

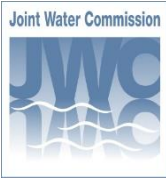
Cities of Hillsboro,
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and Tualatin Valley
Water District



JWC Algae Response and Communications Plan

J. Dorsey

Willamette Basin CyanoHABs Workshop | April 28, 2021

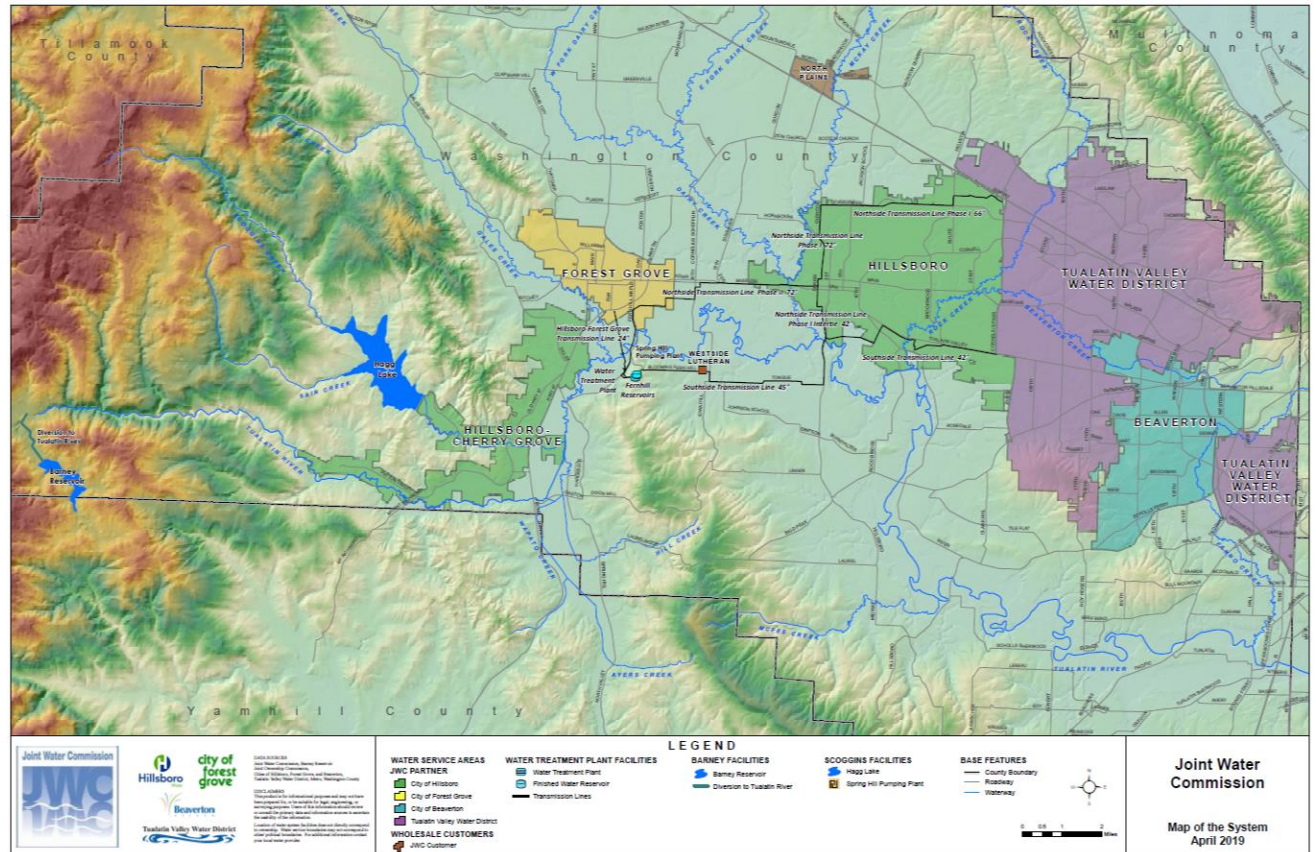


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The Joint Water Commission

- The Joint Water Commission (JWC) is a partnership agency between the cities of Beaverton, Forest Grove, Hillsboro and the Tualatin Valley Water District.
- Serves approx. 400,000 customers in Washington County
- Currently has a peak capacity of 85 million gallons of water per day (MGD)
- Treats water from the Tualatin River, Scoggins Reservoir and Barney Reservoir





The JWC Algal Response and Communications Plan

- **First developed in 2016**

- Known blooms in the watershed
- A bloom in Wapato Lake – Lake is pumped to the Tualatin upstream of the WTP
- Wanted to monitor for toxin and taste and odor before regulations
- Utilized federal EPA recommendations based on cell counts of toxic/non-toxic species
- Includes guidance for sampling for the watershed and treatment plant



- **Major updates in 2019 based on OHA's Cyanotoxins in Drinking Water Rule**

- Included sampling for toxins in the watershed in addition to speciation
- Including a tandem Communication Plan from Lessons Learned from Salem
- Added guidance for distribution system monitoring



Algal Response Plan

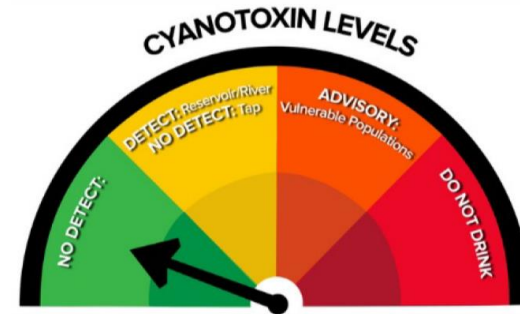
- **Segmented by location type**
 - Reservoirs
 - Streams
 - Water Treatment Plant
 - Distribution Systems
- **Step-wise and includes triggers for moving up or down levels**
 - Follow the most escalated level for each trigger
 - To reduce a level, the associated trigger must not be present for two consecutive sampling sessions
- **Investigative reservoir and stream sampling follow OHA guidelines for cell counts of potentially toxic species and toxin levels**
- **Regulatory sampling at the WTP is as stringent or more than OHA regulations**

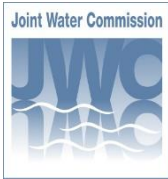




Communications Plan

- **Outlines the JWC staff's responsibilities for providing information to staff/partners, regulators, elected officials and public**
- **Guiding Principals**
 - Open Two-Way Communication
 - Collaborative
 - Proactive
 - Strong and Consistent Messages
 - Timely and Truthful
- **Target Audiences**
 - JWC Partners and Internal Employees of JWC member agencies
 - JWC Commissioners and other Governing Boards of JWC member agencies
 - Wholesale and Retail Customers of JWC and its member agencies
 - OHA, WaCo, and News Media
- **Lists Potential Actions based on Algal Response Plan level Scenarios**





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2019 Bloom at Hagg Lake

February 28th : HAB Level 1 Triggered

Aphanizomenon flos-aquae (AFA) found below JWC Reservoir

April 2nd: Staff observe bloom at dam during unrelated sampling.

Lab coordinator identifies species at JWC and confirmation speciation sample sent to lab

April 3rd: Microcystins 0.15 ng/mL at the Boom and 0.43 ng/mL at Elks Rec Area

Water Quality Program Coordinator determines a Reservoir HAB Level 3 - OHA contacted
AFA in Hagg Lake, Scoggins Creek, not detected at intake

April 8-10th & April 17th

Voluntary Raw Water sample analyzed by DEQ (April 8th)

AFA in Hagg Lake, not detected at intake

No detections of toxins

April 22nd – 25th: Toxins detected 0.15 ng/mL in Scoggins Creek and 0.20 ng/mL at Eagle Point Rec Area

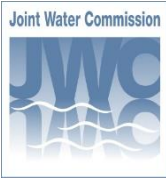
Decreased AFA in Hagg Lake and Scoggins Creek, not detected at intake

May 1st

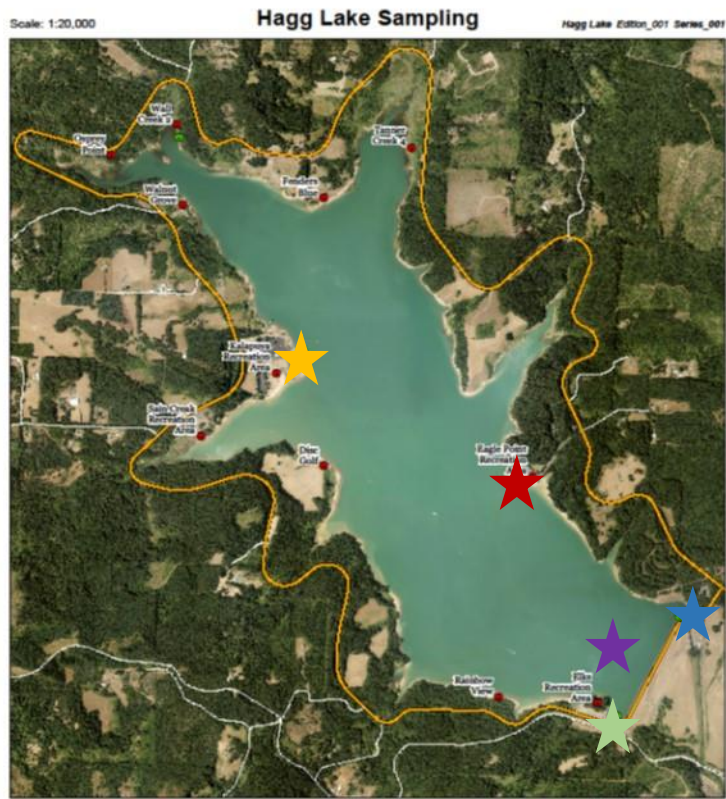
AFA in Scoggins Creek (LOW levels) not detected in lake OR intake

May 6th : Return to routine monitoring (HAB Level 2)

AFA in Hagg Lake, Scoggins Creek, not detected at intake (LOW Levels)

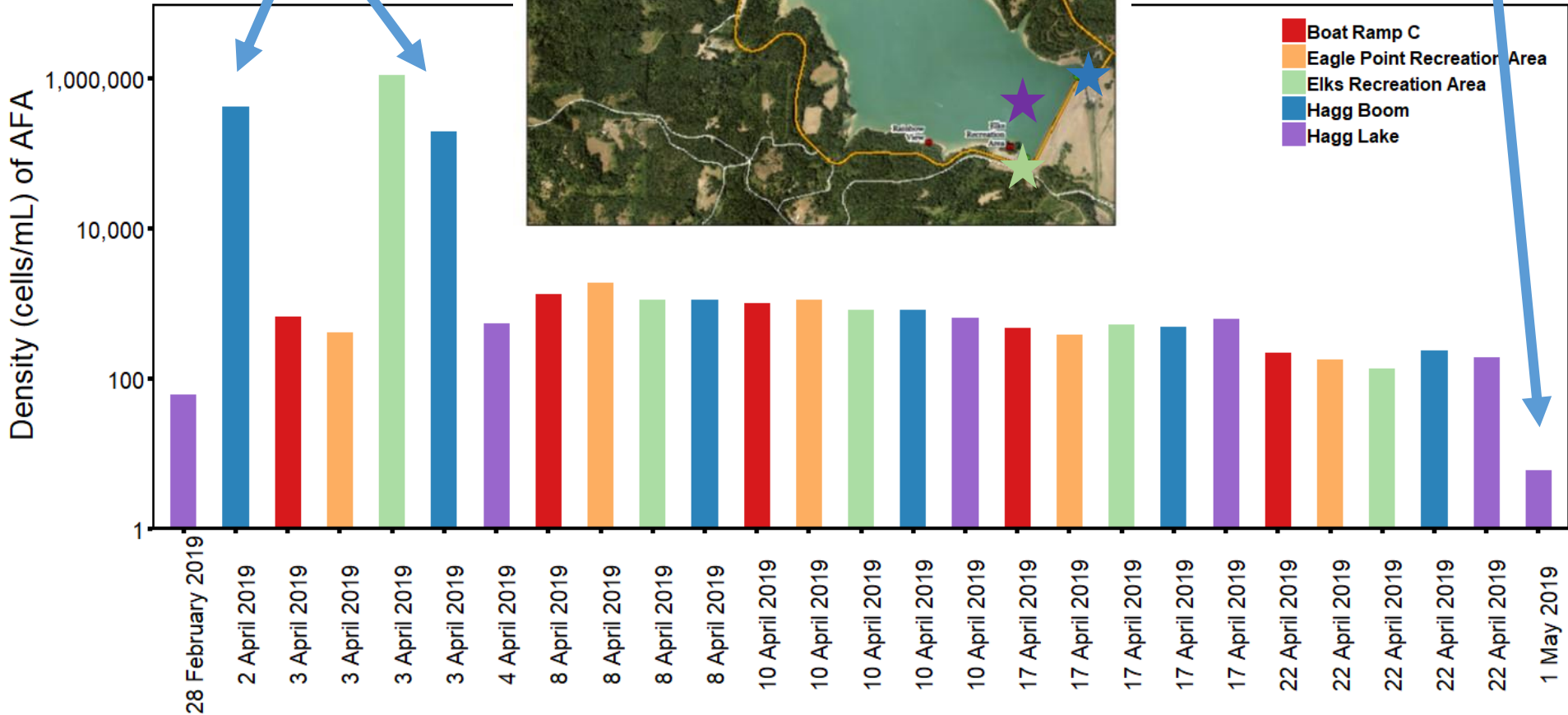


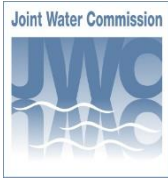
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When we decided it
was at HAB Level 3

When we decided we
could return to routine
sampling



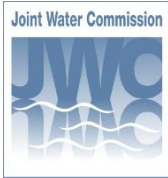


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2019 Bloom at Hagg Lake - Communication

- **Did NOT occur during “regulatory” season, but followed our plans**
- **Contact with Partners & Internal Updates to Water Dept. and Communications Staff**
 - Initiated 4/3
 - Continued as results were received
 - Final notification sent 5/10 to close out event
- **Made Record of contact with:**
 - OHA (Drinking Water and Recreational Advisory Staff)
 - Washington County Parks
 - DEQ Lab
 - CWS
 - TVID (Dam Operator)
 - Hillsboro City Manager and Fire
 - USGS



Key Takeaways

1. Establish clear and meaningful triggers for moving up and down through the sampling plan
2. Early and consistent internal communication is important for keeping the message clear if/when it reaches external audiences
3. Be prepared but be flexible as needed (i.e. sampling locations, labs, etc.)

Joint Water Commission



**Cities of Hillsboro,
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Thank you