



Rogue Drinking Water Provider Perspective

Ben Klayman; Director of Water Quality and Treatment
Jason Canady, Public Works Director (Grants Pass)

Rogue Basin Wildfires and Drinking Water Supplies – Impacts and Opportunities Workshop

January 12, 2021





Mail Tribune

A **rosebud** NEWSPAPER

TUESDAY
September 8, 2020

\$1.50

NEWS 10

FIRST ALERT FIRE

Fire danger: **EXTREME**

The stage had been set for extreme fire conditions

- Unprecedented winds; Extreme fire danger
- Jackson County in Extreme Drought
- Risk of power outages, particular at WTP

A8 | Tuesday, September 8, 2020 | MailTribune.com | AshlandTidings.com

WEATHER / HEALTH

Five-day forecast for the Rogue Valley

Today	Wednesday	Thursday	Friday	Saturday
94° 54°	98° 55°	98° 57°	97° 56°	97° 56°
Partly sunny and very hot	Sunny and very hot	Very hot	Blazing sunshine and very hot	Very hot

Extended Forecast: Plenty of sun Sunday; very warm in the mountains. High 90. Mostly cloudy Monday; very warm in the mountains. High 94. Mostly sunny Tuesday. High 95. Sunny and very warm Wednesday and Thursday. High Wednesday 89. High Thursday 88 in the mountains to 92 in the valleys. Friday; mostly sunny; very warm in the mountains. High 85.

Temperature Trends | Actual and forecast | Normal | Record

In the Region
Through 5 p.m. Monday

City	Mon. HI/LP	Today HI/LP	Tom HI/LP
Med	93/70	93/70	93/70
pc	87/51	87/51	87/51
fs	83/46	83/46	83/46
fs	78/54	78/54	78/54
fs	79/51	79/51	79/51
fs	98/51	98/51	98/51
fs	91/51	91/51	91/51
fs	82/31	82/31	82/31
fs	79/31	79/31	79/31
fs	79/31	79/31	79/31
fs	88/20	88/20	88/20

WILD WEST WEATHER ADVISORIES

RED FLAG WARNING

STRONG WINDS
GUSTS UP TO 60 MPH

WINTRY WEATHER
THROUGH TUESDAY
SNOW ACCUMULATIONS
UP TO 18" IN THE HIGHEST
ELEVATIONS

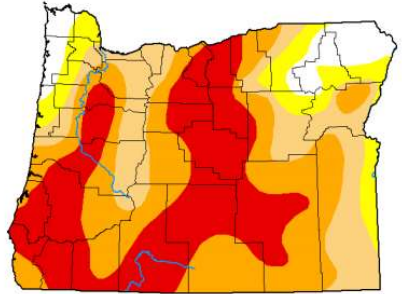
RED FLAG WARNING
THROUGH TUESDAY

U.S. Drought Monitor Oregon

September 29, 2020
(Released Thursday, Oct. 1, 2020)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	6.50	93.50	84.77	65.53	33.59	0.00
Last Week (9-22-2020)	4.96	95.02	83.86	67.32	34.70	0.00
3 Months Ago (6-30-2020)	7.40	92.51	76.67	45.51	5.33	0.00
Start of Calendar Year (12-31-2019)	2.40	97.60	24.45	0.00	0.00	0.00
Start of Water Year (10-01-2019)	88.54	11.45	0.00	0.00	0.00	0.00
One Year Ago (9-29-2019)	88.54	11.45	0.00	0.00	0.00	0.00



Intensity:

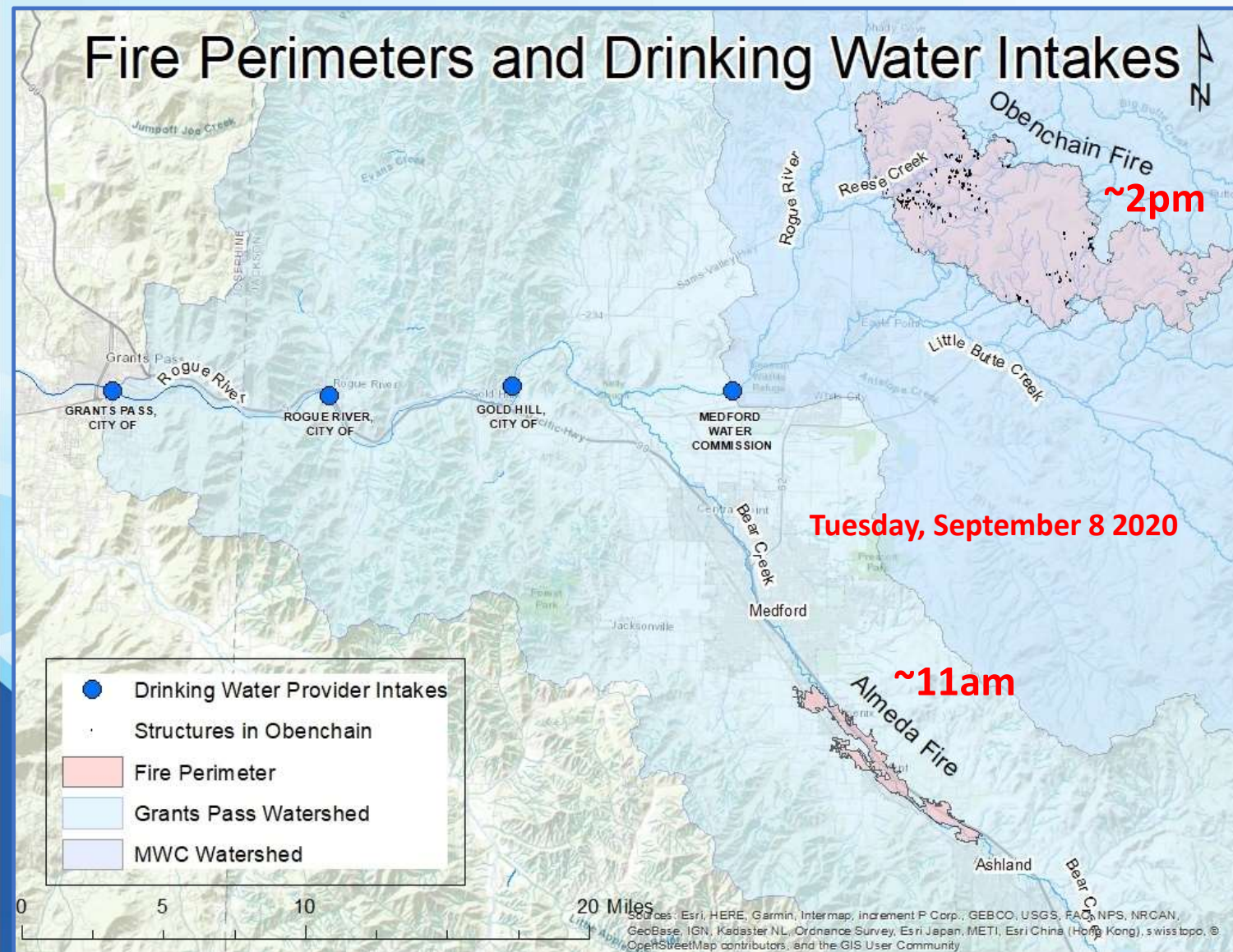
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

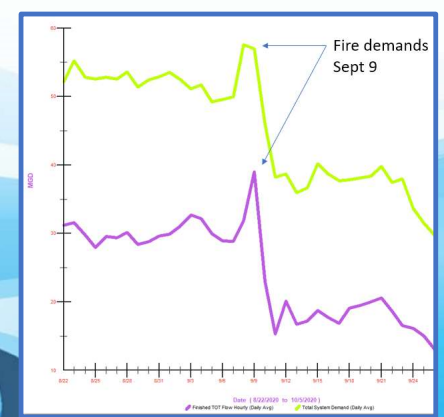
Author:
Brad Rippey
U.S. Department of Agriculture

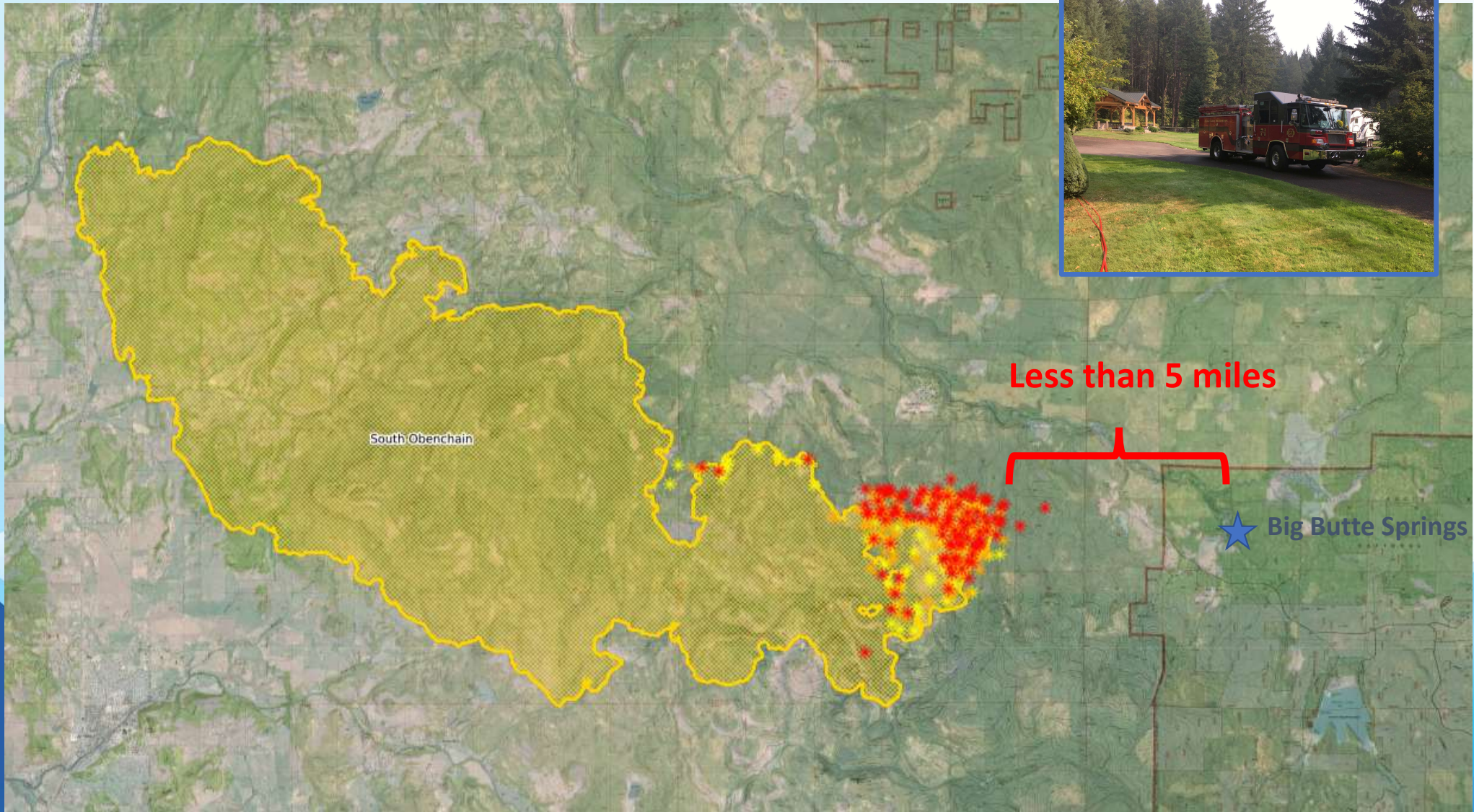
USDA | NRMC | NWS | droughtmonitor.unl.edu

Fire Perimeters and Drinking Water Intakes



Tuesday, September 8 2020





Less than 5 miles

★ Big Butte Springs



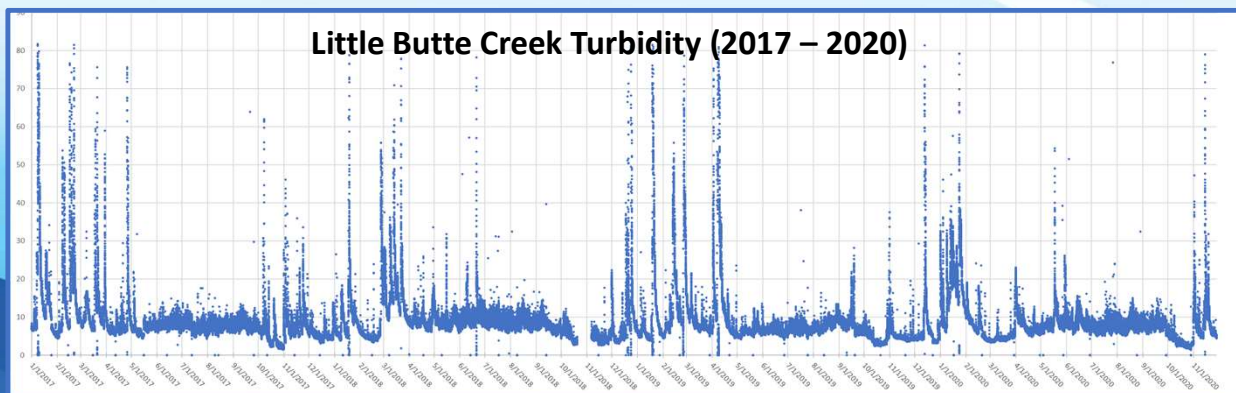
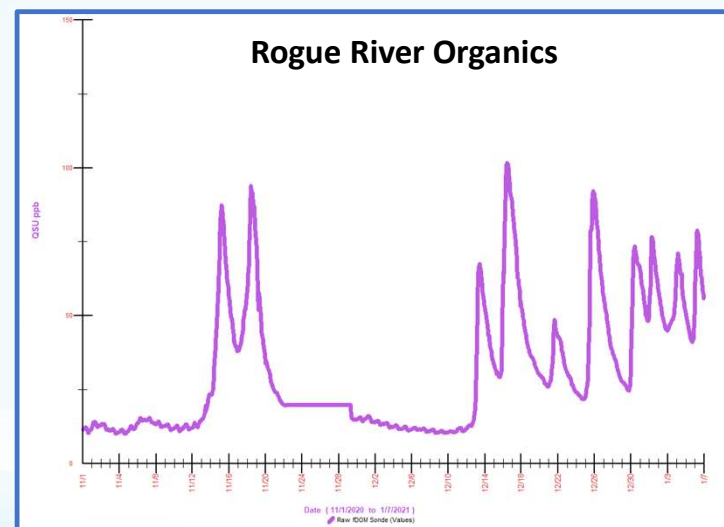
Risks to Drinking Water

- Turbidity
- pH and alkalinity
- Temperature
- Organic carbon and nutrients
- Disinfection byproducts
- Harmful algal blooms
- Metals concentrations
- VOCs and other “contaminants”



Source Water Monitoring

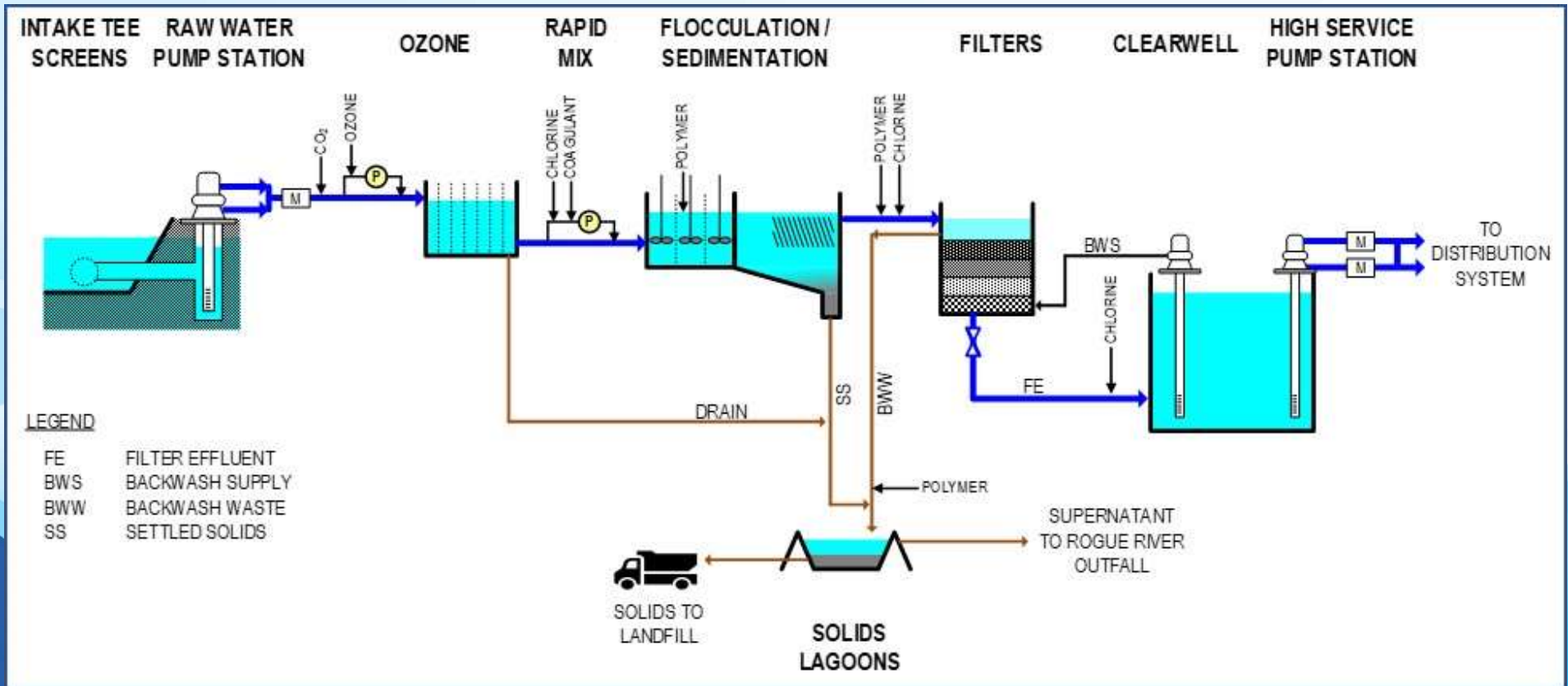
- Updated source water monitoring plan
 - Frequency
 - Locations
 - Parameters
 - Improved online monitoring capabilities
- Data Analysis





RESILIENCY

MWC Treatment Resilience



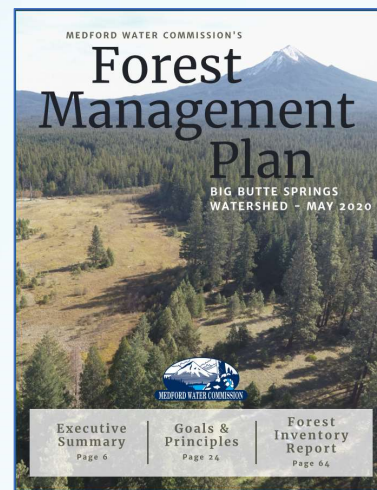
Backup Power Resilience

Enable production of up to 23 mgd fully treated water without grid power
Scheduled to be online summer 2021



Source Watershed Resilience

- Forestry
 - Forest management on MWC land
 - Collaboration with Forest Service, BLM, private timber, other landowners and stakeholders
- Agriculture
 - Working with JSWCD, irrigation districts and others on Agricultural non-point source reduction
 - NWQI – NRCS grant focused on upper Rogue
- Urban
 - Almeda Fire and Bear Creek
 - Industrial and urban areas upstream of DW providers
 - Stormwater monitoring and control

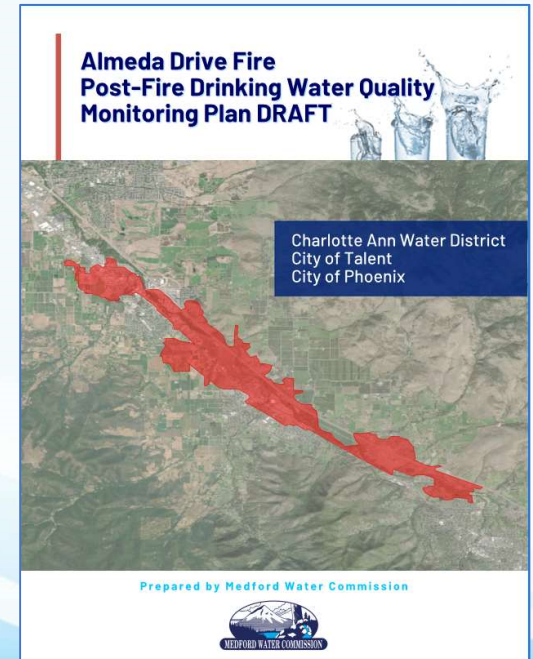




We're all in this together...

Regional Collaboration

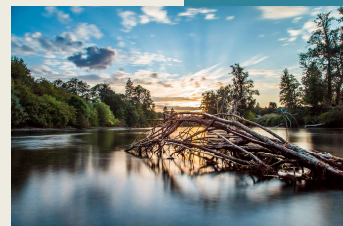
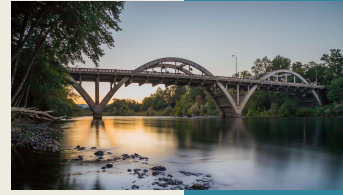
- Distribution system monitoring for VOCs
 - Talent, Phoenix, Charlotte Ann Water District sampling every burned structure prior to re-connection to water system
- Source Water
 - Increase in monitoring and data-sharing amongst Rogue Drinking Water Partners (RDWP)
 - Regional emergency response plan development
- Partnering Agencies
 - State / County agencies providing guidance and resources
 - Non-profits





Grants Pass Perspectives

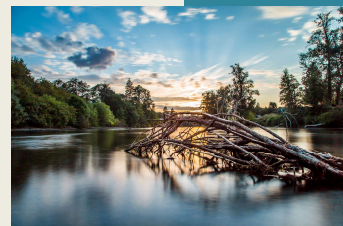
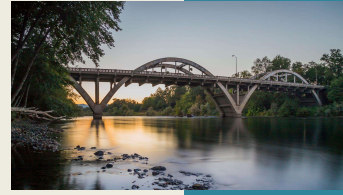
- Collaboration is key to ensuring safe drinking water
 - Shared resources such as online instrumentation assists all utilities in monitoring potential threats
- Development of enhanced tools is needed
 - Models to predict time of travel in local waterways
 - Real-time, online data sharing
 - Affordable instrumentation to provide accurate data without the need of slow and expensive lab testing
- All partners will be better prepared for the next event which we hope will never happen





Grants Pass Perspectives

- Initial data has not revealed any immediate reasons to be worried
 - Continued monitoring will be required
- It is hard to say that the data is “not typical” most utilities do not monitor raw water to the extent that it is being done in response to this fire
 - Finished water is all that traditionally matters
- More data will be required to create a good post rainfall profile of the source water to assist operators to make decisions ahead of future events



THANK YOU

Medford Water Commission
200 S. Ivy Street - Room 177 | Medford, Oregon 97501
541.774.2430



MEDFORD WATER COMMISSION