Commissioners present:
Tualatin Valley Water District (TVWD): Jim Duggan
City of Hillsboro: David Judah
City of Beaverton: Denny Doyle

Committee Members present:
TVWD: Tom Hickmann, Management Committee
       Paul Matthews, Finance Committee
       Carrie Pak, Operations Committee
City of Hillsboro: Niki Iverson, Management Committee
City of Beaverton: Chad Lynn, Management Committee
                      David Winship, Operations Committee

Managing Agency Administrative Staff present:
Dave Kraska, Willamette Water Supply Program (WWSP) Director; WWSS Commission General Manager
Joelle Bennett, WWSP Assistant Director
Bill Van Derveer, WWSP Program Manager
Lisa Houghton, WWSP Finance Manager
Clark Balfour, TVWD General Counsel
Faye Branton, WWSP Administrative Assistant; WWSS Commission Recorder

Other Attendees:
Mike Britch, WWSP Engineering and Construction Manager
Christina Walter, WWSP Permitting and Outreach Manager
Joel Cary, TVWD Water Resources Division Manager
Chris Wilson, City of Hillsboro-JWC Water Treatment Manager
Robert Annear, Senior Principal Engineer, Geosyntec Consultants

CALL TO ORDER
Chairman Duggan called the regular Willamette Water Supply System (WWSS) Commission meeting to
order at 12:03 p.m.

ROLL CALL
Ms. Branton administered the roll call and noted attendance.

1. GENERAL MANAGER’S REPORT

Mr. Kraska presented a safety moment on avoiding buried utility lines when digging. (See presentation.)

The General Manager’s report included an overview of etiquette for remote meetings; the Approvals
and Procurement Forecast for May through July 2020; updates on projects planning, permitting, and
communications; and status updates on the design and construction of projects.
2. **PUBLIC COMMENT**

There were no public comments.

3. **CONSENT AGENDA**

   A. Approve the May 7, 2020 meeting minutes.

   Motion was made by Doyle, seconded by Judah, to approve the consent agenda as presented. The motion passed unanimously with Doyle, Duggan, and Judah voting in favor.

4. **BUSINESS AGENDA**

   A. Consider adopting Resolution No. WWSS-08-20 amending Exhibit 1 to the Willamette Water Supply System Intergovernmental Agreement to modify the reservoir capacity allocations, contingent upon execution of the Memorandum of Understanding for WWSS Reservoir RES_1.0 Storage Reallocation.  
   
   – *Staff Report – Dave Kraska*

   Mr. Kraska presented the staff report requesting adoption of Resolution No. WWSS-08-20.

   Motion was made by Judah, seconded by Doyle, to adopt Resolution No. WWSS-08-20 amending Exhibit 1 to the Willamette Water Supply System Intergovernmental Agreement to modify the reservoir capacity allocations, contingent upon execution of the Memorandum of Understanding for WWSS Reservoir RES_1.0 Storage Reallocation. The motion passed unanimously with Doyle, Duggan, and Judah voting in favor.

   B. Consider approving an Annual Work Plan for Stantec Consulting Services Inc. to provide Program and Construction Management Services for the Willamette Water Supply Program during Fiscal Year 2021.  
   
   – *Staff Report – Dave Kraska*

   Mr. Kraska presented the staff report requesting approval of the Stantec FY 2021 Annual Work Plan for the Willamette Water Supply Program.

   Motion was made by Doyle, seconded by Judah, to approve the Annual Work Plan for Stantec Consulting Services Inc. to provide Program and Construction Management Services for the Willamette Water Supply Program during Fiscal Year 2021. The motion passed unanimously with Doyle, Duggan, and Judah voting in favor.

   C. Consider approving Contract No. 2020-051 with Tapani, Inc. for PLW_1.3 Pipeline Construction for the Willamette Water Supply Program.  
   
   – *Staff Report – Mike Britch*

   Mr. Britch presented the staff report requesting approval of Contract No. 2020-051 with Tapani, Inc. for PLW_1.3 Pipeline Construction for the Willamette Water Supply Program.

   In response to Commissioner’s question, staff replied that it is too soon to tell if the construction market is trending toward more competitive project bids. Staff are cautiously optimistic for a favorably competitive construction market going forward.
Motion was made by Judah, seconded by Doyle, to approve Contract No. 2020-051 with Tapani, Inc. for PLW_1.3 Pipeline Construction for the Willamette Water Supply Program. The motion passed unanimously with Doyle, Duggan, and Judah voting in favor.

D. Consider adopting Resolution No. WWSS-09-20 adopting a revised Annual Work Plan for the Willamette Water Supply System for fiscal year 2020-21 and WWSP Capital Improvement Plan (Baseline 5.2) and requiring staff to continue working closely with the WWSS Management Committee to control overall WWSS costs and to manage exposure to cost risks. – Staff Report – Dave Kraska

Mr. Kraska presented the staff report and presentation requesting adoption of Resolution WWSS-09-20. (See presentation.)

Referencing Baseline cost trends to date, WWSS Management Committee members commented that typically, estimated cost trends this tight are not seen until approximately 90% design is reached. To hold this kind of stability from concept level to present date for a Program of this magnitude is a remarkable feat and a testament to the team.

Staff responded with appreciation stating they are endeavoring to provide the best financial information to support the partners in managing their costs.

Ms. Houghton presented an overview of the revised Fiscal Year 2021 WWSS Budget, followed by Mr. Kraska presenting closing considerations.

Commissioners expressed appreciation for the thorough, understandable update and the precedent set for managing costs over the next years, as well as for the anticipated positive impact on jobs for the life of the Willamette Water Supply Program.

Motion was made by Judah, seconded by Doyle, to adopt Resolution No. WWSS-09-20 adopting a revised Annual Work Plan for the Willamette Water Supply System for fiscal year 2020-21 and WWSP Capital Improvement Plan (Baseline 5.2). The motion passed unanimously with Doyle, Duggan, and Judah voting in favor.

E. Consider adopting Resolution No. WWSS-10-20 declaring public necessity to acquire property interests over, upon, under and through real property for pipeline section PLM_4.3 for the Willamette Water Supply System. – Staff Report – Joelle Bennett

Ms. Bennett presented the staff report requesting adoption of Resolution WWSS-10-20.

Motion was made by Doyle, seconded by Judah, to adopt Resolution No. WWSS-10-20 declaring public necessity to acquire property interests over, upon, under and through real property for pipeline section PLM_4.3 for the Willamette Water Supply System. The motion passed unanimously with Doyle, Duggan, and Judah voting in favor.

F. Consider adopting Resolution No. WWSS-11-20 establishing regular monthly meeting dates of the Willamette Water Supply System Board of Commissioners for fiscal year 2020-21. – Staff Report – Dave Kraska
Mr. Kraska presented the staff report requesting adoption of Resolution WWSS-11-20.

Motion was made by Judah, seconded by Doyle, to adopt Resolution No. WWSS-11-20 establishing regular monthly meeting dates of the Willamette Water Supply System Board of Commissioners for fiscal year 2020-21. The motion passed unanimously with Doyle, Duggan, and Judah voting in favor.

5. INFORMATION ITEMS

A. Planned July Business Agenda items – Staff Report – Joelle Bennett

Ms. Bennett presented information on anticipated business agenda items for the July 2, 2020 WWSS Commission Board meeting. Staff anticipates recommending approval of (1) Resolution of Public Necessity for PLM_5.3; (2) Findings for Exemption from Competitive Bidding for RES_1.0 and PLM_5.3; (3) WWSS IGA Exhibit 1 amendment to update ownership on the North Transmission Line and South Transmission Line emergency connections and complete other minor updates; and (4) Adding a City of Beaverton Hall Boulevard 16-inch pipeline to the COB_1.0 project.

B. The next Board meeting is scheduled on July 2, 2020, at Tualatin Valley Water District Board Room or via dial-in conference, to be determined based on the COVID-19 situation.

6. COMMUNICATIONS AND NON-AGENDA ITEMS

A. None scheduled.

Commissioners exhorted everyone to continue to stay safe and expressed appreciation to staff for the thorough agenda packet and continued good work.

ADJOURNMENT

There being no further business, Chairman Duggan adjourned the meeting at 1:14 p.m.
Safety Minute:

Call 811 Before Digging!

It’s That Time of Year!

- Landscape and gardening projects beckon!
Know what’s below before you dig!

• More than 20 million miles of buried utilities in the U.S.
• 45% of all homeowners will not call 811 before digging, leading to an underground utility being damaged every six minutes.
• Your risk of causing damage is less than 1% if you call 811 and have utilities marked before you dig.

Know what’s below before you dig!

• Avoid injury to yourself and others
• Avoid property damage
• Avoid the cost of utility repairs
• Avoid potential shutdowns for repairs (water, gas, electric, phone, internet)

½” Natural Gas Line
Only 18” Deep
Prepare to Dig Safely

1. Call 811 before every digging job – planting a tree, putting in fence posts, building a deck, installing a mailbox...
   - 2-10 days before excavation
   - www.callbeforeyoudig.org
   - 1-800-332-2344

2. Wait for the utility markings – usually 2 full business days

3. Dig carefully around the markings

Be Safe! Call 811 Before Digging!
4.D Adopt Revised Fiscal Year 2020-2021 Annual Work Plan and Budget and WWSP Capital Improvement Plan (Baseline 5.2)

June 4, 2020

Outline

- Preview of requested Board action
- Baseline background
- WWSP project contingency and management reserve
- Baseline history
- Proposed Baseline 5.2
- Proposed Revised FY 2021 WWSS Annual Work Plan and Budget
- Closing considerations and commitments
- Requested Board action
Preview of Requested Board Action

Consider adopting a revised Annual Work Plan and Budget for the Willamette Water Supply System (WWSS) for fiscal year 2020-21 and WWSP Capital Improvement Plan (Baseline 5.2) and requiring staff to continue working closely with the WWSS Management Committee to control overall WWSS costs and manage exposure to cost risks.
What is the Baseline?

**Why adopt a Baseline and when?**
- Board to adopt a capital improvement plan (IGA Section 5 & 8)
- Component of WWSS Financial Procedures (IGA Exhibit 6)
- Part of WWSS governance (WWSS MAM)
- Updated annually and modified if needed

**How is it used?**
- Planning and managing work
- Establishing fiscal year budgets
- Detecting potential changes or variances
- Input to risk analysis and management
- Reporting to Board, Partners, WIFIA, and public
- Input to financial forecasting by Partners

Approach to annual Baseline preparation and review

1. WWSP Prepares Initial Draft
2. Partners/WWSS Committees Review
3. WWSP Addresses Comments; Prepares Updated Draft
4. Management Committee Considers Recommendation to WWSS Board
5. WWSS Board Considers Adoption
The Baseline cost estimate has 3 main components

- Program-wide Risks
- Project-level Risks

System-wide

- Program Management
- Overall Design & Construction Management
- Permitting & Mitigation
- Real Estate
- Controls & Procurement
- Outreach
- Legal
- System Integration

Projects

* Includes 3.5% annual escalation

**WWSP PROJECT CONTINGENCY AND MANAGEMENT RESERVE**
How is uncertainty reflected in the Baseline?

**Project Contingency**  
*Changes within the scope of the project, anticipated design developments, planning/estimating evolution, and minor price fluctuations*

**EXAMPLE USES**
- Project details established through design progression
- Minor, within-scope changes during design
- Minor market variations
- Minor, within-scope changes during construction

**Management Reserve**  
*Changes to WWSS projects beyond the Project Contingency intent/amount, changes to System-wide costs, and coverage of Owner’s discretionary costs*

**EXAMPLE USES**
- Unforeseen IGA adds project cost
- Property cost exceeds budget
- Major scope change during design
- Project bids above budget
- Major changes during construction
- New tax imposed
- Escalation exceeds assumed rate

---

How do Project Contingency budgets and the WWSS Management Reserve budget interact?

**Project Contingency Budget**
- Project A: $5M
- Project B: $1M
- Project C: $3M
- Project D: $10M

**Management Reserve Budget**: $40M

- Project Has Unneeded Funds
- Project Requires Add'l Funds

*Amounts shown are for demonstration purposes*
Examples of how changes can affect WWSP budgets

<table>
<thead>
<tr>
<th>Example</th>
<th>Project Budget Change</th>
<th>Management Reserve Change</th>
<th>WWSP Total Baseline Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Project Bids $5M Below Budget</td>
<td>-$5M</td>
<td>+$5M</td>
<td>$0M</td>
</tr>
<tr>
<td>B. New IGA Commitment of $8M</td>
<td>+$8M</td>
<td>-$8M</td>
<td>$0M</td>
</tr>
<tr>
<td>C. $2M Expansion of Ancillary Project</td>
<td>+$2M</td>
<td>$0M</td>
<td>+$2M</td>
</tr>
<tr>
<td>D. Annual Rebaseline Risk Analysis Indicates $4M MR Shortfall</td>
<td>$0M</td>
<td>+$4M</td>
<td>+$4M</td>
</tr>
</tbody>
</table>
Are the Baseline estimates reliable?

<table>
<thead>
<tr>
<th>Projects Bid</th>
<th>WWSP Budget</th>
<th>Contractor’s Bid &amp; Contingency</th>
<th>Percent Difference from Budget</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLM_2.0</td>
<td>$4,070,200</td>
<td>$4,070,200</td>
<td>0%</td>
<td>$0</td>
</tr>
<tr>
<td>PLM_3.0</td>
<td>$11,628,032</td>
<td>$11,361,106</td>
<td>-2%</td>
<td>$266,926</td>
</tr>
<tr>
<td>PLW_1.1</td>
<td>$6,949,989</td>
<td>$6,452,248</td>
<td>-7%</td>
<td>$497,741</td>
</tr>
<tr>
<td>PLM_5.1</td>
<td>$19,221,178</td>
<td>$18,096,002</td>
<td>-6%</td>
<td>$1,125,176</td>
</tr>
<tr>
<td>PLM_5.2</td>
<td>$22,549,998</td>
<td>$16,395,981</td>
<td>-27%</td>
<td>$6,154,017</td>
</tr>
<tr>
<td>PLM_1.2*</td>
<td>$7,832,725</td>
<td>$7,994,660</td>
<td>2%</td>
<td>($161,936)</td>
</tr>
<tr>
<td>PLM_1.1</td>
<td>$3,968,167</td>
<td>$2,872,507</td>
<td>-28%</td>
<td>$1,095,660</td>
</tr>
<tr>
<td>RWF_1.0 Phase I GMP</td>
<td>$41,779,232</td>
<td>$51,095,816</td>
<td>22%</td>
<td>($9,316,584)</td>
</tr>
<tr>
<td>PLW_1.3**</td>
<td>$35,359,893</td>
<td>$31,888,054</td>
<td>-10%</td>
<td>$3,471,839</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>$153,359,414</td>
<td>$150,226,575</td>
<td>-2%</td>
<td>$3,132,839</td>
</tr>
</tbody>
</table>

* PLM_1.2 includes change order to add Day Road crossing
** PLW_1.3 draft Baseline 5.1 budget used for this comparison due to substantial scope differences from Baseline 4.1

Project construction costs comprise a majority of the Baseline

Is the Baseline cost estimate changing over time and why?

- Percentage-based Management Reserve
- Moved WTP from WRWTP to new site
- Created RWF_1.0
- Added 13 partner turnouts
- Added Ground Lease
- Probability-based Management Reserve
- Changed from PLE_1.0 to MPE_1.0
- RWF_1.0 GMP
- Project refinements
- New Oregon tax
- Modified WTP_1.0 cost risk
- Added COB_1.0
- Added COH_1.0

Lists are major changes only
How have Baseline estimates changed by Partner?

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Cost/Baseline Estimate ($ Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>3.1</td>
<td>3.1</td>
</tr>
<tr>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>5.2</td>
<td>5.2</td>
</tr>
</tbody>
</table>

 WWSS-only Baseline cost estimates by Partner

(Ancillary Projects removed; no adjustments to System-wide estimates)

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Cost/Baseline Estimate ($ Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>3.1</td>
<td>3.1</td>
</tr>
<tr>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>5.2</td>
<td>5.2</td>
</tr>
</tbody>
</table>

Difference between Baselines

- Baseline 1.1 v. 5.2: +$128M (+11.8%)
- Baseline 2.1 v. 5.2 (WWSS configuration stabilized): +$61M (+3.3%)

Amounts would be slightly lower with adjustments to System-wide estimates applied.
WWSS Management Reserve estimate for each Baseline

Differences between Baselines reflect:
• Net of all Project and System-wide estimate updates (+/-)
• Net difference in actual v. estimated annual escalation
• Updated risk analysis for all then-current risks

PROPOSED BASELINE 5.2
Baseline 5.2 Partner Cost Summary

<table>
<thead>
<tr>
<th>Partner</th>
<th>Baseline 4.1</th>
<th>Baseline 5.2</th>
<th>Change ($)</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaverton</td>
<td>$61,764,311</td>
<td>$83,247,980</td>
<td>$21,483,669</td>
<td>35%</td>
</tr>
<tr>
<td>Hillsboro</td>
<td>$459,265,062</td>
<td>$462,657,631</td>
<td>$3,392,569</td>
<td>1%</td>
</tr>
<tr>
<td>TVWD</td>
<td>$729,037,856</td>
<td>$780,603,831</td>
<td>$51,565,975</td>
<td>7%</td>
</tr>
<tr>
<td>WIF</td>
<td>$13,885,102</td>
<td>$15,019,653</td>
<td>$1,134,551</td>
<td>8%</td>
</tr>
</tbody>
</table>

Total Estimated Cost | $1,263,952,331 | $1,341,529,095 | $77,576,764 | 6%         |

1 Based on Program cost data and preliminary cost shares, including ancillary projects.
Key changes from Baseline 4.1 to 5.2

<table>
<thead>
<tr>
<th>Budget Element</th>
<th>Change ($M)</th>
<th>Change (%)</th>
<th>Change Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWF_1.0</td>
<td>$14.3</td>
<td>15%</td>
<td>Recognizing Phase 1 GMP and projected Phase 2 GMP</td>
</tr>
<tr>
<td>WTP_1.0</td>
<td>$32.6</td>
<td>11%</td>
<td>Recognizing estimated project cost increase approved in May 2019</td>
</tr>
<tr>
<td>RES_1.0</td>
<td>$1.4</td>
<td>2%</td>
<td>Chemical feed facility and expected increase in rock excavation</td>
</tr>
<tr>
<td>Pipelines</td>
<td>-$13.3</td>
<td>-3%</td>
<td>Net of numerous design refinements</td>
</tr>
<tr>
<td><strong>WWSS Projects</strong></td>
<td><strong>$35.0</strong></td>
<td><strong>4%</strong></td>
<td></td>
</tr>
<tr>
<td>MPE_1.0</td>
<td>$6.9</td>
<td>7%</td>
<td>Design development, adding Metzger turnout, and changing Beaverton-Hillsdale tie-in</td>
</tr>
<tr>
<td>COH_1.0</td>
<td>$1.1</td>
<td></td>
<td>Adding ancillary project</td>
</tr>
<tr>
<td>COB_1.0</td>
<td>$17.7</td>
<td></td>
<td>Adding ancillary project</td>
</tr>
<tr>
<td><strong>Ancillary Projects</strong></td>
<td><strong>$25.7</strong></td>
<td><strong>25%</strong></td>
<td></td>
</tr>
<tr>
<td>Management Reserve</td>
<td>$20.0</td>
<td>61%</td>
<td>Updated risk analysis, including WTP_1.0 cost risk</td>
</tr>
<tr>
<td>System-wide</td>
<td>-$4.7</td>
<td>-3%</td>
<td>Design/construction management staff optimization and utilization of SMEs</td>
</tr>
<tr>
<td>Real Estate</td>
<td>$2.2</td>
<td>4%</td>
<td>Additional easements and increased market valuation</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td><strong>$78.2</strong></td>
<td><strong>6%</strong></td>
<td></td>
</tr>
</tbody>
</table>

How are costs distributed within Baseline 5.2?

- **WWSS Projects**: 71.1%, $953.7M
- **Ancillary Projects**: 9.7%, $130.7M
- **Management & System Integration**: 9.6%, $129.2M
- **Management Reserve**: 3.9%, $52.9M
- **Real Estate**: 3.9%, $52.6M
- **Permitting & Mitigation**: 1.7%, $22.3M
The FY 2021 Budget is a “slice” of Baseline 5.2
Revised FY 2021 WWSS Budget

Key changes from Initial FY 2021 WWSS Budget
CLOSING CONSIDERATIONS AND COMMITMENTS

Cost control will remain a key challenge for years to come

- WWSP understands the Partners’ desire for cost certainty and will collaborate to address their concerns as they arise.
- WWSP will continue to employ robust processes to maximize value and control costs.
- When changes occur, WWSP will communicate as early as possible to enable their management.
- Baseline is updated annually, and can be updated more frequently as necessary.
Anticipated impact of WWSP on jobs

U.S. EPA estimates

4,168 jobs created between 2019 and 2026

Source: U.S. EPA Public Benefits Report for WWSP WIFIA loans

Requested Board Action

Consider adopting a revised Annual Work Plan and Budget for the Willamette Water Supply System (WWSS) for fiscal year 2020-21 and WWSP Capital Improvement Plan (Baseline 5.2) and requiring staff to continue working closely with the WWSS Management Committee to control overall WWSS costs and manage exposure to cost risks
QUESTIONS