

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 DistrictDick Schmidt
Jim Doane
Bernice Bagnall



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

ALL TESTIMONY IS ELECTRONICALLY RECORDED.

The Commission lunches at 12:00 p.m.

CALL TO ORDER

Introductions.

- 1. <u>CONSENT AGENDA</u> (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, April 13, 2018.
 - B. Approve Executive meeting minutes from Friday, June 8, 2018

2. COMMUNICATIONS AND NON-AGENDA ITEMS

A. None scheduled.

3. UNFINISHED BUSINESS

A. None scheduled.

4. **NEW BUSINESS**

A. Consider authorizing a 2018-2019 lease agreement for water treatment plant capacity.

Staff Report – Kevin Hanway

5. **EXECUTIVE SESSION**

- A. Consider convening into Executive Session under:
 - ORS 192.660(2)(e) for deliberation with persons designated by the governing body to negotiate real property transactions, and ORS 192.660(2)(f) to consider information or records that are exempt by law from public inspection; and ORS 192.660(2)(h) to consult with counsel concerning the legal rights and duties of a public body with regard to current litigation or litigation likely to be filed.
- B. Take action(s) related to Executive Session, if needed.
- **6. DISCUSSION ITEMS** (These items may result in action by the Commission.)
 - A. Water Quality Update regarding UCMR4 and Cyanotoxin Testing. Staff Report - Niki Iverson and Jessica Dorsey
 - B. Water Treatment Plant Expansion Project update. Staff Report – Erika Murphy
 - C. Year-to-Date Financial status. Staff Report – John Campbell
 - D. Stored water status.

 Staff Report Kristel Griffith
 - E. General Manager's Report.

 Staff Report Kevin Hanway

7. <u>ADVICE/INFORMATION ITEMS</u>

A. The next JWC and BRJOC meetings will be held on October 12, 2018. Meetings are held at the Civic Center in Room 113B. The BRJOC meeting will be held at 12:30 p.m. with the JWC meeting following immediately after the BRJOC meeting adjourns.

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

MINUTES

Commissioners Present:

Hillsboro: John Godsey, Dave Judah and Deborah Raber

Forest Grove: Peter Truax and Rod Fuiten

Beaverton: Marc San Soucie

Tualatin Valley Water District: Jim Doane and Dick Schmidt

Staff Present:

Hillsboro: Kevin Hanway, Rob Dixon, Sophia Hobet, Niki Iverson, Tacy Steele,

Erika Murphy, Tyler Wubbena, John Campbell, Lee Lindsey,

Michelle Wareing, Chris Wilson, Kristel Griffith, and Andi Eiesland

Beaverton: David Winship

Forest Grove: Rob Foster and Jesse McElwain Tualatin Valley Water District: Carrie Pak and Clark Balfour

Other: Laura Maffei – Cable Huston

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, January 12, 2018.
 - B. Acknowledge receipt of Audit Arrangement Letter and required communication under SAS 114.

Motion made by Truax, seconded by Fagin, to approve the Consent Agenda, with an addendum to the minutes to reflect that Mark Fagin was present. Motion carried unanimously with Commissioners Godsey, Raber, Judah, Fuiten, Truax, San Soucie, Fagin, Doane, and Schmidt all voting in favor.

2. COMMUNICATIONS AND NON-AGENDA ITEMS

A. None scheduled.

3. UNFINISHED BUSINESS

A. None scheduled.

4. **NEW BUSINESS**

A. Consider approval of Fiscal Year 2018-19 Joint Water Commission proposed budget. Staff Report – Lee Lindsey

Lindsey gave the Commission an update for the current Fiscal Year. Next, Lindsey explained the budget for the Fiscal Year 2018-2019. He stated the overall proposed budget for total expenditures is \$27,328,652. The total budget figure includes water production costs of \$8,663,152 and capital outlay of \$18,165,500. The proposed budget includes a decrease of \$11,996 (.4%) in personnel costs. The proposed Materials and Services budget includes an increase of \$139,850 (3.1%) from FY 17/18 budget amounts. The majority of the increase variance is due to Caustic Soda increasing \$161,000 due to market price increases. The proposed Operating Capital Outlay budget increased by \$138,000 to \$178,000. Budgeted items include repairs to Fern Hill reservoir; replacement of soft starts for raw water pumps 3 and 4, and equipment purchases. The proposed budget includes an increase of \$98,808 (13.1%) in Special Payments from the current budget of \$755,645. The proposed capital budget includes total expenditures of \$16,165,000, plus an additional \$2,000,000 budgeted for Emergency Replacement and Acquisitions.

Commissioner Doane asked if the deferment of the Cathodic Protection Study would impact the budget and if the study would actually be performed in Fiscal Year 18-19. Hanway stated the study would be performed in Fiscal Year 18-19. The project is on schedule and should be completed by June of next year.

Motion made by Truax, seconded by Doane, to approve the Fiscal Year 2018-19 Joint Water Commission proposed budget as revised. Motion carried unanimously with Commissioners Godsey, Raber, Judah, Fuiten, Truax, San Soucie, Fagin, Doane, and Schmidt all voting in favor.

B. Consider approval of 2018-2019 lease for water treatment plant capacity. Staff Report – Kevin Hanway

Hanway informed the Commission that the JWC Intergovernmental Agreement requires Commission approval of all leases. Tualatin Valley Water District (TVWD) has requested a standard one-year lease of 2 MGD of excess Water Treatment Plant (WTP) capacity from the other partners. Forest Grove is willing to make a total of 2.5 MGD of capacity available to be leased.

Raber thanked Forest Grove for their willingness to make this capacity available for lease.

Motion made by Godsey, seconded by Doane, to approve the 2018-2019 lease for water treatment plant capacity. Motion carried unanimously with Commissioners Godsey, Raber, Judah, Fuiten, Truax, San Soucie, Fagin, Doane, and Schmidt all voting in favor.

C. Consider authorizing the Executive Committee to take final action on a Project Management Plan Agreement with United States Fish and Wildlife Service and Clean Water Services for Wapato Lake Pump House replacement project. Staff Report – Kristel Griffith

Griffith recapped the staff report stating that the U.S. Fish and Wildlife Service (FWS), Clean Water Services (CWS), and the JWC are working together to replace the pump house at Wapato Lake. These entities have collaborated in the past without a formal agreement, however, the nature of this project requires an agreement to be signed. A Project Management Plan (PMP) is a standard document that the Federal Governments uses for collaborative projects with other agencies. An accelerated timeline for this project may not allow for an approval to wait until the July meeting. Since the PMP will need to be finalized sometime in the next month, the JWC Managing Agency is requesting the Commission to authorize its Executive Committee to consider approval of the PMP. Motion made by Truax, seconded by San Soucie, to approve the authorization of the Executive Committee to take final action on a Project Management Plan Agreement with United States Fish and Wildlife Service and Clean Water Services for Wapato Lake Pump House replacement project, as presented. Motion carried unanimously with Commissioners Godsey, Raber, Judah, Fuiten, Truax, San Soucie, Fagin, Doane, and Schmidt all voting in favor.

D. Consider approval of contract renewal with Univar USA, Inc. for the purchase of caustic soda. *Staff Report – Sophia Hobet*

Hobet recapped the staff report. She gave this history of the contract. Due to turbulence in the global marketplace, there is an increase in cost for Caustic Soda per dry ton. The original contract signed in July 2015 was for \$275,262 annually (\$440/ton). The first renewal of the contract increased to \$429,687 annually (\$687/ton). The proposed contract for July 2018-June 2019 is for \$530,625 annually (\$849/ton). Hobet explained some of the reasons for the market instability and stated that it is doubtful there will be any price improvement for a few years, until the market stabilizes again.

Fagin asked if there is a benefit to signing a contract as opposed to purchasing it as needed. Hobet stated that it's more cost-effective to sign a contract.

Judah asked if this is a product that may end up with a tariff, and is there a different chemical that can be used in the treatment process in place of Caustic Soda. Hobet stated that she did not know if this was a product that would have a tariff. She explained there are other chemicals that can be used in place of Caustic Soda; however, it would require a different way to integrate the chemical into the treatment system as alternatives come in the form of solids rather than

liquids. These treatment methods are less stable and more difficult to use from an operational standpoint. Hanway stated that alternative methods would be looked at and presented before it was time to renew the contract again, if there was a viable option. Hobet stated that due to market instability, Univar is unable to create contracts for durations lasting longer than a one year time period.

Motion made by San Soucie, seconded by Judah, to approve the contract renewal with Univar USA, Inc. for the purchase of caustic soda, as presented. Motion carried unanimously with Commissioners Godsey, Raber, Judah, Fuiten, Truax, San Soucie, Fagin, Doane, and Schmidt all voting in favor.

E. Consider approval of contract renewal with Eco Services, Inc., for the purchase of Aluminum Sulfate. *Staff Report – Sophia Hobet*

Hobet recapped the staff report. She stated that in April of 2016, the JWC contracted with Eco Services, Inc. to supply and deliver Alum for a period of two years, with an option to renew the contract for up to four years. Eco Services is proposing to renew the Alum contract with the JWC for two years, starting April 18, 2018, with a renewal price of \$332/ton, or \$498,000 annually.

Motion made by Godsey, seconded by Fagin, to approve the contract renewal with Eco Services, Inc., for the purchase of Aluminum Sulfate, as presented. Motion carried unanimously with Commissioners Godsey, Raber, Judah, Fuiten, Truax, San Soucie, Fagin, Doane, and Schmidt all voting in favor.

F. Consider amendment to CH2M Hill design services contract for the Joint Water Commission Water Treatment Plant Expansion to 85 Million Gallons per Day project. (Item will also include a Water Treatment Plant Expansion Project update). Staff Report – Erika Murphy

Murphy gave the Commission a project update for Package 1, including a budget update. She then gave an update for Package 2. She showed the Commission progress pictures for the project. Murphy explained the necessity to amend the contract. The SCADA integration work for Package 2 improvements is extensive. Portland Engineering (PEI) completed the work for Package 1, and it was assumed that they would also perform the Package 2 work. However, a number of concerns during the Package 1 improvements caused staff to seek an alternative firm for this work. CH2M provided a scope and fee for the work to be performed for Package 2. The fee is not to exceed \$436,000 for the scope of work. Since the proposed work is outside of the original CH2M scope, staff proposed that the work is captured in a Contract Amendment (Change Order). The staff has prepared a contract amendment to the CH2M contract, which will increase the total contract price to \$5,758,870.

San Soucie asked for clarification for what portion of the project PEI was responsible for. Murphy stated that PEI performed the work for Package 1, and had anticipated that PEI would be completing the work for Package 2; however, staff felt it was necessary to assess options of having

the work completed with another firm. Godsey asked if a proposal had been received from PEI and how that proposal compared to the proposal from CH2M. Murphy stated PEI did not submit a proposal.

Motion made by Truax, seconded by Doane, to approve the CH2M Hill design services contract amendment for the Joint Water Commission Water Treatment Plant Expansion to 85 Million Gallons per Day project, as presented. Motion carried unanimously with Commissioners Godsey, Raber, Judah, Fuiten, Truax, San Soucie, Fagin, Doane, and Schmidt all voting in favor.

5. **EXECUTIVE SESSION**

- A. Consider convening into Executive Session under:
 - 1. ORS 192.660(2)(e) for deliberation with persons designated by the governing body to negotiate real property transactions, and ORS 192.660(2)(f) to consider information or records that are exempt by law from public inspection; and ORS 192.660(2)(h) to consult with counsel concerning the legal rights and duties of a public body with regard to current litigation or litigation likely to be filed.

Motion made by Doane, seconded by Truax to convene into Executive Session. Motion carried unanimously with Commissioners Godsey, Raber, Judah, Fuiten, Truax, San Soucie, Fagin, Doane, and Schmidt all voting in favor.

B. Take action(s) related to Executive Session, if needed.

No action was needed for Executive Session.

- **6. DISCUSSION ITEMS** (These items may result in action by the Commission.)
 - A. Stored water status. Staff Report Kristel Griffith

Griffith presented the Commission with the status of stored water for Scoggins Reservoir. She stated that it is currently 97% full. She reported that the release season historically starts in May or June. Currently, it is forecasted to be lower than average rainfall.

B. General Manager's Report. Staff Report – Kevin Hanway

Hanway reported on the utilization of the new generator system. Due to a car accident, the generator was utilized for 21 minutes with no issues. Hanway stated that Lee Lindsey and John Campbell have been working to make improvements in the presentation format of the budget

since joining the department. They will continue to look at potential improvements in budget format presentation in order to make them easier to read. Hanway finished his update with an explanation as to why Campbell is on loan to the Water Department from the Finance Department. He stated that the loan of this employee was originally to cover leave taken by Mellisa Franklin, JWC Management Analyst. Franklin has since decided not to return and a hiring process will need to take place.

7. ADVICE/INFORMATION ITEMS

Secretary

A. The next JWC and BRJOC meetings are scheduled on Friday, June 8, 2018, if needed for budget approval. If both budgets are approved at the April meeting, June's meeting will be cancelled and the next JWC and BRJOC meetings will be held on July 13, 2018. Meetings are held at the Civic Center in Room 113B. The BRJOC meeting will be held at 12:30 p.m. with the JWC meeting following immediately after the BRJOC meeting adjourns.

There bei	ng no further business to come before the Commission, the meeting adjourned at
Chairman	
	Hillsboro/Forest Grove/ Beaverton/ TVWD Joint Water Commission
ATTEST:	

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

MINUTES

Commissioners Present:

Hillsboro: John Godsey
Forest Grove: Carl Heisler
Beaverton: Mark Fagin
Tualatin Valley Water District: Bernice Bagnall

Staff Present:

Hillsboro: Tyler Wubbena, Niki Iverson, Kristel Griffith and Andi

Eiesland

Beaverton: David Winship Tualatin Valley Water District: Carrie Pak

CALL TO ORDER

Commissioner Godsey chaired the meeting due to Commissioner Schmidt's absence.

1. **NEW BUSINESS**

A. Consider approval of the Project Management Plan Agreement with United States Fish and Wildlife Service and Clean Water Institute for Wapato Lake pump house replacement project. Staff Report – Kristel Griffith

Griffith informed the Joint Water Commission (JWC) Executive Committee of the history of the project. She informed the Commissioners that the JWC, Clean Water Services (CWS), and U.S. Fish and Wildlife Service (FWS) have worked together previously in 2008, by performing in-kind services when the dike surrounding the lake failed. This failure resulted in an algal bloom event that caused a taste and odor issue to the JWC water supply. United States Fish and Wildlife Service would like to replace the Wapato Lake pump house as both the pump house and the pumps within are no longer serviceable. Historically, the JWC has worked with Clean Water Services; however, this agreement is with the Clean Water Institute (CWI). The Clean Water Institute is a non-profit organization under Clean Water Services. This non-profit status allows CWI to apply for grants and work with the Federal Government in ways that public utilities cannot. The CWI has been in existence since 2010 and shares the same employees as CWS.

Griffith stated that a Project Management Plan (PMP) will document roles and responsibilities between the three parties. She stated JWC's legal counsel has advised that the PMP be considered an Intergovernmental Agreement (IGA) between the three participating entities. She covered the roles and responsibilities that the PMP assigns to each agency. Griffith covered the budget of the project stating the JWC's contribution will total \$40,000, and the total project cost as \$2,149,000.

Bagnall voiced concerns about the agreement being with CWI rather than CWS. She felt there should be more details regarding the roles and responsibilities for SCADA monitoring. Iverson stated the SCADA monitoring portion of the project is just for the benefit of the WTP. The SCADA system is not required for the other agencies to monitor performance or functionality of the pumps.

Bagnall informed the Commission that Commissioners Doane and Schmidt also shared her concerns that the JWC would sign something which should be treated as an IGA with an organization (CWI) which does not have a track record for project management, has never been audited, and does not have a budget. Godsey felt that it was less of a risk as CWI shares all the same staff as CWS, and is also governed by the same County Board. Iverson stated that this can be run by JWC legal counsel to see if there is any risk to the JWC in signing an agreement with CWI rather than CWS, given the level of participation JWC has in the agreement.

Iverson stated the action items requested by the Commission in order to conditionally approve the agreement. These action items included following up with legal counsel to assess the risk to the JWC if a PMP with CWI is signed, following up with CWS to find out why the PMP is being run through CWI rather than CWS, and requesting that CWS potentially sign the PMP as well.

Motion by Heisler, seconded by Fagin, to conditionally approve the Project Management Plan Agreement with United States Fish and Wildlife Service and Clean Water Institute for Wapato Lake pump house replacement project, pending results of action items stated by Iverson. The motion passed with Commissioners Godsey, Heisler, and Fagin voting in favor, and Bagnall voting against.

Information will be sent to the Commissioners to determine if the information learned from the action items meets the standards for approval. If the information obtained from the action items does not meet approval, an additional meeting will be convened to discuss other options.

2. ADVICE/INFORMATION ITEMS

A.	The next JWC and BRJOC meetings are scheduled on Friday, July 13, 2018 at the Civic Center.
	There being no further business to come before the Commission, the meeting adjourned.
	Chairman: Hillsboro/Forest Grove/ Beaverton/TVWD Joint Water Commission
	ATTEST: Secretary



STAFF REPORT

To: Joint Water Commission

From: Jessica Dorsey, Water Quality Program Coordinator

Date: July 13, 2018

Re: Agenda Item 6A – Water Quality Update regarding UCMR4 and Cyanotoxin Testing

Staff Recommendation:

For informational purposes only. No action requested at this time.

Background:

Joint Water Commission (JWC) staff developed an algal response plan in 2016, in coordination with the Water Quality Committee, Operations Committee, and communication staff in preparation for a Do Not Drink event caused by a harmful algae bloom. JWC received an award from the Pacific Northwest Section of the American Water Works Association for this plan in 2017. Recently, JWC staff believed it was prudent to update the algal cyanotoxin response plan due to the water quality event in the City of Salem, and in preparation for algal-related testing that is occurring in JWC members' distribution systems.

Even though the risk of receiving a detection is currently low, based on the lack of identified blue-green algal blooms in the upper Tualatin watershed, it is considered a "best management practice" to prepare for a detection. Then, if a toxic bloom ever occurs, some of the issues and concerns raised in the Salem event can be avoided. JWC has been working closely with the JWC Water Quality Committee to review the response plan and obtain input for the update. JWC is also working closely with the communications staff of each JWC member agency to update communication templates and notification processes for our agencies to use in an emergency.

JWC staff have prepared the following:

- Updated the JWC Algal Monitoring Plan for 2018 (reviewed and approved by partners).
- Partially-updated Communication Plan. Some additions are still being developed and reviewed by partners, based on "lessons learned" in Salem.
- Developed a response plan specific to UCMR 4 testing as an appendix to the Algal Response Plan (reviewed and approved by partners).

- Created an informational website, and drafted talking points and public notices for an algal event (in review).
- Submitted comments to OHA on the draft regulation for cyanotoxin monitoring in an official letter (attached). The temporary OHA regulation for cyanotoxin testing is also attached.
- Draft water treatment and operations response plans are under development.
 (Emergency response plans are in place, but supplemental plans to respond specifically to cyanotoxin detections are in progress.)

The total amount of increased testing would be based on the following factors:

1. <u>UCMR4 Testing by JWC Partners and City of Cornelius (Hillsboro's Wholesale</u>

<u>Customer</u>): Joint Water Commission (JWC) partners, and one wholesale agency, have begun testing for the cyanotoxins cylindrospermopsin and microcystin at various entry points to their respective water distribution systems. The testing is part of the fourth round of U.S. Environmental Protection Agency's (U.S. EPA) Unregulated Contaminants Monitoring Rule (UCMR4). The UCMR4 rule requires all public drinking water systems serving 10,000 or more customers to monitor for 30 unregulated chemical contaminants between 2018 and 2020. Any detection of cyanotoxin by the above agencies will result in increased sampling and analysis work by JWC. The amount of increased monitoring would be dependent on the cyanotoxin level detected, and if follow-up sampling detected any cyaonotoxin present in JWC water.

Agencies serving JWC water will begin conducting testing every other week for a series of eight consecutive tests in:

- Cornelius: May August 2018
- Tualatin Valley Water District (TVWD): June September 2018 All test results will be posted on TVWD's website as they are received.
- City of Beaverton: August November 2018.
- City of Forest Grove: April July 2019.
- City of Hillsboro: June September 2020.

2. Cyanotoxin Monitoring required by Oregon Health Authority (OHA) draft rule, effective July 1, 2018, and likely to be made a permanent rule on January 1, 2019:

JWC Staff is also preparing for an increased amount of algal cyanotoxin testing in fiscal year 2018-19 based on new draft temporary rules issued by the Oregon Health Authority (OHA) due to the current City of Salem drinking water incident. JWC submitted the attached comments to OHA regarding concerns and questions raised by the water quality staff at our member agencies. Niki Iverson (Hillsboro/JWC) and Joel Cary (TVWD) also attended a meeting with the Oregon State Senate President Peter

Courtney and Senate Majority Leader Ginny Burdick to discuss the response, concerns, and gaps to the temporary rule implementation. The draft rule requires monitoring by all public drinking water systems that have been identified as "agencies with potential for cyanotoxin occurrences in their drinking water systems." Under the rule, JWC will be required to test the raw water for cyanotoxins every two weeks from May 1 to October 31, regardless of the presence of algal blooms in the watershed, which is different than the way algal monitoring has been implemented previously.

Also, it is important to note that the JWC Water Treatment Plant (WTP) response to any detection of cyanotoxin in the JWC water system would result in JWC treatment staff increasing water treatment through the addition of Powdered Activated Carbon (PAC). PAC is proven to be effective at removing organics from water, and was used in the 2008 taste and odor event caused by the presence of geosmin (non-toxin) in the water. After the 2008 event, a PAC injector was installed at the WTP and can be put into service quickly and with minimal effort, if needed for the removal of organics (toxic or non-toxic).

Cost:

Costs for algal toxin analyses range from \$200-\$500 per test, depending on the type of analyses performed.

The costs associated with a detection under UCMR4 testing would vary greatly, depending on the amount detected by the testing partner or wholesale agency, and the results to follow-up JWC system testing. The current response plan for a finished water detection of cyanotoxin at any level calls for taking 10-12 JWC samples per day, in order to properly monitor the event. Analytical costs could run as high as \$2,000-\$6,000 per day, and in an event that lasts as long as Salem's event, those accumulating costs could exceed \$100,000 for a serious algal bloom event. The budget below is set to cover the new rule testing and possibly a small event, but additional funds would need to be utilized for a large-scale cyanotoxin response.

Costs for testing under the new rule are still being determined as OHA finalizes the rule, but based on the cost for analyses listed above, the budget below will cover the testing required for the draft rule. Assuming the rule becomes permanent, this amount will need to be included in the JWC budget as a regular item in the future.

The addition of PAC, as part of the water treatment plant process to remove cyanotoxins present in the source water would have additional treatment costs that would be divided among the partners according to individual agency demands.

Costs for partners to sample in their systems would vary based on number of samples collected.

These costs are estimates based on a toxic algae event. Amendments to the budget are not recommended at this time.

Budget:

1. JWC Materials and Services budget for FY 19 for Bluegreen Algae Bloom Contingency Monitoring is \$25,150.

Attachments:

- 1. JWC Letter to OHA
- 2. OHA Temporary Rule Requiring Cyanotoxin Monitoring



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 Fulten Carl Heisler Peter Truax

City of Beoverton Denny Doyle Marc San Soucie Mark Fagin

Tuolotin Valley Water District lim Doane IJ ck Schmidt Bernice Bagnail June 19, 2018

Mr. David Emme Manager, Drinking Water Services Oregon Health Authority 800 NE Oregon Street Portland, OR 97232

Subject: JWC comments on Draft Cyanotoxin Monitoring Rule, 333-061-0510 to 333-061-0580.

Dear Mr. Emme.

The Joint Water Commission (JWC) has found the staff at the Drinking Water Services (DWS) office to be a valuable partner in our mission to serve our customers safe, reliable and affordable drinking water. JWC greatly appreciates the willingness of DWS staff to provide their expertise in drinking water regulation on an ongoing basis. We also support DWS in taking an active role in the area of emerging contaminants, including cyanotoxins.

With this in mind, JWC staff has reviewed the draft temporary rule (OAR 333-061-0510 to 333-061-0580) requiring some utilities to test for cyanotoxins and would like to submit the following comments.

333-061-0520(5):

The language for sampling locations does not clarify monitoring for consecutive systems. Finished water is defined as entry point to distribution system (EPTDS) but in 333-061-0540(2)(b) it is stated that "If any finished water sample detects cyanotoxins, water suppliers must immediately begin monitoring daily at the entry point to the distribution system.", implying that they are two different locations. This is also in conflict with the UCMR program which specifies EPTDS as where water enters each system's distribution system and not the finished water location of the water treatment plant serving the consecutive systems. The rule should redefine the finished water sampling point as the treated water for each source monitoring location and define distribution sampling for consecutive systems as "the EPTDS for the source experiencing a HAB and representative distribution sites" or separately define EPTDS.

In 333-061-0520(7) it is stated that a health advisory level is defined by "consuming water containing cyanotoxins at this concentration for up to 10 days." But should clarify if that is 10 consecutive days or any 10 days in a given time period.

"Source" or "source water" is not defined but is reference or listed as a sample collection point multiple times throughout the rule.

The proposed definitions also make interpretation of 333-061-540(4)(c) difficult for consecutive systems.



General Manager Kevin Hanway 150 E. Main Street Hillsboro, DR 97123 503-615-6585

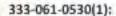
Board of Commissioners

City of Hillsboro John Godsey David Judah Deborah Raber

City of Forest Grove Rod Fulten Carl Heisler Peter Truax

City of Beaverton Denny Doyle Marc San Soucie Mark Fagin

Tuolotiin Volley Water District Ilm Coarne Dick Schmidt Bernios Bagnall



OHA will need to make clear if this rule will replace the existing guidelines including advisory levels for anatoxin and saxitoxin and source water monitoring based on algae speciation and enumeration.

333-061-0540:

The description of monitoring and the separation of raw water and finished water monitoring in 333-061-0540(1) and (2) make it difficult to understand the whole of the monitoring requirements and requirements triggered by detections. Because sampling for finished water is triggered by a detection in raw water there is no Routine monitoring at the finished water site. The terms finished water and EPTDS are used interchangeably but may not be the same location as is the case in consecutive systems.

333-061-0540(4)(a) should be amended to say "but no later than 24 hours after receiving results".

333-061-0550:

333-061-0550(1) says that samples must be analyzed by "ELISA for the specific cyanotoxin, EPA method 546, or equivalent method approved by the Authority". ELISA, and EPA 546 which is also ELISA, is a method considered by many to be unreliable. This section needs clarification: If a routine sample has a detection for only one of the two cyanotoxins listed in the definition is that the only toxin confirmation samples are required to be tested for? The Method Reporting Limit (MRL) for EPA 546 is 0.3 ug/L for total microcystins. Based on this, any detection would require a health advisory. Does OHA have required MRLs for the testing? Will OHA provide a list the other approved methods?

As written this section of the rule prompts two questions: Has OHA ensured that there is sufficient lab capacity nationally to handle the volume of samples May-October if multiple utilities have detections? What will the required turnaround time (TAT) be for analysis once the lab receives samples? This seems to be an issue with current UCMR 4 sample analysis. If there is not a required TAT for analysis it seems likely utilities could be required to increase monitoring and/or issue public notification based on results that are not relevant to current conditions and/or outside the 10-day advisory window.

333-061-0570(7):

The OHA-supplied health effects language makes no mention that the advisory levels are based on a 10-day exposure period. This is incredibly important to explain to the public and since this rule is being put in place without the proper EPA rulemaking procedure or review of information produced by the fourth round of UCIMR



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 Beoverton Denny Dayle Marc San Soucie Mark Fagin

Tuolotin Volley Woter Oistriet Ilm Doane Dick Schmidt Bernice Bagnali monitoring OHA has the responsibility to justify the timeline for monitoring and public notification it is requiring utilities to follow and the health risks to the public.

The rule also needs clarification on how advisories will be issued for consecutive systems. To use JWC as an example-will advisories be based on individual consecutive system results from their EPTDS and representative distribution system sampling (i.e. Hillsboro could issue an All Population advisory, Beaverton a Sensitive Population advisory and TVWD no advisory) or will an advisory be issued at the treated source (JWC served systems have advisory for Sensitive Populations based on finished water results at JWC water treatment plant)?

333-061-0580(1)(b):

The terms for samples used in this subsection do not correspond to those used in the previous sections of the rule.

Thank you for the opportunity to share JWC's concerns on the draft temporary rule. JWC appreciates the commitment and level of effort the OHA and DWS contribute to public health issues and regulations. JWC looks forward to working with you to better understand the complexities of this emerging water quality concern and develop regulations based on sound science in order to best protect public health.

Sincerely,

Kevin Hanway General Manager

Joint Water Commission

OFFICE OF THE SECRETARY OF STATE

DENNIS RICHARDSON SECRETARY OF STATE

LESLIE CUMMINGS
DEPUTY SECRETARY OF STATE



ARCHIVES DIVISION

MARY BETH HERKERT DIRECTOR

800 SUMMER STREET NE SALEM, OR 97310 503-373-0701

TEMPORARY ADMINISTRATIVE ORDER

INCLUDING STATEMENT OF NEED & JUSTIFICATION

PH 231-2018

CHAPTER 333
OREGON HEALTH AUTHORITY
PUBLIC HEALTH DIVISION

FILED

06/26/2018 4:39 PM ARCHIVES DIVISION SECRETARY OF STATE & LEGISLATIVE COUNSEL

FILING CAPTION: Cyanotoxin monitoring and testing at public drinking water systems

EFFECTIVE DATE: 07/01/2018 THROUGH 12/27/2018

AGENCY APPROVED DATE: 06/26/2018

CONTACT: Brittany Hall 800 NE Oregon St. Suite 930 Filed By: 503-449-9808 Portland, OR 97232 Brittany Hall

publichealth.rules@state.or.us Rules Coordinator

NEED FOR THE RULE(S):

The Oregon Health Authority (Authority) establishes rules for public drinking water systems to ensure all Oregonians have safe drinking water. Cyanobacteria are naturally occurring bacteria in marine and fresh water ecosystems, and may produce cyanotoxins, which at sufficiently high concentrations can pose a risk to public health. Cyanotoxins are currently an unregulated contaminant under the Federal Safe Drinking Water Act and public drinking water systems are not required to monitor and test for the presence of these toxins in drinking water. Recent events have indicated that cyanotoxins are present in certain drinking water systems supplied by water sources that are susceptible to harmful algal blooms that produce the release of cyanotoxins. These rules require water suppliers to monitor for the presence of cyanotoxins in drinking water at public water systems that are supplied by susceptible water sources. Water suppliers must also notify the public of the presence of cyanotoxins in drinking water, report testing results to the Authority and issue health advisories when cyanotoxin advisory levels are exceeded.

JUSTIFICATION OF TEMPORARY FILING:

If the Oregon Health Authority (Authority) fails to adopt cyanotoxin monitoring rules applicable to certain water systems there would be no standardized process to determine whether cyanotoxins are present in susceptible water sources and whether those water sources present a risk to public health. A lack of knowledge of the presence of cyanotoxins and process for public water systems to notify the public of the potential public health risks of the presence of cyanotoxins may endanger the health of vulnerable populations and the general public. Failure to immediately take rulemaking action would leave public water suppliers and the Authority without sufficient data to provide adequate actions to ensure safe drinking water and protect public health. These temporary rules will require public water systems to monitor the presence and levels of cyanotoxins in drinking water and standardize a process to timely notify the public of potential risk to health.

The Authority finds that failure to act promptly will result in serious prejudice to the public interest, the Authority, and vulnerable populations including children under the age of six, the elderly and those with illnesses or immune-compromised. These rules need to be adopted promptly so that applicable public drinking water systems are required to

test for cyanotoxins that may pose a risk to public health and timely notify the public and issue health advisories to protect public health.

DOCUMENTS RELIED UPON, AND WHERE THEY ARE AVAILABLE:

EPA, Recommendations for Public Water Systems to Manage Cyanotoxins in Drinking Water: https://www.epa.gov/ground-water-and-drinking-water/recommendations-public-water-systems-manage-cyanotoxins-drinking

Ohio rule regulating harmful algal blooms, Chapter 3745-90: http://epa.ohio.gov/ddagw/rules#112029992-chapter-3745-90-harmful-algal-blooms

RULES:

333-061-0510, 333-061-0520, 333-061-0530, 333-061-0540, 333-061-0550, 333-061-0560, 333-061-0570, 333-061-0580

ADOPT: 333-061-0510

RULE TITLE: Applicability of Cyanotoxin Rules

RULE SUMMARY: 333-061-0510, Applicability of Cyanotoxin Rules: defines which water suppliers are subject to OAR 333-061-0510 to 333-061-0580

RULF TEXT:

- (1) Water suppliers subject to OAR 333-061-0510 to 333-061-0580 are those water suppliers operating water systems subject to regulation under OAR 333-061-0010 that:
- (a) Are supplied by a surface water source that is susceptible to harmful algae blooms or release of cyanotoxins; or
- (b) Are supplied by a groundwater source determined by the Authority to be under the direct influence of a surface water source that is susceptible to harmful algae blooms or release of cyanotoxins; or
- (c) Purchase water from another water system that is supplied by a surface water source or a groundwater source determined by the Authority under the direct influence of a surface water that is susceptible to harmful algae blooms or release of cyanotoxins.
- (2) A water source is susceptible to harmful algae blooms or release of cyanotoxins when:
- (a) One or more harmful algae blooms have been documented or at least one cyanotoxin was previously detected in the water source or at any location in a public water system supplied by that water source;
- (b) The point of diversion into the water system is downstream of or influenced by another surface water source susceptible to harmful algae blooms or release of cyanotoxins;
- (c) The surface water source is susceptible to cyanotoxins based on a water quality limited listing in the Oregon DEQ Integrated Report and Clean Water Act Section 303(d) list for the limiting factors of algae and aquatic weeds, chlorophyll-a, nitrates, phosphorus, pH, or dissolved oxygen; or
- (d) The Authority determines the source is susceptible to harmful algae blooms and cyanotoxins based on the characteristics of the source, including, but not limited to, slow moving or stagnant water, or available sources of nutrients.
- (3) The Authority may, in its discretion, exempt a water supplier that would otherwise be subject to OAR 333-061-0510 to 333-061-0580 if the water supplier submits sufficient evidence, including but not limited to, water quality data, watershed characteristics, and environmental conditions such that the Authority determines that the water source has a low susceptibility to cyanotoxins when considered with any other information available to the Authority.

(4) A water supplier subject to OAR 333-061-0510 to 333-061-0580 under this rule must begin monitoring as described in OAR 333-061-0510 to 333-061-0580 beginning the week of July 15, 2018.

STATUTORY/OTHER AUTHORITY: 448.131, 448.150, ORS 448.123

STATUTES/OTHER IMPLEMENTED: 448.150, ORS 448.123

RULE TITLE: Definitions

RULE SUMMARY: 333-061-0520, Definitions: defines terms used in OAR 333-061-0510 to 333-061-0580.

RULE TEXT:

Except as follows, or unless the context indicates otherwise, the definitions in OAR 333-061-0020 shall apply to OAR 333-061-0510 to 333-061-0580. In addition, the following definitions apply to OAR 333-061-0510 to 333-061-0580:

- (1) "Confirmation sample" means a finished water sample taken on a different day but the same location and analyzed by the same method.
- (2) "Cyanobacteria" are photosynthetic bacteria that share some properties with algae and are found naturally in freshwater and saltwater. Some species of cyanobacteria can produce toxins, which are known to be harmful to human health above certain concentrations.
- (3) "Cyanotoxins" means total microcystins and cylindrospermopsin produced by cyanobacteria.
- (4) "Detected" or "detection" means an analytical result that is equal to or greater than the reporting limit for the analytical method being used.
- (5) "Distribution sampling points" means representative points in the distribution system.
- (6) "Finished water sampling point" means each entry point to the distribution system which is representative of the water intended for distribution and consumption without further treatment, except as necessary to maintain water quality in the distribution system (for example, booster chlorination).
- (7) "Harmful algae bloom" means a dense colony of cyanobacteria that can rapidly multiply in surface waters when environmental conditions are favorable for growth.
- (8) "Health advisory level" is the concentration of a cyanotoxin determined by the US Environmental Protection Agency, as specified in OAR 333-061-0530(1), at or below which adverse health effects are not expected to occur if consuming water containing cyanotoxins at this concentration for up to 10 days.
- (9) "Monitoring" means collecting a sample, having it analyzed by a competent lab, and reporting the results to the Authority.
- (10) "Raw water sampling point" means a sampling point on each water source intake in use prior to any treatment, or another raw water sampling point acceptable to the Authority.
- (11) "Subject water suppliers" means a water supplier subject to OAR 333-061-0010 and OAR 333-061-0510 to 333-061-0580 as described in OAR 333-061-0510.
- (12) "Vulnerable people" means formula-fed infants, people under the age of six, pregnant women, nursing mothers, the elderly, those receiving dialysis treatment, those with pre-existing liver conditions, and other sensitive populations.

STATUTORY/OTHER AUTHORITY: ORS 448.123, 448.131, 448.150

RULE TITLE: Health Advisory Levels

RULE SUMMARY: 333-061-0530, Health Advisory Levels: identifies levels for cyanotoxins, above which a health advisory is issued.

RULE TEXT:

- (1) The health advisory levels are as follows:
- (a) Total Microcystins: 0.3 ug/L for vulnerable people; 1.6 ug/L for people aged 6 and older.
- (b) Cylindrospermopsin: 0.7 ug/L for vulnerable people; 3 ug/L for people aged 6 and older.
- (2) Exceeding a health advisory level in a sample collected from a finished water sampling point or a distribution sampling point requires additional monitoring and public notification as prescribed by OAR 333-061-0540(4) and OAR 333-061-0570.

STATUTORY/OTHER AUTHORITY: ORS 448.123, 448.131, 448.150

RULE TITLE: Cyanotoxin Monitoring

RULE SUMMARY: 333-061-0540, Cyanotoxin Monitoring: defines when and how water suppliers must monitor for cyanotoxins.

RULE TEXT:

Subject water suppliers must monitor for cyanotoxins as follows.

- (1) Water suppliers with raw water intakes must monitor at raw water sampling points as follows:
- (a) From May 1 through October 31 water suppliers shall monitor at the raw water sampling point at least once every two weeks for cyanotoxins.
- (b) If cyanotoxin levels are greater than or equal to 0.3 ug/L, or there is a recreational harmful algae bloom advisory in a water body upstream, water suppliers must immediately increase monitoring to weekly.
- (c) Water suppliers may resume raw water monitoring every two weeks if cyanotoxin levels are less than 0.3 ug/L in at least two consecutive weekly samples.
- (2) Water suppliers with raw water intakes must monitor at finished water sampling points as follows:
- (a) If cyanotoxin levels are greater than or equal to 0.3 ug/L at the raw water sampling point, water suppliers must monitor finished water weekly, beginning within 24 hours of receiving raw water results.
- (b) If any finished water sample detects cyanotoxins, water suppliers must immediately begin monitoring finished water daily.
- (c) Water suppliers may resume weekly finished water monitoring if cyanotoxins are not detected in two consecutive daily samples collected at the finished water sampling point.
- (d) Finished water monitoring may be discontinued if both cyanotoxin levels are less than 0.3 ug/L in two consecutive samples of the raw water and is not detected in any finished or distribution sample.
- (3) Revised cyanotoxin monitoring frequency. The cyanotoxin monitoring frequency may be revised (decreased, increased or discontinued) at the discretion of the Authority. When establishing the revised schedule, the Authority may consider cyanotoxin data collected in accordance with this rule, locations of intakes and dilution factors for raw water monitoring of sources downstream of a harmful algae bloom, operational changes made, and other information provided by the water supplier.
- (4) Monitoring following a cyanotoxin health advisory level exceedance in finished water.
- (a) If the cyanotoxin concentration exceeds a health advisory level in a finished water sample, the water supplier must collect a finished water confirmation sample as soon as practical, but no later than 24 hours after receiving results.
- (b) Distribution sampling. A water supplier with a confirmed finished water result greater than or equal to 0.3 ug/L for total microcystins or greater than or equal to 0.7 ug/L for cylindrospermopsin, and all water suppliers that purchase water from a water supplier with an exceedance, shall monitor daily at representative sites in the distribution system within 24 hours of receiving the confirmation sample result. Additional distribution system monitoring may be required by the Authority based on sampling results and other relevant circumstances.
- (c) Once the health advisory is lifted as permitted under OAR 333-061-0570(4), water suppliers must monitor no less frequently than prescribed in sections (1) and (2) of this rule.
- (5) Monitoring extension. Upon a request from a water supplier, the Authority may agree to extend the 24-hour monitoring timeline required pursuant to this rule on a case-by-case basis when the water supplier has a logistical problem timely collecting or analyzing samples in accordance with the requirements of OAR 333-061-0510 to 333-061-0580. When an extension is agreed to by the Authority, the Authority shall specify in writing how much time the water supplier has to monitor. Examples of potential logistical problems include, but are not limited to:
- (a) Extreme weather conditions that create unsafe travel or on-site conditions for the person collecting the sample.
- (b) Limited laboratory capacity on weekends and holidays.

STATUTORY/OTHER AUTHORITY: ORS 448.123, 448.131, 448.150

RULE TITLE: Analytical Methods

RULE SUMMARY: 333-061-0550, Analytical Methods: identifies how cyanotoxin monitoring water samples must be analyzed by drinking water laboratories.

RULE TEXT:

(1) A water supplier shall ensure that cyanotoxin samples are analyzed using the Enzyme-linked immunosorbent assay (ELISA) for the specific cyanotoxin, EPA method 546, or another method approved in writing by the Authority.

(2) After December 31, 2018, to analyze samples required by OAR 333-061-0510 to 333-061-0580, a water supplier must use a laboratory accredited according to OAR chapter 333, division 64 and the Oregon Environmental Laboratory Accreditation Program (ORELAP), or the Oregon Department of Environmental Quality Laboratory.

STATUTORY/OTHER AUTHORITY: ORS 448.123, 448.131, 448.150

RULE TITLE: Reporting

RULE SUMMARY: 333-061-0560, Reporting: requires water suppliers to notify purchasing water systems when advisory levels are exceeded and requires laboratories and water suppliers to report laboratory results to the Authority.

RULE TEXT:

- (1) If the cyanotoxin concentration exceeds a health advisory level in the confirmation sample collected at any finished water sampling point in accordance with OAR 333-061-540(2), the water supplier shall notify all purchasing systems served by the water supplier as soon as practical but no later than 24 hours after receiving the confirmation sample results.
- (2) Mandatory reporting requirements for laboratories:
- (a) Laboratories must report validated results of any analysis that exceeds a health advisory level directly to the Authority and to the water supplier as soon as possible but no later than 24 hours or one business day of validating results, or within 72 hours or three business days post analysis.
- (b) Subcontracted laboratories must report validated results of any analysis that exceeds the health advisory level directly to their client laboratory as soon as practical but no later than 24 hours or one business day of validating results, or within 72 hours or three business days post analysis.
- (3) The water supplier shall:
- (a) Ensure that laboratories conducting the testing report as described in section (2) of this rule; and
- (b) Report to the Authority any analytical result used to determine whether an advisory may be lifted pursuant to OAR 333-061-0570(4) within 24 hours; and
- (c) Report to the Authority any analytical result that changes the frequency of monitoring pursuant to OAR 333-061-0540 within 24 hours;
- (d) Report to the Authority all other analytical results less than the health advisory levels within 10 days of the end of the month the sample results were received.
- (4) Analyses required by OAR 333-061-0540 must be uploaded by the laboratory to the Authority in an approved XML format, or submitted in a format approved by the Authority.

STATUTORY/OTHER AUTHORITY: ORS 448.123, 448.131, 448.150

RULE TITLE: Public Notification

RULE SUMMARY: 333-061-0570, Public Notification: identifies how and when water suppliers must notify the public of monitoring results and the standard language to be used.

RULE TEXT:

Subject water suppliers must notify the public as follows.

- (1) Issuance of a Health Advisory. If cyanotoxin levels from a confirmation sample in finished water or in the distribution system exceed any health advisory level, the water supplier and any suppliers that purchase water from that system must issue a health advisory as soon as possible, but no later than 24 hours of receipt of results. The public notification shall include, at a minimum, the cyanotoxin and health advisory level exceeded, the sample collection dates, dates results were received, locations of the samples, and the standard health effects language in section (6) of this rule.
- (2) The Authority may allow a water supplier additional time to issue an advisory, in order to await additional results or implement operational changes to reduce cyanotoxin levels, including but not limited to switching sources and optimizing treatment. If the Authority allows additional time, the water supplier shall issue public notification to all customers within 24 hours of receiving the confirmation sample results. The notification must include the date the samples were collected, the dates results were received, whether the sample was collected at the finished water sampling point or in the distribution, the results of the analyses, and steps the water supplier is taking to minimize risk to public health.
- (3) The Authority may allow the water supplier to limit distribution of the health advisory in accordance with OAR 333-061-0042(1)(b).
- (4) Unless otherwise specified by the Authority based on public health and safety considerations, a health advisory shall remain in effect until the following occur:
- (a) Cyanotoxin concentrations are below the applicable health advisory level in two consecutive samples collected a minimum of 24 hours apart at the finished water sampling point; and
- (b) Cyanotoxin concentrations are below the applicable health advisory level in two consecutive sets of samples collected at representative distribution sampling points.
- (5) Consumer confidence report. Each water supplier that detects a cyanotoxin in a sample collected at a finished water sampling point or a distribution sampling point collected within its water system in accordance with OAR 333-061-0540 shall include the following in the consumer confidence report required by OAR 333-061-0043:
- (a) The range of levels detected and highest single measurement of cyanotoxin concentration in samples collected at finished water sampling points and distribution sampling points, the cyanotoxin health advisory level, and whether an advisory was required to be issued.
- (b) Information regarding the major source of the contaminant using definitions found in OAR 333-061-0520(2), (3), and (7).
- (c) Standard health effects language in section (6) of this rule.
- (6) Standard health effects language. Water suppliers shall include the following standard health effects language in public notification and consumer confidence reports: "Consuming water containing concentrations of cyanotoxins over the health advisory level for more than 10 days may result in upset stomach, diarrhea, vomiting, as well as liver or kidney damage. Formula-fed infants, children younger than six, pregnant women, nursing mothers, the elderly, those receiving dialysis treatment and those with pre-existing liver conditions may be more susceptible than the general population to the health effects of cyanotoxins. Seek medical attention if you or your family members experience illness."

STATUTORY/OTHER AUTHORITY: ORS 448.123, 448.131, 448.150

RULE TITLE: Record Keeping

RULE SUMMARY: 333-061-0580, Record Keeping: identifies record keeping requirements for water suppliers.

RULE TEXT:

- (1) Subject water suppliers shall retain, on its premises or at a convenient location near its premises, records of cyanotoxin analyses made pursuant to OAR 333-061-0510 to 333-061-0580 for not less than 10 years. Actual laboratory reports may be kept, or data may be transferred to tabular summaries, provided that the following information is included:
- (a) The date, place and time of sampling, and the name of the person who collected the sample;
- (b) Identification of the sample as to whether it was collected at a raw, finished or distribution sampling point;
- (c) Date of analysis;
- (d) Laboratory and person responsible for performing analysis;
- (e) The analytical method used; and
- (f) The results of the analysis.
- (2) Subject water suppliers shall retain, on its premises or at a convenient location near its premises, health advisories issued in accordance with OAR 333-061-0510 to 333-061-0580, and consumer confidence reports issued in accordance with OAR 333-061-0510 to 333-061-0580 and OAR 333-061-0043, for not less than 10 years.

STATUTORY/OTHER AUTHORITY: ORS 448.123, 448.131, 448.150

Agenda Item 6B - WTP Expansion Project Update

MONTHLY PROJECT TRACKING REPORT

June 2018

Project Name WTP Facility Plan & Expansion to 85 MGD

Project # 80054200-11011 (Facility Plan, CIMP, 75 MGD)

80054200-10571 (Expansion to 85 MGD)

Project Manager Erika Murphy

Project Description

Project objectives include making improvements to the existing WTP to achieve sustainable 75 MGD capacity. This will include removing hydraulic bottlenecks improving backwash and solids handling processes. Life safety improvements and the implementation of capital improvement and maintenance projects (CIMP) will be concurrent with this work. Additionally, a Facility Plan will be created to capture the ultimate build-out capacity of the WTP. All improvements will be borne by all JWC partners at current ownership capacity. This project also includes expansion to 85 MGD capacity. All improvements associated with the expansion will be shared by City of Hillsboro (80%) and TVWD (20%).

Total Project Budget \$ 35,000,000

Total Expenditures to Date \$ 14,971,888 Total Remaining \$ 20,028,112

CRITICAL MILESTONES		
Task	Estimated Completion Date	Actual Completion Date
Facility Plan	January 2017	Adopted January 13, 2017
GMP for Package 1	January 2017	Awarded January 13, 2017
GMP for Early Work Package 2	July 2017	Awarded July 14, 2017
GMP for Package 2	October 2017	Awarded October 13, 2017
Substantial Completion	June 30, 2019	

PROJECT HIGHLIGHTS

Delivery of the parallel plate settlers and raw water pumps has been delayed by the manufacturer and is expected in July. Crack repair is complete on the surge basin and the water test is complete. Filter structure construction continues. Installation of earthquake resistant ductile iron pipe (ERDIP) continues. 36" filter gallery overflow pipe installation is complete. Decant water lines are being installed for the new sludge drying beds. Slayden has advertised for a grading subcontractor to complete the berm construction for the two new sludge drying beds this summer.

FUNDING SOURCES	Facility Plan,	CIME	P, 75 MGD	Expansion to 85 MGD				
Agency	% Contribution	Fir	nancial Stake	% Contribution	ancial Stake			
Hillsboro	45%	\$	7,262,514	80%	\$	15,088,863		
TVWD	16.67%	\$	2,689,820	20%	\$	3,772,216		
Beaverton	25%	\$	4,034,730	0%	\$	-		
Forest Grove	13.33%	\$	2,151,857	0%	\$	-		

PERSONNEL SERVICES	٨	Лonth Paid	F	Paid to Date	ı	Month Paid	F	Paid to Date
		#11011		#11011		#10571		#10571
Staff Cost	\$	1,566	\$	162,833	\$	4,173	\$	115,960
Permitting	\$	-	\$	61,371	\$	5,489	\$	127,519
Miscellaneous	\$	-	\$	51,296	\$	=	\$	873

CONTRACTS								
Awarded to	Contract #	Month Paid		Paid to Date		ontract Amt	Change Orders	
CH2M	1934	\$ 194,515	\$	3,973,325	\$	5,322,870	\$	436,000
Slayden	1979	\$ 1,381,380	\$	10,409,640	\$	27,305,637	\$	-
PEI	2179	\$ -	\$	42,780	\$	43,520	\$	-
Carlson Testing - Package 1	2180	\$ -	\$	5,231	\$	19,801	\$	-
Carlson Testing - Package 2	2438	\$ 1,571	\$	21,061	\$	23,668	\$	-
		\$ -	\$	-	\$	-	\$	-
		\$ -	\$	-	\$	-	\$	-
TOTALS		\$ 1,577,466	\$	14,452,037	\$	32,715,496	\$	436,000



Agenda Item 6C JWC QUARTERLY REPORT

JWC RESOURCES	REVISED BUDGET 17/18	YTD 17/18	AVAIL REMAIN 17/18	% USED
BEGINNING WORKING CAPITAL	-	-	-	
WATER SALES				
HILLSBORO - WATER PURCH	4,242,153	2,767,055	1,475,098	65%
FOREST GROVE - WATER PURCH	367,662	181,536	186,126	49%
BEAVERTON - WATER PURCH	1,808,186	878,986	929,200	49%
TVWD - WATER PURCH	1,793,690	932,322	861,368	52%
NORTH PLAINS - WATER PURCH	115,000	147,070	(32,070)	128%
NORTH PLAINS SDC	150,000	23,872	126,128	<u>16</u> %
TOTAL WATER SALES:	8,476,691	4,930,840	3,545,851	58%
CONTRIBUTIONS IN AID				
HILLSBORO - CAPITAL OUTLAY	10,439,900	4,766,250	5,673,650	46%
FOREST GROVE - CAPITAL OUTLAY	1,111,722	238,309	873,413	21%
BEAVERTON - CAPITAL OUTLAY	2,140,350	380,532	1,759,819	18%
TVWD - CAPITAL OUTLAY	3,058,028	1,115,627	1,942,401	36%
CWS - CAPITAL OUTLAY		734	(734)	<u>0</u> %
TOTAL CONTRIBUTIONS IN AID:	16,750,000	6,501,451	10,248,549	39%
OTHER				
GRANTS AND DONATIONS	-	-	-	0%
WESTERN LUTHERAN SCHOOL	-	1,375	(1,375)	0%
INTEREST EARNED	-	25,308	(25,308)	0%
MISCELLANEOUS INCOME	-	28,002	(28,002)	0%
LEASE REVENUE	102,050	102,050		<u>100%</u>
TOTAL OTHER:	102,050	156,734	(54,684)	154%
CONTINGENCY				
HILLSBORO-CONTINGENCY	225,000	-	225,000	0%
FOREST GROVE - CONTINGENCY	66,650	-	66,650	0%
BEAVERTON - CONTINGENCY	125,000	-	125,000	0%
TVWD - CONTINGENCY	83,350		83,350	<u>0</u> %
TOTAL CONTINGENCY:	500,000	-	500,000	0%
TOTAL RESOURCES:	25,828,741	11,589,026	14,239,715	<u>45</u> %
	REVISED BUDGET		AVAIL REMAIN	
JWC REQUIREMENTS	17/18	YTD 17/18	17/18	% USED
PERSONAL SERVICES	2,973,796	2,518,225	455,571	85%
MATERIALS AND SERVICES	4,529,050	2,634,104	1,894,946	58%
CAPITAL OUTLAY	17,070,250	7,841,550	9,228,700	46%
SPECIAL PAYMENTS	755,645	625,860	129,785	83%
CONTINGENCY	500,000		500,000	<u>0%</u>
TOTAL REQUIREMENTS:	25,828,741	13,619,738	12,209,003	<u>53</u> %
TOTAL RESC	URCES AND I	REQUIREM	ENTS	
	REVISED BUDGET	YTD 17/18	AVAIL REMAIN	% USED
TOTAL RESOURCES	17/18 25,828,741	11,589,026	17/18 14,239,715	45%
TOTAL REQUIREMENTS	25,828,741	13,619,738	12,209,003	53%
NET INCOME (LOSS)		(2,030,712)	2,030,712	
BEGINNING WORKING CAPITAL	-	(2,030,712)	2,030,712	
ENDING WORKING CAPITAL		(2,030,712)		
LIVERING WORKING CAPITAL		(2,030,712)	<u> </u>	

JWC CAPITAL PROJECT QUARTERLY REPORT

PROJECT	PROJECT DESCRIPTION	pproved FY '-18 Budget	 ACTUAL FY 7-18 as of 5.31.18
10829	PUMP RECONDITIONING	\$ -	
	Personnel Services Expenditures		\$ 501
	Contractor Expenditures		\$ 4,301
11011	PRELIMINARY DESIGN FACILITY PLAN TOTAL COSTS	\$ 6,490,000	
	Personnel Services Expenditures		\$ 30,809
	Contractor Expenditures		\$ 2,536,806
10571	WATER TREATMENT PLANT EXPANSION 75 TO 85 TOTAL COSTS	\$ 8,260,000	
	Personnel Services Expenditures		\$ 57,089
	Contractor Expenditures		\$ 5,081,133
11135	FAIRWAY FUND LAND	\$ 150,000	
	Personnel Services Expenditures		\$ 6,359
	Contractor Expenditures		\$ 9,112
	JWC EMERGENCY EQUIP REPLACEMENT TOTAL COSTS	\$ 2,000,000	\$ -
	TOTAL PROJECT COSTS	\$ 16,900,000	\$ 7,726,110

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 DistrictJim Doane
Dick Schmidt
Bernice Bagnall

In May 2018, the Joint Water Commission (JWC) donated life jackets to the "Safe Kids Washington County" coalition, a child-safety-focused program led by Hillsboro Fire & Rescue. The life jackets will be housed at Hagg Lake kiosks for visitors to borrow while recreating on the water. The JWC began an annual donation of life jackets several years ago to help improve water safety at Hagg Lake.

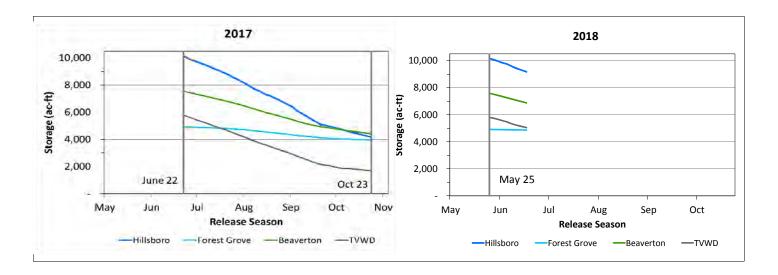


Hillsboro Fire & Rescue firefighters accept donation of lifejackets from Joint Water Commission Assistant Water Manager Chris Wilson (far right) and his daughters Kinsley and Addie.

JOINT WATER COMMISSION Weekly Stored Water Summary Report

Year to Date as of June 17, 2018

	Season B	eginning Sto	orage		D Releases an 5/25/2018)		Storage Remaining			
	Scoggins	Barney	Total	Scoggins	Barney	Total	Scoggins	Barney	Tota	I
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)
Hillsboro	5,000	5,127	10,127	802	199	1,001	4,198	4,928	9,126	90%
Forest Grove	4,500	414	4,914	45	-	45	4,455	414	4,868	99%
Beaverton	4,000	3,556	7,556	559	156	715	3,441	3,400	6,841	91%
TVWD	-	5,789	5,789	-	775	775	-	5,014	5,014	<i>87</i> %
Total	13,500	14,886	28,386	1,406	1,131	2,537	12,094	13,755	25,849	91%
%				55%	45%		90%	92 %		



Week of June 11 - June 17, 2018

	Scog	gins Releases		Ва	rney Releases	Total Releases				
-	Released	Daily Avg Release		Released	Daily Avg Release		Released	Daily Avg Release		
	(ac-ft)	(ac-ft/d)	(cfs)	(ac-ft)	(ac-ft/d)	(cfs)	(ac-ft)	(ac-ft/d)	(cfs)	
Hillsboro	171	24	12	119	17	9	290	41	21	
Forest Grove	15	2	1	-	-	-	15	2	1	
Beaverton	128	18	9	91	13	7	219	31	16	
TVWD	-	-	-	206	29	15	206	29	15	
Total	313	45	23	417	60	30	730	104	53	

Water Available		V	/ater Product	ion	Water Used Through Meters				
			Raw W	/ater	Finished '	Water			
Source	(ac-ft)		(ac-ft)	(Mgal)	(ac-ft)	(Mgal)	Agency	(ac-ft)	(Mgal)
Reservoir Release	730	JWC	887	289	867	282	Hillsboro	472	154
Natural Flow	194	SSFP	17	6	17	6	Forest Grove	13	4
							Beaverton	212	69
							TVWD	200	65
							North Plains	8	2
Total	924		904	295	884	288	·	906	295
Capture Rate [†]			98%						

[†] Release changes occur between 8am-12pm. Production is measured from 12am-12am.

^{*} Flows through TVWD's Butternut Creek meter are not included in this report

JOINT WATER COMMISSION Weekly Stored Water Summary Report

Daily Detail		6/11	6/12	6/13	6/14	6/15	6/16	6/17
Daily Release (ac-ft)								
Scoggins		55.5	29.8	29.8	29.8	49.6	59.5	59.5
Barney		59.5	59.5	59.5	59.5	59.5	59.5	59.5
Total	_	115.0	89.3	89.3	89.3	109.1	119.0	119.0
Daily Allocations to Storag	ge (ac-ft)							
Hillsboro		49.5	33.7	36.5	34.9	43.5	47.6	44.2
Forest Grove		0.9	2.8	2.0	0.8	2.0	2.6	4.0
Beaverton		33.5	28.1	27.2	29.4	30.0	34.2	36.1
TVWD		31.1	24.7	23.5	24.1	33.5	34.6	34.7
Total	_	115.0	89.3	89.3	89.3	109.1	119.0	119.0
Water Available (ac-ft)								
Reservoir Release		115.0	89.3	89.3	89.3	109.1	119.0	119.0
Natural Flow		27.8	27.8	27.8	27.8	27.8	27.8	27.8
Total	_	142.8	117.0	117.0	117.0	136.9	146.8	146.8
Water Production (ac-ft)								
JWC Raw Water		118.4	112.5	112.4	116.9	135.9	144.6	146.0
SSFP Finished Water		2.5	2.6	2.5	2.5	2.5	2.5	2.5
Total		120.9	115.1	114.9	119.3	138.3	147.0	148.5
Capture Rate (% of Avail) [†]		85%	98%	98%	102%	101%	100%	101%
JWC Finished Water		115.5	110.5	110.2	114.7	132.6	141.3	142.2
SSFP Finished Water		2.5	2.6	2.5	2.5	2.5	2.5	2.5
Total		118.0	113.1	112.7	117.1	135.0	143.8	144.7
Water Used Through Mete	e <u>rs</u>							
Hillsboro (with SSFP)	(ac-ft)	64.5	60.4	66.3	67.2	71.2	72.8	69.5
Forest Grove	(ac-ft)	0.6	2.5	1.9	0.6	1.8	2.4	3.6
Beaverton	(ac-ft)	27.9	27.5	28.0	31.4	29.8	33.0	34.7
TVWD	(ac-ft)	25.9	24.2	24.2	25.7	33.4	33.4	33.5
North Plains	(ac-ft)	0.4	1.5	0.7	1.7	1.1	0.5	1.6
Total		119.4	116.1	121.2	126.6	137.3	142.2	142.9
Hillsboro (with SSFP)	(Mgal)	21.0	19.7	21.6	21.9	23.2	23.7	22.6
Forest Grove	(Mgal)	0.2	0.8	0.6	0.2	0.6	0.8	1.2
Beaverton	(Mgal)	9.1	9.0	9.1	10.2	9.7	10.8	11.3
TVWD	(Mgal)	8.5	7.9	7.9	8.4	10.9	10.9	10.9
North Plains	(Mgal)	0.1	0.5	0.2	0.5	0.4	0.2	0.5
Total		38.9	37.8	39.5	41.3	44.8	46.3	46.6
Weather								

[†]Release changes occur between 8am-12pm. Production is measured from 12am-12am.