



GRAND COUNTY

**WATERSHED
RECOVERY**

Water Impacts and Recovery Efforts East Troublesome Fire

September 2, 2021

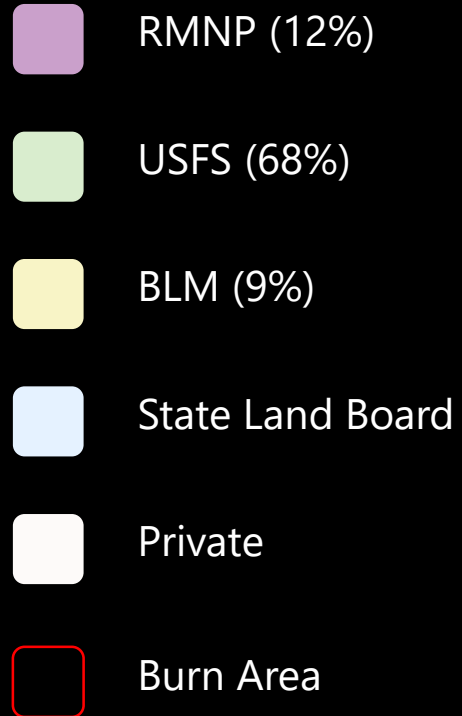
Wildfire Matters Review Committee



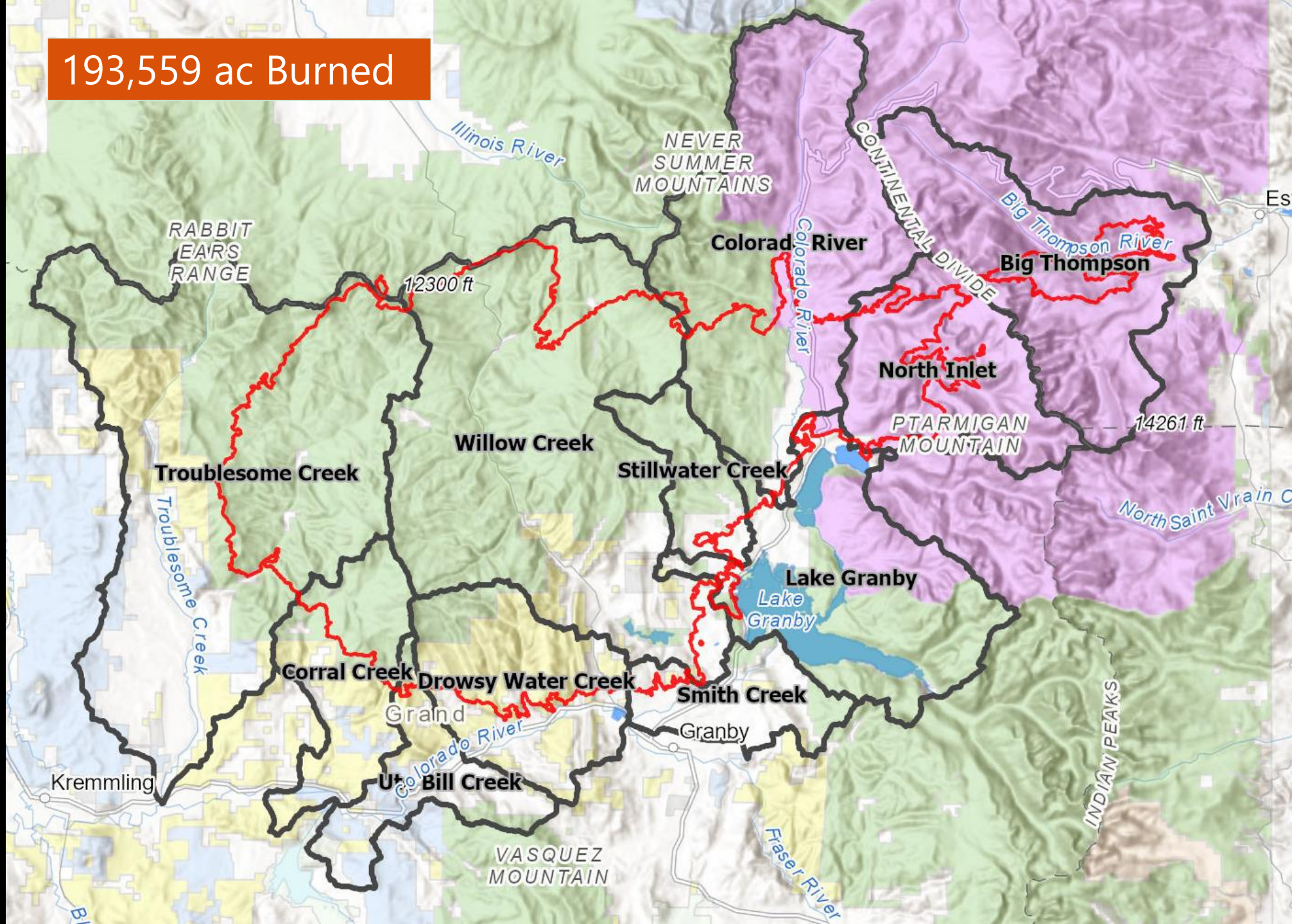
PRIVATE LAND
19,757 ac (10%)

FEDERAL LAND
168,908 ac (90%)

Land Ownership



193,559 ac Burned

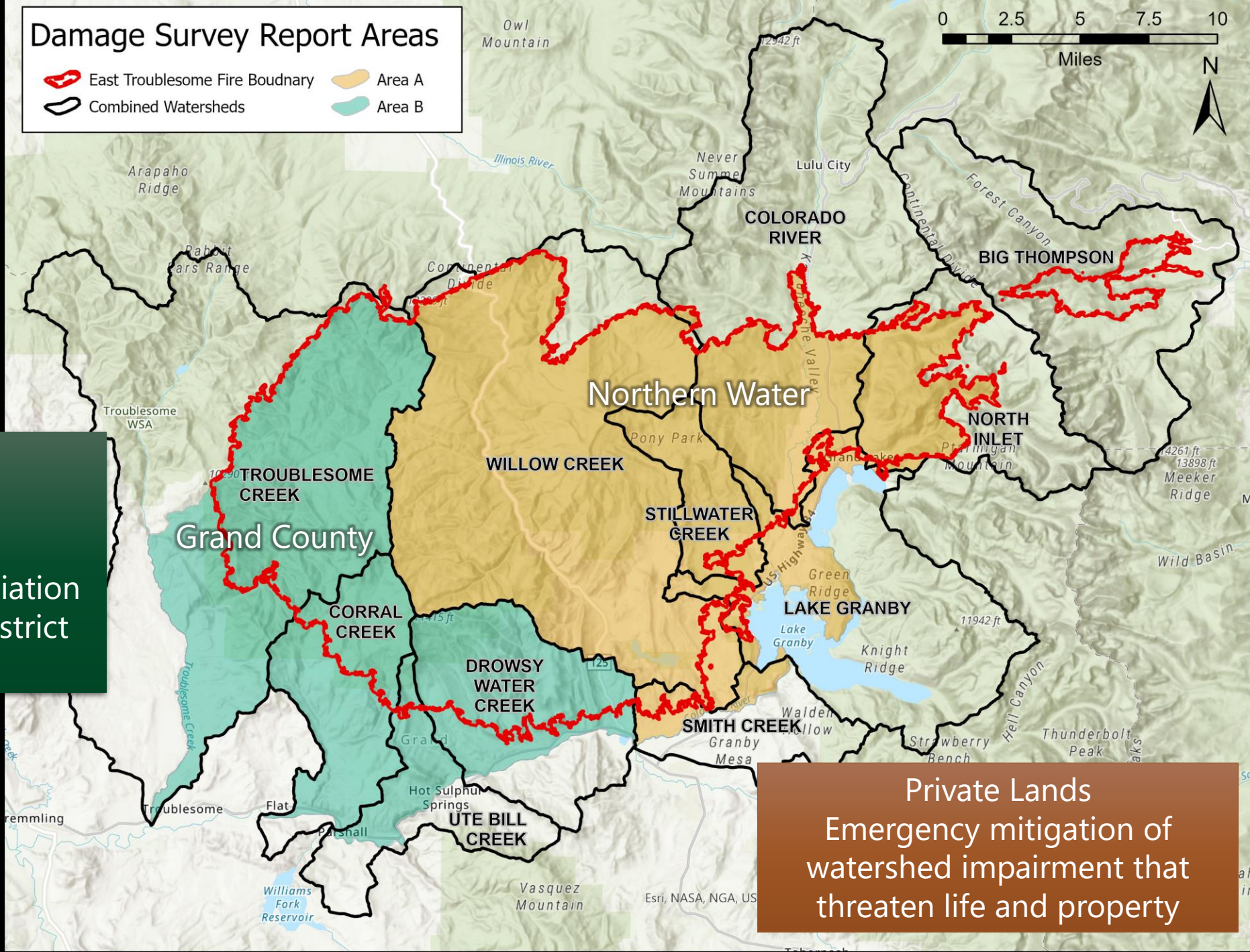


Emergency Watershed Protection Program Sponsorship

Partners

Northern Water
Grand County

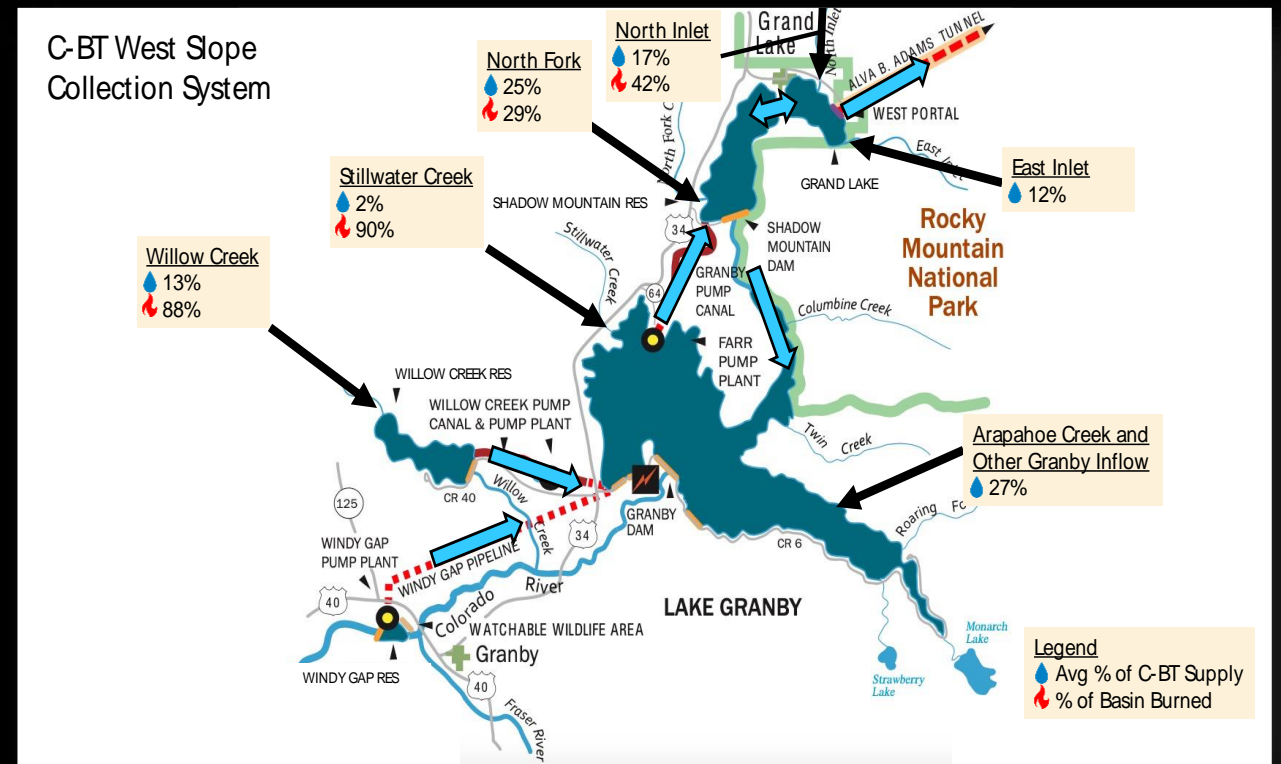
Three Lakes Watershed Association
Middle Park Conservation District
River District



Private Lands
Emergency mitigation of
watershed impairment that
threaten life and property



Post Wildfire Impacts



SEDIMENTATION



DEBRIS FLOWS



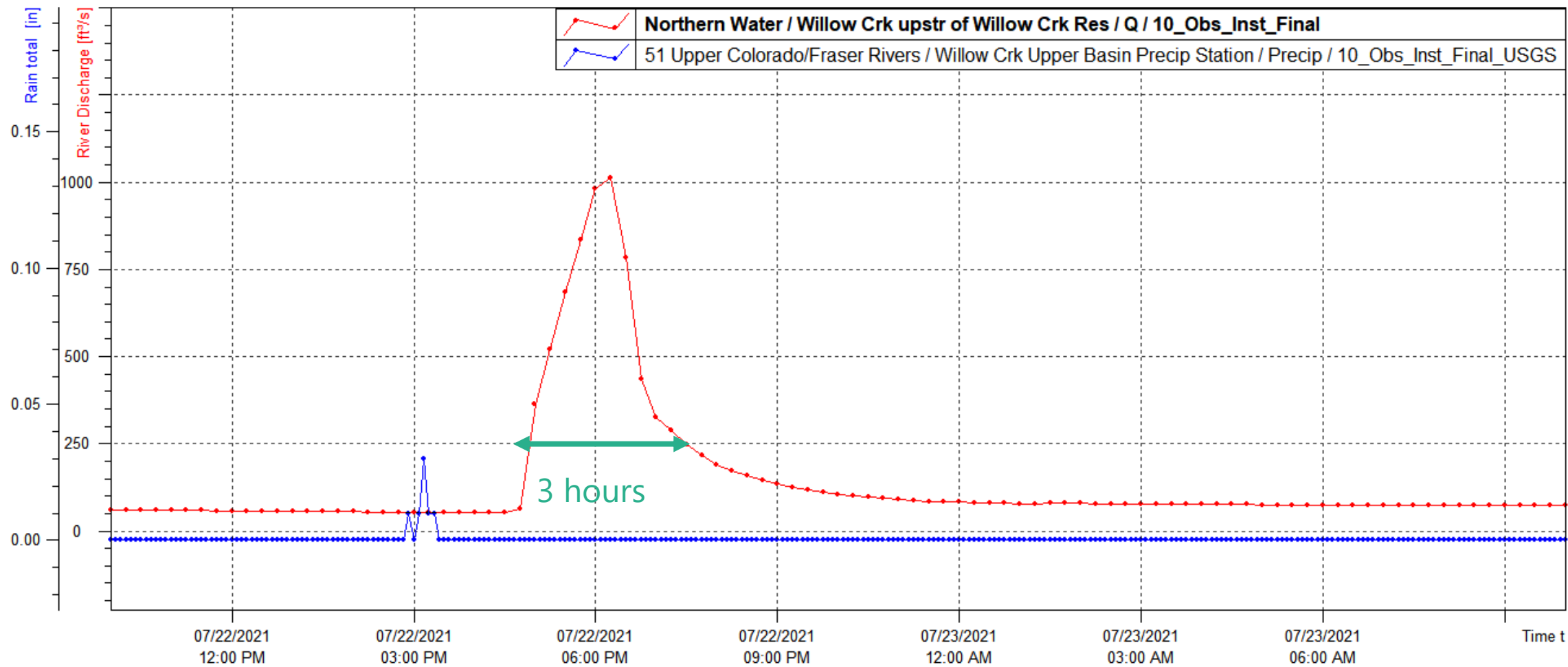
HARMFUL ALGAE BLOOMS



WATER TREATMENT



FLASH FLOOD





WILLOW CREEK UPSTREAM OF WILLOW CREEK RESERVOIR

July 22, 2021





Jul 7, 2021 Hwy 125 - Mudslides





Willow Creek @ C-Lazy U Ranch – July 22, 2021



Highway 125 along Willow Creek – July 27, 2021



August 4, 2021

Highway 125 Willow Creek Bridge



July 5, 2021

August 5, 2021
Willow Creek Reservoir Inlet



Willow Creek Reservoir
August 9, 2021





August 17, 2021
Willow Creek Reservoir Debris Removal



DANGER

LAKE IS CLOSED TO FULL-BODY CONTACT

Toxic algae may be present! Water contact can cause illness

- ▶ Keep kids out
- ▶ No pets in water (death may occur)
- ▶ Do not drink water
- ▶ No water recreation (swimming, skiing, paddle-boarding, wading, etc.)
- ▶ If exposed, shower immediately

Fishing permitted - rinse fish with clean water and properly dispose guts
Boating permitted - avoid algae

  If you or your animals have nausea, vomiting, diarrhea, rash, irritated eyes, seizures or breathing problems, call Poison Control: **1-800-222-1222**



Polestar 2
100% electric



YOUR AD HERE »

Potential algae bloom prompts closure of Willow Creek Reservoir in Grand County

News [FOLLOW NEWS](#) | August 2, 2021



Staff report
SkyHi News

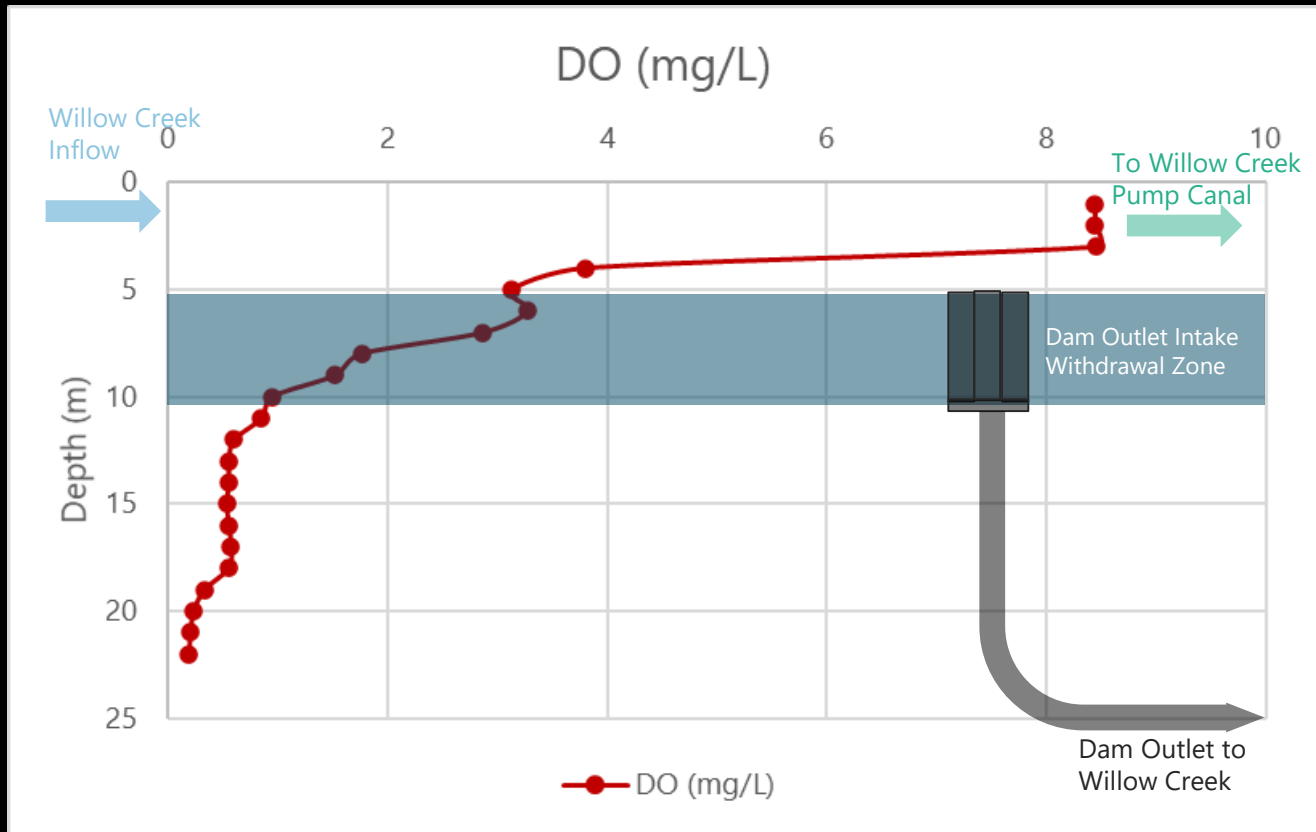
GRAND COUNTY — U.S. Forest Service officials have closed Willow Creek Reservoir in Grand County because of a potential blue-green algae bloom.

Willow Creek Reservoir, which is north of Summit County, is normally open to non-motorized recreation. The Forest Service says it is working with county officials, Colorado Parks and Wildlife, the Bureau of Reclamation, Northern Water and others to try to keep the public safe and assess when the area can reopen.

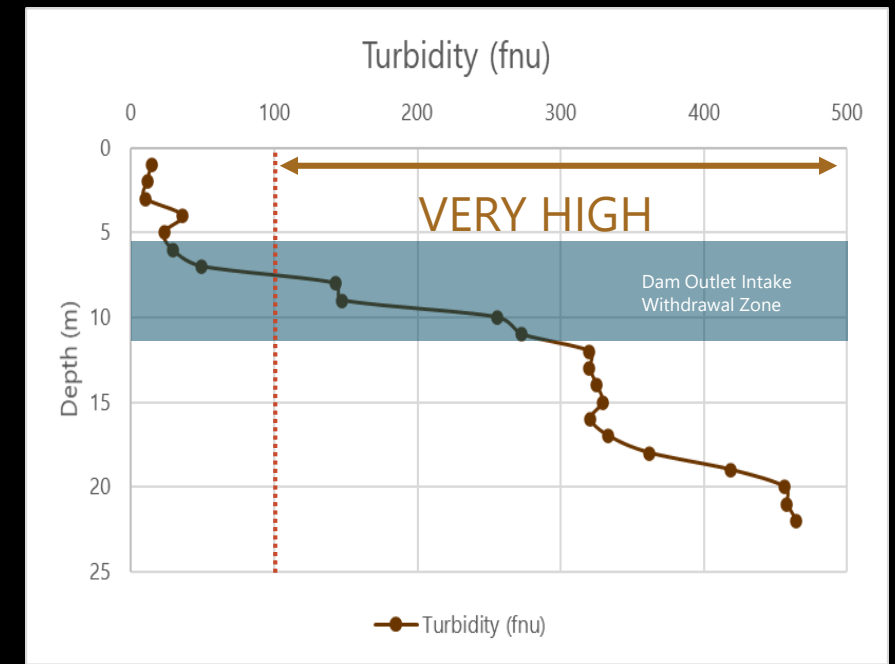
Some types of blue-green algae can produce toxins that may be harmful to humans and pets at elevated concentrations.



Willow Creek Reservoir - July 27, 2021



Dissolved Oxygen < 6 mg/L
= Impacts to Aquatic Life





North Inlet
Aug 3, 2021



North Inlet Samples,
Aug 4, 2021



Aug 4, 2021
Grand Lake Beach

A helicopter is shown in flight, dropping a large bucket of water over a field. The sun is low on the horizon, creating a warm glow. The background features rolling hills and a clear sky. The text "Fire Recovery" is overlaid in the center.

Fire Recovery

Progress Update

Debris Booms



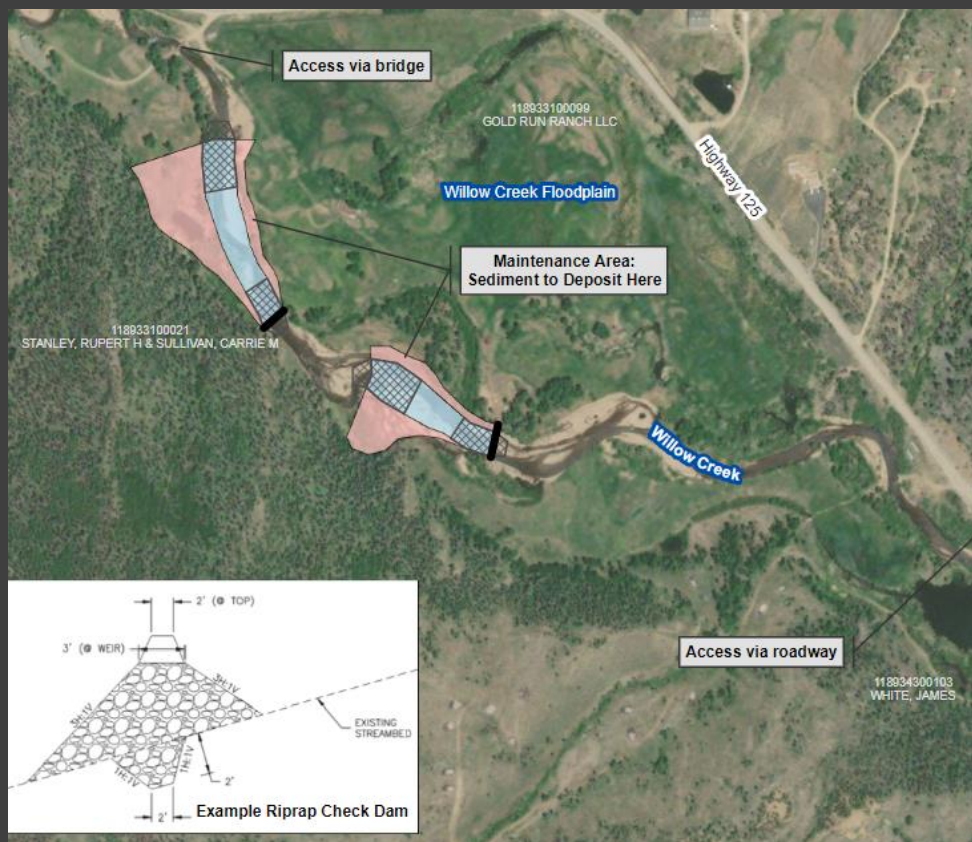


LEGEND

Active Debris Removal at Existing Riprap Check Structure



Pre-Existing Debris Removal



Sediment Management



Photo 1. Willow Creek Hillslope 1



Photo 2. Willow Creek Hillslope 2



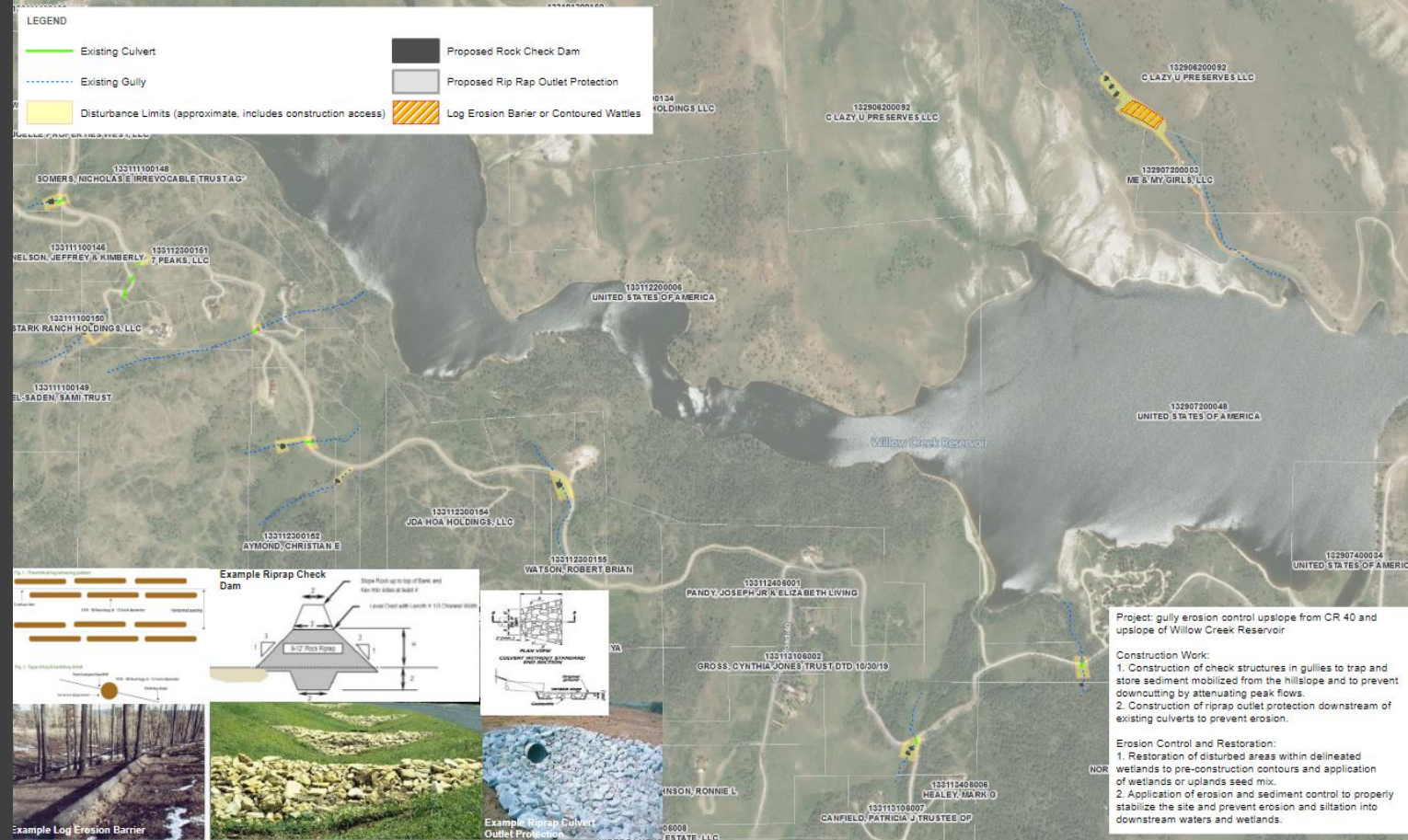
Photo 3. Heritage Ranch Hillslope 1



Photo 4. Heritage Ranch Hillslope 2



Barrier



Hillslope/Gully Erosion Control



New Debris Removal



2,318 ACRES



361 SEMI
LOADS



24 DAYS



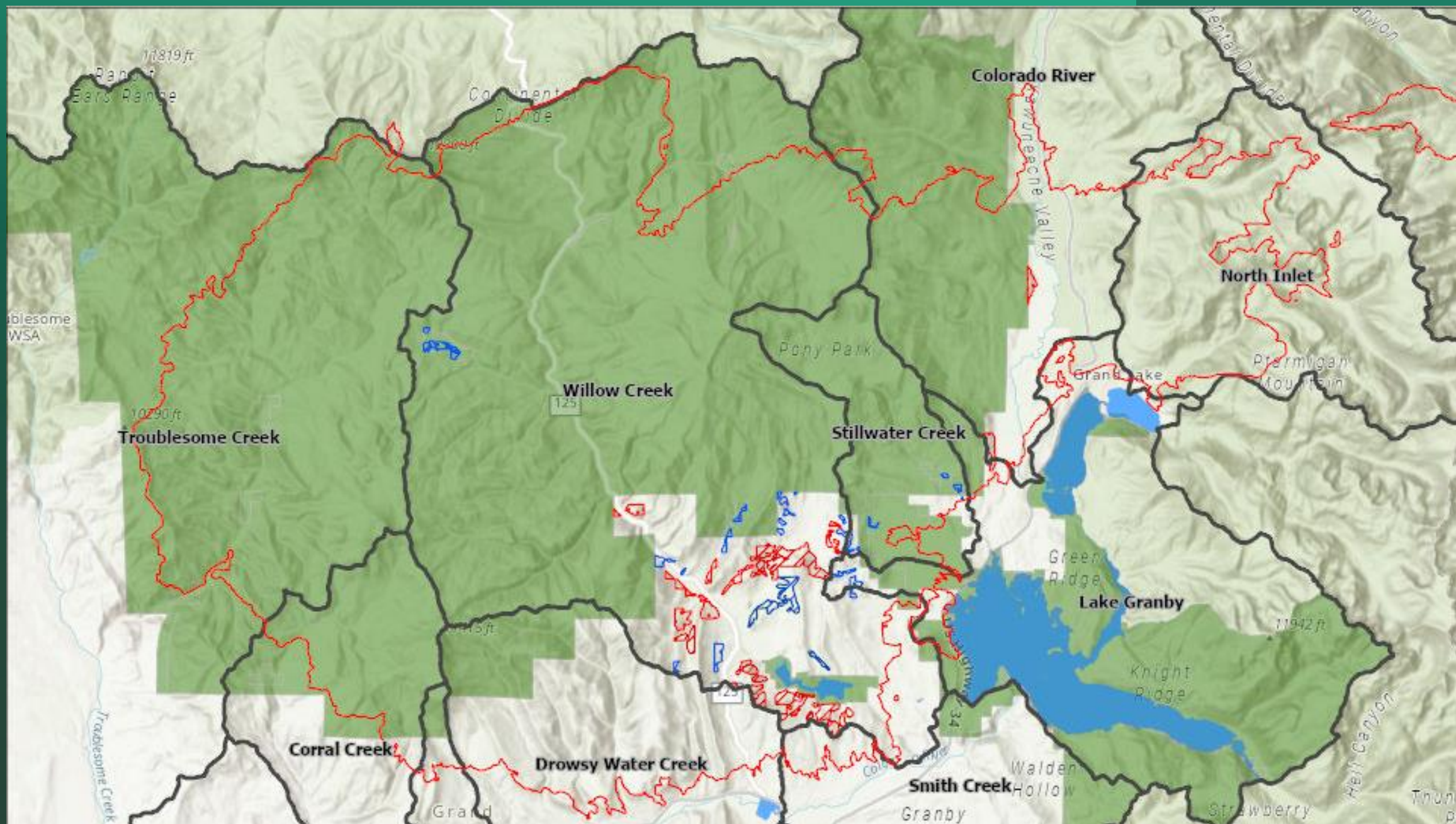
\$5.2 MILLION



7,137 DROPS

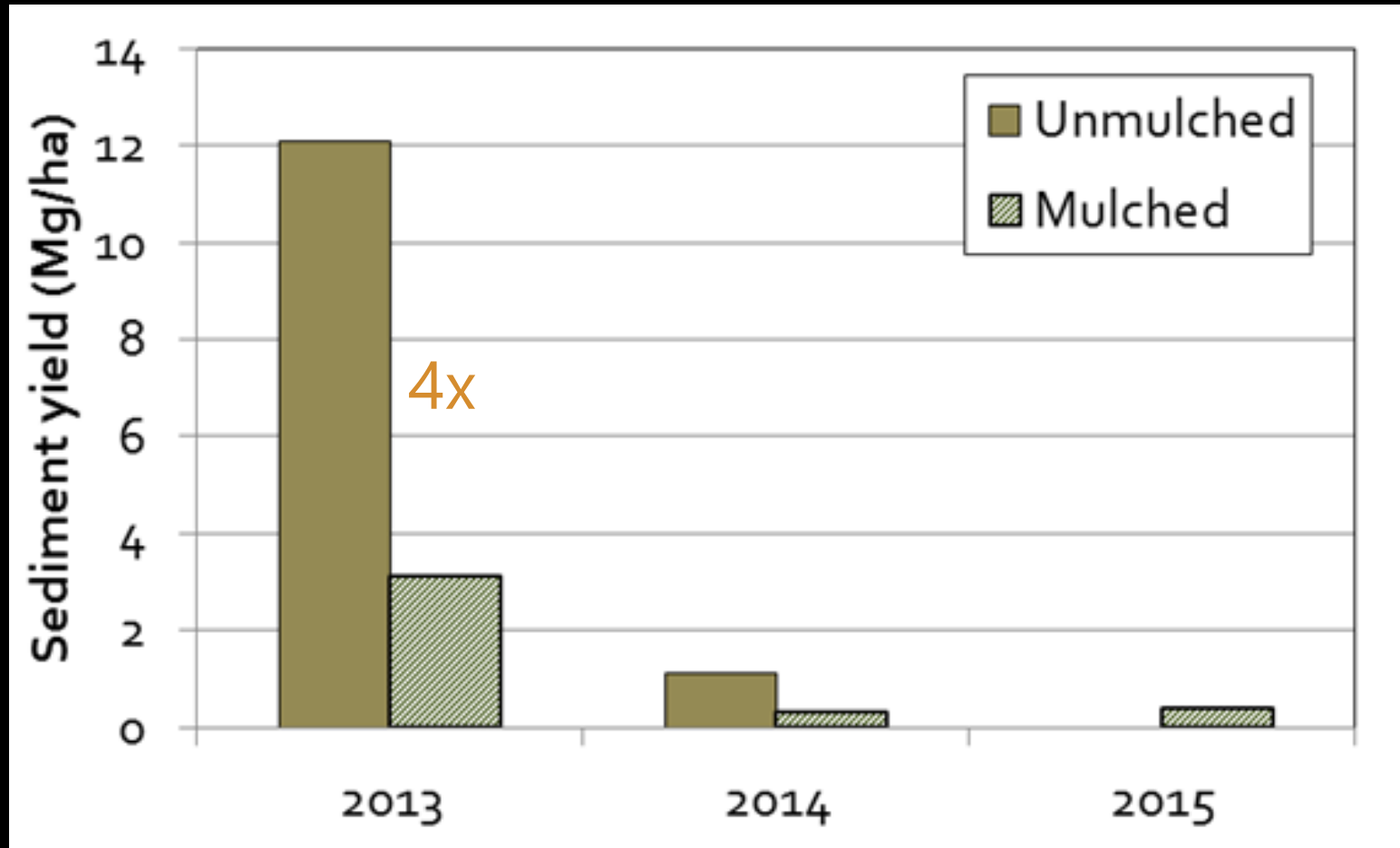




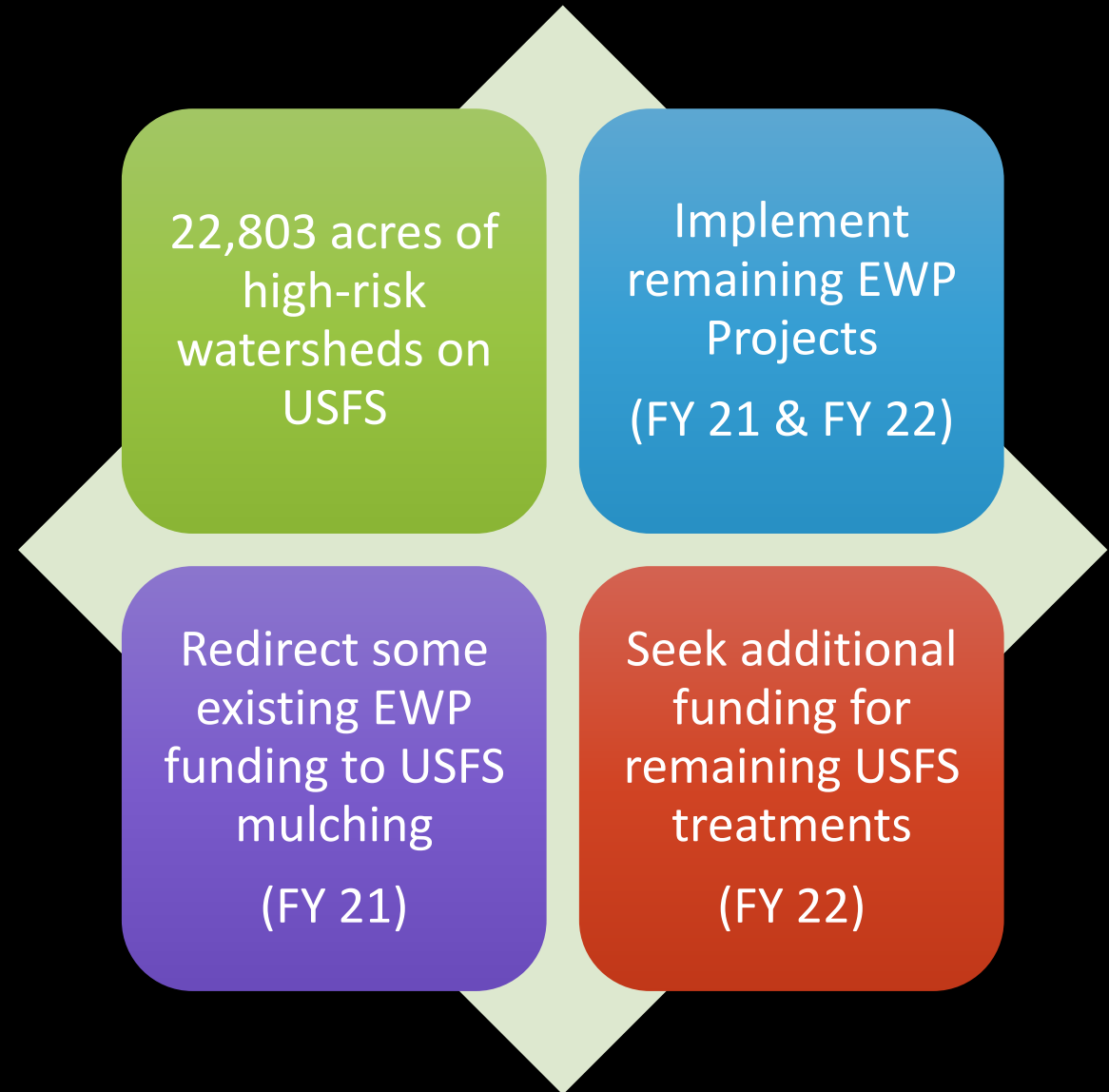


2012 High Park Fire Study Sites

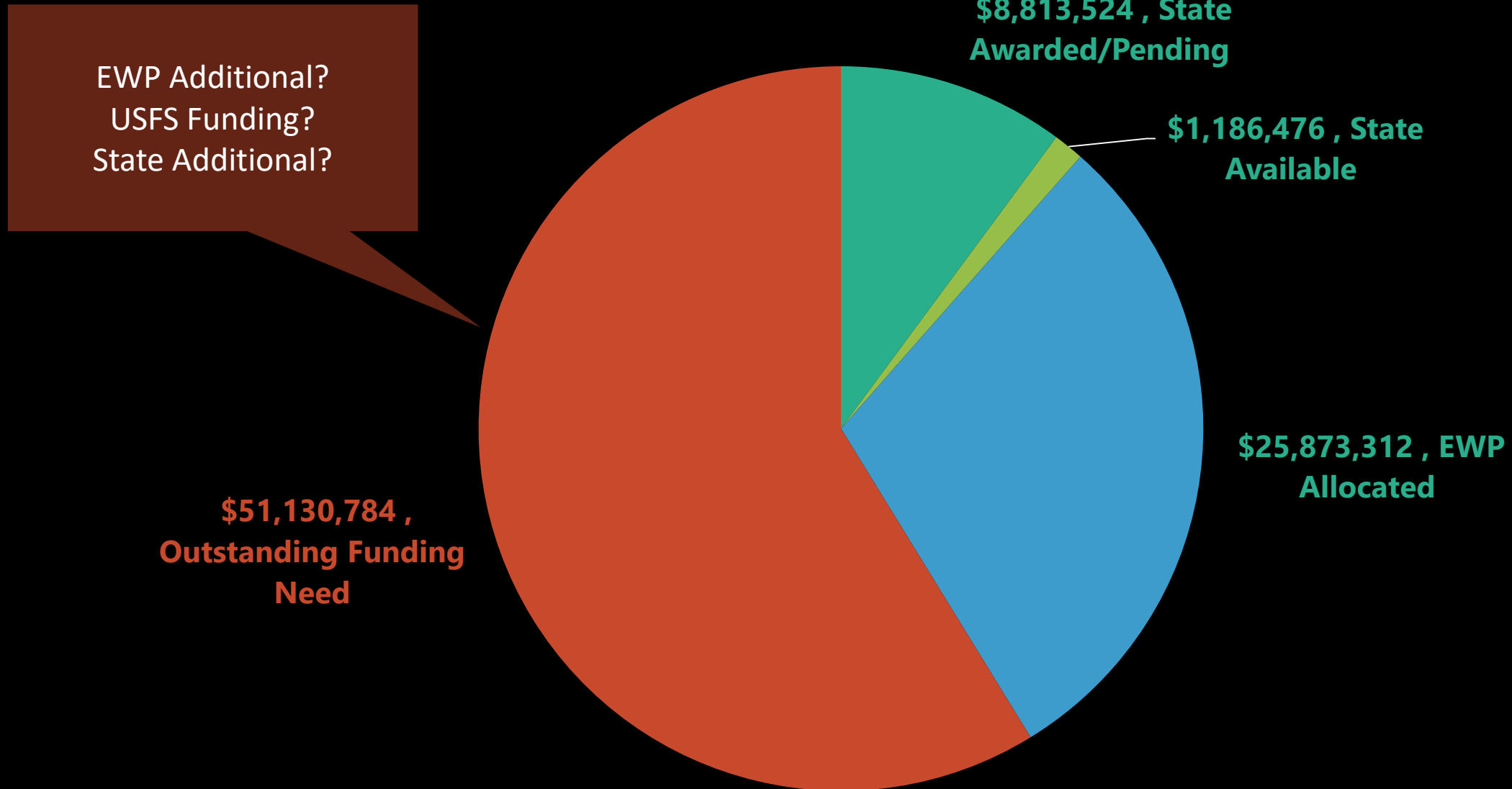
Mulching
Works!!!!



Watershed Restoration Moving Forward



WILDFIRE RECOVERY FUNDING NEEDS EAST TROUBLESOME





Questions & Comments

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