# Drought Impacts on Public Water Systems

- Sources for 15 public water systems went dry in 2021
  - PWS hauled water from nearby public water source
  - Used alternate sources
  - Curtailment
  - Many systems restricted water use
- Vulnerability of Community Water Systems:
  - 84% serve less than 500 people
  - 71% use groundwater
  - 41% only have one source of supply

Oregon Health Authority

# Drought Impacts on Public Water Systems

- Increased risk of wildfires, can impact public water systems:
  - 33 public water systems damaged or destroyed in 2020 fires.
  - Power outages and service interruption
  - Loss of pressure due to high demand
  - Long-term impacts to watershed
  - Release of contaminants caused by heating of plastic pipes
- Increased risk of harmful algal blooms
  - Lower flows in rivers, streams
  - higher water temperatures and stagnant water
  - Less dilution of nutrients



Panther Creek WD, Treatment System

Oregon Health Authority

# Drought Impacts on Domestic Wells

- >300 wells dry across Oregon in 2021
  - 2/3 in the Klamath Falls area
- Domestic use: drinking, cooking, sanitation, hygiene, gardening
- Loss of water compounded by:
  - Duration,
  - Distance from nearest replacement source,
  - Cost of replacement water,
  - Delay in repair/redrill
  - Low income/health conditions

# OHA Actions to Drought Impacts

- OHA Drinking Water Services regulates public water systems to ensure supplies meet drinking water standards ensuring safe and adequate water supplies.
- Assist public water systems in identifying sources of financial support, including the Drinking Water SRF, to finance system improvements like well deepening or replacement.
- Provide guidance on water hauling to ensure that hauled water is safe.
- Advise systems that any supplies have to be safe and may need treatment or boil precautions.
- Monitor for other public and environmental health impacts of drought

Oregon Health Authority

# Public Health Impacts of Extreme Drought: Water Insecurity

Increased Risk of Exposure to Contaminants

Dehydration & Malnutrition

Mental Health Impacts