1. CALL TO ORDER/ROLL CALL

Chair Snider called the meeting of the Lake Oswego Tigard Water Partnership Oversight Committee to order at 5:33 pm at the Red Rock Creek Conference Room at Tigard City Hall, 13125 SW Hall Blvd, Tigard, Oregon 97223.

2. APPROVAL OF MINUTES OF OCTOBER 29, 2018 MEETING

Mayor Studebaker made a motion to approve the minutes of the October 29, 2018 meeting. Councilor Manz seconded the motion. The motion passed unanimously.

3. PUBLIC COMMENT

None

4. OLD BUSINESS

4.1 Water Rights Extension Remand

Ms. Duncan stated there was nothing new to report and everything that had evolved had been explained in an email from Joel Komarek to Committee members. WaterWatch appealed the remand and a response from Oregon Water Resources Department (ORWD) was expected sometime in February. Mr. Goodrich added OWRD requested an extension for the response and it was granted. Councilor Manz asked being in the fourth year of decreased snowpack, how that might impact the case if WaterWatch continues to appeal. Ms. Duncan replied it wouldn’t affect the case in that specific light and noted the agenda item for conservation messaging for the upcoming summer.

4.2 Operations Committee Activities Report

Ms. Duncan referred to the corresponding pages in the meeting packet. She reported a special study was conducted on the filters and plant performance with the assistance of Stantec Engineering, to
evaluate the performance of the new water treatment system and biological filters. Operators and Engineers collected data, conducted analysis and found the filters to be performing as expected. Declining rates of disinfection byproducts continue which is a very good indicator that the ozone biological filters function as expected. Improving water quality parameters was one of the goals of the project so the substantiating data is positive. **Mayor Snider** said the decrease in levels in Tigard was pretty dramatic. **Ms. Duncan** stated the results had exceeded expectations, particularly with disinfection byproducts and lead and copper.

**Ms. Duncan** reported there had been seven customer requests for lead and copper testing in Lake Oswego over the previous quarter. Tigard received a few calls relating to taste, odor, and/or color and were all resolved by flushing. **Mayor Studebaker** asked what water line flushing entailed. **Ms. Duncan** explained water taste and odor problems are primarily due to water sitting stagnant usually towards the end of a line. Often the issues are specific to the house so the customer is asked to open all faucets in the house and let them run for several minutes. That often resolves the problem but if not, then utility workers go out and open a fire hydrant and turn over the water to freshen it up.

**Ms. Duncan** referenced water use and production summary in the Operations Report and noted water demand was up a little from 2017 but otherwise trended comparably. Water production for the year was just about four billion gallons for the year; 2.2 billion went to Tigard and 1.8 billion went to Lake Oswego. **Ms. Duncan** referred to the asset management portion of the report and stated with the plant fully staffed operators have been catching up on work orders and preventative maintenance.

**Ms. Duncan** stated, as previously reported, there had been excess vibration in the pump motors at the river intake pump station and monitoring revealed a phenomenon in which the bearings are being damaged by stray shaft voltage from the variable frequency drive that runs the motor. She said bids were being collected for replacement of the bearings on the motors. **Mayor Snider** asked if that would become a preventative maintenance issue in the future or if there was a way to address the problem. **Ms. Duncan** replied the bearings could be protected with a ceramic coating and the installation of a device to capture or prevent the damage from the stray current on the bearings. **Mayor Studebaker** asked if there was any indication that a different variable frequency drive would make a difference. **Ms. Duncan** said she hadn't heard of that and would need to discuss it with an electrical engineer, but the cost to replace the bearings would be far less than replacing the variable frequency drive. She said the issue would be considered when the fifth pump is installed.

**Ms. Duncan** noted there were still some warranty repairs under way with the ozone system and staff continues to work to make sure all issues/glitches are addressed before the warranty period expires. **Mayor Studebaker** asked if there were many problems with the ozone system. **Ms. Duncan** responded there hadn't been anything major but there had been some leaking gaskets and materials. She explained ozone is very abrasive and damaging to material and a typical gasket on a valve is made of material that is unable to resist the damage caused by ozone. Some of the valves in the system didn't have the right type of gasketing so the vendor has replaced a lot of the original material installed. **Councilor Manz** asked if ozone is corrosive. **Ms. Duncan** said it is corrosive and abrasive so stainless steel or titanium must be used.
5. NEW BUSINESS

5.1 LO - Tigard FY18 Budget True-up

Mr. Goodrich explained annually the cities provide information such as cost structure, actual expenditures, and the comprehensive asset financial report to FCS Group which puts the information into their model and analyses water use compared to actual expenditures. It is broken down into various components having to do with fixed costs, based on cost allocation of ownership within the Partnership, and variable costs which are based on capacity use. Their analysis determined Tigard used 54.67% of capacity compared to Lake Oswego using 45.3% capacity. Expenditures were less than anticipated for FY18 resulting in Tigard overpaying $431k. During FY19 Tigard pays about $146k per month to Lake Oswego. The goal going forward will be to avoid large reconciling payments. Mayor Snider commented the cities weren’t certain of operating expenses associated with the new plant and now they are slowly narrowing in on realistic numbers. Ms. Duncan stated the River Intake and Water Treatment Plant are much more energy efficient than expected. Original budget amounts were based on water consumption to the two cities from the old plant but the new plant has many efficiencies and uses less electricity resulting in a signficant budget surplus for power. Mayor Studebaker asked where the payment to Tigard would come from. Ms. Duncan replied it would come from the water fund contingency. Ms. Rooney added the ending fund balance was higher than expected so there is an extra $431k in that balance.

5.2 Lake Oswego Tigard FY 20 Budget Proposal

Ms. Duncan recalled at the previous meeting there was discussion of an additional full time employee (FTE) to help extend operating hours at the water treatment plant, specifically in the summer to smooth out operations and continue to participate in the energy demand response program, as well as to help meet higher summer water demands. The committee asked to see two proposals, one with the additional FTE and one without, and the budget impact each would have. She stated option one with the additional FTE total budget amount would be $3.64M which included reduced electrical and chemical costs, energy demand program income, and increased contracted services and equipment repair budget. Option two did not include the additional FTE to extend operating hours, eliminated energy demand program income, increased electrical costs due to on/off operation in the summer at a total budget of $3.58M, a net budget difference from option 1 of $59K. Councillor Manz asked if on/off operation adds to the wear and tear of equipment. Ms. Duncan said every start and stop of a pump or motor or a rotating piece of equipment does add to the wear and tear. She noted operating 24 hours uses less equipment where at 18 hours 3 or 4 pumps run to meet demand but at 24 hour operation only 2 or 3 pumps would need to run. Also of note, plant upsets or problems typically occur during start-up in the morning. Ms. Duncan noted the capital improvement budget item to purchase and install the fifth pump at the river intake at $500k which would be shared between the two cities. Mayor Studebaker asked if one FTE would be sufficient to run 24 hours. Ms. Duncan said 24 hour operations would occur two to three months out of the year during high water demand period. Mayor Studebaker asked what that person would do during the rest of the year. Ms. Duncan responded they would be working on maintenance. She explained during the summer more staff work operating shifts and during winter, with less operating hours, staff are freed up to conduct bigger maintenance projects. During the summer less maintenance is done, only things absolutely needed. Councillor Manz asked if it was difficult to fill the operator positions. Ms. Duncan replied the labor market is tight but the Lake Oswego - Tigard plant attracts good staff because it is a new, state of the art plant with a good reputation. She said two new operators were hired over the summer, one with level one certification, and one with a
level four certification. She commented she prefers to hire people with some degree of education and certification but a lot of potential that can be trained up. The job market is tight but there has been good success hiring good people. Mayor Snider asked Mr. Goodrich what the impact would be for Tigard if the plant runs 24 hours a day. Mr. Goodrich voiced support for the addition of an FTE and said operating 24 hours a day would make Tigard operations more efficient and would be beneficial. Mayor Snider, Mayor Studebaker, and Councilor Manz all voiced their support for adding an FTE in the FY20 budget. Mr. Goodrich requested a recommendation from the Oversight Committee to the Lake Oswego Budget Committee to approve the proposed FY20 budget. Councilor Manz made a motion for the Oversight Committee to recommend to the Budget Committee to approve option one presented and the proposed budget. Mayor Studebaker seconded the motion. Motion passed unanimously.

5.3 Conservation Messaging Plan

Ms. Duncan stated the past few years had seen below average snow pack, water levels, and rainfall. Last year the river was fairly low but curtailment efforts were not implemented. Clackamas River Water Providers (CRWP) were discussing a messaging plan focused on conservation during the months of September and October when the river is at its lowest and when people should be turning off their irrigation systems. CRWP members are asking their elected officials if this was a message they would support. She noted for Lake Oswego and Tigard it would not be much of a stretch because of the strong conservation program already in place and irrigation system auditing. It would be a newer message for some of the providers. Mr. Goodrich pointed out the pricing systems for each City encourages conservation. Committee members voiced their support for the messaging plan.

5.4 Lake Oswego and Tigard Master Plans and Resiliency Discussion

Ms. Duncan introduced Lake Oswego’s City Engineer, Erica Rooney and Rob Murchison, who is leading the Master Plan Update for Tigard. Ms. Rooney stated Lake Oswego updated their Water Master Plan in 2018 and Tigard had begun updating theirs. The information gathered in those efforts feeds in to emergency planning and vulnerability assessments in both communities and also feeds into the Partnership’s Water Management and Conservation Plan. Each city handles its own conveyance but there are components to address collectively. She explained the Master Plans address current and future water demand, seismic resiliency and emergency supply which are important at each individual city but also as a Partnership there are specific issues to be addressed such as source of supply risks, identifying system deficiencies, and the Capital Improvement Program. The joint effort on the Water Management and Conservation Plan addresses water source and supply elements, conservation measures and benchmarks, curtailment, and service area and demand projections. It's important to note the cities are connected and need each other to respond to water shortages. Aside from water not being available, other system vulnerabilities were identified, such as terrorist attacks. The Risk and Resiliency Assessment and Emergency Response Plan address these types of events. She reiterated, both cities have their own plans for their conveyance systems but need each other to respond to emergencies because the two systems are connected.

Ms. Rooney discussed seismic resiliency and shared the OHA map of earthquake and tsunami damage potential for a magnitude nine earthquake. Lake Oswego and Tigard are situated in the moderate - heavy range. She then referenced a map which identified the Lake Oswego water “backbone” system and critical facilities that would require water in an emergency. She noted the hazard analysis areas where main waterlines pass through liquefiable soil and would need to be updated for seismic resiliency. The commonality for the two cities is the Bonita supply line, part of the backbone for both
cities even though it's in Lake Oswego. A fragility analysis revealed the probability of failure for the Bonita supply line in the 80% - 100% range.

**Ms. Rooney** explained source of supply risks include problems like contamination, lower river levels due to climate change, flooding, and power outages. **Councilor Manz** asked if any trains with chemical loads travel anywhere near the river. **Ms. Duncan** said a rail line crosses the Clackamas River upstream of the intake but didn't know if oil or chemicals were transported there. The CRWP Source Protection Plan includes a spill response component and representatives from Union Pacific participate in CRWP emergency planning, table tops, and workshops to plan for scenarios of a train derailment and/or hazardous spill.

**Ms. Rooney** stated Lake Oswego only has one water source whereas Tigard has a few options for emergency backup so the hope would be to have a reliable supply line for Lake Oswego to receive water from Tigard if necessary. **Councilor Manz** asked about Lake Oswego's water rights on the Willamette River. **Ms. Duncan** stated those water rights were only for 4 mgd. **Mr. Goodrich** reported WES had recently acquired 100 mgd on the Willamette as part of the purchase of the Blue Heron plant and suggested that may be an option for future discussion.

**Ms. Rooney** stated the items she had presented would be addressed as Tigard develops their Master Plan. **Mr. Murchison** reported staff and consultants were about 30% in to the Master Plan and would be addressing the same topics and going through the same steps over the next four - five months. The other connections available to Tigard would be examined as part of the process; ASRs are controlled by Tigard but the Joint Water Commission, Portland, and Willamette Water Supply connections are all located on the far west portion of Tigard, so the plan will explore options to get water to Bonita. **Mayor Snider** said he didn't understand the fragility of the Bonita supply line since it was recently installed. **Mr. Murchison** clarified new pipe was not laid between Waluga Reservoir to the freeway and that is the portion shown on the fragility diagram. **Mr. Goodrich** explained during design and budget development it was determined that portion of pipeline was meeting the needs at that time but would need to be replaced at a future date. **Ms. Rooney** added the Oregon Resiliency Plan hadn't been established at that point. **Ms. Rooney** recapped Lake Oswego wants to ensure a good connection at Bonita to be able to send water back to Lake Oswego if necessary. She surmised that Lake Oswego is at the mercy of Tigard and wanted to continue to maintain the efforts of being partners. She stated the Bonita pipeline is one of several recommended CIP seismic resiliency projects for Lake Oswego.

**Mr. Murchison** stated the findings from the Lake Oswego Master Plan Update would be incorporated into the Tigard plan and hopefully the Bonita pipeline project would rise to the top of the CIP in both cities. **Ms. Duncan** clarified staff was not looking for a decision but wanted to plant the seed that Lake Oswego had an interest to see the ASRs and Bonita supply line are considered in the Plan. **Mr. Murchison** stated the Tigard proposed CIP budget would include work on the ASR 3 in the near future and maintenance work on ASR 2 so they would be readily available if necessary. **Mayor Snider** asked if there had been a solution to the taste issues associated with the ASRs. **Mr. Goodrich** said his recommendation would be to dump the water in the ASRs because it's old Portland water but staff feels dilution and blending is the answer. He noted ASR 1 would be coming to the end of its life cycle and hoped the master plan would include a recommended outcome. **Mayor Studebaker** asked if there was a timeline for the Bonita pipeline replacement. **Mr. Goodrich** explained the pipeline from Waluga Reservoir to Bonita Pump Station is a Tigard asset so the timing will depend on the outcome of the Tigard Master Plan.
6. FUTURE AGENDA ITEMS

6.1 Depreciation funding for Partnership Assets; Final Recommendation to Councils for Percent Allocation

6.2 Joint Lake Oswego Tigard Water Management and Conservation Plan Review

6.3 Clackamas River Water Providers Program Overview

6.4 Other Future Agenda Items

_**Mayor Snider**_ asked if anyone had topics to add to the future agenda items list. _Mr. Goodrich_ stated he sits on the Board of the Clackamas River Basin Council representing Clackamas River Water Providers. The organization is a watershed Council with representatives from agriculture, fish & environmental, and water providers. The Council was recently awarded an $8M grant which requires matching funds. The grant money would be used for temperature control/shading projects and restoration of the river to provide better fish habitat. He stated CRWP affords $10k per year and suggested perhaps the Partnership may want to help fund projects. He suggested having the Partnership name attached to efforts would help alleviate the perception that Lake Oswego and Tigard take water from a watershed in which they aren't located. _Mayor Snider_ stated both cities benefit from the watershed and asked if it would be a one-time donation or ongoing. _Mr. Goodrich_ proposed it would be an annual expenditure.

_Councilor Manz_ asked what the amount of the donation would be and if the organization has the bandwidth to carry out the projects. _Mr. Goodrich_ responded they have a strong volunteer base and membership. _Mayor Snider_ asked what amount would make an impact. _Mr. Goodrich_ said $25k - $50k would make an impact. _Mayor Studebaker_ stated the Budget Committee would consider the expenditure but couldn't commit at this time. _Mr. Goodrich_ suggested a representative from the Watershed Council give a presentation about their program at a future Oversight Committee meeting.

_Councilor Manz_ questioned if there would be a conflict donating to the watershed group from the water fund. _Ms. Duncan_ replied if the money is for source water protection it would be ok and noted the fees paid to CRWP for source water protection help to meet EPA requirements. _Councilor Manz_ asked if participation would benefit the cities regarding the issues like the one with WaterWatch. _Ms. Duncan_ said she would like to defer that question to Joel Komarek and would follow up with him. She added the new federal farm bill has provided more funding for source water protection programs and water providers are being encouraged to reach out to the state agricultural and conservation departments as resources to help with source water protection, as well.

_Mayor Snider_ reported the Tigard Council would be conducting new Board and Commission assignments and anticipated there could be two new participants on the Oversight Committee. He acknowledged two new representatives may be difficult but suggested if Councilor Liz Newton were to be appointed to the Committee then he would step down. Councilor Newton was heavily involved with the Partnership on a staff level for many years when she was the Assistant City Manager for Tigard. If she is not assigned to the Committee then Mayor Snider would stay on for another two years so as not to have two completely new Tigard representatives on the Committee.
7. ADJOURN

Mayor Snider adjourned the meeting at 6:54 pm.

The next meeting will be held April 11, 2019 at 5:30 to 7:00 pm at the Lake Oswego Main Fire Station, 300 B Avenue, Lake Oswego OR 97034.

Respectfully Submitted,

[Signature]

Susie Anderson
Administrative Assistant

Approved by the Oversight Committee:

May 6, 2019