

Joint Water Commission



General Manager

Kevin Hanway
150 E. Main Street
Hillsboro, OR 97123
503-615-6585

Board of Commissioners

City of Hillsboro

John Godsey
David Judah
Deborah Raber

City of Forest Grove

Rod Fuiten
Carl Heisler
Peter Truax

City of Beaverton

Denny Doyle
Marc San Soucie
Mark Fagin

Tualatin Valley Water District

Dick Schmidt
Jim Doane
Mark Knudson

HILLSBORO/FOREST GROVE/BEAVERTON/
TUALATIN VALLEY WATER DISTRICT
JOINT WATER COMMISSION (JWC)
PRELIMINARY AGENDA

City of Hillsboro
Civic Center
150 East Main St., **Room 113B**

April 14, 2017
12:30 p.m.
Regular Meeting

Assistive Listening Devices (ALD) and sign language interpreters are available, at no cost, and can be scheduled for this meeting. Please provide at least 72 hours notice prior to the meeting. To obtain these services, call (503) 681-6100 or TTY (503) 681-6284.

ALL TESTIMONY IS ELECTRONICALLY RECORDED.

The Commission lunches at 12:00 p.m.

CALL TO ORDER

Introductions.

1. **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 regular meeting minutes from Friday, October 14, 2016.

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

A. None scheduled.

3. **UNFINISHED BUSINESS**

A. None scheduled.

4. **NEW BUSINESS**

A. Consider approval of proposed FY 2016-17 supplemental budget. *Staff Report – Mellisa Franklin*

B. Consider approval of proposed FY 2017-18 budget. *Staff Report – Mellisa Franklin*



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

- A. Stored water status. *Staff Report – Kristel Fesler*
- B. Water Treatment Plant Upgrade and 85 MGD Expansion. *Status Update – Erika Murphy.*
- C. General Manager's Report. *Staff Report – Kevin Hanway*

6. **ADVICE/INFORMATION ITEMS**

- A. The next JWC and BRJOC meetings are scheduled on Friday, July 14, 2017 at the Civic Center in Room 113B. The BRJOC meeting will be held at 12:30 p.m. with the JWC meeting following.

HILLSBORO/FOREST GROVE/BEAVERTON
TUALATIN VALLEY WATER DISTRICT
JOINT WATER COMMISSION (JWC)

MINUTES

City of Hillsboro
Civic Center Room 113B
150 East Main St.

January 13, 2017
12:30 p.m.
Regular Meeting

Commissioners Present:

Hillsboro:	John Godsey and Dave Judah
Forest Grove:	Carl Heisler, Rod Fuiten and Peter Truax
Beaverton:	Marc San Soucie, Mark Fagin and Denny Doyle
Tualatin Valley Water District:	Jim Doane, Dick Schmidt and Mark Knudson

Staff Present:

Hillsboro:	Kevin Hanway, Rob Dixon, Niki Iverson, Tyler Wubbena, Sophia Hobet, Tacy Steele, Erika Murphy, Mellisa Franklin, Chris Wilson and Tonya Bilderbeck
Beaverton:	David Winship
Forest Grove:	Rob Foster and Derek Robbins
Tualatin Valley Water District:	Carrie Pak and Pete Boone
Clean Water Services:	Mac Martin

Others:

Kerry Larsen – Slayden Constructors
Brad Phelps – CH2M
Tommy Brooks – Cable Huston
Clark Balfour – TVWD Attorney

The Commission lunches at 12:00 p.m.

CALL TO ORDER

Introductions.

1. **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 regular meeting minutes from Friday, October 14, 2016.
 - B. Receipt of FY 2016 Audit Report.

Motion by Doyle, seconded by Schmidt, to approve the Consent Agenda, as presented. Motion carried unanimously with Commissioners Godsey, Judah, Heisler, Fuiten, Truax, San Soucie, Fagin, Doyle, Doane, Schmidt and Knudson all voting in favor.

2. COMMUNICATIONS AND NON-AGENDA ITEMS

A. None scheduled.

3. UNFINISHED BUSINESS

A. None scheduled.

4. NEW BUSINESS

A. Election of Chair and appointment of Vice Chairs and Alternates. *Staff Report – Kevin Hanway*

Designation of Vice Chairs and Alternates

Forest Grove: Truax, Chair
Heisler, Alternate

Beaverton: Doyle, Vice Chair
San Soucie, Alternate

Hillsboro: Godsey, Vice Chair
Judah, Alternate

TVWD: Doane, Vice Chair
Schmidt, Alternate

Motion by Heisler, seconded by Godsey, to appoint Truax as Chair, and appoint the designated Commissioners as Vice Chairs and their respective alternates for the Joint Water Commission for 2017. Motion carried unanimously with Commissioners Godsey, Judah, Heisler, Fuiten, Truax, San Soucie, Fagin, Doyle, Doane, Schmidt and Knudson all voting in favor.

B. Designation of Managing Agency. *Staff Report – Kevin Hanway*

Motion by Doane and seconded by San Soucie, to designate the City of Hillsboro as the managing agency of the Joint Water Commission for 2017. Motion carried unanimously with Commissioners Godsey, Judah, Heisler, Fuiten, Truax, San Soucie, Fagin, Doyle, Doane, Schmidt and Knudson all voting in favor.

After the vote, newly elected Chairman Truax presided over the remainder of the meeting.

C. Consider approval of lease for WTP capacity. *Staff Report – Kevin Hanway*

Hanway said the JWC IGA contains provisions for partner leases from March 1 to February 28 of the following year and requires board approval. He said TVWD is interested in leasing 2 mgd of Water Treatment Plant capacity. Forest Grove and Beaverton have agreed to lease capacity to TVWD from their shares.

Motion by Godsey, seconded by Doane, to approve the lease for WTP capacity, as presented. Motion carried unanimously with Commissioners Godsey, Judah, Heisler, Fuiten, Truax, San Soucie, Fagin, Doyle, Doane, Schmidt and Knudson all voting in favor.

D. Consider approval of Guaranteed Maximum Price contract for Package 1 – WTP 85 MGD Expansion project. *Staff Report – Erika Murphy*

Murphy reported the project was broken into two bid packages, primarily for scheduling purposes, so that the full project can achieve completion as scheduled in 2019. Each bid package includes work related to both the 75 MGD capacity upgrade and the 85 MGD capacity expansion. Package 1 includes construction and procurement work that can begin immediately. Package 2 includes improvements for which construction cannot begin until later this year after land use approvals have been obtained.

During the pre-construction phases of both Package 1 and Package 2 over the last six months, Slayden Constructors has provided services that include, but are not limited to: weekly meetings with the JWC staff and CH2M, design and constructability reviews at 30%, 60% and 90% design, value engineering, cost estimating, project scheduling, and assistance in development of procurement strategies and sub-contractor selection.

Package 1 design is now at 100% complete. Slayden provided costs estimates for 60%, 90% and 100% design of Package 1. Having realistic construction cost estimates during the design phase has allowed the team to modify the scope and design to reduce project costs while still achieving the project objectives.

Package 2 has completed 15% and 30% design stages. Design and permitting processes are scheduled to continue through the summer. A proposed GMP for Package 2 is scheduled for presentation to the Commission in October 2017.

Judah asked if the plant will use more chlorine, and if so, will that require a permitting review for what is put into the air. Murphy said chlorine should not increase, and is still within permitting guidelines for what is put into the air.

Murphy said the GMP that is proposed for award is \$4,869,882. Cost share allocations by partner and a cost summary detail of the GMP are provided in Exhibits 1 and 2, which were included in the agenda packets.

Motion by Doane, seconded by San Soucie, to approve the Guaranteed Maximum Price contract for Package 1 – WTP 85 MGD Expansion project in the amount of \$4,869,882, as presented. Motion carried unanimously with Commissioners Godsey, Judah, Heisler, Fuiten, Truax, San Soucie, Fagin, Doyle, Doane, Schmidt and Knudson all voting in favor.

- E. Consider approval of Resolution 129-J, adopting the JWC Curtailment Plan. *Staff Report – Tacy Steele*

Steele reviewed the Curtailment Plan process, stating the plan update was initiated due to events of 2015. She said flooding caused production issues at the plant for about a week in December 2015, which reduced the WTP's ability to produce enough water to meet partner demands; Hillsboro considered going into curtailment during that time, but TVWD and City of Beaverton reduced their demands by shifting to other sources, allowing Hillsboro to meet demands. However, staff realized after the event that the current JWC Curtailment Plan said very little about non-peak season curtailment.

Steele reported the previous JWC Curtailment Plan was written and approved after the 2001 drought. She said a draft of the updated plan was presented at the July 2016 meeting, and highlighted notable updates including:

- Acknowledgement that the already standard practice that if WTP capacity is limited, the partners will respond first by seeking resolution through collaboration.
- Provision to petition Governor for curtailment exemption in an all-state drought declaration.
- Acknowledgement that any curtailment will be based on stored water and capacity issues, and may not always apply to all partners simultaneously.
- Direction that if the collaborative approach doesn't resolve the situation, the available component capacity will be allocated to individual partners based on their ownership or leased capacity in working component providing supply.
- Updated list of reliability improvements
- Updated summaries of past incidents that required curtailment considerations for the Joint Water Commission.
- References to the curtailment requirement in JWC Limited License agreement for Aquifer Storage and Recover (ASR) wells.
- Acknowledgement that a partner volunteering to shift supplies in order to help another partner avoid curtailment could result in reimbursable costs to the assisting agency(ies).
- Additional reference to the Barney Reservoir Joint Ownership Plan (BRJOC) and the role that Commission would play in a Curtailment situation involving Barney Reservoir.
- References to other JWC plans for direction in specific curtailment activities related to capital infrastructure.
- Updated procedures for coordination with outside agencies.
- Direction by Board to exercise Curtailment Plan.
- Addition of Decision Tree to guide JWC to appropriate curtailment protocol based on situation at hand.

Knudson commended Steele on a job well done, and said it is a great plan. He suggested a decision tree be referenced in the curtailment plan, and on page 13, under "Authority," change "Executive Committee" to "Management Committee."

Motion by Doane, seconded by Heisler, to approve the JWC Curtailment Plan, with the addition of a decision tree reference and the committee name change, as presented. Motion carried unanimously with Commissioners Godsey, Judah, Heisler, Fuiten, Truax, San Soucie, Fagin, Doyle, Doane, Schmidt and Knudson all voting in favor.

- F. Consider approval of Resolution 130-J, adopting JWC WTP Facility Plan. *Staff Report – Kevin Hanway*

Hanway said the draft WTP Facility Plan was presented to the Commission for review at the October Commission meeting, and an overview presentation was made at that meeting. This plan has been updated and revised per comments received from JWC staff and Commissioners. All revisions have been made in "track changes" form to allow quicker review of modifications.

Hanway stated the Resolution notes that the facility plan has been adopted, and clearly cites the purpose of the facility plan is to direct staff to rely on the facility plan.

Doane commented that he feels the document is adequate.

Motion by Godsey, seconded by Doane, to approve Resolution 130-J, adopting the JWC WTP Facility Plan, as presented. Motion carried unanimously with Commissioners Godsey, Judah, Heisler, Fuiten, Truax, San Soucie, Fagin, Doyle, Doane, Schmidt and Knudson all voting in favor.

- G. Consider approval of contract amendment to Carollo Engineers for construction phase services on Backup Power Project. *Staff Report – Erika Murphy*

Murphy reported JWC staff met with Carollo to discuss design communication issues and expectations in June 2015, and to advise Carollo that it objected to some of the fees that had been invoiced. The dispute over fees was not resolved at that time. JWC and Carollo entered into a no-cost contract amendment under which the parties agreed to defer resolution of the disputed fees until completion of the project, and that Carollo would continue to perform its services on the project but would not submit additional payment requests until the project was completed.

She said the project was completed late in the 2015-16 fiscal year, and Carollo submitted its final invoice for all services provided. Of the final invoice amount, JWC has paid \$147,012, which is not disputed as services provided within the contract scope. After that payment, the remaining budget under the existing contract is \$9,383, which is expected to be sufficient to cover Carollo services at the end of the one-year construction warranty period after negotiations were finalized, which is a reduction of over \$30,000 from the original invoice.

Doane said he appreciates staff work to reduce costs by over \$30,000.

Motion by Doane, seconded by San Soucie, to approve the contract amendment to Carollo Engineers for construction phase services on Backup Power Project in the amount of \$101,290.00, as presented. Motion carried unanimously with Commissioners Godsey, Judah, Heisler, Fuiten, Truax, San Soucie, Fagin, Doyle, Doane, Schmidt and Knudson all voting in favor.

5. DISCUSSION ITEMS (These items may result in action by the Commission.)

A. YTD Financial status. *Staff Report – Mellisa Franklin*

Franklin reviewed the financial packet as of November 30, 2016. She reported JWC is at 41% of the budget year.

Franklin said the Fairway fund was an unplanned purchase; however, due to the location of the south transmission line on that property, the most reasonable option was to purchase the property. The sale closed in December 2016.

B. Stored water status. *Staff Report – Kristel Fesler*

Fesler reported since the October meeting, there have been significant inflows of approximately 20,000 acre feet to Hagg Lake. She said WTP staff have been drawing the lake down to meet the rule curve set by the Bureau of Reclamation, and provide flood control to the valley. Fesler said that May 1st is the target date for complete fill of the reservoir.

Fesler also reported that Saddle Mountain has 36 inches of snow. Weather reports are calling for increased temperatures, with a high confidence of flooding next week. The WTP is prepared to handle any water quality impacts due to flooding.

C. Update on Scoggins Dam alternatives evaluation. *Staff Report – Kevin Hanway, David Winship and Tom VanderPlaat*

VanderPlaat updated the commission on the Scoggins Dam alternatives evaluation.

Winship provided his perspective as a JWC partner. He said this is a large percentage of the JWC's summer water, and the JWC is part of a decision-making team for the future of Scoggins Dam. The partners will share 15% of the dam safety costs, and already pay for their share of dam operations and maintenance.

D. General Manager's Report. *Staff Report – Kevin Hanway*

Hanway reported that Tacy Steele was promoted to Program Manager; and Lindsay Wochnick was hired to replace Steele as the Public Relations Information Officer.

Hanway updated the Commission on the Fairway Fund property purchase. He reminded the Commission that they had approved a settlement on the property at their regular meeting in October 2016. The property sale closed in late December 2016. He said staff will present an update at the April meeting regarding an organized clean-up of the property.

6. ADVICE/INFORMATION ITEMS

- A. The next JWC and BRJOC meetings are scheduled on Friday, April 14, 2017 at the Civic Center in Room 113B. The BRJOC meeting will be held at 12:30 p.m. with the JWC meeting following.

There being no further business to come before the Commission, the meeting adjourned at 2:55 p.m.

Chairman _____
Hillsboro/Forest Grove/ Beaverton/
TVWD Joint Water Commission

ATTEST: _____
Secretary



STAFF REPORT

To: Joint Water Commission

From: Mellisa Franklin, Management Analyst

Date: March 30, 2017

Re: Agenda Item 4A – Consider Approval of FY 2017 Supplemental Budget Amendment

Staff Recommendation:

Approve the proposed FY 2017 Supplemental Budget Amendment and Summary of Estimated Additional Revenues and Expenditures by Partner.

Background:

Approval of a supplemental budget is required when unanticipated expenditures and corresponding revenues occur after adoption of the budget. After the Commission approved the proposed budget for the current FY 2016/17, a few events have occurred that require the approval of a supplemental budget, as briefly discussed at the January 13, 2017, Commission Meeting. The total adjustment is less than 10% of the FY 2016/17 Adopted Budget. The net effect of these events total an additional \$795,000 over the FY17 budget in the Projects Capital Outlay Category. These events include:

- Acceleration of the Water Treatment Plant Facility Plan and Expansion Project
- Unanticipated cost of purchasing the Fairway Fund Land
- Rollover cost of the Standby Power Generation that were completed in FY17, versus FY16 as budgeted
- Rollover cost of Install Flow Meter project expenditures that were budgeted in FY 17 but rolled over to FY17, versus FY16

The following provides additional detail for these items. On page 3 is a table showing the proposed Supplemental Budget.

Updated Capital Outlay Expenditures

	Total FY 2016/17 Budgeted Expenditure	Projected to Year End Actual	Difference
1. Standby Power	\$100,000	\$250,000	\$150,000
2a. WTP Facility Plan	\$1,810,000	\$3,375,000	\$1,565,000
2b. WTP Expansion to 85	\$1,400,000	\$2,000,000	\$600,000
3. Install Flow Meters	\$200,000	\$380,000	\$180,000
4. Brookwood/Shute Rd	\$30,000	\$30,000	\$0
5. Fairway Fund Litigation		\$250,000	\$250,000
6. JWC Emergency Equipment Replacement Allocation	\$2,000,000	\$50,000	(\$1,950,000)
Total	\$5,540,000	\$6,335,000	\$795,000

1. Standby Power: The Standby Power project was originally budgeted at \$100,000 for fiscal year 2017. However, due to the contract amendment regarding negotiations with Carollo, which was approved at the October 14, 2016, Commission Meeting, and costs were rolled into FY2017.

2. WTP Facility Plan & WTP Expansion to 85: The Facility Plan and Expansion was originally budgeted \$3,210,000. However, due to the acceleration of the project the projected to year-end costs will be \$5,375,000. Work on the project was accelerated due to 2 reasons:
 - a. Engineering Services, provided by CH2M, were accelerated in order to begin construction phase of Package 2 in the fall of 2017.

 - b. The contract for the first phase of construction (Package 1) was approved Commission meeting on January 13, 2017, for a GMP of \$4,869,882. Some items of the Package 1 construction were accelerated to be completed by the spring of 2017, to not disturb peak water production season (\$139,000). Procurement of long-lead time equipment (i.e. raw water pumps and plate settlers) was necessary to ensure it will be on site and ready to install beginning the fall of 2017. This equipment and materials were ordered at cost of \$1.5 million, and will not be paid for until they are received on site. There is a possibility that the items ordered will be delivered before the end of FY17, increasing expenditures during the current fiscal year.

3. Install Flow Meters: Completion of this multi-year project was budgeted in FY 2017 at \$200,000. After the budget was submitted for review the scope of the project was changed

to include replacement of an additional flow meter; however, that was not followed up with a modification to the proposed budget. The contract for the revised scope was approved and the work has now been completed. The final total project cost will be approximately \$380,000.

4. Brookwood/Shute Rd: This project is projected to be within budgeted amounts.
5. Fairway Fund Litigation: In December of 2016 JWC purchased this property in settlement of litigation, at total estimated cost of \$250,000. This expenditure was not previously budgeted.
6. JWC Emergency Equipment Replacement Allocation: Expenditures in this category are projected to be \$1,950,000 below budget.

Proposed Supplemental Budget Amendment:

The proposed Supplemental Budget increases the Capital Outlay budget by \$645,000, and increases the Resources budget by a corresponding amount to address the revenue to be received from the partners for those expenditures.

	Budget	Adjustment	Revised	
Resources				
Beginning Working Capital	\$ -	\$ -	\$ -	
Water Sales	7,506,856	225,000	7,731,856	
Contributions in Aid	5,490,000	570,000	5,910,000	
Miscellaneous & Interest	13,000	-	13,000	
Equipment Reserve	<u>500,000</u>	<u>-</u>	<u>500,000</u>	
Total Resources	<u>\$13,509,856</u>	<u>\$ 795,000</u>	<u>\$14,154,856</u>	
Requirements				
Personnel Services	\$ 2,592,620	\$ -	\$ 2,592,620	
Materials & Services	3,851,550	-	3,851,550	
Capital Outlay	5,666,000	795,000	6,311,000	Increase due to Capital Projects
Special Payments	899,686	-	899,686	
Contingency	<u>500,000</u>	<u>-</u>	<u>500,000</u>	
Total Requirements	<u>\$13,509,856</u>	<u>\$ 795,000</u>	<u>\$14,154,856</u>	

Please do not hesitate to contact staff with any questions you may have, so we may have time to answer them before the meeting.



STAFF REPORT

To: Joint Water Commission

From: Mellisa Franklin, Management Analyst
Kevin Hanway, General Manager

Date: March 30, 2017

Subject: Agenda Item 4B – Fiscal Year 2017-2018 JWC Proposed Budget

Staff Recommendation:

Approve proposed Fiscal Year (FY) 17/18 budget as presented, subject to final modifications not to exceed 5% of Personnel Service and Special Payments costs as determined by the City of Hillsboro.

Background:

The proposed Budget FY 2017-18 has been reviewed with all partners' managerial, financial and operational staff. All of the partners recommend approval of the proposed budget.

JWC partners are charged only for actual expenditures. Most water production costs are shared by all partners, with allocations based on their 12-month rolling average share of total water production. Capital outlay costs are allocated to partners based on their percentage ownership shares in the asset.

The proposed budget includes the following:

Total Expenditures: The overall proposed budget total expenditures are \$25,967,002. The total budget figure includes water production costs of \$8,567,002 (15% increase from prior year budget) and capital outlay of \$16,900,000.

- Plant Production Volume: Water production unit costs are projected to increase by 13.61% to \$0.49/unit as compared to the \$0.43/unit budget of FY 16/17. Budget estimates for many expenditures correlate to projected plant production volume. Total Projected Plant Production (average day) for Fiscal year 2017-2018 is 35 MGD, an overall production increase of 5% from the current year's budget estimates. All of the JWC partners increased their demand estimates (Hillsboro - 0.65 MGD, Forest Grove - 0.17 MGD, Beaverton - 0.5 MGD, and TVWD - 0.5 MGD) for an overall estimated increase of 1.82 MGD in average daily demand. (Note: Water production

costs in the approved budgets for the past two fiscal years have estimated costs of \$0.43/unit; actual costs in FY 2016 were \$0.35, and actual costs for year-to-date FY 2017 are \$0.27/unit.)

- Personnel Services: The proposed budget includes a 21% increase (\$534,942) in personnel costs. The proposed budget includes:
 - A 5% overall increase in total personnel services to include: (1) estimated increases in Medical and Dental costs for half the year; (2) Hillsboro's estimated Cost of Living Adjustments (COLA) (final figures are not yet determined)
 - Increase in PERS contribution rates, effective July 1, 2017.
 - Employee cost allocations increase from a total of 21.7 to 24.0 FTE. Employee count at the water treatment plant is unchanged, remaining at 17 FTE. Updated employee allocations for other Hillsboro Water Department employees accounts for the balance of the effective FTE total. The increase in effective FTE from the prior year results from the net of increases and decreases in employee cost allocations, with the largest increases flowing from increased allocation of Project Manager and Engineering Coordinator time during design and construction of the water treatment plant expansion project; and increased allocation of time for Water Department Administration Division staff.
- Materials and Services: The proposed Materials and Services budget includes an increase of \$678,000 (approximately 18%) from FY 16/17 budget amounts. The majority of the variance is due to two major studies to be performed that will guide maintenance plans and activities on the transmission pipelines: Cathodic Protection Study (\$160,000) and assessment of the South Transmission Line (\$250,000). There are also additional services needed next fiscal year that are not normally budgeted for, such as: Water Rights study to meet fish screening requirements on the JWC permit S-54737 (\$110,000), and Chlorine Scrubber Maintenance (\$33,000).
- Operating Capital Outlay: The proposed Operating Capital Outlay budget increased by \$45,000 to \$170,250. Budgeted items include: replacement of a Water Treatment Plant truck; purchase of a water quality program boat/trailer/canopy; purchase of HACH WIMS database program (previously budgeted in FY17); improvements to intake gate, gravel parking lot and shop area; and equipment purchases. Additional information on each of the purchases is provided on page six of the proposed budget packet.
- Special Payments: The proposed budget includes a decrease of \$160,000 (18%) in Special Payments from the current budget of \$899,686. The decrease is due to lower estimated lease revenues. (The category of "special payments" also includes items such as insurance, facilities depreciation, support services charges, equipment depreciation, facilities charges, insurance, and payments to other governments. Actual costs will be determined once the cost allocation for the City of Hillsboro has been completed at year-end.)
- Capital Projects: The proposed capital budget includes two projects with a total expenditure of \$14,900,000, plus an additional \$2,000,000 budgeted for Emergency Equipment Repair.

The primary capital project is the continuation of the WTP Expansion Project, which began in FY 16/17. The expansion project is expected to continue into FY 18-19, with a small rollover to FY 19-20. The current estimate for the total construction cost of these improvements is approximately \$35 million.

The proposed budget also includes \$150,000 for a project to clean up the Fairway Fund property that was purchased this year.

Notes describing each of these projects can be found on page 8 of the proposed budget.

Joint Water Commission (JWC) - FY 17/18 PROPOSED BUDGET

JWC Fund	13/14 Actual	14/15 Actual	15/16 Actual	16/17 Budget	YTD 16/17	16/17 PYE	FY 17/18 Budget	Projected To Budget (\$)	Change in FY 17 Budget to Draft \$	Change in FY 16 Budget to Draft %
Revenues										
Beginning Working Capital [1]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
Water Sales										
Hillsboro - Water Purchases [2]	3,014,695	3,082,442	3,071,344	3,729,991	1,981,080	3,152,179	4,316,536	(577,812)	586,545	16%
Forest Grove - Water Purchases [2]	217,478	347,634	339,663	312,436	156,241	203,640	371,676	(108,796)	59,240	19%
Beaverton - Water Purchases [2]	1,165,348	1,204,509	1,140,165	1,512,746	602,191	1,331,620	1,837,473	(181,126)	324,727	21%
TVWD - Water Purchases [2]	1,254,791	1,283,374	1,468,969	1,464,783	754,715	1,417,949	1,824,268	(46,834)	359,485	25%
Tigard - Water Purchases	-	-	149,371	-	-	-	-	-	-	0%
North Plains - Water Purchases [3]	120,555	136,195	142,357	115,000	121,945	115,000	115,000	-	-	0%
North Plains SDC	122,136	55,545	374,144	50,000	274,805	274,805	150,000	224,805	100,000	200%
Lease Revenue [4]	287,244	-	321,426	321,900	-	94,193	102,050	(227,707)	(219,850)	0%
Total Water Sales	6,182,248	6,109,700	7,007,439	7,506,856	3,890,978	6,589,386	8,717,002	(917,470)	1,210,146	16%
Contributions in Aid (Capital Outlay)										
Hillsboro - Capital Outlay	620,496	2,017,496	2,521,950	2,984,320	1,150,114	3,451,088	10,439,900	466,768	7,455,580	250%
Forest Grove - Capital Outlay	184,072	124,038	211,991	531,178	145,733	497,235	1,111,722	(33,943)	580,544	109%
Beaverton - Capital Outlay	345,298	974,833	568,908	1,003,000	228,138	1,043,849	2,140,350	40,849	1,137,350	113%
TVWD - Capital Outlay	1,026,324	580,904	689,108	971,502	341,673	1,068,024	3,058,028	96,522	2,086,526	215%
CWS - Capital Outlay	-	1,543	1,813	-	2,149	2,149	-	2,149	-	0%
Total Contributions in Aid	2,176,190	3,698,814	3,993,770	5,490,000	1,867,807	6,062,344	16,750,000	572,344	11,260,000	205%
Miscellaneous and Interest										
Grants [5]	-	523,421	906,429	13,000	-	13,000	-	-	(13,000)	0%
Miscellaneous Income	828	(531)	53,547	-	11,409	11,409	-	11,409	-	0%
Westside Lutheran School	1,137	1,323	1,242	-	596	1,192	-	1,192	-	0%
Interest Earned	-	10,032	12,380	-	6,907	10,000	-	10,000	-	0%
Total Miscellaneous and Interest	1,965	534,244	973,598	13,000	18,912	35,601	-	22,601	(13,000)	0%
Contingency										
Hillsboro Contingency	-	-	-	225,000	-	-	225,000	(225,000)	-	0%
Forest Grove Contingency	-	-	-	66,650	-	-	66,650	(66,650)	-	0%
Beaverton Contingency	-	-	-	125,000	-	-	125,000	(125,000)	-	0%
TVWD Contingency	-	-	-	83,350	-	-	83,350	(83,350)	-	0%
Total Contingency	-	-	-	500,000	-	-	500,000	(500,000)	-	0%
Total Current Revenues	8,360,404	10,342,759	11,974,807	13,509,856	5,777,697	12,687,332	25,967,002	(822,524)	12,457,146	92%
Total Resources	8,360,404	10,342,759	11,974,807	13,509,856	5,777,697	12,687,332	25,967,002	(822,524)	12,457,146	92%
Expenditures										
Water Production Costs										
Personnel Services [6]	2,132,850	2,391,648	2,419,104	2,592,620	1,867,573	2,530,099	3,127,562	(62,521)	534,942	21%
Materials and Services [7]	3,009,634	3,298,716	3,495,960	3,851,550	2,156,215	3,049,257	4,529,050	(802,293)	677,500	18%
Operating Capital Outlay [8]	27,418	121,629	78,562	126,000	24,914	110,301	170,250	(15,699)	44,250	35%
Special Payments [9]	1,730,119	438,511	843,957	899,686	403,425	662,676	740,140	(237,010)	(159,546)	-18%
Total Water Production Costs	6,900,021	6,250,505	6,837,583	7,469,856	4,452,127	6,352,332	8,567,002	(1,117,523)	1,097,146	15%
Other Expenditures										
Projects Capital Outlay [10]	1,460,383	4,092,253	5,137,224	5,540,000	1,997,313	6,335,000	16,900,000	795,000	11,360,000	205%
Contingency	-	-	-	500,000	-	-	500,000	(500,000)	-	0%
Total Other Expenditures	1,460,383	4,092,253	5,137,224	6,040,000	1,997,313	6,335,000	17,400,000	295,000	11,360,000	188%
Total Current Expenditures	8,360,404	10,342,758	11,974,807	13,509,856	6,449,441	12,687,332	25,967,002	(822,524)	12,457,146	92%
Ending Working Capital	(0)	1	-	-	(671,744)	0	-	-	0	-
Total Requirements	8,360,404	10,342,758	11,974,807	13,509,856	5,777,697	12,687,332	25,967,002	(822,524)	12,457,146	92%
Total JWC Fund	12/13 Actual	13/14 Actual	15/16 Actual	16/17 Budget	YTD 16/17	16/17 PYE	FY 17/18 Budget	Projected To Budget (\$)	Change in FY 17 Budget to Draft \$	Change in FY 16 Budget to Draft %
Total Resources	8,360,404	10,342,759	11,974,807	13,509,856	5,777,697	12,687,332	25,967,002	(822,524)	12,457,146	92%
Total Current Expenditures	8,360,404	10,342,758	11,974,807	13,509,856	6,449,441	12,687,332	25,967,002	(822,524)	12,457,146	92%
Totals	(0)	1	-	-	(671,744)	0	-	(1)	0	-

Notes:

1. Beginning Working Capital (Actual and Projected) will be \$0 as agreed by the JWC Partners

2. Water Purchases

FY 16/17 PYE:

	FY 17 Approved Budget	FY17 Actual	*Water Purchases a/o February 2017 Billing.
Hillsboro	53.86%	53.34%	Water purchases are projected to year end and allocated to each partner using each partner's usage % for the past 12-months of the water delivered report.
Forest Grove	3.66%	3.87%	
Beaverton	21.24%	21.33%	
TVWD	21.24%	21.46%	
	100%	100%	
Per ccf cost	\$ 0.43	\$ 0.27	

FY 17/18 Proposed:

% Allocation for Water Purchases
Based on pro-rata share of plant production estimates

	FY 17 Approved Budget	FY 18 Proposed	FY 17 Plant MGD	FY 18 Plant Est MGD
Hillsboro	53.86%	52.91%	17.9	18.5
Forest Grove	3.66%	3.95%	1.2	1.4
Beaverton	21.24%	21.57%	7.1	7.6
TVWD	21.24%	21.57%	7.1	7.6
	100%	100%	33.2	35.0
Per ccf cost	\$ 0.43	\$ 0.49		13.61%

Water production unit cost increased by 13.61% for this projection. Please note, these are not final numbers and are subject to change. FY17 Actual ccf unit cost is calculated on actual usage. There is a 5.48% (approximately a 1.8 MD) increase in Plant Production for FY17-18 based on estimates provided by each partner.

3. North Plains - Water Purchases account for monthly revenue for water sales to North Plains. JWC Partners water production volume and costs include North Plains. Monthly, each partners water purchases is reduced by the amount of revenue received from the City of North Plains.

4. There is a Water Treatment Plant Capacity Leases scheduled for FY17-18, requested by TVWD and approved by the JWC Commission on the January 13, 2017 meeting. The contract lease is for 2 MGD, in the total revenue of \$102,050 split between Beaverton (44.5%) and Forest Grove (55.5%).

5. Grants: FY17 Grant amounts include \$8,000 from Clean Water Services for Hagg Lake Monitoring. We are also receiving \$5,000 from Infrastructure Finance Authority for creating of a portable, public education display of the Tualatin River Watershed and water distribution system for implementing drinking water source protection.

There are no grants budgeted for FY17/18.

6. Personnel Services:

FY 16/17 PYE:

Personnel Services are projected to be \$62k lower than budgeted amounts due to the following:
a) \$51k of the under spending is due to Extra Labor and Overtime, and we are not projecting to use the full amounts budgeted for FY17.
c) A portion of the underspending is also due to a couple of positions that were vacant and later filled during the fiscal year.

The 2017/18 budget for Personnel Services is preliminary and will change. See the following assumptions:

- a) Budgeted a 5% increase of total compensation for the possible Cost of Living Adjustment (COLA) and medical and dental insurance increases. Actual numbers for the items above will not be finalized until late April.
- b) There are no new full FTE's for JWC.
- c) During calendar year 2016, employees have been keeping track of their time spent between the 3 entities: City of Hillsboro, JWC, and Barney. The information gathered during the calendar year has created updated allocations for each employee and is reflected in the FY 2017/18 Personnel Services budget.
- d) Amounts include updated PERS Employer Contribution rate, effective 7/1/17.

7. Materials and Services:

FY 16/17 PYE

Joint Water Commission (JWC) - FY 17/18 PROPOSED BUDGET

With the short and wet summer during FY17 the Water Treatment Plant was not pushed to budgeted capacity and the costs of chemicals and electrical utilities were lower than budgeted. The projected to year end estimates that we will end the year \$802k lower than the approved FY17 budget. The difference is due to the following:

- a) \$440k of the under spending in Utilities due to a short and wet summer.
- b) \$213k of the under spending in Chemicals due to a short and wet summer.
- c) \$96k of the under spending in Program Materials and Supplies
- d) \$37k of the under spending in Contractual Services

FY 17/18 Proposed:

Materials and Services is projected to be \$677k over the adopted FY17 budget.

a) The majority of the variance is due to Contractual Services. There are 2 major study's to be performed in FY18, a Cathodic Protection Study of \$160k and an interior condition inspection and structural assessment of the South Transmission Line (STL) of \$250k. There are also additional services that have not normally been budgeted such as: Diving Services of \$50k, Transmission Line Corridor Control Work of \$50k, \$110k Water Rights to meet fish screening requirements on JWC permit S-54737, and \$33k Chlorine Scrubber Maintenance that occurs every 4 years. The total variance due to the items above makes \$653k of the difference.

8. **Operating Capital Outlay:**

FY 16/17 PYE

Operating Capital Outlay are projected to be in-line with the budgeted amounts.

FY 17/18 Proposed:

See worksheet named 'Capital Outlay (Operating and Projects) and Contingency' for the listing of FY 17-18 Operating Capital Outlay.

9. **Special Payments:**

FY 16/17 PYE:

Special Payments is projected to be \$237k under the FY 17 budget due to the payments back to Partners who participated in leasing out their Water Treatment Plant Capacity were not as high as budgeted.

FY 17/18 Proposed:

The Special Payment budget is preliminary and will change. The Special Payments line item includes the following: facilities depreciation, support services, equipment depreciation, facility charges, insurance, fleet service charges, and payments to other governments. Our increase estimate is 10% from FY17 Budgeted Support Services and 17% of actual billed FY17 property, plant, and equipment insurance. Once the cost allocation plan is completed for FY 17/18 these numbers will be updated.

10. **Projects Capital Outlay:**

FY 16/17 PYE:

Projects Capital Outlay in total will go over the originally budgeted amounts of \$5.540 million, by \$795 thousand. See worksheet titled '2016-17 Projected to Year End Capital Outlay Project Listing' for details. The majority of the variance is due to the projected acceleration progression of the Facility Plan and Expansion project. We will be going to the April 2017 Joint Water Commission to request for a Supplemental Budget Amendment, to ensure we are in compliance with budget law.

FY 17/18 Proposed:

See worksheet named 'Capital Outlay (Operating and Projects) and Contingency' for the listing of FY 17-18 Project Capital Outlay.

JOINT WATER COMMISSION
2016-17 Projected to Year End Capital Outlay Project Listing

			Budget FY 16-17	PYE				
Project #			Total Budgeted	PYE	Hillsboro	Forest Grove	Beaverton	Tualatin Valley Water District
Projects Capital Outlay - Administration:								
JWC - 01	JWC-01-Standby Power Generation	10414	100,000	250,000	112,500	33,325	62,500	41,675
			100%		45.00%	13.33%	25.00%	16.67%
JWC - 02	Facility Plan, CIMP, & 75 MGD Projects	11011	1,810,000	3,375,000	1,518,750	449,888	843,750	562,613
			100%		45.00%	13.33%	25.00%	16.67%
	JWC WTP Expansion to 85 MGD	10571	1,400,000	2,000,000	1,600,000	-	-	400,000
			100%		80.00%	0.00%	0.00%	20.00%
JWC - 03	JWC-03-Install Flow Meters	11013	200,000	380,000	171,000	50,654	95,000	63,346
			100%		45.00%	13.33%	25.00%	16.67%
JWC - 04	JWC-04-Brookwood/Shute Rd. Widening	10470	30,000	30,000	14,700	-	600	14,700
			100%		49.00%	0.00%	2.00%	49.00%
	Fairway Fund Litiation (Land)	11135		250,000	131,500	-	92,250	26,250
			100%		52.60%	0.00%	36.90%	10.50%
Projects Capital Outlay			3,540,000	6,285,000	3,548,450	533,867	1,094,100	1,108,584
Equipment Replacement:								
	JWC Emergency Equipment Replacement Allocation		2,000,000	50,000	26,300	-	18,450	5,250
	Equipment Replacement		2,000,000	50,000	26,300	-	18,450	5,250
	Ownership %'s:		100%	100%	45.00%	13.33%	25.00%	16.67%
	Less: North Plains SDC		(50,000)	(274,805)	(123,662)	(36,632)	(68,701)	(45,810)
					45.00%	13.33%	25.00%	16.67%
	North Plains SDC		(50,000)	(274,805)	(123,662)	(36,632)	(68,701)	(45,810)
	Total Projects		5,490,000	6,060,195	3,451,088	497,235	1,043,849	1,068,024

Joint Water Commission - FY 17/18 Proposed DRAFT Budget

Revenues		Budget 2016/2017	Budget 2017/2018	Change from prior year	
				\$	%
Beginning Working Capital		-	-	-	0%
Water Sales					
4480	Hillsboro Water Purchases	3,729,991	4,316,536	586,545	16%
4481	Forest Grove Water Purchases	312,436	371,676	59,240	19%
4482	Beaverton Water Purchases	1,512,746	1,837,473	324,727	21%
4483	TVWD Water Purchases	1,464,783	1,824,268	359,485	25%
4484	Tigard Water Purchases	-	-	-	0%
[b] 4485	North Plains Water Purchases	115,000	115,000	-	0%
4486	North Plains SDC	50,000	150,000	100,000	200%
4487	Lease Revenue	321,900	102,050	(219,850)	-68%
Total Water Sales		7,506,856	8,717,002	1,210,146	16%
Contributions in Aid (Capital Outlay)					
4500	Hillsboro Capital Outlay	2,984,320	10,439,900	7,455,580	250%
4501	Forest Grove Capital Outlay	531,178	1,111,722	580,544	109%
4502	Beaverton Capital Outlay	1,003,000	2,140,350	1,137,350	113%
4503	TVWD Capital Outlay	971,502	3,058,028	2,086,526	215%
4504	Tigard Capital Outlay	-	-	-	0%
4505	Special Projects	-	-	-	0%
4506	CWS Capital Outlay	-	-	-	0%
Total Contributions in Aid (Capital Outlay)		5,490,000	16,750,000	11,260,000	205%
Miscellaneous and Interest					
4276	Grants - State	13,000	-	(13,000)	-100%
4600	Miscellaneous Income	-	-	-	0%
4622	Western Lutheran School	-	-	-	0%
4200	Interest Earned	-	-	-	0%
Total Miscellaneous and Interest		13,000	-	(13,000)	-100%
Contingency					
4520	Hillsboro Contingency	225,000	225,000	-	0%
4521	Forest Grove Contingency	66,650	66,650	-	0%
4522	Beaverton Contingency	125,000	125,000	-	0%
4523	TVWD Contingency	83,350	83,350	-	0%
Total Contingency		500,000	500,000	-	0%
Total Revenues		13,496,856	25,967,002	12,457,146	92%
Expenses		Budget 2016/2017	Budget 2017/2018	Change from prior year	
				\$	%
Personnel Services					
5000's	Personnel Services - Administration	556,272	635,994	79,722	14%
5000's	Personnel Services - Operations	2,036,348	2,491,568	455,220	22%
Total Personnel Services		2,592,620	3,127,562	534,942	21%
Materials and Services					
6000's	Materials and Services - Administration	70,100	499,800	429,700	613%
6000's	Materials and Services - Operations	3,781,450	4,029,250	247,800	7%
Total Material and Services		3,851,550	4,529,050	677,500	18%
Numbers compiled from the following workbooks:					
Operating Capital Outlay					
7000-7030	Operating Capital Outlay - Administration	-	-	-	0%
7000-7030	Operating Capital Outlay - Operations	126,000	170,250	44,250	35%
Total Operating Capital Outlay		126,000	170,250	44,250	35%
Special Payments					
8000's	Special Payments	899,686	740,140	(159,546)	-18%
Total Special Payments		899,686	740,140	(159,546)	-18%
Subtotal - Operating Costs		7,469,856	8,567,002	1,097,146	15%
Projects - Capital Outlay					
7040	Project Capital Outlay	5,540,000	14,900,000	9,360,000	169%
7040	Project Capital Outlay - Equipment Reserve	-	2,000,000	2,000,000	0%
Total Project Capital Outlay		5,540,000	16,900,000	11,360,000	205%
Contingency					
8300	Contingency	500,000	500,000	-	0%
Total Contingency		500,000	500,000	-	0%
Total Expenses		13,509,856	25,967,002	12,457,146	92%
Allocation of Operating (Water Production) Costs:					
Subtotal-Operating Costs sum of [c]:		6,444,170	7,406,612	962,442	15%
Subtotal-Operation Costs sum of [d]:		703,786	808,340	104,554	15%
STL Condition Assessment Project [\$250k]		-	250,000	250,000	0%
Less North Plains Water Purchases [b]:		(115,000)	(115,000)	-	0%
Less Grant Monies		(13,000)	-	13,000	-100%
Total Operating Costs:		7,019,956	8,349,952	1,329,996	19%
Plant Production %'s [sum of c]:					
Hillsboro	52.91%	3,470,885	3,918,955	448,070	13%
Forest Grove	3.95%	235,684	292,857	57,173	24%
Beaverton	21.57%	1,368,800	1,597,400	228,600	17%
TVWD	21.57%	1,368,800	1,597,400	228,600	17%
Totals	100%	6,444,170	7,406,612	962,443	15%
[Plant Production % from "Plant Prod Estimate" tab; % allocation for each partner.]					
Ownership %'s [sum of d]:					
Hillsboro	45.00%	256,862	266,081	9,219	4%
Forest Grove	13.33%	76,088	78,819	2,731	4%
Beaverton	25.00%	142,701	147,823	5,122	4%
TVWD	16.67%	95,153	200,618	105,465	111%
Totals	100%	570,804	693,340	122,536	21%
[Ownership % allocation for each partner on Operating Capital Outlay and Special Payments budget.]					
STL OWNERSHIP-STL CONDITION ASSESSMENT %'s [sum of f]:					
Hillsboro	52.60%	-	131,500	131,500	0%
Forest Grove	0.00%	-	-	-	0%
Beaverton	36.90%	-	92,250	92,250	0%
TVWD	10.50%	-	26,250	26,250	0%
Totals	100%	-	250,000	250,000	0%
[Project specific to STL Allocation]					
Cost per gallon:		\$ 0.000579173	\$ 0.000653113	0.00007	12.8%
Cost per CCF [see note below]:		\$ 0.43	\$ 0.49	0.05531	12.8%

JOINT WATER COMMISSION
2017-18 Proposed Budget
WATER TREATMENT PLANT PRODUCTION ESTIMATES

Agency	16-17 Budget		17-18 Budget		% Difference from 16-17	% alloc	Alloc of W. Lutheran and North Plains	Total Projected	
	DAILY AVG DEMAND (GPD)	ANNUAL PROJECTED TOTAL (GPD * 365 days)	DAILY AVG DEMAND (GPD)	ANNUAL PROJECTED TOTAL (GPD * 365 days)				in gallons	in MGD
Hillsboro:	17,750,000	6,478,750,000	18,400,000	6,716,000,000	4%	52.91%	48,668,000	6,764,668,000	18.5
Forest Grove:	1,205,280	439,927,200	1,375,000	501,875,000	14%	3.95%	3,637,000	505,512,000	1.4
Beaverton:	7,000,000	2,555,000,000	7,500,000	2,737,500,000	-7%	21.57%	19,838,000	2,757,338,000	7.6
TVWD:	7,000,000	2,555,000,000	7,500,000	2,737,500,000	7%	21.57%	19,838,000	2,757,338,000	7.6
Western Lutheran:	2,000	730,000	2,000	730,000	0%				
North Plains:	250,000	91,250,000	250,000	91,250,000	0%				
Total Plant Production:	33,207,280	12,120,657,200	35,027,000	12,784,855,000	5%	100%	91,981,000	12,784,856,000	35.0

(730,000)	W. Lutheran
(91,250,000)	North Plains
(91,980,000)	Total W. Lutheran and N. Plains
<u>12,692,875,000</u>	Projected w/o W. Lutheran and North Plains

JOINT WATER COMMISSION
Capital Outlay (Operating and Projects) and Contingency
2017/18 Proposed Draft Budget

		FY 17/18 Budgeted	Hillsboro	Forest Grove	Beaverton	Tualatin Valley Water District
Projects Capital Outlay - Administration:						
	Carryover Project #					
JWC - 01	JWC-01-WTP Expansion					
	11011 Facility Plan, CIMP, & 75 MGD Projects	6,490,000	2,920,500	865,117	1,622,500	1,081,883
		100%	45.00%	13.33%	25.00%	16.67%
	10571 JWC WTP Expansion to 85 MGD	8,260,000	6,608,000	-	-	1,652,000
		100%	80.00%	0.00%	0.00%	20.00%
JWC - 02	11135 JWC-02-Fairway Fund Land	150,000	78,900	-	55,350	15,750
		100%	52.60%	0.00%	36.90%	10.50%
	Projects Capital Outlay	14,900,000	9,607,400	865,117	1,677,850	2,749,633
Equipment Replacement:						
	JWC Emergency Equipment Replacement Allocation	2,000,000	900,000	266,600	500,000	333,400
	Equipment Replacement	2,000,000	900,000	266,600	500,000	333,400
	Ownership %'s:	100%	45.00%	13.33%	25.00%	16.67%
	Sub-total - projects & equip replace	16,900,000	10,507,400	1,131,717	2,177,850	3,083,033
	Less: North Plains SDC	(150,000)	(67,500)	(19,995)	(37,500)	(25,005)
	Total Projects & Equipment Less North Plains SDC	16,750,000	10,439,900	1,111,722	2,140,350	3,058,028
	Contingency	\$ 500,000	225,000	66,650	125,000	83,350
		100%	45.00%	13.33%	25.00%	16.67%
	Total Equipment Reserve/Contingency	\$ 17,400,000	\$ 10,732,400	\$ 1,198,367	\$ 2,302,850	\$ 3,166,383
Operating Capital Outlay (Ownership %):						
	[1] Replacement Silverado 2500	50,000	22,500	6,665	12,500	8,335
	Subtotal - Automotive	50,000	22,500	6,665	12,500	8,335
	[2] YSI EXO2 Datasonde	18,750	8,438	2,499	4,688	3,126
	[3] Water Quality Boat, Trailer, Canopy, & Accessories	25,000	11,250	3,333	6,250	4,168
	[4] Process Monitoring Instrumentation	10,000	4,500	1,333	2,500	1,667
	[5] Chlorine Gas Monitoring System	10,000	4,500	1,333	2,500	1,667
	Subtotal - Equipment	63,750	28,688	8,498	15,938	10,627
	[6] Intake Gate	24,000	10,800	3,199	6,000	4,001
	[7] Gravel Parking Lot and Shop Area	20,000	9,000	2,666	5,000	3,334
	Subtotal - Facilities and Improvement	44,000	19,800	5,865	11,000	7,335
	[8] Hach WIMS	12,500	5,625	1,666	3,125	2,084
	Subtotal Computer Hardware & Software	12,500	5,625	1,666	3,125	2,084
	Total Operating Capital Outlay	170,250	76,613	22,694	42,563	28,381
	Totals	17,570,250	10,809,013	1,221,061	2,345,413	3,194,764

Notes:

See individual project description sheets for estimated total project costs. For some projects in FY17 the budget includes carryover portions of the FY16 amounts. Percentages use for allocation of costs.

[1] Replacement of Vehicle #907-2000 Chevy Silverado 2500. This truck is and will be used for maintenance type activities. It is used to haul heavy equipment to locations both within and outside of the WTP. It is used pull a heavy duty trailer and haul such items as a forklift, tractor, anthracite bags and other equipment weighing up to 14,000 pounds.

[2] Datasonde-Current datasonde, which was purchased in 2010, used for routine water quality monitoring is being phased out by manufacturer. New model will also include ability to monitor dissolved organic matter.

[3] Boat to be purchased for the monitoring of Hagg Lake. Staff has previously used the Barney monitoring boat for Hagg Lake monitoring because the current JWC boat has safety issues. Work at Barney will require that boat to remain at Barney Reservoir at all times so a new boat must be purchased to continue the Hagg Lake monitoring project.

[4] Process Monitoring Instrumentation: Water chemistry (pH/temperature/chlorine) data for process control provided by current instrumentation in the WTP lab is read only and has to be recorded manually. This project replaces instruments with more accurate equipment that is also capable of interfacing with our SCADA system and recording data in our historian.

[5] Chlorine Gas Monitoring System: This equipment monitors the chlorine tank and injector room for chlorine gas in the event of a release. Current equipment has performed less than desirable given its importance and safety factor. This equipment would replace the current controller and 2 sensors with new.

[6] The intake gate is located approximately ¼ north of the JWC-WTP, at the intersection of Blooming Fern Hill Rd and Fern Hill Rd. The gate is the main access point for the Spring Hill Pumping Plant, which is where the JWC raw water pumps are located. The current gate setup is a chain link gate, that is manually operated with several different agencies having individual locks, as there are multiple agencies that use the Spring Hill Pumping Plant.

There have been instances where the gate has been left open by one of the agencies with access, but no one was on site. This creates not only a security vulnerability, but a liability as there are many hazards including open water, steep embankments and high voltage. In addition to this, while there is an adequate pull out for a truck, a staff member does have to park their vehicle on the side of the road, exit the vehicle and unlock the gate. This puts the staff member(s) in harm's way in the event another driver was not paying attention or had an emergency. An automated gate would eliminate or minimize these two problems. We have received quotes on this project previously in the range we are asking for.

[7] JWC vehicle fleet currently parks on sloped gravel parking near Pole Barn due to lack of paved parking spaces. Vehicles must drive over curb to access gravel parking. This project would remove curb, level slope and pave parking spaces for vehicles. This also eliminates any safety concerns regarding un-even walking surfaces when entering/exiting vehicles.

[8] Hach's Water Information Management Solution (HachWIMS) is a database (SQL based) to centrally store and manipulate data that accommodates a wide variety of water system operations. It is a secure system to easily monitor trends, perform analysis, create reports. It includes tools for quality assurance and quality control, automated report creation (both regulatory and customizable), and individualized dashboards. Some example data to be included are: water produced at treatment systems, transmission system flows, releases from storage, and water quality in the distribution system and treatment plants.

The total cost for HachWIMS is to be a 25% split between Hillsboro Resources, Hillsboro Ops, JWC, and BRJOC.

JWC/BRJOC EMPLOYEE ALLOCATION - FY 17/18 Proposed DRAFT Budget

Job Title	JWC ADMIN %	JWC OPS %	BRJOC ADMIN %	BRJOC OPS %
ADMIN SUPPORT SPECIALIST	10%			
ADMIN SUPPORT SPECIALIST	65%		3%	
ADMIN SUPPORT SPECIALIST		1%		1%
ADMIN SUPPORT SUPERVISOR	10%		2%	
ASSISTANT WATER MANAGER	100%			
ASSISTANT WATER MANAGER		5%		1%
DIRECTOR WATER	15%		5%	
ELECTRICIAN		10%		10%
ELECTRICIAN		98%		1%
ENGINEERING COORDINATOR		5%		
ENGINEERING COORDINATOR		25%		
GOVERNMENT RELATIONS MANAGER	10%			
INFORMATION SYSTEMS ANALYST		50%		
LEAD WATER PLANT OPERATOR		94%		2%
LEAD WATER PLANT OPERATOR		94%		2%
LEAD WATER PLANT OPERATOR		94%		2%
LEAD WATER PLANT OPERATOR		94%		2%
LEAD WATER PLANT OPERATOR		98%		1%
LEAD WATER PLANT OPERATOR		98%		1%
LEAD WATER PLANT OPERATOR		98%		1%
LEAD WATER PLANT OPERATOR		98%		1%
LEAD WATER PLANT OPERATOR		98%		1%
MAINTENANCE COORDINATOR		98%		1%
MANAGEMENT ANALYST	30%		10%	
MANAGEMENT ANALYST		5%		2%
NEW-ENGINEERING TECHNICIAN		5%		
NEW-PROGRAM AND SUPPORT MANAGER	18%		2%	
NEW-PROJECT MANAGER		2%		
NEW-SENIOR PROGRAM MANAGER	32%		5%	
NEW-WATER PROJECT SPECIALIST		55%		20%
PRINCIPAL ENGR		8%		2%
PROGRAM & SUPPORT MANAGER		20%		5%
PROJECT ENGINEER		10%		
PROJECT ENGINEER		10%		
PROJECT MANAGER		80%		2%
PROJECT SPECIALIST		1%		1%
PROJECT SPECIALIST		5%		
PROJECT SPECIALIST		5%		
PROJECT SPECIALIST		10%		
PROJECT SPECIALIST		40%		10%
PUBLIC INFO & RELATIONS OFFICE		15%		
SENIOR FACILITIES & MAINT TECH		98%		1%
SENIOR PROGRAM MANAGER	8%			2%
SENIOR PROGRAM MANAGER	40%		1%	
SENIOR PROGRAM MANAGER		40%		5%
SENIOR WATER DISTR OPERATOR				50%
SENIOR WATER PLANT OPERATOR		98%		1%
SENIOR WATER TECHNICIAN		98%		1%
WATER DISTRIBUTION COORDINATOR				2%
WATER DISTRIBUTION COORDINATOR		1%		
WATER DISTRIBUTION COORDINATOR		1%		
WATER DISTRIBUTION COORDINATOR		2%		
WATER DISTRIBUTION COORDINATOR		2%		
WATER DISTRIBUTION OPERATOR		1%		2%
WATER DISTRIBUTION OPERATOR		1%		
WATER DISTRIBUTION OPERATOR		1%		
WATER DISTRIBUTION OPERATOR		1%		1%
WATER DISTRIBUTION OPERATOR		1%		1%
WATER DISTRIBUTION OPERATOR		2%		1%
WATER DISTRIBUTION OPERATOR		2%		3%
WATER DISTRIBUTION OPERATOR		2%		
WATER DISTRIBUTION OPERATOR		2%		
WATER DISTRIBUTION OPERATOR		2%		
WATER LAB COORDINATOR		85%		5%
WATER PROGRAM COORDINATOR		45%		5%
WATER PROGRAM COORDINATOR		45%		10%
WATER RESOURCE SPECIALIST		40%		10%
WATER RESOURCE SPECIALIST		65%		25%
WATER TREATMENT PLANT COOR	100%			

Personnel Services (Allocation) Totals - Proposed FY 2017/18:	4.38	19.66	0.28	1.93
Total FTE JWC/BRJOC Allocations:		24.04		2.21

Total FTE Count	JWC	BRJOC
FY 17-18 (Proposed)	24.04	2.21
FY 16-17	21.69	1.68
FY 15-16	20.67	2.37
FY 14-15	21.35	2.16
FY 13-14	20.13	2.72

FY 18 PROPOSED JWC CAPITAL OUTLAY DESCRIPTIONS

Project # & Title: 11011/10571 - Joint Water Commission (JWC) Water Treatment Plant Expansion

Project Description: This project will continue the design of the Water Treatment Plant (WTP) expansion and begin early construction activities. There are several key components of this project. 1) Return the WTP to its rated capacity of 75 MGD. Each partner will have a capacity share responsibility for this. 2) Expand the capacity from 75 to 85 MGD. Hillsboro will take 8 MGD of this expansion and TVWD will take 2 MGD of this expansion. 3) Design life safety improvements as recommended in the 2008 seismic study and further prioritized by Carollo in the Seismic CIP program; and 4) Perform a facility plan for the proposed build-out of the WTP based on the Willamette Supply decision. The facility plan and treatment plant expansion design was awarded to CH2M and started in the second half FY 15-16. Slayden Construction was selected as the CM/GC contractor for the project. Expansion is expected to be complete in summer 2019. Estimated total cost of the WTP Design and Facility Plan is \$5,000,000. The current estimate for the total design and construction cost of these improvements is approximately \$35,200,000 including staff time.

Status: Active

Estimated Completion: June 2020

Funded/Unfunded: Funded: JWC Partners (Cities of Hillsboro, Forest Grove, Beaverton and the Tualatin Valley Water District)

Operating Impacts: None

Project Costs	Prior Years	2017-18 Budget	2018-19 Estimate	2019-20 Estimate	2020-21 Estimate	2021-22 Estimate	Project Total
Design & Engineering	\$ 5,929,669	\$ 1,000,000	\$ 1,000,000	\$ 300,000	\$ -	\$ -	\$ 8,229,669
Construction	-	13,750,000	11,050,339	2,170,000	-	-	26,970,339
Total:	\$ 5,929,669	\$ 14,750,000	\$ 12,050,339	\$ 2,470,000	\$ -	\$ -	\$ 35,200,008

Revenue Funding Source(s):

JWC Partner Payments	\$ 5,929,669	\$ 14,750,000	\$ 12,050,339	\$ 2,470,000	\$ -	\$ -	\$ 35,200,008
Total:	\$ 5,929,669	\$ 14,750,000	\$ 12,050,339	\$ 2,470,000	\$ -	\$ -	\$ 35,200,008

Project # & Title: xxxxx - Joint Water Commission (JWC) Fairway Fund Land

Project Description: The JWC purchased two pieces of property from Fairway Fund Investors on the South Transmission Line (STL) to clear up issues regarding the easement for the STL on property previously owned by Southern Pacific Transportation Company (railroad). The property is approximately 800 ft x 50 ft and is location south of SE Tualatin Valley Hwy and east of SE Minter Birdge Road. The purpose of the project (1) is to remove several existing structures on the property and prepare for potential sale and (2) removed the 'Indenture' agreement created by the railroad and replace with an easement. The property will be evaluated for sale or transfer of ownership. Long term property and transmission line maintenance will be evaluated

Status: Active

Estimated Completion: Spring 2018

Funded/Unfunded: Funded: JWC Partners (Cities of Hillsboro, Forest Grove, Beaverton and the Tualatin Valley Water District)

Operating Impacts: None

Project Costs	Prior Years	2017-18 Budget	2018-19 Estimate	2019-20 Estimate	2020-21 Estimate	2021-22 Estimate	Project Total
Design & Engineering	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ 150,000
Total:	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ 150,000

Revenue Funding Source(s):

JWC Partner Payments	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ 150,000
Total:	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ 150,000



STAFF REPORT

To: Joint Water Commission

From: Erika Murphy, Project Manager

Date: April 3, 2017

Subject: Agenda Item 5B – Joint Water Commission Water Treatment Plant Expansion to 85 MGD Project Update

This memo provides updates on the Water Treatment Plant (WTP) Expansion to 85 MGD project, specifically the Package 1 construction progress and the Package 2 design effort.

Package 1 Construction Update:

The Package 1 Guaranteed Maximum Price (GMP) was approved at the JWC meeting in January 2017, and authorized Slayden Constructors to begin construction on Package 1. The total construction contract is \$4,869,882.

- Slayden mobilized onsite in February.
- Life-safety seismic bracing was installed in several buildings
- Maintenance work on the existing filters began, including recoating the pipes in the filter gallery, and replacing the sand and anthracite filter media
- The rapid mix pumps and chemical metering equipment have been ordered and are scheduled to arrive onsite for immediate installation in May 2017.

Package 2 Design Status:

Package 2 is currently at 30% complete. Design is scheduled to continue through the summer.

In December 2016, Slayden provided a 30% cost estimate totaling just over \$40M total project cost (including construction, engineering, JWC staff time, etc.). In order to reduce the project cost and align with the budget, a series of Value Engineering (VE) sessions were held. The discussion focused around:

- clarification and prioritization of project objectives
- potential scope reduction and cost savings
- weighing advantages and risks of deferring or deleting work from the project scope
- permitting and procurement consequences of delaying construction work
- options for achieving seismic resiliency consistent with target levels of service

The purpose of one VE workshop was to present options for seismic resiliency of yard piping. Slayden's 30% cost estimate showed that costs for yard piping alone added over \$4M to the total project

estimate. The seismic workshop investigated several options to replace the auger-cast, pile-supported pipes, while maintaining the predicted Level of Service (LOS) goals specified in the 2015 CIP Update (Carollo, 2015) and reiterated in the adopted Facility Plan (CH2M, January 2017). In addition, the proposed solutions accounted for expected liquefaction settlement of up to 21 inches during a large seismic event. All options were considered for cost savings and compliance with LOS goals.

Value engineering ideas to reduce yard piping sizes to 48" diameter or smaller were also incorporated into the discussion. This reduction has two benefits; reducing pipe cost and allowing the use of earthquake resistant ductile iron pipe for all yard piping. The recommendation from the seismic workshop was to use earthquake-resistant, ductile iron pipe for essential yard piping only. CH2M is currently working with domestic manufacturers American and US Pipe for acceptable products to keep costs competitive and eliminate the need for sole source procurement.

After the seismic workshop and value engineering workshops, the Operations Committee approved removal of some project elements from the scope that are not essential to the capacity improvements, and modification of the specifications for some of the project elements. Based on the design changes made to date, the most recent cost estimate provided by Slayden is a \$35.5M total project cost for Package 2, including construction, engineering, and staff time.

Next Steps:

In an effort to be efficient with design and engineering fees, design was suspended while the VE options were analyzed and Slayden evaluated the cost impacts. In response, the Operations Committee approved an accelerated design schedule after the workshops to maintain the scheduled July 100% design plan completion. Traditionally, the Engineer would progress from 30% to 60% design with an Owner review of the plans at 60% completion. Instead, CH2M proposed "rolling reviews" from 30% to 90% design, which consists of five review meetings throughout the design effort to discuss active design question and alternatives, and make decisions on how to proceed. After each rolling review meeting, Slayden will provide a list of decision changes and an approximate cost impact. CH2M will provide a 90% design deliverable (plans and specifications) that the JWC will have several weeks to review, prior to the production of 100% plans.

July 2017 – Anticipated Early Grading Package for GMP 2

In order to take advantage of dry summer weather, CH2M is accelerating design of the rough grading work for Package 2. This package will include the deep excavations for the new filter and surge basin structures. Erosion control and dewatering will be included in this package, as will placing the excavated spoils for the new sludge drying bed berms.

October 2017 – GMP for Package 2

Pending the progress of the design and the project budget, the Package 2 GMP will be brought to the October JWC meeting for approval