STATE OF COLORADO

Colorado Water Conservation Board Department of Natural Resources

1313 Sherman Street, Room 721 Denver, Colorado 80203 Phone: (303) 866-3441 Fax: (303) 866-4474 www.cwcb.state.co.us



John W. Hickenlooper Governor

Mike King

DNR Executive Director

James Eklund CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Kevin Houck, Chief

Watershed and Flood Protection Section

DATE: July 1, 2013

SUBJECT: Agenda Item 18.a, July 16-17, 2013 Board Meeting

Colorado Wildfire Overview

Staff Recommendation

This is an informational item only, and Board action is not required. CWCB staff will present an update to the Board regarding the recent wildfire activities across the state and the resulting implications for flooding, watershed restoration, and utility impacts.

Background

Wildfires have historically occurred during the summer months due to the forested vegetation (fuels), various forms of ignition (including lightning and human causes), and periods of drought. In recent years, wildfire activity has increased notably, likely due to several variables including weather related factors, periods of dry conditions, and pine and spruce beetle infestations. These factors have led to many of the largest and most damaging fires in the state, including the Hayman, Missionary Ridge, and Coal Seam Fires of 2002, the Fourmile Fire in 2010, the High Park and Waldo Canyon Fires of 2012, and the Black Forest, East Peak, Royal Gorge, and West Fork Complex Fires in 2013.

For extended periods following the fires being extinguished, hydrologic effects remain. These effects include enhanced risk for flooding, ongoing erosion and debris flows, and impacts to utility infrastructure, including sedimentation in reservoirs, water quality issues, exposure of transmission lines, and clogging of intake structures. Experience from recoveries from past fires has shown that full watershed recovery can often take ten years or longer, especially in high-severity burns. While the watersheds involved in the 2002 fires are largely (although not completely) recovered, the more recent fires will continue to create problems for many more years.

Staff will present basic statistics and summarize impacts for the most recent large fires from 2010 to the present, with emphasis on the more recent fires. Staff will also provide general information on what can be expected from these burn scars for the foreseeable future.