

October 31, 2013

Office of Water Quality Water-Quality Information Note 2014.02

Subject: Availability of Office of Water Quality Briefing Paper on the Effects of Wildfire on Sourcewater and Fisheries

Relatively recent and new knowledge is emerging on the impacts of wildfires on the quality of drinking-water and on water-dependent natural resources. As a science agency with an earth-science and natural resources mission, wildfire is an important and relevant topic for U.S. Geological Survey (USGS) activities. The purpose of this Water-Quality Information Note is to announce the availability of a briefing paper on selected water-quality effects from wildfire. The purpose of this briefing paper is to provide recent information on water-quality issues resulting from wildfire.

In the last several decades, both the incidence of large wildfires and the duration of the wildfire season across much of the United States have increased. Future projections, based on forecasted climate scenarios generated by global general circulation models (GCM's) and down-scaled regional climate models (RCM's), indicate both an increase in the expected severity of wildfires and an expansion of wildfire season over much of the northern hemisphere, particularly for western North America. Approximately 80 percent of the U.S's freshwater resource originates on forested land, and more than 3,400 public drinking-water systems are located in watersheds containing national forest lands. Thus, potential impacts from current and forecast wildfire occurrence on the quantity and quality of runoff used for source water and to support fisheries and aquatic habitats are considerable.

The briefing paper was developed by George Ritz, Chief of the Branch of Quality Systems for the Office of Water Quality in Denver. Sheila Murphy and Deborah Martin in the Water Mission Areas' National Research Program provided key information from their own research on this topic.

The URL for this briefing paper and associated information is: <u>http://water.usgs.gov/owq/topics/wildfire/briefing.html</u>

WaQI Notes are archived on the Office of Water Quality web site, <u>http://water.usgs.gov/usgs/owq/WaQI/index.html</u>

Signed,

The Office of Water Quality October 31, 2013

Distribution: All WMA Employees