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FROM: Chris Sturm, Watershed and Flood Protection Section

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AGENDA ITEM: Agenda Item 17. September 20-21, 2022 Board Meeting
Wildfire Ready Watersheds Update

Introduction

This informational agenda item provides an update on the progress of the [Wildfire Ready Watersheds](#) (WRW) program. Senate Bill 21-240 established the program by directing the Board to develop “a statewide watershed analysis to investigate the susceptibility of life, safety, infrastructure, and water supplies to wildfire impacts”.

Discussion

Wildfire Ready Watersheds is a strategy and program developed by the Colorado Water Conservation Board that provides a proactive approach to address post wildfire impacts. Impacts are defined as risks posed by post wildfire hazards to community values such as water supplies, life and property, and transportation corridors. Common post fire hazards include increased runoff, debris flows, hillslope erosion, water quality impairments, flooding, and associated sediment erosion and deposition. The mission of Wildfire Ready Watersheds is to assess the susceptibility of Colorado’s water resources, communities, and critical infrastructure to post-wildfire impacts and advance a framework for communities to plan and implement mitigation strategies to minimize these impacts - before wildfires occur.

Wildfire Ready Watersheds has a two-part focus: (1) a statewide post-fire susceptibility analysis and (2) a framework that communities can use to perform watershed scale planning to address post wildfire hazards. The susceptibility analysis is composed of several phases: data collection, data development, analysis, mapping, and reporting. This effort relies on existing and new statewide datasets for critical water supplies, populations at risk, aquatic species habitat, and other infrastructure layers. The data is used to perform a susceptibility analysis that intersects post wildfire hazards with known values at risk to determine impacts to life & safety, infrastructure, habitat, and property. This serves to further an understanding of which watersheds will be most susceptible to post wildfire impacts and where community stakeholders should focus their efforts in their wildfire mitigation efforts.

The framework further describes and provides guidance on how to refine the susceptibility evaluations for local communities to utilize at smaller watershed scales. It serves as a guide for best planning practices in advance of a wildfire and supports post-fire mitigation strategies. This includes stakeholder development, data collection, GIS preparedness, permitting and compliance, hazard analysis and evaluations, engineering/modeling, pre and post fire management actions, design, and construction. Design and construction will include project types that can be implemented before and after wildfire. Historically, many projects implemented after a fire are for immediate protection of life, property, and water supplies.



They have limited success as they are treating point of impact problems with little regard to watershed health or stream function. Projects constructed before fire provide the same or better protections while also addressing multiple objectives in watershed health and water supply protection. These project types can be designed to protect and enhance ecosystem structure and function within the watershed drainage network. Most implementation strategies will involve a mosaic of different project types employed across the watershed.