hereby adopted.

Section 2: The Rules of Conduct may be amended by subsequent resolution of the Board.

Approved and adopted at a regular meeting held on the 30<sup>th</sup> day of July 2018.

\_\_\_\_\_  
John Godsey, Chair

\_\_\_\_\_  
Sean Garland, Vice Chair

## **Willamette Intake Facilities Commission**

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## Willamette Intake Facilities Commission Board of Commissioners Rules of Conduct

### A. AUTHORITY

Article 4, Section 4.4 of the Willamette Intake Facilities Commission Intergovernmental Agreement requires the Board of Commissioners (Board) to adopt rules regarding the conduct of meetings. The Board will review these rules periodically. Amendments will be made as necessary.

### B. DEFINITIONS

As used in these rules, the following mean:

- Board: The Board of Commissioners of the Willamette Intake Facilities Commission.
- Commission: The Willamette Intake Facilities Commission formed by Agreement dated April 18, 2018. (Agreement)
- Managing Agency: The Party designated as Managing Agency under Section 5 of the Commission Agreement.
- Chair and Vice Chair: The Board members elected by the Board pursuant to Section 4.6 of the Agreement.
- Member: A person appointed to the Board by a Party to the Commission.

### C. BOARD MEETINGS

1. Regular Meetings to conduct Commission business will be held quarterly, but no less often than semi-annually on the 4<sup>th</sup> Monday of the designated month and additionally as needed. Meetings will be held at the offices of the Managing Agency unless another location is approved by the Board.
2. Special meetings may be called by the Chair or any two Board members.
3. Executive sessions will be held in compliance with the Oregon Public Meetings Law.

4. The notice, conduct of the meeting, and taking of the minutes will be in accordance with the Oregon Public Records and Meetings law.
5. Telephonic/electronic meetings may be held in compliance with the Oregon Public Meetings Law. Members of the Board may participate and vote in meetings via telephone, electronically, or by other means consistent with the Oregon Public Meetings Law. Voting requirements for a topic shall be as provided in Section 4.5 of the Agreement.
6. Attendance at meetings is expected of all members of the Board who should use their best efforts to attend all meetings.

**D. AGENDA**

1. The agenda headings for Board business meetings are generally as follows:
  - Call to order – roll call
  - General Manager’s Report
  - Public comment regarding items not listed on the agenda
  - Consent agenda
  - New business
  - Information Items
  - Non-agenda Items
  - Adjournment
2. The Managing Agency will designate a General Manager who will be responsible to prepare and schedule agenda items. Members of the Board or the Management Committee may request that items be placed on an agenda at any meeting. The Board will make best efforts to reach consensus on agenda items.
3. Items appropriate for the consent agenda are items that are deemed to be non-controversial and not likely to require separate discussion. The consent agenda is generally approved with one motion. Any member of the Board may ask that any item be removed from the consent agenda. Upon such request, the item in question will be moved to the new business section of the agenda.

4. Non-Agenda items is an opportunity for a Board Member to propose an agenda item for consideration at the next scheduled Board meeting. The proposed topic shall be submitted in writing to the Board Chair stating the topics, issues and questions with sufficient specificity to enable Staff to briefly research the topic. Managing Agency Staff will prepare and distribute an abbreviated report prior to the next scheduled meeting. Based upon the presentation of the report as an agenda item, the Board shall discuss and determine if the topic is concluded, should no longer be pursued or if it should be further studied by Staff. If the Board determines that further study is necessary, the Board will set a schedule for when it will appear on a future agenda. Staff will prepare a comprehensive report for presentation as an agenda item at a future meeting determined by the Board.

**E. BOARD DISCUSSIONS AND DECORUM**

1. Members of the Board will conduct themselves so as to bring credit upon the Commission by ensuring non-discriminatory delivery of public services, keeping informed about matters coming before the Commission, and abiding by Commission decisions, whether or not the member voted on the prevailing side.
2. Members of the Board shall seek to preserve order and decorum during meetings and may not, by conversation or other action, delay or interrupt the proceedings or refuse to obey rulings of the Chair regarding rules of the procedure or these Board rules. When addressing staff or members of the public, members of the Board will confine themselves to questions or issues under discussion and not engage in personal attacks or impugn the motives of any speaker.
3. The following ground rules will be observed to maintain order and decorum during Board discussions. Members of the Board:
  - a. will gather necessary information and ask questions of Managing Agency staff before meetings.
  - b. will have an opportunity to speak once on any pending motion or agenda item and will speak for themselves and not for other members.
  - c. will not speak on behalf of the Board, unless they have been authorized by the Board to do so.

- d. will be open, direct, and candid in the Board forum and should be brief and succinct in stating their views and focus on only one issue topic at a time.
  - e. will not speak until having been recognized by the Chair in the order of their requests. The Chair will provide each member of the Board with an opportunity to speak before recognizing another member of the Board. Members of the Board will not interrupt another member who has the floor.
  - f. will not disguise statements as questions or use repetition as a way to convince others.
  - g. will keep discussions moving and call for a “process check” if the Board becomes bogged down in discussions.
  - h. will set and adhere to time limits on discussions.
  - i. will focus on policy issues and will not criticize or attack each other, staff, or other persons.
  - j. will not seek to discuss a major policy issue that is not a topic on the current agenda but rather seek to have the discussion scheduled on a future agenda using the process for Non-Agenda items in Section D.4.
4. Public comment:
- a. Citizen and community meeting group testimony forms will be available at each business meeting. At the time on the agenda designated for public comment and during any public hearing, any member of the public desiring to address the Board must first request to be recognized by the Chair and then state their name for the record. The Chair may set time limits for comments. The Chair may request that groups with similar comments choose a spokesperson to present joint remarks.
  - b. In general, members of the Board will not respond to comments made during the public comment agenda time, except to ask clarifying questions. Any public requests for Board action will be referred to staff for review before being placed on a future agenda.

## **F. MOTIONS**

### **1. General**

- a. Motions will be clearly and concisely stated. The Chair will state the name of the member of the Board who made the motion and the member who made the second.
  - b. The Chair should repeat the motion prior to voting.
  - c. Most motions die if they do not receive a second. Motions for nominations, withdrawal of a motion, agenda order, roll call votes, and a point of order do not require a second. Any motion on which a second is not made but on which discussion begins is automatically seconded by the member beginning the discussion.
  - d. Discussion of a motion is open to all members of the Board who wish to address the motion. A member of the Board must be recognized by the Chair before speaking.
  - e. The Chair will ask for a voice vote for all final decisions. All members of the Board are expected to vote on each motion unless they are disqualified for some reason. A member of the Board who does not vote must state the basis for any conflict of interest or other disqualification. The Managing Agency will maintain a record of the votes. Any member of the Board may request a roll call vote on any motions.
  - f. At the conclusion of any vote, the Chair will announce the results. Members of the Board who wish to explain the reasons for their votes should do so briefly and succinctly.
2. **Withdrawal.** A motion may be withdrawn by the motion maker at any time without the consent of the Board.
  3. **Table.** A motion to table is not debatable and precludes all amendments or further debate. If the motion prevails, the item may be taken from the table only by adding it to a future agenda for continued discussion.

4. Postpone. A motion to postpone to a certain date is debatable and amendable. A motion to postpone indefinitely is a motion to reject without a direct vote and is debatable and not amendable.
5. Amendment. A motion to amend may be made to a previous motion that has been seconded but not voted on. Amendments will be voted on first, then the main motion as amended (or not amended). Motions to adjourn, amend the agenda order, table, point of order, take from table, and reconsider may not be amended.
6. Reconsideration. When a motion has been decided, any member of the Board who voted with the majority may move for reconsideration. A motion for reconsideration may only be made at the meeting at which the motion on the ordinance, resolution, order, or other decision was approved.

#### **G. BOARD MEMBER CONDUCT**

1. If a member of the Board appears before another governmental agency or organization to give a statement on an issue, the member must state:
  - a. Whether the statement reflects personal opinion or is the official position of the Board; and
  - b. Whether the statement is supported by the majority of the Board.

If the member is representing the Board, the member must support and advocate for the official Board position on the issue rather than a personal viewpoint.

#### **H. CONFIDENTIALITY**

1. Members of the Board will keep all written materials provided to them on matters of confidentiality under law in complete confidence to ensure the position is not compromised. No mention of the information read or heard should be made to anyone other than members of the Board, the Managing Agency, or Board Attorney.
2. If the Board meets in executive session, members should attempt to provide direction or consensus to the Managing Agency on proposed terms and conditions for negotiations. All contact with other parties must be left to the

designated staff or representative(s) handling the negotiations or litigation. Members of the Board may not have any contact or discussion with any other party or its representative nor communicate any executive session discussion.

3. All public statements, information, or press releases relating to a confidential matter will be handled by designated Managing Agency staff or a designated member of the Board.
4. Unless required by law, no member of the Board may make public the discussions or information obtained in executive session.

## **I. COMMUNICATION WITH STAFF**

1. The Board will respect the separation between policy making (Board function) and administration (Managing Agency function) by:
  - a. Working with the Managing Agency staff as a team with a spirit of mutual respect and support.
  - b. Except in a Board meeting, not attempting to exert influence concerning personnel matters, purchasing issues, the award of contracts, or the selection of consultants. However, the sharing of ideas with the Managing Agency in these matters is appropriate.
  - c. Limiting individual contacts with Managing Agency staff to the General Manager so as not to influence staff decisions or recommendations, interfere with their work performance, undermine the General Manager's authority to prevent the full Board from having the benefit of any information received. To this end, members of the Board shall not request Managing Agency staff to perform significant work without the approval of the General Manager, so that workloads and work plans are not adversely impacted.
  - d. Respecting roles and responsibilities of staff when and if expressing criticism in a public meeting or through public electronic mail messages.
2. All written information and material requested by members of the Board will be submitted by Managing Agency staff to the entire Board with a notation stating who requested the information. In situations where Management Agency staff provides a copy of an existing document previously provided to

the Board, staff will advise the entire Board rather than providing the material to each member.

3. The Board will refer any comments or questions regarding administration to the Managing Agency who may either answer the inquiry or ask a staff member to do so.

## **J. MINUTES**

1. Minutes will be prepared with sufficient detail to meet their intended use. Verbatim minutes are not required. The minutes of meetings of the Board will comply with provisions of ORS 192.650 by containing the following information at a minimum:
  - The name of each member of the Board and staff present;
  - All motions, proposals, resolutions, orders, and measures proposed and their disposition;
  - The result of all votes, including ayes and nays and the names of the members of the Board who voted;
  - The substance of the discussion on any matter; and
  - Reference to any document discussed at the meeting.
2. The Board may amend the minutes to more accurately reflect what transpired at the meeting. Upon receipt of the minutes in the Board agenda packet, members of the Board should read and submit any changes, additions, or corrections to the Managing Agency so that a corrected copy may be issued prior to the meeting for approval. Under no circumstances may the minutes be changed following approval by the Board, unless the Board authorizes such change.
3. The Managing Agency or designee will make an audio recording of all meetings and maintain custody of all recordings. A member of the Board may obtain a copy of any recording. A member of the Board may obtain a meeting transcript or partial transcript if it can be produced with nominal staff time. If a transcript would require a significant amount of staff time, the Managing Agency may only produce the transcript with Board approval.

## **K. ADJOURNMENT**



1. Upon motion and majority vote of the members of the Board present, any meeting of the Board may be continued or adjourned from day to day or for more than one day. No adjournment may be for a period longer than until the next regular meeting.
2. Upon the request of a member of the Board, a short recess may be taken during a Board meeting.
3. A motion to adjourn will be in order at any time except as follows:
  - When made as an interruption of a member while speaking; or
  - While a vote is being taken

**L. OREGON GOVERNMENT ETHICS COMMISSION REQUIREMENTS AND REPORTING**

1. Members of the Board must review and observe the requirements of the State Ethics Law (ORS 244.010 to ORS 244.390) dealing with the use of public office for private financial gain.
2. Members of the Board must give public notice of any conflict of interest or potential conflict of interest, and the notice will be reported in the meeting minutes. In addition to matters of financial interest, members will maintain the highest standards of ethical conduct and assure fair and equal treatment of all persons, claims, and transactions coming before the Board.

**K. COMMITTEES**

1. The Board will appoint Standing Committees and Ad Hoc Committees under the terms of the IGA. As part of the charge to a committee, the Board may require compliance with all or part of these Rules of Conduct. The Confidentiality Rules in Section H will apply without necessity of Board action.

## **Willamette Intake Facilities Commission**

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**WIF COMMISSION STAFF REPORT**

**To:** Board of Commissioners  
**From:** David Kraska, PE, General Manager  
**Date:** July 30, 2018  
**Subject:** Management Committee Reports

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**Requested Board Action:**

Informational item. No Board action required

**Key Concepts:**

- The Willamette Intake Facilities (WIF) Commission is a new entity whose partners have organized as a group for the first time.
- These reports from the members of the WIF Management Committee are intended to increase the understanding the WIF Board has of its member agencies.

**Background:**

The WIF Commission comprises the cities of Wilsonville, Sherwood, Tigard, Beaverton, and Hillsboro, and the Tualatin Valley Water District. Each entity supplies water to a unique service area with its own constraints, opportunities and challenges. Accordingly, each entity will have individual needs for the supply from the Willamette River. The WIF Commission provides an opportunity for these entities to address water supply issues together for the common good.

To improve the understanding the entities have for each other, it was suggested that the members of the Management Committee make brief presentations at a WIF Board meeting. These presentations would provide information such as the size and diversity of the service area, anticipated growth, and plans for the Willamette Supply.

**Budget Impact:**

None.


**Staff Contact Information:**

David Kraska, PE; General Manager; 503-941-4561; david.kraska@tvwd.org

**Attachments:**

Presentations from TVWD, Hillsboro, Sherwood, Tigard, Beaverton

**Management Staff Initials:**

General Manager		TVWD General Counsel	N/A
TVWD Chief Engineer	N/A	TVWD Chief Financial Officer	N/A

## **Willamette Intake Facilities Commission**

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# About Tualatin Valley Water District

## *Willamette Intake Facilities Commission Board Meeting*

July 30, 2018



## About TVWD

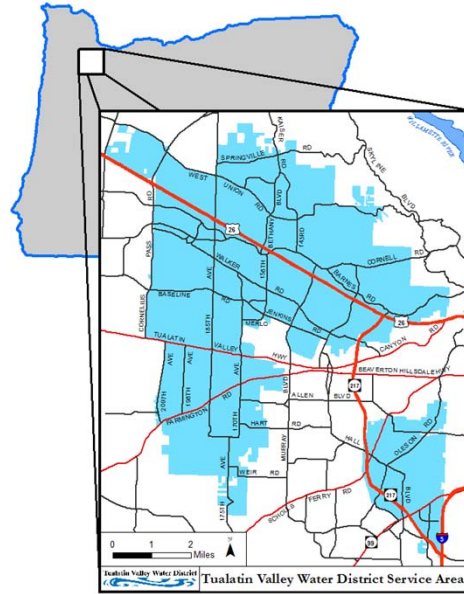
### *A History of Partnerships*

- Expansion of Wolf Creek Highway Water District
- Merger of Wolf Creek & Metzger Water Districts
- Joint Water Commission
- Barney Reservoir Joint Ownership Commission
- TVWD-Beaverton Aquifer Storage & Recovery
- Willamette River Water Coalition
- Willamette Water Treatment Plant
- WCSL Emergency Pump Station (Flow & Eddy)
- Willamette Water Supply Program
- Willamette Intake Facilities Commission



## About Our District

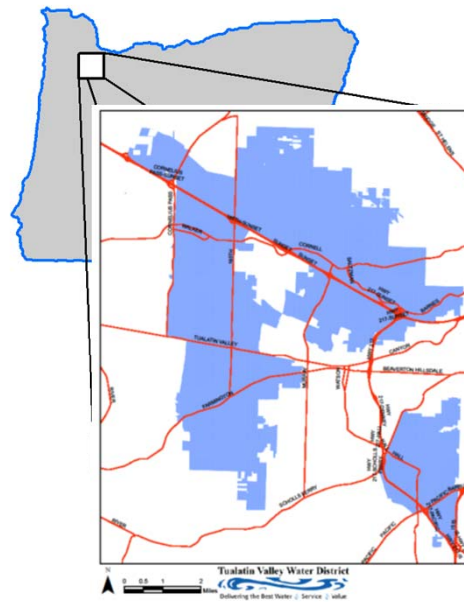
- **Our Mission:** To provide our community quality water and customer service
- **Our Vision:** Delivering the best water, service, value
- **Our Values:** Reliability, Integrity, Stewardship, Excellence, Safety
- Service area covers more than 45 square miles
  - Includes parts of Beaverton, Hillsboro, Tigard, and Unincorporated Washington County



Delivering the Best Water  Service  Value

## About Our District

- **Our Mission:** To provide our community quality water and customer service
- **Our Vision:** Delivering the best water, service, value
- **Our Values:** Reliability, Integrity, Stewardship, Excellence, Safety
- Service area covers more than 45 square miles
  - Includes parts of Beaverton, Hillsboro, Tigard, and Unincorporated Washington County



Delivering the Best Water  Service  Value

## Our Customers

- ~222,000 customers through 62,500 service connections
- TVWD customer base:
  - 94% Residential + Multi-Family
  - 6% Commercial, Industrial and Institutional
- Water Sales FY 2017:
  - 70% Residential + Multi-Family
  - 30% Commercial + Industry
- Nearly 8 Billion gallons in FY 2017



Delivering the Best Water  Service  Value

5



Providence St. Vincent Hospital Meter Vault Replacement

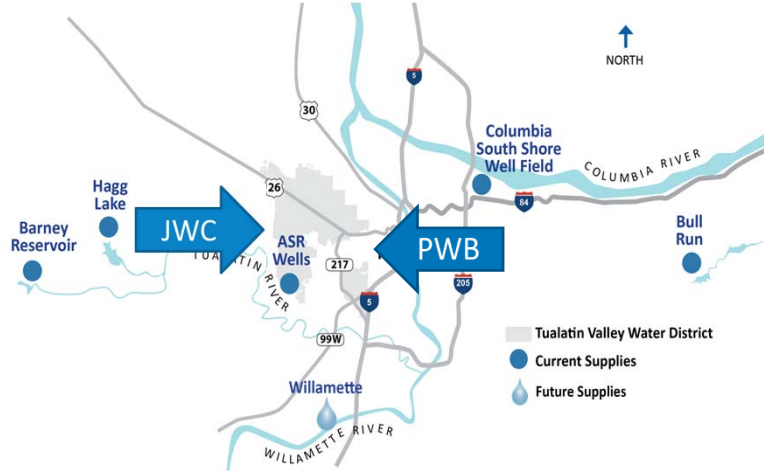
## Water Distribution System Assets

- 787 miles of pipe (2 to 60 inches)
- 40 pressure zones over an elevation range of 385 ft. to 1045 ft.
- 14 pump stations, over 55 pressure regulating valves
- 23 active storage reservoirs with more than 67 MG of capacity
- 1 aquifer storage and recovery (ASR) max capacity of 300 MG
- Micro-hydro electrical generator station

Delivering the Best Water  Service  Value

## Current Water Sources and Supply

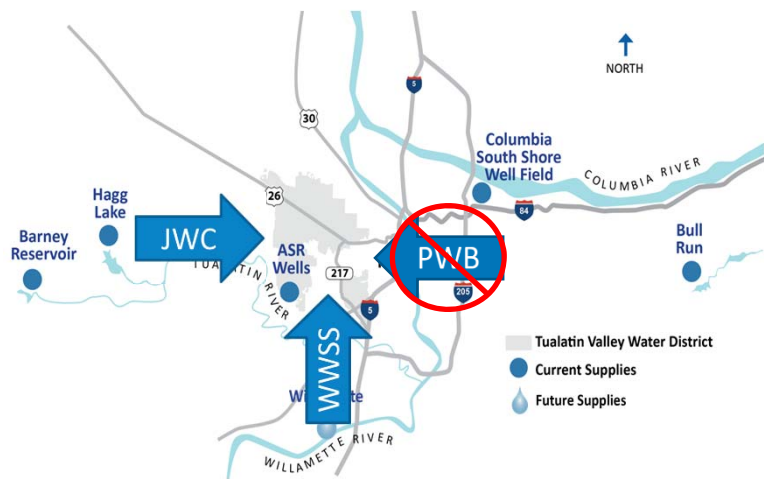
- Two supply sources: Portland and Joint Water Commission
- Average daily supply of 22 million gallons (ranges from 15 mgd to 41 mgd)
- 12.5 million gallons per day available from the Joint Water Commission



Delivering the Best Water Service Value

## TVWD's Plans for the Willamette Supply

- Intend to replace the Portland supply
- Entire system will receive filtered and chlorinated water
- Anticipate significant activities to prepare distribution system for new supply in 2026



Delivering the Best Water Service Value



# Wilsonville Water Supply



Willamette Intake Facilities Commission  
Board Meeting  
July 30, 2018

## About Wilsonville

- 💧 Incorporated in 1968
- 💧 Population – 24,315  
(July 2017)
- 💧 7.6 square miles
- 💧 Located in both Washington and Clackamas Counties



## Our Customers (2017)

- Water Accounts – 7576
- Customer Base:
  - Commercial – 6.1%
  - Residential – 82.1%
  - Public – 1.0%
  - Industrial – 1.9%
  - Multi-Family – 6.7%
  - Other – 2.2%
- Water Sales - \$5,045,530
  - Commercial & Industrial & Public – 28%
  - Residential & Multi-Family – 72%
- Average Daily Demand – 5.563 MG
- Peak Day Demand – 13.172 MG (August 2, 2017)

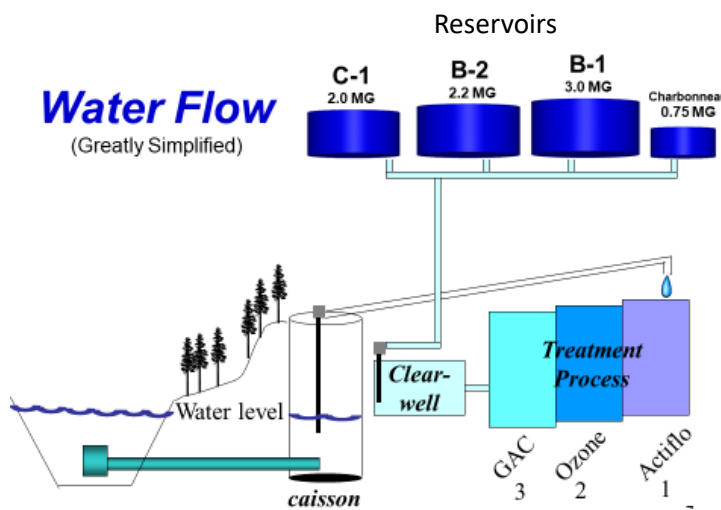


## Willamette River Water Treatment Plant

- Partnered with Tualatin Valley Water District to construct WRWTP
- Plant completed April 2002
- Production capacity 15 MGD
- City of Sherwood purchase 5 MDG capacity in 2012



# Water Treatment Process



# Water Distribution

- 💧 119 miles of water pipe line
- 💧 3 pressure zones over elevation range of 100 feet to 410 feet
- 💧 Over 4200 back flow devices
- 💧 4 reservoirs with 10 MG storage capacity (includes WRWTP clear well)



## Current Water Sources and Supply

- 💧 10 MGD capacity from Willamette Water Treatment Plant
- 💧 8 groundwater wells (emergency back-up)



## Questions?



# About The City of Sherwood Water System

*Willamette Intake Facilities Commission Board Meeting*

July 31, 2018



## About Sherwood

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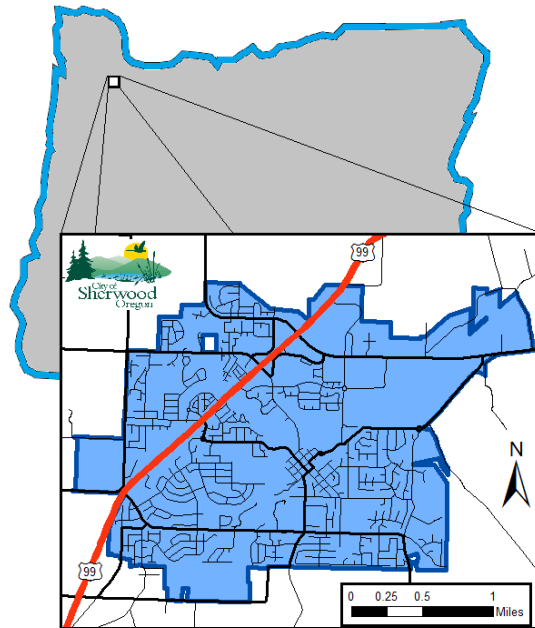
### *A History of Partnerships*

- City of Tualatin and Tualatin Valley Water District for Portland Water
- Willamette River Water Coalition
- Regional Water Providers Consortium
- City of Wilsonville and TVWD for Willamette Water Treatment Plant
- City of Wilsonville Transmission Pipeline
- Willamette Intake Facility Commission



## About Our City

- **Our Mission:** Provide high quality services for all residents and businesses through strong relationships and innovation in a fiscally responsible manner.
- **Core Values:**
  - Citizen engagement
  - Community Partnerships
  - Quality Service
  - Fiscal Responsibility
  - Community Livability
  - Community Pride
  - Transparent Government
  - Forward Thinking



## Our Customers

- ~19,000 customers through 6,000 service connections
- Sherwood customer base:
  - 92% Residential + Multi-Family
  - 8% Commercial, Industrial and Institutional
- Water Sales for 2017:
  - 73% Residential + Multi-Family
  - 27% Commercial + Industry
- Nearly 650 Million gallons in 2017





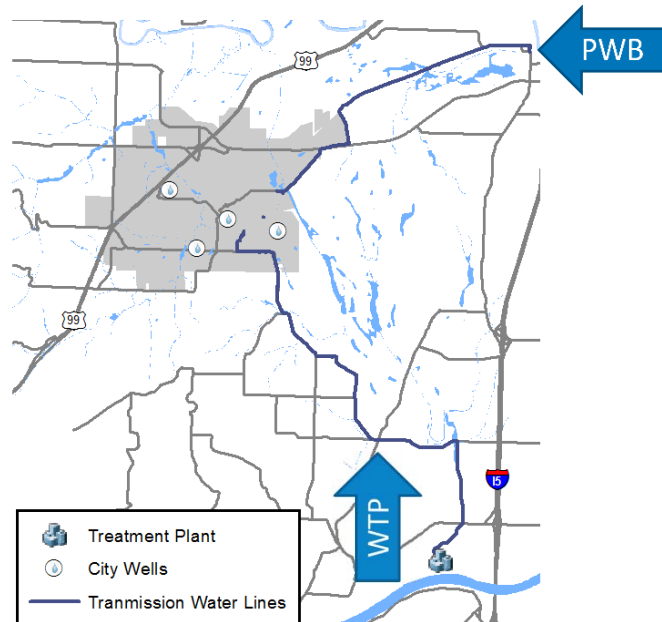
Water System Improvement Project 2011

## Water Distribution System Assets

- Over 82 miles of main line pipe (6 to 48 inches)
- 3 pressure zones over an elevation range of 380 ft. to 525 ft.
- 2 pump stations, 3 pressure regulating valves
- 3 active storage reservoirs with more than 9 MG of capacity
- 4 groundwater wells

## Current Water Sources and Supply

- Three supply sources: Wilsonville Water Treatment Plant is our primary source with Portland Water Connection in Tualatin and groundwater wells for emergency situations
- Average daily supply of 1.87 million gallons (ranges from 1.15 mgd to 4.42 mgd)
- 5 million gallons per day available from WRWTP



## **Willamette Intake Facilities Commission**

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**About City of Hillsboro Water System**  
Willamette Intake Facilities Commission Board Meeting July 30, 2018



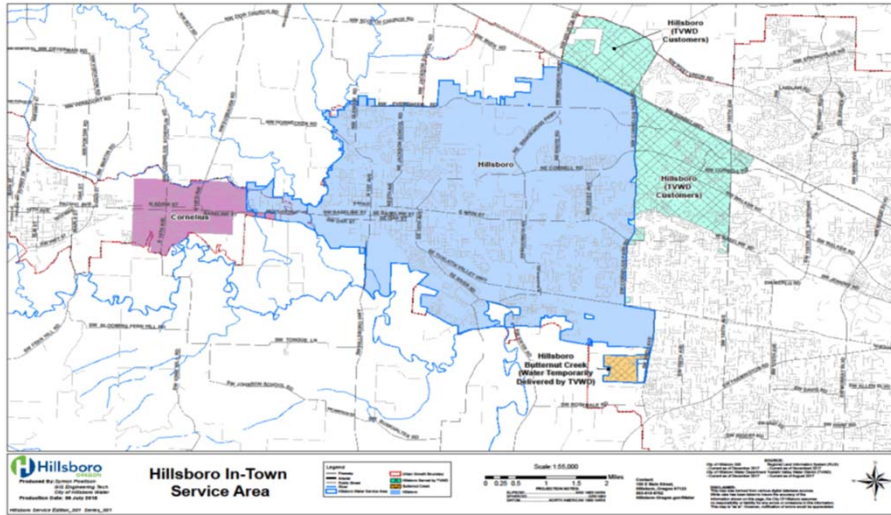
## About Hillsboro Water

By City Charter operates under Utilities Commission.

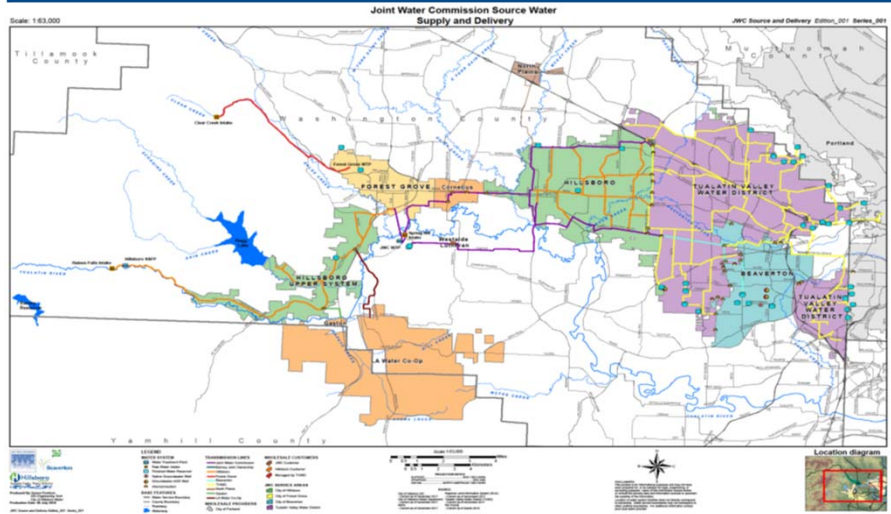
- Retail Water Distribution
  - City of Hillsboro Service area
  - Rural System
- Wholesale Water Supplier
  - City of Cornelius
  - City of Gaston
  - LA Water Co-Op
- Regional Water Supply – Managing Agency
  - Joint Water Commission – Hillsboro, Forest Grove, Beaverton, TVWD
  - Barney Reservoir Joint Ownership Commission – Hillsboro, Forest Grove, Beaverton, TVWD and Clean Water Services



## Hillsboro service area



## JWC & BRJOC service area



## Our Customers

25,000 accounts

85,000 customers

### Customer Base

- 93% Residential
- 6% Commercial
- 1% Industrial

### Water Sales 2017

- 32% Residential
- 13% Commercial
- 47% Industrial
- 8% Wholesale

Average Day Demand 17.4 mgd

Peak Day Demand 32.2 mgd



## Water Distribution Assets

- 313 miles of pipe (2 to 36 inches)
- 3 storage reservoirs and pump stations with more than 31 MG capacity

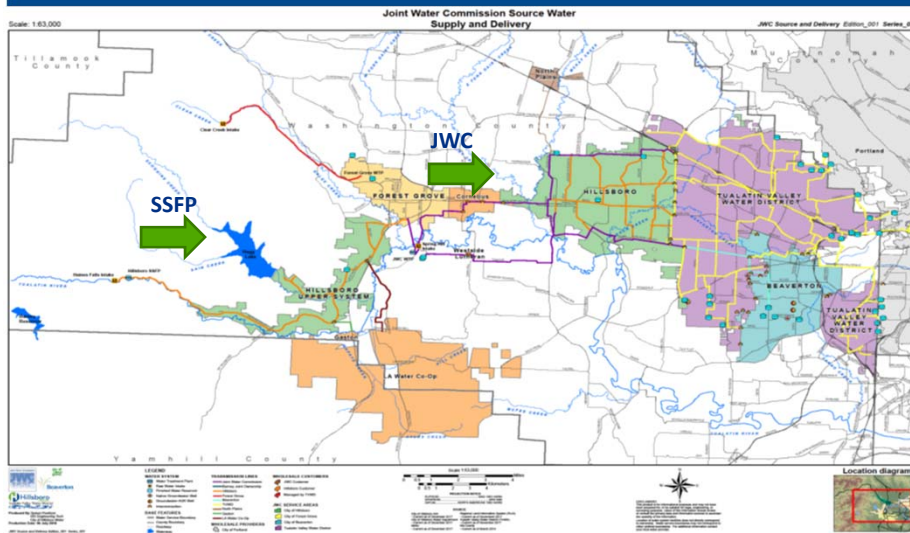


## Current Water Supply Source

1. Hillsboro owns Slow Sand Filter Plant (SSFP) on Upper Tualatin River.
  - 2 mgd capacity
  - Supplies rural retail, LA Water, Gaston
2. Joint Water Commission
  - Hillsboro owns 33.75 mgd WTP capacity
  - Expands to 41.75 mgd by July 2019
  - Supplies Hillsboro city service area and Cornelius



## Current Water Supply Source

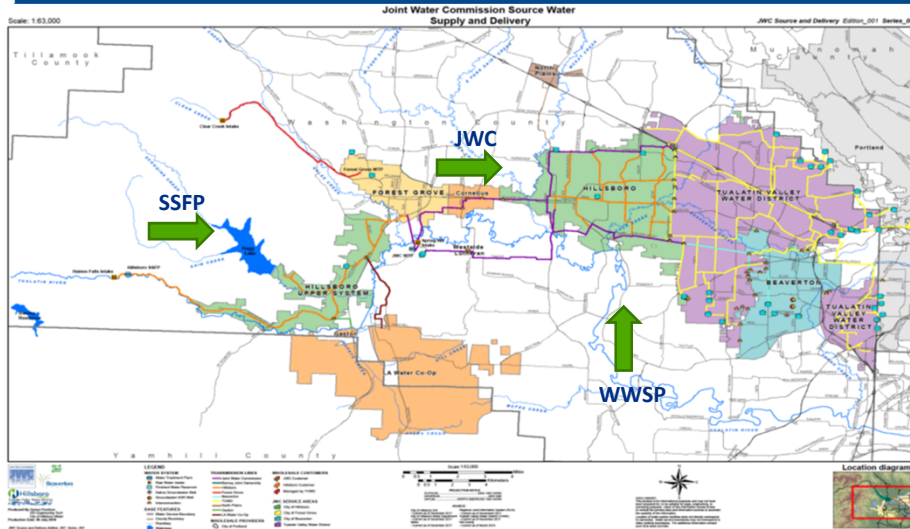


## Hillsboro's plans for the Willamette Supply

- Planning for 36.2 mgd of long-term WWSP capacity
- Helps to meet long-term growth in demand
- Provides resilient, redundant supply
- JWC remains primary source of supply



## Hillsboro's plans for the Willamette Supply



## **Willamette Intake Facilities Commission**

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CITY OF TIGARD  
Respect and Care | Do the Right Thing | Get it Done



## Public Works Department - Water Division

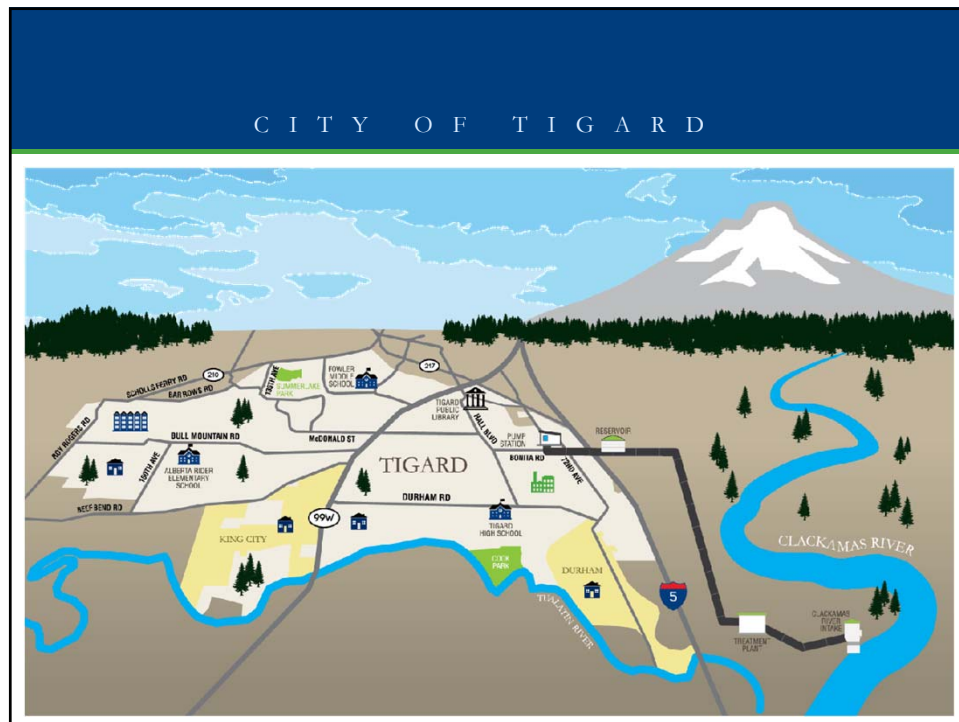
Willamette Intake Facilities Commission Board Meeting  
John Goodrich, Utility Manager | July 30, 2018

CITY OF TIGARD

### About the Tigard's Water Utility Division

*The City of Tigard provides water to over 60,000 individuals in the Tigard Water Service Area. This area includes the City of King City, City of Durham, 7/8ths of the City of Tigard, and the unincorporated area of Bull Mountain.*

- ▶ Tigard's main source of drinking water comes from the Clackamas River
- ▶ The Lake-Oswego Water Treatment Plant expansion and the infrastructure that connects the plant to the City of Tigard were completed in 2016.



CITY OF TIGARD

### Water Distribution System Capacity & Assets

- ▶ Currently 14 million gallons (mgd) Water Supply system capacity with future expansion capability to 18 mgd
- ▶ Aquifer Storage Recovery system capacity 4 mgd with future expansion capacity to 6 mgd
- ▶ Average daily demand: 6 mgd
- ▶ Peak usage: 12 mgd
- ▶ 14 storage reservoirs, 6 pump stations and about 260 miles of pipes



CITY OF TIGARD

### Our Customers

- ▶ 62,000 customers via 19,650 service connections
- ▶ 95% Residential vs. 5% commercial/industrial
- ▶ Portion of the city served by Tualatin Valley Water District



CITY OF TIGARD

### Our Support to Regional Water Supply

#### Regional Memberships and Partnerships:

- ▶ Lake Oswego-Tigard Water Partnership
- ▶ Clackamas River Water Providers
- ▶ Willamette River Water Coalition
- ▶ Willamette Intake Facility Commission
- ▶ Regional Water Providers Consortium
- ▶ Pacific North West Section AWWA
- ▶ Oregon Association of Water Utilities

CITY OF TIGARD

**QUESTIONS?**

*City of Tigard*

- Public Works Department
  - Water Utility Division
- Finance/IT Department
  - Utility Billing Division



***“Committed to provide the highest quality water and service to our Community”***

City of Beaverton

# Beaverton Water Supply

*Willamette Intake Facility  
Board Presentation  
July 30, 2018*

2018 DRINKING WATER QUALITY REPORT  
CITY OF BEAVERTON



## CITY OF BEAVERTON

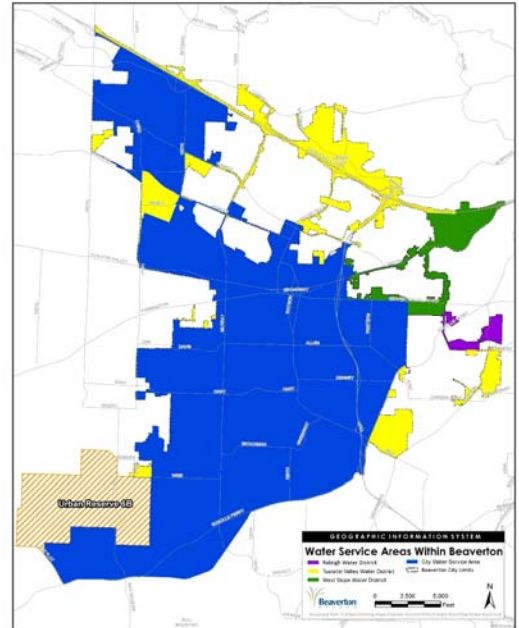
- Incorporated in 1893; City charter approved in 1980; Population 95,685
- Located in Washington County, in the economically diverse Portland MSA
- 7 miles from Portland; 44 miles from Salem; 107 miles from Eugene
- Encompasses 18.7 square miles
- Connected to Interstates 5 and 84 by way of US Route 26 and State Highway 217
- Connected to downtown Portland via MAX light rail
- Located 20 miles from Portland International Airport
- City provides a full range of municipal services
- Grew as a suburb of Portland and over the past few decades has developed its own economic base
- Economic base includes high technology companies, a strong retail trade sector, manufacturing and various industries, and product distribution



CITY OF BEAVERTON WIF PRESENTATION

# Service Area

- The City directly provides drinking water to approximately 71,238 of the City's total population of 95,685
- Tualatin Valley Water District (TVWD), West Slope Water District, and Raleigh Water District provide water to the remaining 22,447 residents within the City limits
- The City's primary source of water comes from the Joint Water Commission, a regional intergovernmental water supply agency of which the City owns a 25% share
- The JWC WTP, located approximately 20 miles from Beaverton
- The JWC supplies water to over 400,000 customers
- The JWC treatment plant can produce up to 75 million gallons per day ("mgd") of finished drinking water. Beaverton owns 18.75 mgd
- The City received 2.61 billion gallons of drinking water from the JWC treatment plant in 2017
- Residential City water customers make up 91% of those served



CITY OF BEAVERTON WIF PRESENTATION

## WATER RIGHTS & SOURCES OF WATER SUPPLY

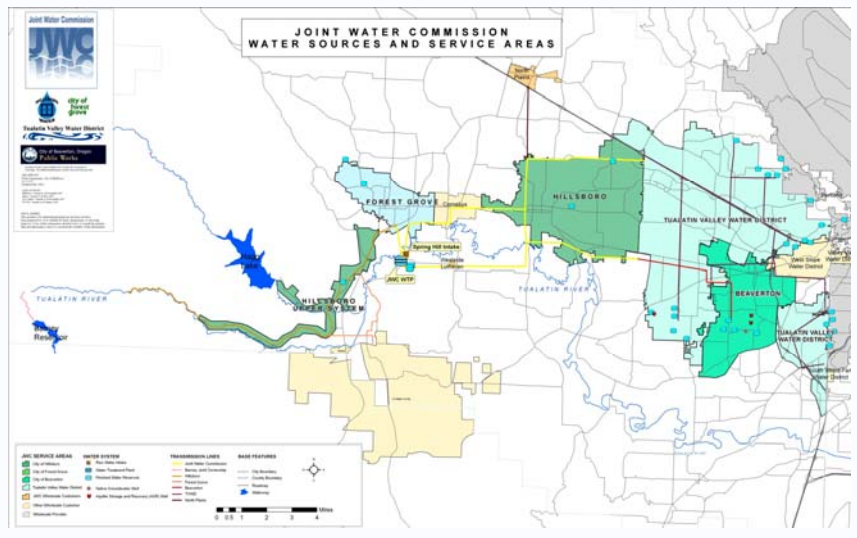
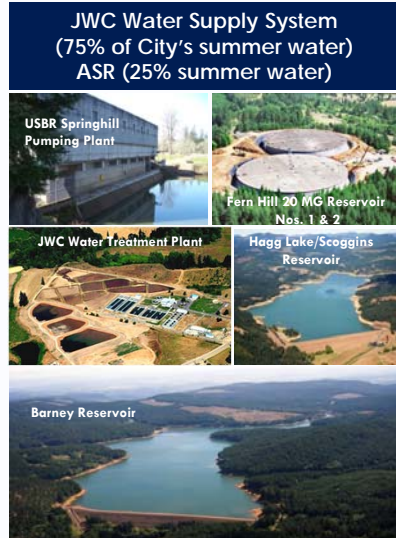
- Since 1980, the City has had a certificated water right on the Tualatin River
- The City's water right allows withdrawals of up to 16 mgd from the river between October and June of every year
- The City owns the right to use up to 1.3 billion gallons in Scoggins Reservoir and 1.4 billion gallons in Barney Reservoir
- During periods of high water demand, the City can supplement its supply of water from City-owned aquifer storage and recovery ("ASR") wells – up to 5 mgd. Additional 6 mgd ASR planned for future
- In 2014, the Willamette Water Supply Program (WWSP) secured a permit from the Oregon Water Resources Department that allows indefinite use of 22 mgd from the Willamette River
  - The City will be able to take advantage of this water right once the WWSP is completed
  - The WWSP is a new water supply source that has an expected operational date of 2026
- In February 2018, the City reached an intergovernmental agreement with TVWD to become a financial partner in the WWSP
- The City's long-term financial commitment to the WWSP is estimated at approximately \$75 million and a total capacity of 5 mgd



US Bureau of Reclamation  
Hagg Lake/Scoggins  
Reservoir

CITY OF BEAVERTON WIF PRESENTATION

# JWC WATER SUPPLY SYSTEM



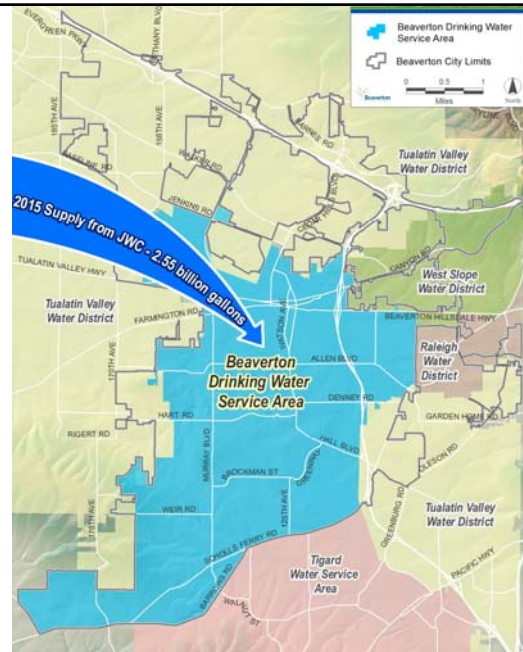
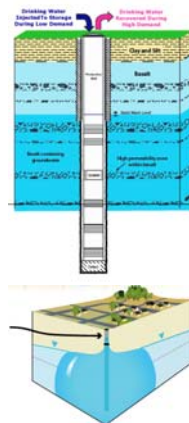
CITY OF BEAVERTON WIF PRESENTATION

## ASR Program

### City of Beaverton

**Total City Population: 95,685**  
**Total Customer Water Meters: 18,500**  
**Population Served: 71,238**

- Second municipality in Oregon to develop ASR, and have been successfully operating ASR wells since 1998.
- Two active ASR wells (ASR2, ASR4), 5MG capacity
- Currently in an ASR expansion phase on a path for up to three future facilities to serve growth, emergencies and create resiliency. ASRs 5, 6, 7 for future

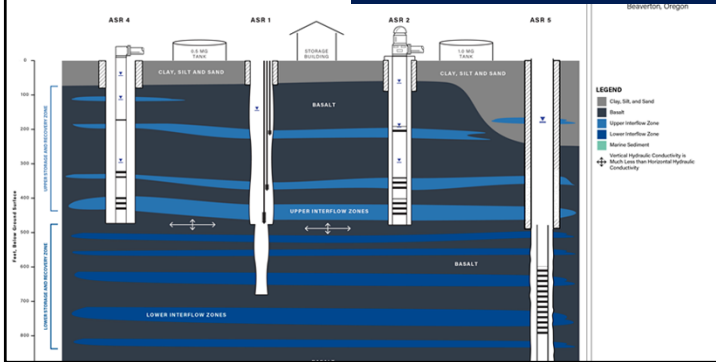


CITY OF BEAVERTON WIF PRESENTATION



## 2018 CIP Water Projects

- ASR 5 (Aquifer Storage & Recovery Pump Station/New location of Water System Telemetry Central Computer Center)
- 2 mgd capacity, 150 MG aquifer storage

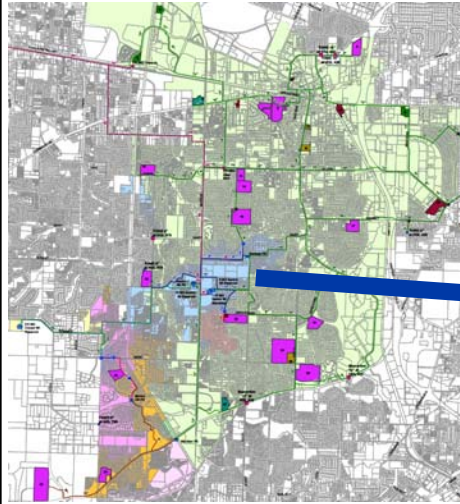


## ASR No. 4

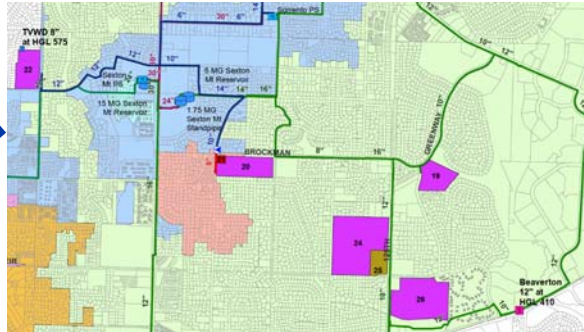
- 3 mgd
- Operational 2007



# SEISMIC RESILIENCE ASSESSMENT

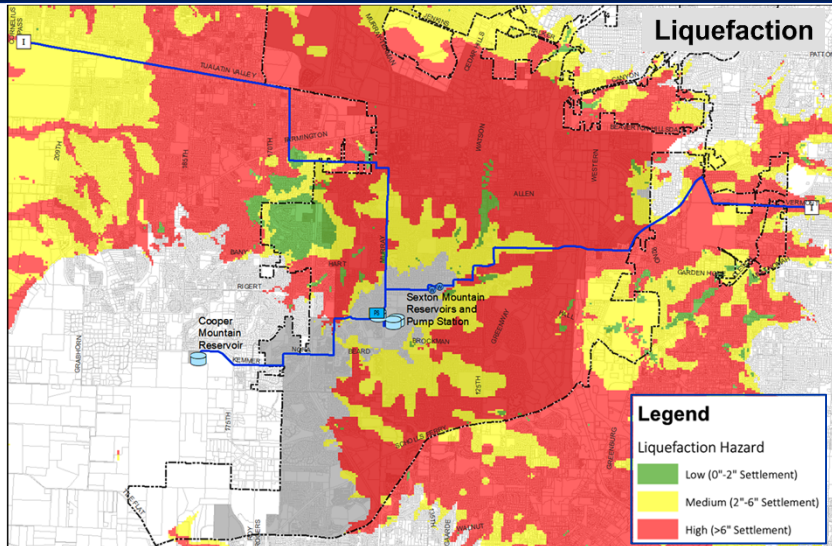


## Water System Backbone and Critical Facilities



CITY OF BEAVERTON WIF PRESENTATION

# SEISMIC RESILIENCE ASSESSMENT



CITY OF BEAVERTON WIF PRESENTATION



**Thank  
You.**

*City of Beaverton WIF Board Presentation  
July 30, 2018*



**WIF COMMISSION STAFF REPORT**

**To:** Board of Commissioners  
**From:** David Kraska, PE, General Manager  
**Date:** July 30, 2018  
**Subject:** Semi-annual update on the Willamette Intake Facilities (WIF) elements of the Willamette Water Supply Program’s (WWSP) Raw Water Facilities Project

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**Requested Board Action:**  
Informational item. No Board action required.

- Key Concepts:**
- The WWSP includes a project titled the Raw Water Facilities Project (RWF\_1.0).
  - The RWF\_1.0 project includes improvements to the WIF.
  - On a semi-annual basis, the WIF Commission will receive an update on the WIF-related elements of the RWF\_1.0 project.
  - This update will present the status of the design of the various improvements, and that the selected contractor has recently received notice to proceed


**Background:**  
The WWSP entails improvements to draw water from the Willamette River, process the water to render it potable, and deliver it to the distribution systems of the Tualatin Valley Water District and the city of Hillsboro. The RWF\_1.0 project, which is part of the WWSP, includes upgrades to the WIF including replacing the screens, expanding the air burst system, and improving the seismic resiliency. This semi-annual update is intended to keep the WIF Commission apprised of the regular progress being made on this project.

**Budget Impact:**  
None.

**Staff Contact Information:**  
David Kraska, PE; General Manager; 503-941-4561; david.kraska@tvwd.org

**Attachments:**  
Raw Water Facilities Project Update presentation

**Management Staff Initials:**

General Manager		TVWD General Counsel	N/A
TVWD Chief Engineer	N/A	TVWD Chief Financial Officer	N/A

## **Willamette Intake Facilities Commission**

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## Willamette Water Supply *Our Reliable Water*

### WIF Commission Board Meeting Update on the WIF Elements of the RWF\_1.0 Project

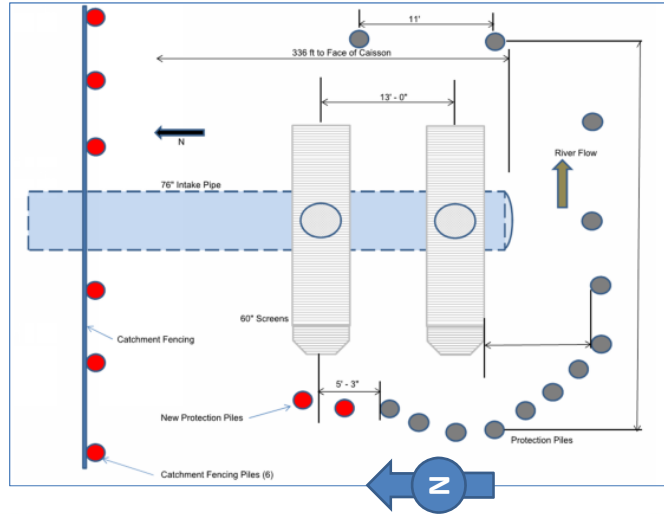
July 30, 2018

## Summary of WIF-Related Improvements

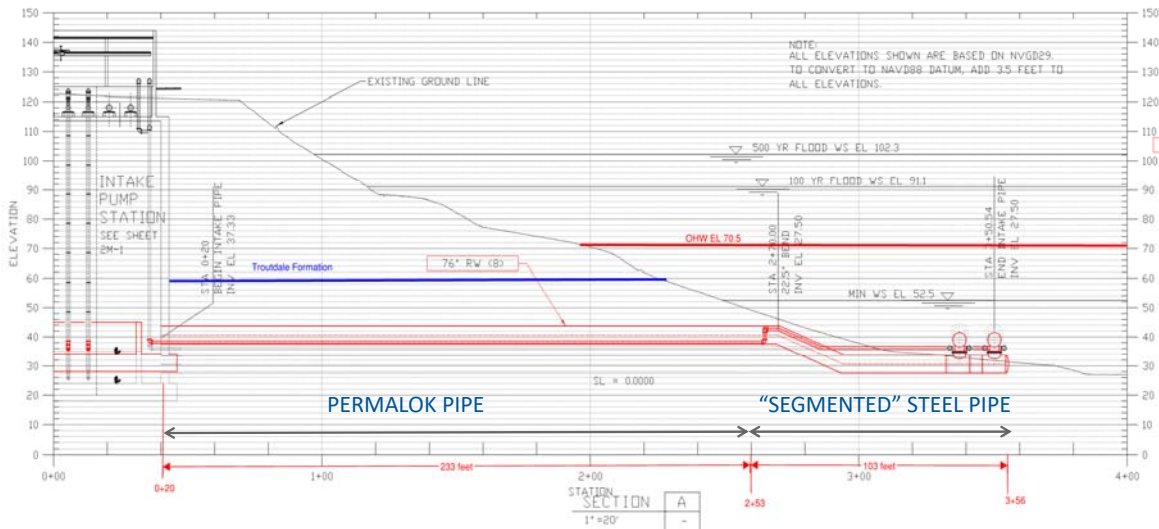
- Expand intake screen capacity
- Improve seismic resilience
  - Intake screens
  - Intake pipeline
  - Caisson
  - Pump station structure
- Air burst system improvements for expanded screens

## Screen Protection Improvements

- Can use the existing bollards
- Plan to install two new bollards
- Considering plan to install catchment fencing
- Screen connection to intake pipe does not require reinforcement for larger screens



## Intake Pipeline Overview

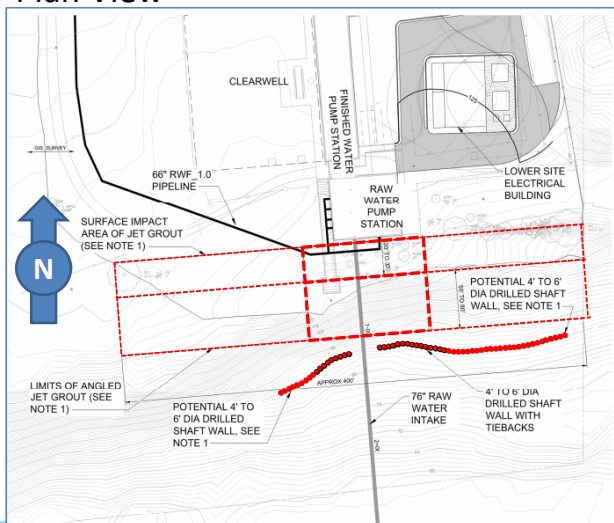


## Intake Pipeline Seismic Retrofit

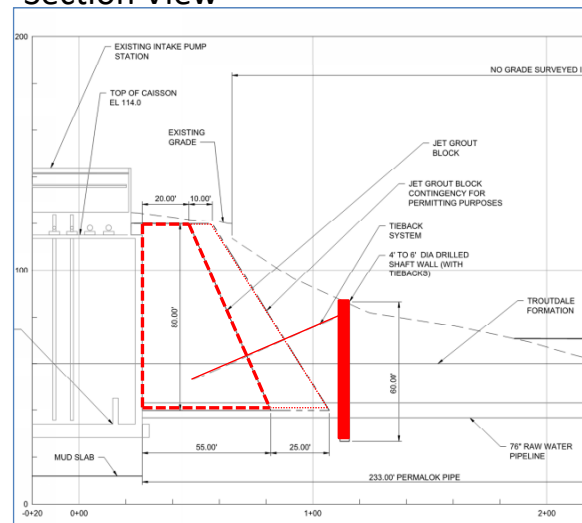
- Segmented steel pipe
  - Field weld joints and repair welded areas
  - Clean the pipe
  - Repair damaged lining, if needed
- Permalock Pipe
  - Field weld joints and repair welded areas
  - Clean the pipe
  - Repair damaged lining at known locations of damage
- Air Pipe
  - Add “quick-connect” fitting for pipe removal in an emergency

## Caisson Seismic Improvements

Plan View



Section View



## Air Burst System Improvements



Replace Compressors



Need Additional Air Receiver Tank

## Status of Construction Manager / General Contractor

Milestone	Date
Kiewit Notice to Proceed	June 26, 2018
Kick-off meeting	June 28, 2018
Procurement plan workshop and site visit	July 25, 2018
Value Engineering #1 meeting	July 26, 2018

## **WIF COMMISSION STAFF REPORT**

**To:** Board of Commissioners

**From:** David Kraska, PE, General Manager

**Date:** July 30, 2018

**Subject:** Willamette Intake Facilities Commission Role in the Willamette Water Supply Program's Raw Water Facilities (RWF\_1.0) Project

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### **Requested Board Action:**

Informational item. No Board action required.

### **Key Concepts:**

- At the April 30, 2018 Willamette Intake Facilities (WIF) Commission Board Meeting, a question was raised about the WIF Commission role in the Willamette Water Supply Program's (WWSP) Raw Water Facilities Project (RWF\_1.0).
- Following up on the question, Clark Balfour, General Counsel for TVWD, reviewed the pertinent agreements and prepared the attached summary memo.
- In summary, TVWD will continue to manage all aspects of design and construction of the RWF 1.0 Project. The WIF Commission will perform the duties of the Board set out in Section 4 of the IGA for ongoing budgeting, Work Plans, and contracting.

### **Background:**

The Willamette Water Supply Program (WWSP) is a major water infrastructure project that entails improvements to draw water from the Willamette River, process the water to render it potable, and deliver it to the distribution systems of the Tualatin Valley Water District and the city of Hillsboro pursuant to an agreement executed in 2015. One of the WWSP projects is called the Raw Water Facilities Project (REF\_1.0). The RWF\_1.0 project includes upgrades to the WIF including replacing the screens, expanding the air burst system, and improving the seismic resiliency.

At the April 30, 2018 WIF Commission Board Meeting, Commissioner San Soucie asked about whether the on-going work on the Willamette Intake Facilities being performed as part of the WWSP's RWF\_1.0 project will come under the jurisdiction of the WIF Commission. It was agreed that staff would review the issue and present the findings at the next WIF Commission meeting

Clark Balfour reviewed the various pertinent agreements and prepared a summary memo that explains that TVWD will continue to manage all aspects of design and construction of the RWF\_1.0 project. David Kraska will make a presentation at the July 30, 2018 meeting that clarifies what elements of the RWF\_1.0 project relate to the WIF, and the WIF Commission's role in that project.

### **Budget Impact:**

None.

**Staff Contact Information:**



David Kraska, PE; General Manager; 503-941-4561; david.kraska@tvwd.org

**Attachments:**

July 10, 2018 Memo from Clark Balfour

WIF Commission Role in the Raw Water Facilities Project Presentation

**Management Staff Initials:**

General Manager		TVWD General Counsel	
TVWD Chief Engineer	N/A	TVWD Chief Financial Officer	N/A





## MEMO

**Date:** July 10, 2018

**To:** Willamette Intake Facilities Commission

**From:** Clark Balfour  
Tualatin Valley Water District, General Counsel

**Re:** Willamette Intake Facilities (WIF) Commission Role in the WWSP Raw Water Facilities Upgrade and Expansion Project (RWF 1.0)

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At the first meeting of the WIF Commission, there was discussion about the work to date on the RWF 1.0 Project and the work moving forward. Commissioner San Soucie asked about the Commission's role for RWF 1.0.

### ***Current Status***

The WWSP will construct the entire Willamette Water Supply System (WWSS) to deliver water to TVWD, Hillsboro and Beaverton. Tigard or Tualatin could participate in the future. The RWF 1.0 Project is part of the Willamette Water Supply Program (WWSP). Improvements to the WIF is a relatively small part of the RWF 1.0 Project. Significant work has already taken place and is proceeding rapidly. TVWD has entered into contracts with David Evans and Associates for environmental permitting; a design contract with Black and Veatch (design is approximately 30 percent complete); and a construction manager / general contractor (CM/CG) contract with Kiewit. WWSP anticipates negotiating a Guaranteed Maximum Price with Kiewit and beginning construction in 2019. Other contracts for RWF 1.0 will be minimal.

### ***Role of the WIF and Managing Agency***

The WIF IGA between all parties, the Intake Facilities Agreement and First Amendment between TVWD and Wilsonville, the Intake Purchase and Sale Agreements between TVWD and each of Sherwood, Hillsboro, Beaverton, and Tigard, the Intake Facilities Easement granted to the WIF, and the Pipeline Easement granted to TVWD and Hillsboro speak to the authorization and vesting of TVWD as the Managing Agency responsible to contract for the permitting, design, and construction of the RWF 1.0 Project. The Agreements are summarized below.

TVWD is undertaking these steps through the WWSP staff led by Dave Kraska. In reliance on these agreements and originally as provided in a June 2015 agreement between TVWD and Hillsboro, TVWD has entered into the contracts as described above. TVWD, as Managing Agency, will continue to manage these existing contracts to successful conclusion, as provided in the various agreements. The existing agreements provide for the payment of proportionate shares.

From this beginning point, the role of the WIF Commission, set forth in the IGA, is to approve, among other matters, annual budgets, capital improvement plans, Work Plans, and new contracts as they are developed. The WIF Commission has approved a budget for the Managing Agency tasks for fiscal year 2018-19 and will continue that task annually. TVWD anticipates that a Work Plan for the RWF 1.0 project will be submitted to the Commission in October. That Work Plan will detail the WIF-related elements of the RWF 1.0 work to be performed along with a cash flow model. It will be updated periodically to account for needed changes to RWF 1.0 tasks, especially as they relate to WIF-related items. No new WIF-related contracts are anticipated in the near future. While the WIF Commission will be the approving party and signatory on future contracts, the Managing Agency will use its procurement processes to solicit and present contracts for Commission approval.

**Conclusion**

1. TVWD is designated as the Managing Agency of the WIF under Section 5 and, through WWSP staff, will manage all aspects of design and construction of the RWF 1.0 Project.
2. The WIF Commission will perform the duties of the Board set out in Section 4 of the IGA for ongoing budgeting, Work Plans, and contracting.
3. TVWD (and Hillsboro) have existing contracts for the RWF 1.0 Project work. The contract(s) will still be managed by TVWD as the WIF Managing Agency.
4. Future WIF related contracts will be approved by the Commission. It is unlikely there will be other contracts to perform the RWF 1.0 Project.

**Abbreviated Summary of Agreements:**

1. TVWD/Hillsboro WWSP Agreement June 15, 2015

TVWD and Hillsboro entered into the Agreement for Design and Construction of the Willamette Water Supply Program. The 2015 Agreement provided that those parties would proceed to construct the WWSS. Costs and capacity ownership of assets are allocated on a percentage basis, and TVWD is designated as the Managing Agency. The Agreement provides mechanisms for review and approval of WWSS projects, management during construction by TVWD, and payment.

The 2015 Agreement delegates broad powers to an Executive Committee consisting of Mark Knudson, CEO of TVWD, and Kevin Hanway, Hillsboro Water Department Director. To the extent not delegated by agreement, the separate decision-making processes of each party would be involved. The Executive Committee approved TVWD's hiring of Dave Kraska as the WWSP Director. In turn, TVWD and Hillsboro have dedicated other staff to the WWSP. The majority of WWSP staff consists of Stantec and Carollo personnel selected through a RFP process who are neither employees of Hillsboro or TVWD.

The Agreement anticipates creation of a broader, multi-party ORS Chapter 190 entity and the transfer of existing assets and future WWSS projects to that entity. TVWD and Hillsboro must approve transfer to that new entity, but that is the intent. Recall that it was at this time that

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TVWD, Hillsboro, Tualatin, and the rest of the members of the WIF Commission were meeting to discuss the creation of a single entity under the title of the Willamette Governance Group. Since then, the WGG has changed to the WIF. Ultimately, there will be two ORS 190 entities.

## 2. Willamette Governance Group (WGG).

The WGG process convened all parties who are now WIF members, plus Tualatin. The original plan was to increase capacity and upgrade the existing intake facilities (through the WWSP RWF project) and build the second Water Treatment Plant on the land in Wilsonville jointly owned by TVWD and Wilsonville. From there, the finished water pipeline would go north to the service areas outside of Wilsonville and Sherwood, who already take water from the existing Willamette River Water Treatment Plant on the “lower” portion of the property. While those WGG discussions were underway, TVWD and Hillsboro determined that the second Water Treatment Plant would instead be located on a separate site. It was determined that the WGG parties should jointly participate as capacity owners of the intake facilities under a new agreement, and then have separate agreements to govern the WRWTP and WWSS systems that exit the WIF. Essentially, the scope of the WGG was reduced to negotiating an agreement for the WIF facilities only. That resulted in the WIF IGA and Commission, leaving the rest of the WWSS to be part of another entity to be formed by TVWD and Hillsboro.

## 3. WIF IGA

The WIF IGA recognized a concurrent process to determine participation in the RWF 1.0 expansion and upgrade. A condition of transfer of existing intake capacity by TVWD to the other parties to the WIF, except Wilsonville, required execution of a Purchase and Sale Agreement between TVWD and each individual party. Wilsonville is a co-owner of the assets under existing agreements, and TVWD executed separate agreements with Wilsonville regarding capacity, other WRWTP assets, cost allocations, future easements, and consent to transfer to the other parties and authorization for TVWD to proceed with RWF 1.0 as Managing Agency.

The WIF IGA anticipates the expansion of the WIF intake capacity to 150 million gallons per day. The Board functions most applicable to this discussion are appointment of TVWD as the Managing Agency, approval of a budget and Work Plan, and approval of necessary contracts to achieve the work. The initial budget for WIF Managing Agency activities for fiscal year 2018-19 was approved at the April 2018 meeting. The Work Plan for the WIF-related elements of the RWF 1.0 project will be submitted to the WIF Commission in October 2018.

Confirmation of the appointment of TVWD as the Managing Agency was one of the Commission’s initial actions. Section 5.6 and Exhibit 7 vest TVWD as the initial Managing Agency with powers to manage the WIF during construction of the RWF 1.0 Project and for a post construction period including, development of a Work Plan and Budget, development of a Capital Improvement Plan, and provision of Project Management. An important part of the Managing Agency/WWSP duties are to coordinate with the WRWTP and WWSP to facilitate construction of the WIF-related elements of the RWF 1.0 project. Wilsonville, through Veolia, is

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responsible to manage current operation and maintenance of the WIF during construction to assure delivery of water to Wilsonville and Sherwood residents.

#### 4. Real Estate Agreements

During the WGG and WIF discussions, it was determined that WV/TVWD as property owners needed to grant two easements. The first easement is from WV/TVWD to the WIF Commission for the WIF to perform the Project according to the WIF IGA. The second is from WV/TVWD to TVWD and Hillsboro to construct the WWSS raw water pipeline through the WRWTP property. This latter easement allows for transfer to the WWSS entity when formed. The Intake Facility Agreement between TVWD and Wilsonville dated March 21, 2018 and the First Amendment to the 2000 Agreement dated March 21, 2018 authorizes TVWD to route, design and construct the WWSS pipeline through the WRWTP property as described in the pipeline easement.

#### 5. Purchase and Sale Agreements

As the WIF was being negotiated, it was unclear which parties would finally participate in the WIF and at what level. WIF membership was contingent on who would participate, and individual participation and purchase of TVWD existing capacity and financial commitment for the RWF 1.0 Project was contingent on the terms of the WIF IGA and the pipeline easement. For that reason, TVWD executed a series of two party Purchase and Sale Agreements with Sherwood, Hillsboro, Beaverton, and Tigard.

Each PSA provides that TVWD will sell a share of existing capacity in the Intake Facility at a fixed price to the other party. There is also a commitment for the purchasing party to pay its proportionate share of actual costs to expand the WIF to 150 mgd. Each PSA vests TVWD as the Managing Agency of the RWF 1.0 Project under the powers of the WIF IGA and to cause WWSP staff to undertake all aspects of the expansion. Each PSA provides that TVWD will be the contracting agency, run the design, bid documents, and bids, manage change orders, develop a work plan and budget, and provide invoicing by TVWD of costs as they are incurred. The PSA provides for payment of the value of existing WIF assets, review of design, bid documents and bids/proposals of the RWF Project by each member, and payment by the individual parties of actual costs as they are incurred.

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# WIF Commission Role in Raw Water Facilities Project

## *Willamette Intake Facilities Meeting*

July 30, 2018

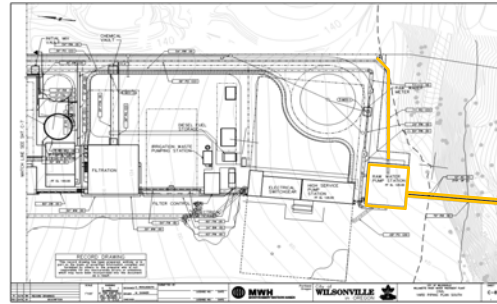


## Outline

- History of the Raw Water Facilities Project and its Relationship to the Willamette Governance Group
- Relevant Information in Agreements
- WIF Commission Role Pre July 1, 2026
- WIF Commission Role Post July 1, 2026

## History of the WWSP's Raw Water Facilities Project

- Originally designed to deliver raw water to two co-located plants
  - Install all mechanical and electrical equipment in existing building
  - Route raw water pipe through the existing plant
- Early 2016:
  - Growing awareness of seismic vulnerability
  - Raw water pipeline constructability issues
  - Evaluation of alternative sites
  - Creation of the Raw Water Facilities as a separate project including:
    - Seismic improvements
    - Bigger pumps and related equipment



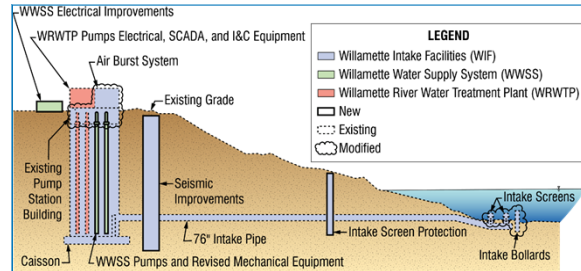
## History of the WWSP's Raw Water Facilities Project

- Late 2016:
  - Initiated physical capacity modeling
  - Prepared initial cost estimates
    - Shared with WGG at July 28, 2016 meeting
- Early 2017
  - Completed the capacity evaluation – proved 150-mgd capacity feasible
  - Completed permit application description based on conceptual design information
    - Updated cost information shared with the WGG at its April 20, 2017 meeting



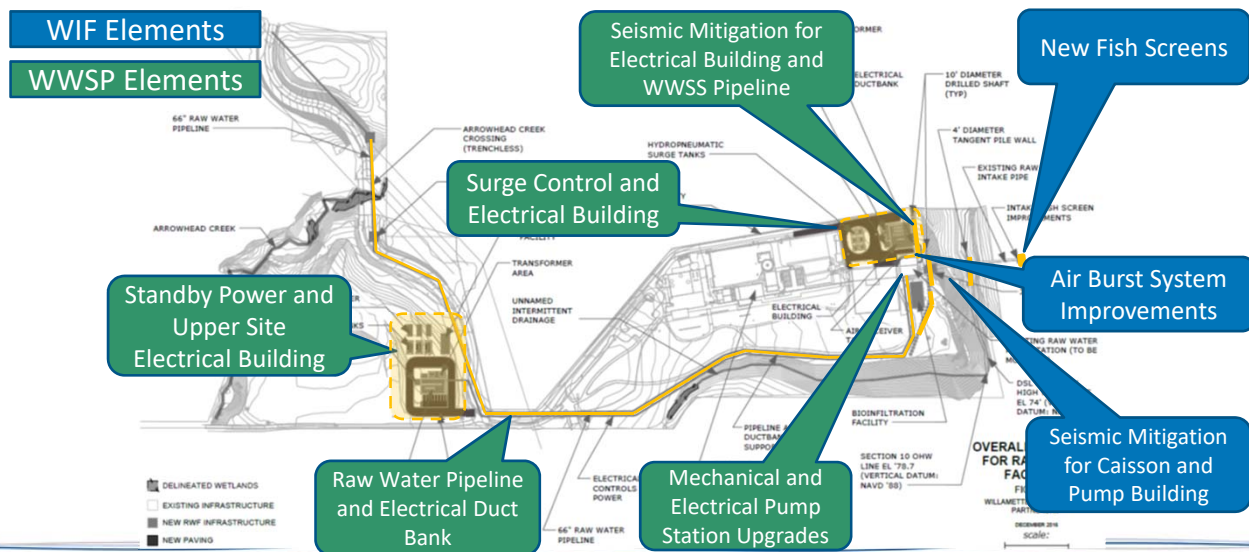
## History of the WWSP's Raw Water Facilities Project

- Late 2017:
  - Hired design consultant for RWF\_1.0
  - Preliminary engineering initiated
    - Geotechnical studies
  - Provided materials for the WIF IGA
  
- Early 2018
  - Completing basis of design report
    - Revised design concepts based on actual site data
  - Hired general contractor (CM/GC)



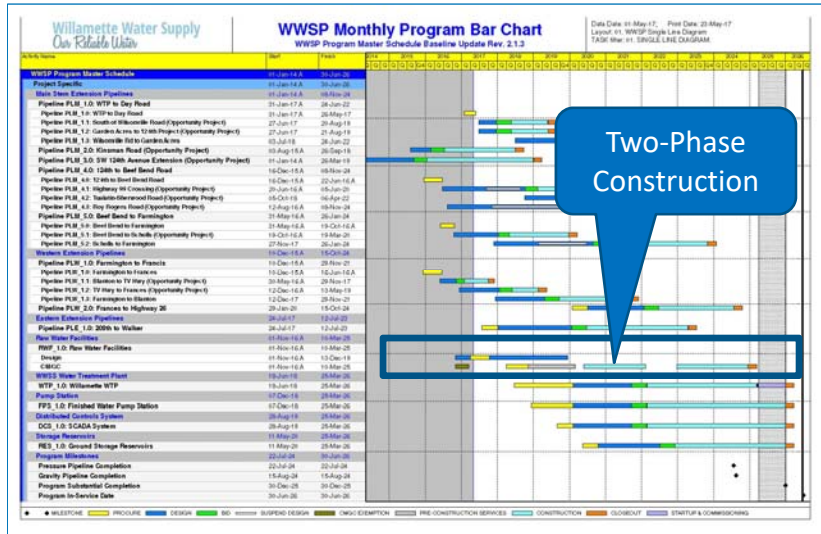
Partner	Capacity (MGD)	Capacity Share (%)	Cost Allocations			Total (\$)
			Permitting (\$)	Screen and Air Burst (\$)	WIF Seismic Cost Allocation (\$)	
Wilsonville	25.0	16.7%	\$ 75,000	\$ 50,000	\$ -	\$ 125,000
TVWD	59.1	39.4%	\$ 393,786	\$ 955,000	\$ 4,487,458	\$ 5,836,244
Sherwood	9.7	6.5%	\$ 77,567	\$ 160,000	\$ 605,280	\$ 842,847
Tigard	15.0	10.0%	\$ 189,674	\$ 930,160	\$ 1,138,949	\$ 2,258,783
Hillsboro	36.2	24.1%	\$ 457,748	\$ 2,244,786	\$ 2,748,663	\$ 5,451,197
Beaverton	5.0	3.3%	\$ 63,225	\$ 310,053	\$ 379,650	\$ 752,928
<b>Total</b>	<b>150.0</b>	<b>100.0%</b>	<b>\$ 1,257,000</b>	<b>\$ 4,650,000</b>	<b>\$ 9,360,000</b>	<b>\$ 15,267,000</b>

## WIF-Related Elements of the WWSP's RWF\_1.0 Project

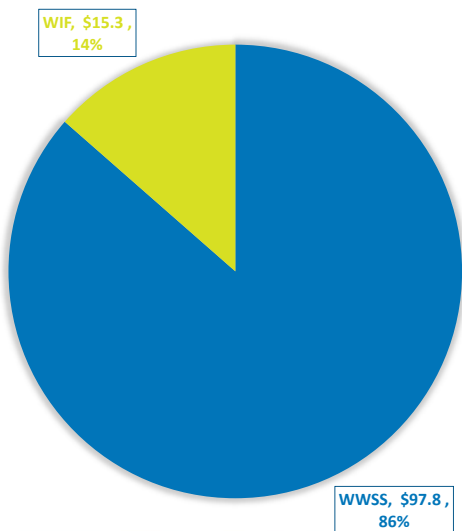


## RWF\_1.0 Project Schedule

- Design Phase:
  - In progress
  - Ends Q4 2019
- Construction Phase 1
  - Starts Q2 2020
  - Ends Q1 2022
- Construction Phase 2
  - Starts Q3 2022
  - Ends Q4 2024



## RWF\_1.0 Estimated Costs – WIF Elements Total about 14 Percent (all values in millions of dollars)



### Estimate Presented to WGG May 2017

Project Component	Estimated Cost (million \$)		
	Total	WIF	WWSS
Intake Screen Replacement	1.40	1.40	
Intake Screen Protection	1.81	1.81	
76" Intake Pipeline Modifications	--	--	
Seismic Stability Improvements			
Existing Caisson Stability	9.36	9.36	
New 66" Pipeline Stability	18.98		18.98
New Electrical Building and Surge Control Facility Stability	8.54		8.54
Existing Pump Station Building Modifications	1.64		1.64
Air Burst System Modifications	1.44	1.44	
WWSS Pumps and Related Equipment	12.49		12.49
WWSS Raw Water Pipeline	12.15		12.15
WWSS Electrical Improvements	40.44		40.44
Civil Improvements	3.42		3.42
Intake Maintenance Modifications	0.10	0.10	
PGE Modifications	--	--	--
Permitting: Intake Replacement	1.3	1.3	
Permitting: WWSS	0.1		0.1
<b>Total</b>	<b>113.17</b>	<b>15.41</b>	<b>97.76</b>

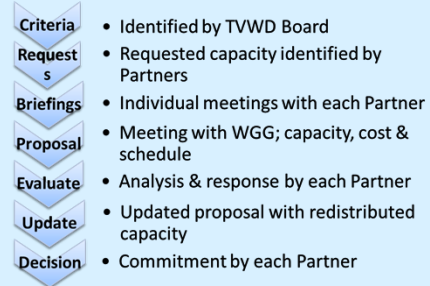
Note: difference in value from the May 2017 WGG presentation (\$15.41M) and the WIF IGA exhibit (\$15.267M) is due to rounding. WIF IGA values will be referenced going forward.



## Summary of the Relationship to the Willamette Governance Group

- RWF\_1.0 project occurred in parallel to WGG process that created the WIF Commission
- WGG members were regularly updated on information as it became available
  - Capacity studies, design changes
  - Cost estimates and shares
- Pertinent information from the RWF\_1.0 project was incorporated into the WIF IGA
- Going forward, similar management and communication is planned:
  - As provided in the WIF IGA, WWSP to manage completing the RWF\_1.0 project with regular communication to WIF Commissioners and staff
  - Need to formalize protocol for invoicing and approving changes

### Willamette Intake Capacity Allocation Process



## Agreements: WWSP Responsible for WIF Upgrades

(reference Clark Balfour memo dated July 10, 2018)

- The WIF Commission role is to approve annual budgets, capital improvement plans, Work Plans, and new contracts.
- The WIF Commission has approved a budget for the Managing Agency tasks for fiscal year 2018-19, and will continue that task annually.
- TVWD plans to submit in October a RWF 1.0 project Work Plan detailing the WIF-related elements of work along with a cash flow model.
  - Update resolution after receiving Guaranteed Maximum Price from CM/GC
    - This update will also include protocol for handling change orders
- While the WIF Commission will be the approving party and signatory on future contracts, the Managing Agency will use its procurement processes to solicit and present contracts for Commission approval.

## WIF Commission Role Pre July 1, 2026

- Adopt Annual Work Plan and Budget
  - Activities and priorities of the Managing Agency
  - Preparation of various plans
  - Capital improvement projects separate from the WWSP's RWF\_1.0 project
- Oversight of Managing Agency's performance including annual audit
- Procure insurance coverage annually
- Set policy related to Willamette River basin activities that are of common interest to the WIF parties
- Approval of changes to the WIF elements of the RWF\_1.0 construction project
  - To be defined in the Project Plan and the October resolution

## WIF Commission Role Post July 1, 2026

- Continue to manage the business affairs of the Commission for the mutual benefit of all the Parties
- Review the performance of the Managing Agency
- Approve operations and management contracts
- Adopt annual work plans and budgets
- Annually adopt a 5-year capital improvement program

# QUESTIONS?

## **Willamette Intake Facilities Commission**

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## **WIF COMMISSION STAFF REPORT**

**To:** Board of Commissioners

**From:** Justin Carlton, WWSP Finance and Administration Supervisor

**Date:** July 25, 2018

**Subject:** Raw Water Facility Project Plan

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### **Requested Board Action:**

No action requested at this time.

### **Key Concepts:**

- TVWD, as the Managing Agency, is responsible for the permitting, design, construction and commissioning of the Intake Facility Expansion Project (RWF\_1.0).
- The RWF\_1.0 Project consists of components that are either specific to the WIF or the WWSS
- The RWF\_1.0 Project Plan will provide clarity regarding the project definition, governance, invoicing, and cost allocations among the WIF and WWSS components.
- The RWF\_1.0 Project Plan is currently being drafted for review by the WIF Finance and Management Committees and will be presented for consideration at the October meeting.
- In addition to the RWF\_1.0 Project Plan, it is anticipated that a FY19 budget for the RWF\_1.0 Project will be presented for consideration at that time. The budget will cover the FY 19 costs as well as costs incurred to date.

### **Background:**

Article 10.1 of the Willamette Intake Purchase and Sale Agreements (PSA) identifies that TVWD, acting through the Willamette Water Supply Program (WWSP) is responsible for the permitting, design, construction, and commissioning of Intake Facility Expansion Project. While Article 10 provides some specifics regarding approval of procurements and related changes, further clarity is needed to establish procedures for WWSP staff. Additionally, estimated cost shares of the RWF Project were presented as Exhibit 11 of the Willamette Intake Facilities Intergovernmental Agreement, but details regarding specific components and allocations of direct expenditures (e.g. project management, design, CM/GC services) and indirect expenditures (e.g. system-wide program costs) need to be addressed. Establishing these procedures will enable the Managing Agency to provide a refined budget and begin invoicing the WIF partners for their respective shares.

### **Budget Impact:**

The estimated cost implications of the RWF\_1.0 project on the WIF parties has been communicated at the Willamette Governance Group meetings and more recently at WIF Finance and Management committees' meetings. A refined cash flow plan is being prepared to be made part of the Raw Water Facility Project Plan, which will be presented to the WIF Commission Board at its October meeting.




### **Staff Contact Information:**

Justin Carlton, WWSP Finance and Administration Supervisor; 503-941-4568; justin.carlton@tvwd.org

**Attachments:**

RWF\_1.0 Project Plan Outline

**Management Staff Initials:**

General Manager		TVWD General Counsel	
TVWD Chief Engineer	N/A	TVWD Chief Financial Officer	

# Raw Water Facility\_1.0 Project Plan

DRAFT OUTLINE – July 2, 2018

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## 1 INTRODUCTION

*This section will state the purpose and scope of this document.*

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## 2 PROJECT DESCRIPTION

*This section will describe the facilities that are part of the WWSP's Raw Water Facilities Project (RWF\_1.0), including the plan for their construction.*

- 2.1 EXISTING FACILITIES
- 2.2 PLANNED IMPROVEMENTS
- 2.3 CONSTRUCTION PHASING

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## 3 GOVERNANCE STRUCTURE

*This section clarifies the governance of the Raw Water Facilities assets, and how they are divided between the Willamette Intake Facilities Commission, and the Willamette Water Supply Program.*

- 3.1 RELEVANT AGREEMENTS
  - 3.1.1 WWSP Construction IGA
  - 3.1.2 Willamette Intake Facilities IGA
  - 3.1.3 Willamette River Water Treatment Plant PSAs
  - 3.1.4 Wilsonville / TVWD Restated Agreement
- 3.2 WILLAMETTE INTAKE FACILITIES COMMISSION
- 3.3 WILLAMETTE WATER SUPPLY PROGRAM / SYSTEM

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## 4 FUNDING

*This section established the funding requirements for each of the WIF and WWSP member agencies.*

- 4.1 ALLOCATION OF DIRECT COSTS
  - 4.1.1 Willamette Intake Facilities
  - 4.1.2 Willamette Water Supply System
- 4.2 ALLOCATION OF SYSTEMWIDE COSTS

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## 5 BUDGET

*This section establishes the annual budget process that will align with the budget calendars for each member agency.*

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## 6 OWNERSHIP

*This section establishes the relative ownership that each member agency holds in each of the facilities.*