



Staff Reports

File #: 321-2020, **Version:** 1

To: Honorable Mayor and Members of City Council

From: Phil Brun, Utilities Director

Prepared By: Joy Eldredge, Deputy Utilities Director

TITLE:

Report on Lake Hennessey and Milliken Reservoir Watersheds after Hennessey and Glass Fires

RECOMMENDED ACTION:

Receive report on potential impacts to the Water System from the recent wildfires in Napa County.

DISCUSSION:

The City of Napa Utilities Water Division owns two watersheds and operates three surface water treatment plants to provide potable drinking water to more than 80,000 customers in the City of Napa, unincorporated Napa County, and surrounding communities. Our watersheds dictate the quality of the water that fills our drinking water reservoirs and the level of treatment that is necessary to ensure clean, safe water to our customers.

On August 16, 2020 the Hennessey LNU complex fire started less than one mile from Lake Hennessey due to lightning strikes on Hennessey Ridge. The fire spread south and east away from the reservoir and into the area that drains into Sage Creek, the third largest tributary that feeds Lake Hennessey. The fire burned a total of 9,000 acres of the 32,800 acre watershed that recharges our Lake Hennessey drinking water supply. The fire also burned 800 acres within the farthest reach of the 6,000 acre Milliken Watershed.

On September 27, 2020, the Glass Fire started just north of the Hennessey watershed. The predicted shift of the winds to Northwest winds had the potential to blow embers and or cause the fire to spread southeast toward our treatment facilities. Staff worked across divisions and departments to put forth an outstanding effort to harden our treatment and conveyance facilities should the fire spread to our property. In the end, our treatment facilities and the watershed were spared from the Glass Fire.

After the wildfire was contained, the CalFIRE Watershed Emergency Response Team (WERT) assessed the post-fire geologic and hydrologic hazards and determined the burn severity of the affected areas. These factors are used to predict the potential for future flood flows, erosion and debris flow that can lead to additional post-fire impacts. Should the burn intensity in the watershed be very high it has the potential to prevent regrowth of vegetation for years and result in sedimentation and increased total organic carbon (TOC) in our source water, especially during rain events. High TOC can have adverse effects on drinking water quality during and after the treatment processes through the formation of disinfection byproducts.

Fortunately, as reported in the WERT, within the Lake Hennessey Watershed, the Hennessey LNU complex fire burned at only low and medium intensity which is favorable. Regrowth of vegetation is expected within one year.

The Glass fire is not expected to affect Lake Hennessey water quality. It touched only the farthest northwest edge of the Hennessey watershed near Angwin in an area that does not drain directly to Conn Creek, the largest tributary of Lake Hennessey.

Ongoing municipal water quality sampling through the rainy season, a joint project with the County, started in January 2020. These initial efforts provide a good baseline snapshot of pre-fire conditions. Sampling and analyses will continue this winter when tributaries flow sufficient to start to recharge our important drinking water sources. Long-term (5 to 10-year) trends will exhibit whether there are any water quality impacts due to fires in our watersheds.

FINANCIAL IMPACTS:

There are no financial impacts associated with this report.

CEQA:

The Utilities Director has determined that the Recommended Action described in this Agenda Report is not subject to CEQA, pursuant to CEQA Guidelines Section 15301.

DOCUMENTS ATTACHED:

ATCH 1 - PowerPoint Presentation

NOTIFICATION:

None