Lake Oswego · Tigard
Water Partnership
sharing water · connecting communities

AGENDA

Lake Oswego/Tigard Water Supply Partnership

Partnership Committee

Monday July 17th 4:30 p.m. to 6:00 p.m.
Lake Oswego Public Works – Pilkington Room
17601 Pilkington Road, Lake Oswego

1. **Call to Order/Roll Call** – Chair Wolf

2. **Approval of Minutes** of meeting held April 17th, 2023.

3. **Public Comment**
(for items not on the agenda, a time limit of 3 minutes per person shall apply)

4. **Committee Business**

    4.1 Operations Committee: Activities Report (Bret Bienerth)

    4.2 Budget report (Bret Bienerth)

    4.3 Water quality testing news

    4.4 Curtailment overview (Bret Bienerth)

    4.5 Back Up Power update (Stefan Broadus)

5. **Future Agenda Items**

    Clackamas River Water Providers (Kim Swan)

6. **Adjourn**

Next meeting: October 16th, 4:30 p.m. to 6:00 p.m. at Tigard Public Works- 8777 SW Burnham St.

Lake Oswego Tigard Water Partnership
Summary of Partnership Committee Meeting
April 17, 2023

City of Lake Oswego:	**Oversight Committee:** Mayor Buck, Councilor Corrigan Staff: Erica Rooney, Public Works Director/City Engineer; Bret Bienerth, Water Treatment Plant Manager; Susie Anderson, Administrative Assistant
City of Tigard:	**Oversight Committee:** Councilor Hu, Councilor Wolf Staff: Brian Rager, Public Works Director; Ross Horton, Sr. Project Engineer; Jennifer Joe, Environmental Program Coordinator

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1. CALL TO ORDER/ROLL CALL

Chair Wolf called the meeting of the Lake Oswego Tigard Water Partnership Committee to order at 5:31 pm. The meeting was held at Tigard Public Works, 8777 SW Burnham Street, Tigard OR 97223.

2. APPROVAL OF MINUTES

Mayor Buck moved to approve the minutes of the February 27, 2023 meeting. **Councilor Hu** seconded the motion. Motion passed unanimously.

3. PUBLIC COMMENT

None.

4. COMMITTEE BUSINESS

4.1 Operations Committee: Activities Report
Mr. Bienerth reviewed the contents of the Operations Report in the meeting packet. Of note, the River Intake pump 3 motor failed in December. Quotes had been received and Industrial Electrical Machinery was awarded a contract in the amount of $87,786. Water Conservation Specialist, Kevin McCaleb, retired.

4.2 Lead and Copper Testing This Summer
Mr. Bienerth introduced Jennifer Joe and explained she oversaw water quality for both cities through a shared worker agreement. **Ms. Joe** stated regulatory lead and copper testing would be conducted this Summer. Lead is a highly toxic pollutant that can cause many biological issues. People most susceptible are children and pregnant women. Over the years lead had been banned in gasoline, residential use paint, and water fixtures. In 1991 the EPA enacted the Lead and Copper Rule (LCR) to regulate lead and

copper in drinking water. If 10% of the customer taps sampled are above the action level then more corrosion control and public education efforts must be implemented. Lead can be found in older plumbing fixtures in homes, not source water or the distribution system. Both cities offer free lead and copper testing to its residents. When Tigard was purchasing water from Portland they participated in the Joint Monitoring Program where all Portland wholesale customers took a combined 100 lead and copper samples every six months. Tigard exceeded the EPA action level in 2013. Portland took the lead on the public outreach and education and Tigard contacted all the schools and daycares in the city and provided information and education. After switching from Portland to Lake Oswego water, lead levels dropped significantly and over time, because detects were fewer and fewer, the frequency of sampling and required number of samples for lead and copper had been reduced. The regulatory every 3-year sampling for lead and copper would be conducted this summer in 3 phases. The first is to contact the homeowner via email to schedule a sample date. Phase 2 is the actual sampling which needs to be done within 24 hours. Phase 3 is reporting results to the State and each participant. Participants also receive a $25 credit on their utility bill**.** **Mayor Buck** asked if the EPA program was designed to detect lead in source or system and because we have a more modern system we just don't have that? **Ms. Joe** responded the program looks for lead in homes. There are homes in Tigard with lead soldering so it's necessary to measure how corrosive the water is to those homes. If one of the 30 samples taken is really high, that could be indicative that other homes could be high, as well. **Mayor Buck** asked if that was how the homes were selected. **Ms. Joe** stated they're referred to as tier 1 homes, built between 1970 and 1985. The ban on lead in homes was implemented in 1985 but she has found some homes built in 1986 that had lead soldering, likely because contractors had it in their inventory when the ban was implemented. **Mayor Buck** asked what contributed to the drop in positive results after switching to Lake Oswego water. **Ms. Joe** replied it was due to corrosion control. pH levels with Portland water was around 7.2 and with Lake Oswego water it's closer to 7.8. **Councilor Wolf** recalled while sitting on the Tigard Tualatin School Board in 2013 a couple of schools were impacted by lead. **Ms. Joe** stated Washington County had a program where lead blood tests were provided at the school for children who were unable to get to a pediatrician. If lead was detected in the blood test they would go in to the home to find the source. The most common source of lead in the home is interior or exterior paint, imported toys, spices, and candies from other countries. **Councilor Hu** expressed concern that the EPA limits weren't based on any scientific guidelines and asked if they might be changed at some point. **Ms. Joe** responded there's no safe level of lead in water but they set an acceptable limit. **Mr. Bienerth** added often the limit is determined by the detection ability. As technology improves, limits may be lowered as detection ability is enhanced.

4.3 Lead and Copper Rule Revision
Ross Horton introduced himself. He is a Senior Project Engineer for the City of Tigard, working almost exclusively on water projects. He would be explaining some new regulations coming from the EPA regarding the revision of lead & copper rule service line inventory requirements. Recent high-profile lead issues prompted regulatory activity to improve the rules established in 1991. The new revised rule released in 2021 lowers the trigger level for remedial actions, increases sampling requirements for schools and child care centers, requires creation of an inventory for all service lines, and requires public notification regarding status of any service line that has potential to be lead, and a plan for replacement. He explained service lines have two parts: the portion from the main to the meter or curb stop is public and from the meter to the house is private. The inventory will include identifying materials for every service line, both private and public, in the entire water system. The types of materials that will be found are lead, non-lead (copper, plastic, galvanized, iron), galvanized requiring replacement (a line that could have been downstream from a lead line at any time), and unknown. The inventory must be

developed based on evidence-based identification of lines either through records review, visual inspection, excavation, or predictive modeling/statistical sampling. The inventory must be submitted to Oregon Health Authority by October 2024. Lead service lines aren't typically an issue on the West Coast and Lake Oswego and Tigard have no known lead service lines. Public service lines installed after 1985 are copper or iron. On the private side of the water meter service lines installed before 1986 are unknow material, potentially lead, and require identification. Service lines installed 1986 or later are considered non-lead even if the material is unknown and services lines larger than 2 inches are considered non-lead. He explained the action plan was to develop a preliminary inventory by reviewing tax lot information, historical engineering standards, development plans and maintenance records, then determine the service lines with unknown material. The Tigard service area includes 20,500 meters. In house review revealed there are records going back to 1975 and anything installed before then is unknown amounting to about 4.4k public and 7.8k private unknown service lines. Lake Oswego has 12,500 meters and contracted with 120Water for records review and inventory development. Lake Oswego has about 10,000 unknown service lines but the hope is that number will decrease as 120Water continues work. Physically verifying thousands of service lines would be quite an undertaking so OHA has provided guidance that specifies the methodology for verifying a sub-set of unknown service lines that will give a statistical sample that would prove with 95% confidence, the absence of lead service lines. Both Lake Oswego and Tigard plan to send field crews out to complete the physical investigations. They will determine the material of the service lines going in to the meter box and what is going from the box to the home. Both cities have about 370 locations that need to be verified. Tigard will use a vacuum excavator to access the meter box to verify the materials. **Mr. Bienerth** stated Lake Oswego was replacing meters and recording the materials data as they go. **Mr. Horton** continued the plan was to finalize the inventory and verify no lead service lines with the statistical model in Spring 2024. If no lead service lines are found during field investigations, that would indicate 95% confidence that no lead service lines exist in the system, which meets OHA requirements. If lead service lines are found that negates the statistic model and then Tigard would work with OHA to develop a lead service line replacement plan and develop a new method to identify lead service lines. Tigard plans to conduct field investigations over the summer and finalize the OHA inventory template in Spring/Summer of 2024 in order to meet the October 2024 deadline.

Mr. Horton explained the new Lead and Copper Rule Revision included a public engagement aspect. If there were no lead service lines or no unknowns a simple statement certifying no lead service lines to the City's website is all that would be required. If there are lead service lines or unknows in the inventory those customers must be notified, there must be a publicly accessible service line inventory showing private and public lines that must be updated annually. He felt confident that the water systems would be lead free based on physical investigations and statistical modeling. If that's not the case, they would be working closely with OHA and a service line replacement plan would be prepared during Summer 2024. **Mr. Rager** noted every water provider in the country was required to conduct this inventory. **Mr. Bienerth** added for many, this was the first time they had to include the private lines. He gave an example of Newark NJ where lead lines are common. The decision was made to replace all private lines to houses without requesting permission from homeowners. **Mayor Buck** asked what would happen if lead service lines were discovered on the private side of the meter during the inventory. **Mr. Bienerth** replied at a minimum they would need to notify the homeowner. Other jurisdictions have made the decision to replace any lead lines found, at City expense, to get all the lead out of the system. It's more efficient and cost effective vs. waiting for homeowners to take care of it and monitoring that.

4.4 Backup Power Update
Mr. Bienerth reported Brown and Caldwell had been selected to work on the backup power project at the Water Treatment Plant and River Intake and were currently determining the scope of work. **Ms. Rooney** stated the contract would go before Council for approval June 6th. The project could take up to two years to complete due to supply chain issues. **Councilor Corrigan** asked what energy source would be used. **Mr. Bienerth** replied it would most likely be diesel generators. **Ms. Rooney** added, the previous year, before most of the current members had joined the committee, a study had been conducted evaluating a variety of different energy sources and determined the most efficient and reliable source would be diesel generators.

4.5 2023/2024 Budget Preview
Ms. Rooney referenced the proposed budget in the meeting packet for fiscal years 23/24 and 24/25. The budget before them was one of four components of the water fund for Lake Oswego. She explained all budgetary items related to Tigard were kept separate from other Lake Oswego water budgets, in the 610.611 department. The Budget Committee's first review of the full budget would be May 4th. The CIP would be reviewed May 11th and if needed, a tentative meeting was scheduled for May 18th. The budget generally goes before Council the first week of June and is approved for implementation beginning July 1st. She added Lake Oswego sets aside $1M annually for rehabilitation and replacement but that wasn't reflected in the budget report before them. The backup power project was inadvertently not included in the report before them but would be when it goes before the Budget Committee.

5. FUTURE AGENDA ITEMS
Mr. Bienerth asked if anyone had any topics they would like to see addressed at a future meeting. He planned to discuss conservation and curtailment at the next meeting

6. ADJOURN

There being no further business, **Chair Wolf** adjourned the meeting at 7:25 pm.

Respectfully Submitted,

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Susie Anderson
Administrative Assistant

Approved by the Partnership Committee:

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4.1 Lake Oswego Tigard Operations Report July 17th, 2023

Customer Inquiries:

Customer Inquiries: Summarized by Tigard's Jennifer Joe

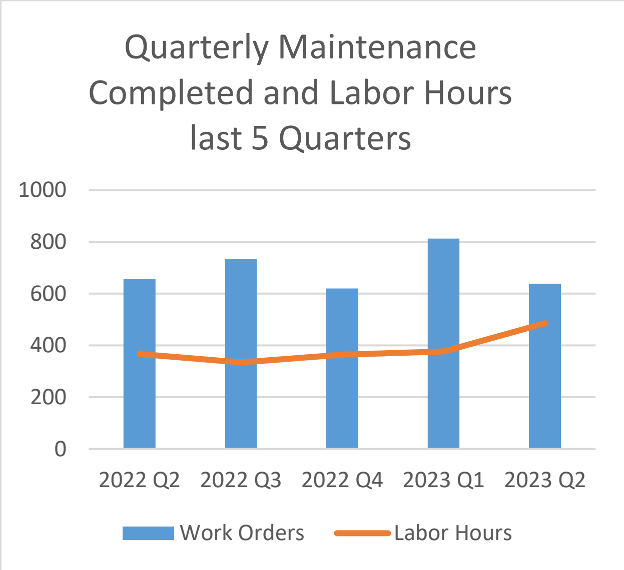
Lake Oswego's issues were mainly from inside the home and there wasn't much we could do, such as old pipes causing discoloration or smells in the bathroom and nowhere else in the home. The other calls were resolved by flushing.

Tigard had three taste and odor calls. Nothing out of the ordinary and all were resolved by flushing the system.

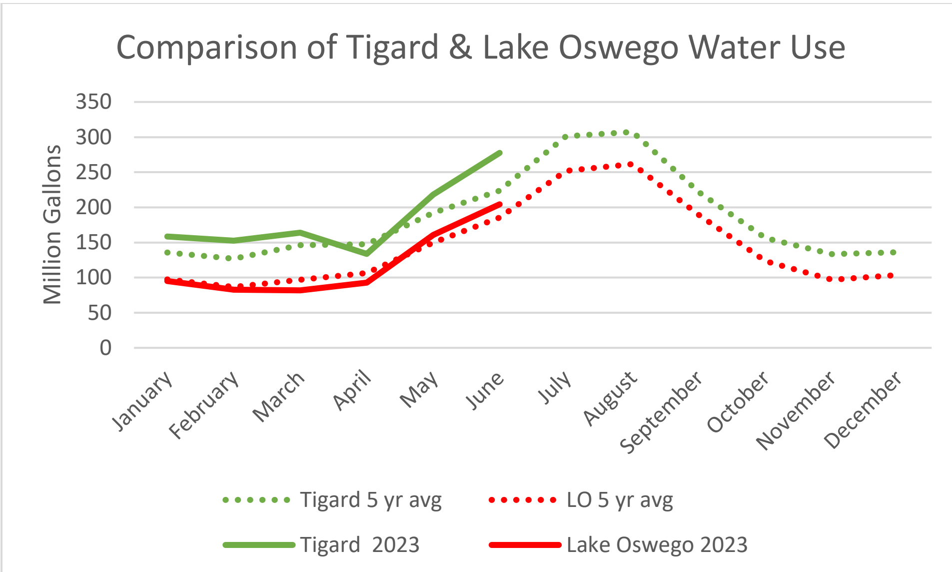
	Discolored water	Taste and Odor
Lake Oswego	3	3
Tigard	0	3

Asset Management:

In the first quarter of 2023 638 work orders were completed. Of these work orders 613 or 95.9% were either preventive or predictive maintenance.



Water Production:



Major Projects:

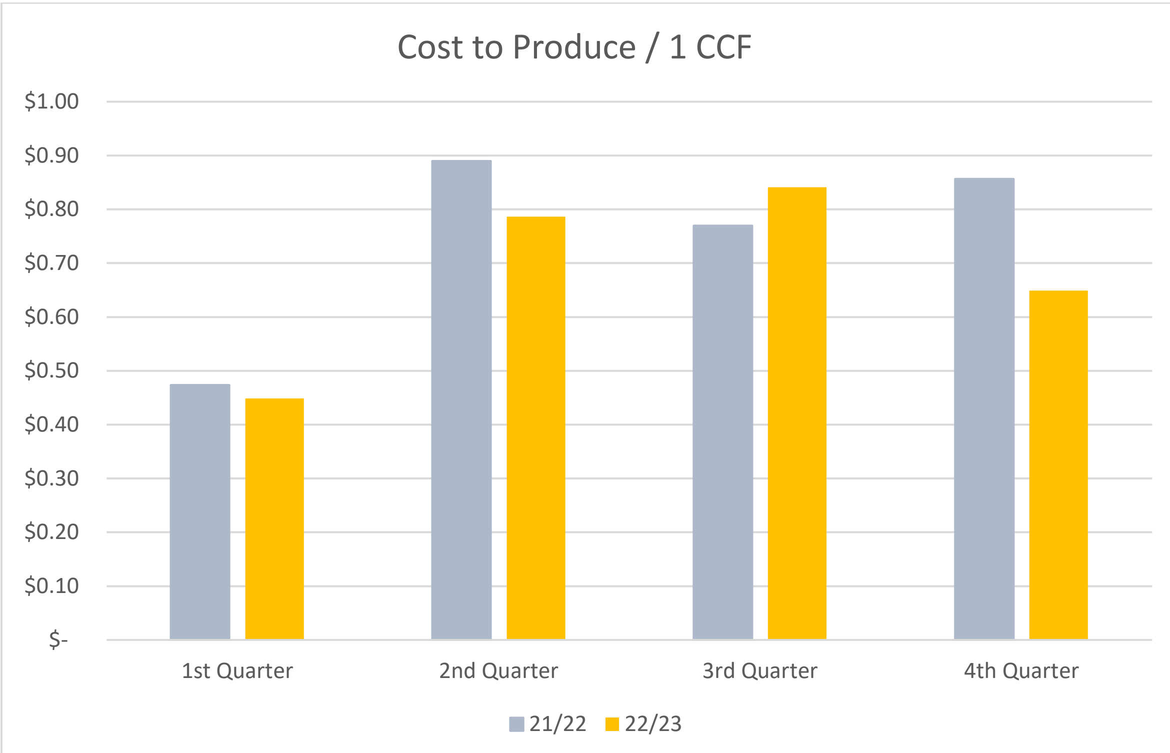
With our plant operating 24 hours a day we are shifting more of our water production to between 10 PM and 6 AM to take advantage of cheaper electricity (around 24% cheaper).

Staff Updates:

Still working through hiring a Water Conservation Specialist.

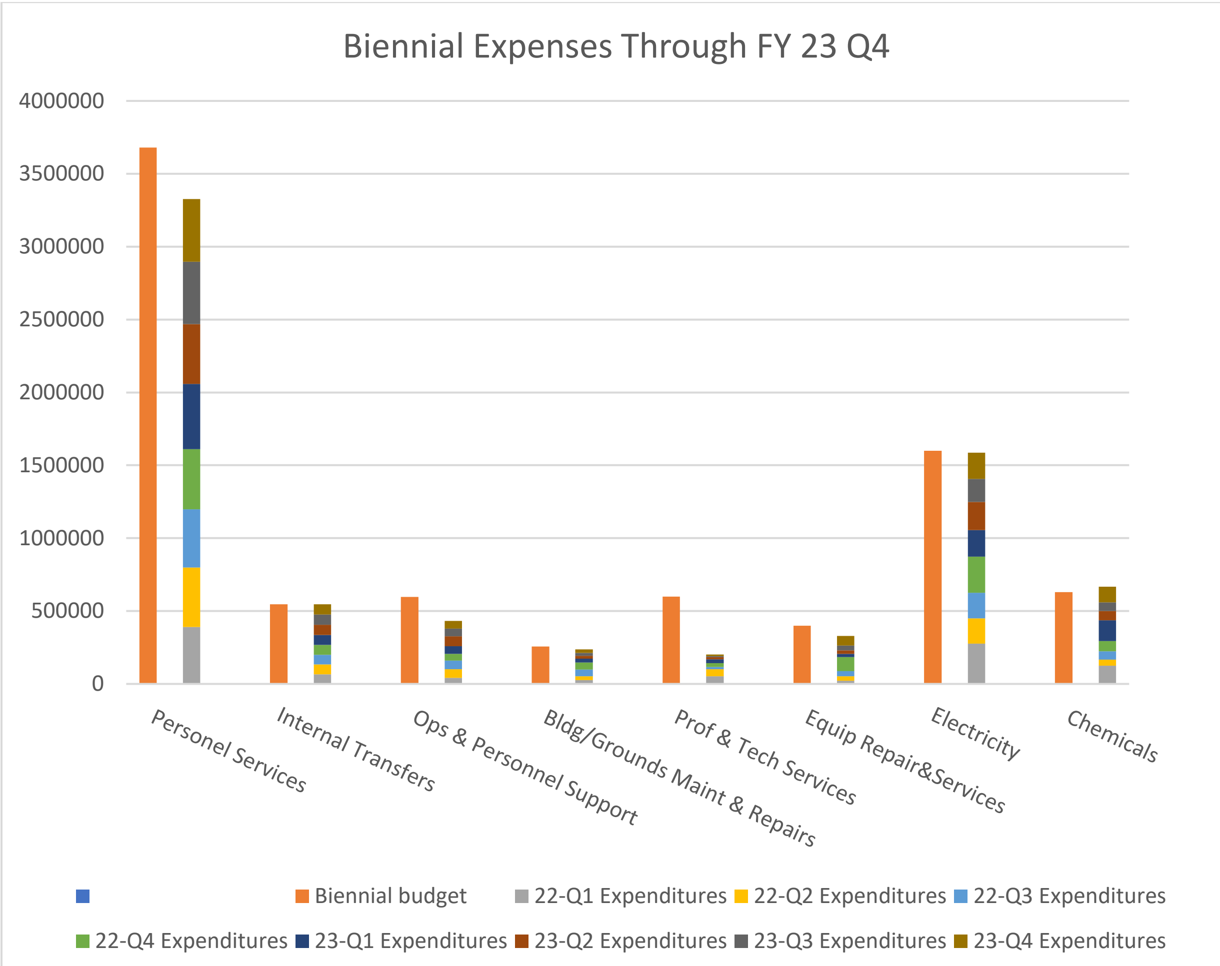
Budget Report FY 23 Q4

Cost to Produce:



FY 22/23					
	Water Produced	**Total Cost**	**Cost / MG**	**Cost / CCF**	**Cost per gallon**
1st Quarter	1610.99	$ 966,297.27	$ 599.82	$ 0.45	$ 0.000600
2nd Quarter	823.07	$ 865,554.69	$ 1,051.62	$ 0.79	$ 0.001052
3rd Quarter	734.42	$ 825,496.88	$ 1,124.01	$ 0.84	$ 0.001124
4th Quarter	1087.35	$ 943,784.53	$ 867.97	$ 0.65	$ 0.000868
FY22/23	4255.83	$3,601,133.37	$ 846.16	$ 0.63	$ 0.000846

FY 21/22					
	MG Produced	**Total Cost**	**Cost / MG**	**Cost / CCF**	**Cost per gallon**
1st Quarter	1583.57	$1,003,139.50	$ 633.47	$ 0.47	$ 0.000634
2nd Quarter	717.47	$ 853,404.51	$ 1,189.46	$ 0.89	$ 0.001190
3rd Quarter	831.96	$ 856,304.59	$ 1,029.26	$ 0.77	$ 0.001029
4th Quarter	823.78	$ 943,227.00	$ 1,145.00	$ 0.86	$ 0.001145
FY 21/22	3956.78	$3,656,075.60	$ 924.00	$ 0.69	$ 0.000924



Fiscal Year 22-23 4th Quarter Expenses: $943,785
Total Biennial Budget: $8,308,000

Examples of budget categories

- Personnel Services: Staff wages and benefits
- Internal Transfers: HR, IT, Legal support provided by City of Lake Oswego
- Ops & Personnel Support: Solids hauling, safety equip, training
- Bldg./Grounds Maint. & Repairs: Landscaping, HVAC
- Prof & Tech, Contracted Services: Studies, Operational manuals,
- Equipment Repair & Service: diagnosis, repair, and replacement of equipment
- Electricity:
- Water Treatment Chemicals: Alum, Chlorine, Caustic Soda, Pax, various polymers

Overview of Lake Oswego and Tigard Water Curtailment Response:

Joint Response: If a situation requires curtailment, the reduction in available water shall be shared proportionately according to allocation of capacity.

Curtailment Stages	Initiating Conditions
Stage 1: Water Shortage Alert	Lake Oswego or Tigard's water supply is 110% or less of its individual water demand.
Stage 2: River Flow Alert	Flow in the Clackamas River at the mouth is calculated to be below 650 cfs between September 16 and May 31 or below 800 cfs between June 1 and September 15.
Stage 3: Severe Water Shortage	• Lake Oswego or Tigard's water supply is less than 100% of its individual water demand. • Minor mechanical or electrical malfunctions at intake or water treatment plant that is expected to be of short duration. • Failure in distribution system that is expected to be of short duration.
Stage 4: Critical or Emergency Water Shortage	• Lake Oswego or Tigard's water supply is less than 50% of its individual water demand. • Major mechanical or electrical malfunctions at intake or water treatment plant. • Significant failure in distribution system. • Contamination of source of supply.

Response: (all responses affect both cities)

Stage 1: Voluntary reductions

- Joint messaging to request reductions in outdoor water use

Stage 2: River Flow Alert -

- Prohibit washing city vehicles
- Prohibit water line testing and flushing unless critical
- Limited irrigation of City parks and landscaping to between 8:00 PM and 10:00 AM
- Prohibit street washing unless required for air quality

Stage 3: Severe Water Shortage

- Cities will attempt to secure emergency sources of water from other water providers
- Prohibit washing of city vehicles
- Prohibit filling swimming pools and ponds
- Prohibit washing roofs, decks, and buildings
- Prohibit cleaning or filling decorative water features
- Prohibit using water to clean sidewalks, driveways, or other hard-surfaced areas
- Prohibit using water for dust control unless the respective City Manager okays it
- Alternate days for irrigation between residential and nonresidential customers
    - Some exceptions apply like golf courses or athletic fields

Stage 4: Emergency Water Shortage

- All water use prohibited, except uses necessary for human consumption and sanitation needs.
- Both Cities may activate their emergency operations centers.