Summary of Wildfire and Drinking Water Workshop, Feb. 28, 2019

by John Speece, Rogue River Watershed Council & Craig Harper, Medford Water Commission

The Rogue Basin Drinking Water Partnership (RDWP) recognizes the critical importance of source water protection in response to the serious threats presented from wildfire. In light of this, the RDWP, in partnership with the Environmental Protection Agency, Rural Community Assistance Corporation, Oregon Department of Environmental Quality, and the Oregon Health Authority, hosted a workshop focused on "Maintaining Clean Water in the Presence of Wildfire Threats" on February 28th in Central Point, Oregon.

More than 50 participants attended the workshop, which provided participants with an understanding of fire history within Rogue sources areas, and concepts on how to identify needs, resources, and priority actions to ensure safe, reliable drinking water supplies before, during, and after wildfires. This was achieved through a series of speakers, small group and panel discussion, and interactive scenarios.

Fire Regimes and Risks in Our Area

Dr. Kerry Metlen, The Nature Conservancy, presented the history of fire in the area, ecological importance of fire, recent changes in the fire regimes, and current projections of the likelihood of fire in the basin. Fire has always been a part of the landscape; however, his research has demonstrated that fire regimes in the Rogue Basin have been altered, changing from a historical eight-year return interval to much longer periods of suppression or complete elimination for over 100 years.

Dr. Metlen offered an analysis of the current risk levels within our source areas and ideas on how best to proceed, suggesting an approach similar to the Ashland Forest Resilience Stewardship Plan. That plan focuses on building partnerships and a collaborative approach to address overstocked forest stands.

Post-Fire. What Can We Expect?

Dr. Amanda Hohner, Washington State University, presented the science on changes after fire to the quality of timing of runoff over the short- and long-term and subsequent impacts on drinking water treatment and operations. Specifically, Dr. Hohner discussed how water quality may be altered following fire, including elevated particulate levels and dissolved organic matter from debris and biomass burned during a fire. She offered suggestions for water providers on the best methods to use to address these treatment issues.

Dave Anderson, Public Works Director for the City of The Dalles, discussed his experience with wildfire within the source water area and how the city responded, describing strategies implemented downstream at the treatment facility. He addressed post-fire concerns including short-, mid- and long-term rehabilitation, and highlighted the partners and funding at each stage.

The Fire is Headed Our Way. What Do We Do?

Again, using the 2013 fire that burned in the City of The Dalles watershed as an example, Dave Anderson described specifically what happened during the fire, and how the city has adapted and changed its emergency communications and response procedures. He emphasized the importance of having an up-to-date Emergency Response and Contingency Plan, and established, trusting relationships with local emergency providers.

Following Dave's presentation, he was joined on a panel by Julie Harvey, DEQ; Dave Larson, ODF; and Melissa Cano, City of Medford, to discuss the scenario of a rapidly moving wildfire threatening drinking water infrastructure (intake, storage, treatment plant, conveyance, etc.). Questions included: How do utilities and emergency response teams interface during an emergency? Do staff know whom to contact and when? Do drinking water staff have access to places behind the fire line? Do emergency responders know this is a source area for drinking water? Will loss of service jeopardize firefighting capabilities or critical services like hospitals? How high of a priority is drinking water infrastructure and distribution to different agencies? What do emergency personnel think are the greatest vulnerabilities of drinking water systems?

Today. What Should We Be Doing Now?

Jumping to the present-day situation locally, Chris Chambers, City of Ashland Fire Department, Forestry Chief, presented on what's been done locally in the area in terms of preventative measures and risk reduction. Using the nationally recognized Ashland Forest Resilience Stewardship Plan as an example, Chris discussed how to better prepare for wildfires and how to respond to their aftermath, and what can be done to minimize risks of high-intensity wildfires.

Chris emphasized the power of collaborative partnerships and how they can be used to leverage available resources across a greater area. He used this project as an example, which began as a 7,000-acre project and has grown to greater than 50,000 acres.

Wrap-Up

The group discussed the workshop and reflected on actions we can individually and collectively take to better prepare for wildfire. One of the key conclusions was the need to include drinking water provider representation in emergency preparedness meetings and discussions. Currently drinking water hasn't received the attention that will be needed to ensure adequate and clean water supplies after large-scale emergencies.

Drinking water providers in the Rogue River Basin and their partners in the larger RDWP will continue to seek ways to increase collaboration between drinking water providers and emergency managers and responders. If you have questions about the RDWP or protection, treatment and delivery of drinking water during emergencies please contact Craig Harper at craig.harper@medfordwater.org or 541-774-2453.