Oregon 2020 Wildfire Impacts on Drinking Water Infrastructure

• Oregon Association of Water Utilities
  – OAWU provides technical assistance, formal training and representation for drinking water and wastewater utility operators and managers – large to small utilities and both members and non-members
  – OAWU’s role during the 2020 fires – field emergency assessments and summary reporting to OEM and various others
  – Summary provided by Jason Green, Executive Director
Responding

- Emergency Management Structure
- Oregon Dept. of Environmental Quality and Oregon Health Authority Respond
- Counties Respond
- OAWU and ORWARN Respond
- Additional volunteers and service providers
- Others
Dry Summer

- **Time of Year When**
  - Water Demand is High
  - Water Supply is Low

- **18 Fires – Early August – Early September**

- **High Wind Event in Early September**
  - Extremely low humidity levels for coast and valley areas — days of teens/ twenties with east wind
  - Fires Increased in Intensity and Spread Rapidly
  - 1.2 Million Acres Burned
Human Impacts

• 9 Confirmed Fatalities
• 1 Missing
• Unknown Number of Sheltered Persons
• Over 23,000 Registered for Assistance
  – Mass Evacuations
  – Over 4,000 Homes Lost
  – 1,400 Other Structures
Public Water Supply Impacts

• More than 60 Systems Jeopardized – OAWU initially contacted or visited and assessed

• 20 Systems Compromised
  – Loss of Pressure due to infrastructure failure and/or electrical
  – Under Boil Water Notice and/or Do Not Use

• Several Drinking Water Systems Incurred Major Loss
  – Treatment plants, pump stations, generators
Communities

• Severely Affected Utilities and Communities
  – Lyons/Mehama, Gates, Detroit
  – Blue River
  – Talent and Phoenix
  – Panther Creek, Echo, Salmon River and River Bend
  – Several MHP destroyed
  – Several tiny water systems such as bed and breakfasts, small hotel units/complexes and restaurants, etc.
Communities

- Utility Infrastructure damage or not – In communities where homes and businesses where lost, rebuilding and repairs and growth with planning needs to occur to begin to repair, rebuild and/or maintain utilities and meet revenue requirements, etc.
Private Water Supply Impacts

• Emerging Concerns

• Numerous Individual Wells Potentially Compromised
  – Damage to Equipment
  – Water Quality Concerns
  – Groundwater Contamination
  – Communication and Informational Needs
Future Considerations

• Emergency Plans Review
• Repairs and Replacements
• Source and Protection
• Possible Contaminations
• Source Water Study and Updates to Protection Plans
• Watershed or Regional Planning Considerations
• Funding
Thank you