

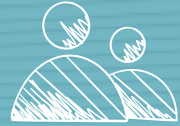


WILDFIRES & ICE STORMS

in Clackamas County



Agenda



Introduce Panelists



Overview of Events



Panel Discussion



Audience Questions

Meet our Panelists!



**Alexa
Morris**

Public Information Officer
Oak Lodge Water
Services District



**Adam
Bjornstedt**

Chief Engineer
Clackamas River Water



**Jennifer
Garbely**

Asst. City Engineer
City of Milwaukie



**Jon
Sleight**

Water Distribution
Supervisor
Clackamas River Water

Three Different Water Systems

Facing Similar but Different Challenges

City of Milwaukie

Clackamas River Water

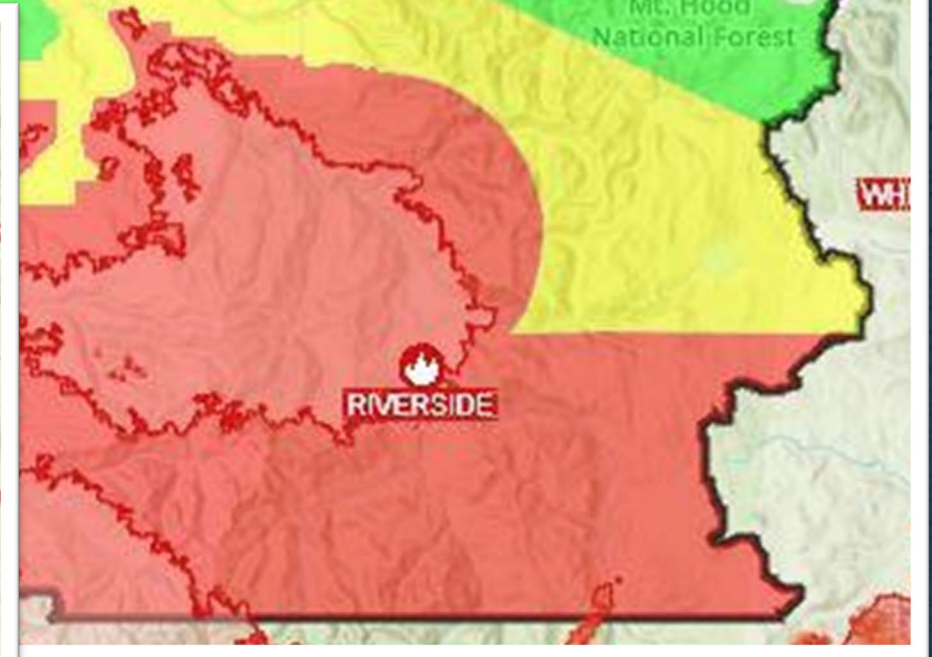
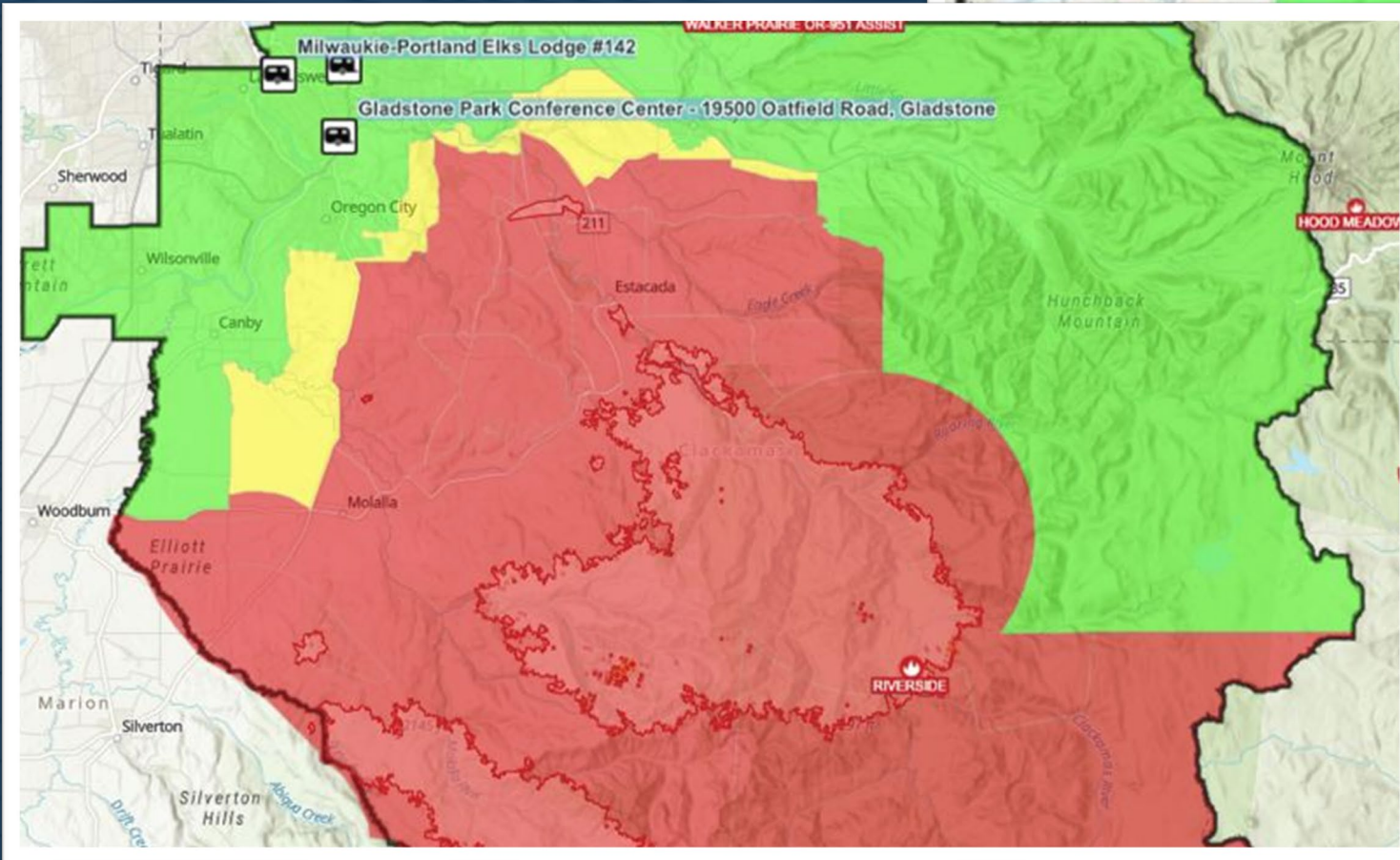
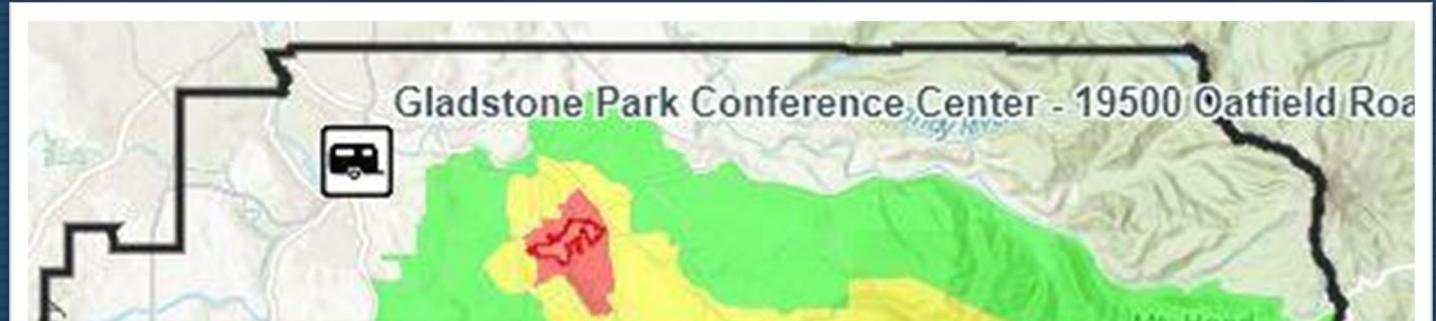
Oak Lodge Water Services District



Overview of Wildfire



Wildfire – Evacuations




Wildfire – Oak Lodge

Staff had to evacuate homes, Poor Air Quality, Lesson Learned



Wildfire – Clackamas River Water SYSTEM IMPACTS




Clackamas River Water

IMPORTANT CRW HYDRANT USAGE NOTICE—FOR IMMEDIATE DISTRIBUTION

September 10, 2020

TO: Clackamas County Fire District #1 (CCFD)
All CCFD Stations and Personnel

Greetings Fire District partners!

These are challenging times we are experiencing, as our agencies respond in various ways to the recent rash of wildfires in Clackamas County. We wanted to take the opportunity to thank you for all that CCFD has done and is doing to overcome these challenges and mitigate risks to the life, health, and safety of our communities.

As a key water provider for much of the CCFD jurisdictional areas, Clackamas River Water (CRW) partners with the emergency response function to ensure that our public water system can provide adequate water for fire suppression activities. Unfortunately, in many of our rural areas, the age and size of water mains serving a number of fire hydrants limits the amount and rate of water that can be taken from hydrants.

When fire hydrants are drawn from rapidly, including when the hydrant valves and fire truck/tender valves are opened or closed too quickly, this can create pressure surge conditions in the water mains that result in catastrophic damage and failure of these lines. **This directly results in a detrimental impact to the water system's ability to serve domestic drinking water and fire suppression water to our customers.** Our crews have limited resources with which to address these main breaks, while still maintaining service to our customers.

Notably this week, we have experienced three main breaks along Fishers Mill Road east of Redland, due to this type of strain being placed on the aged, under-sized cast iron water main by the heavy use of fire hydrants along this road. This letter serves as notice that CRW will be immediately bagging a number of hydrants in this area for "non-use", and redirecting CCFD and their fire-fighting partners to utilize hydrants in parts of the CRW system nearby that are more capable of handling these types of flows.

See the attached map, and note that key hydrants to draw water from in this area include on Hattan Road north of address 16551, Springwater Road between Hattan Road and Carver Bridge, and Butter Road between Redland Road and Butterfield Lane. Thank you for your immediate cooperation and understanding.

(PRIMARY CONTACT) Jason Labrie, Water Distribution Supervisor, labrie@crwater.com, 503-793-7953
(SECONDARY CONTACT) Adam Bjornstedt, Chief Engineer, abjornstedt@crwater.com, 503-729-1600

Labrie

Attached- Hydrant Availability Maps

503.729.3226 Providing high quality, safe drinking water for our customers

Wildfire – Clackamas River Water STAFF IMPACTS



Wildfire – Milwaukie

9/9 During the fire someone set Elk Rock on fire



Overview of Ice Storm



Overview of Ice Storm – Oak Lodge

Partnerships, Pivot, Challenge, Lesson Learned

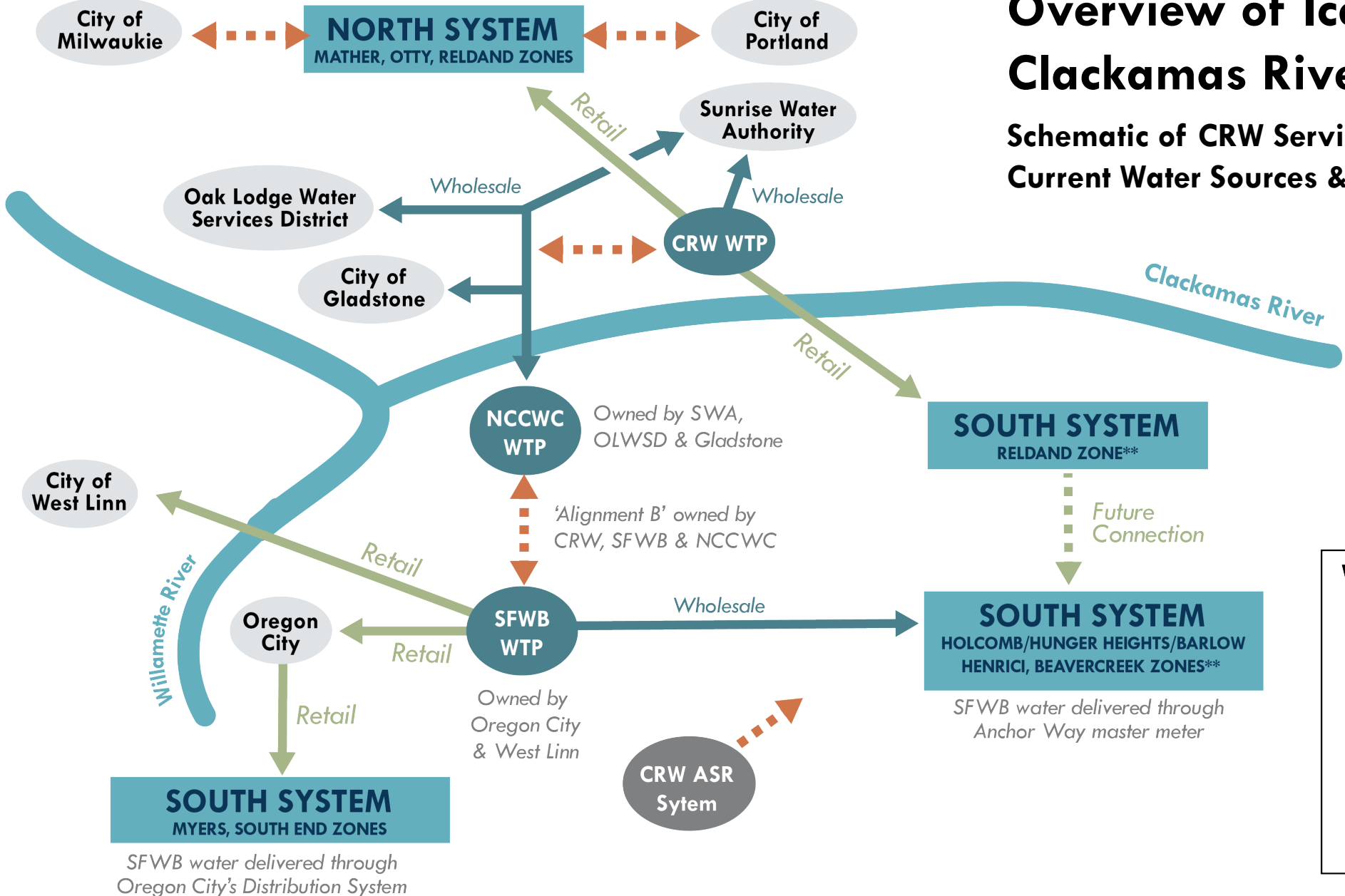


Overview of Ice Storm – Clackamas River Water



Overview of Ice Storm – Clackamas River Water

Schematic of CRW Service Areas: Current Water Sources & Interconnections



Water Supply Key

- ◄ - - - ►
EMERGENCY ONLY
- Wholesale
- Retail

Overview of Ice Storm – Milwaukie

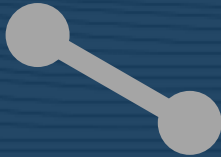


Milwaukie Lessons Learned

The Human
Element



Air quality &
Temperatures
Phone App



Can't work
without power



Burn Out/
Mental
Exhaustion

Panel Discussion





Audience Questions?

WASC