



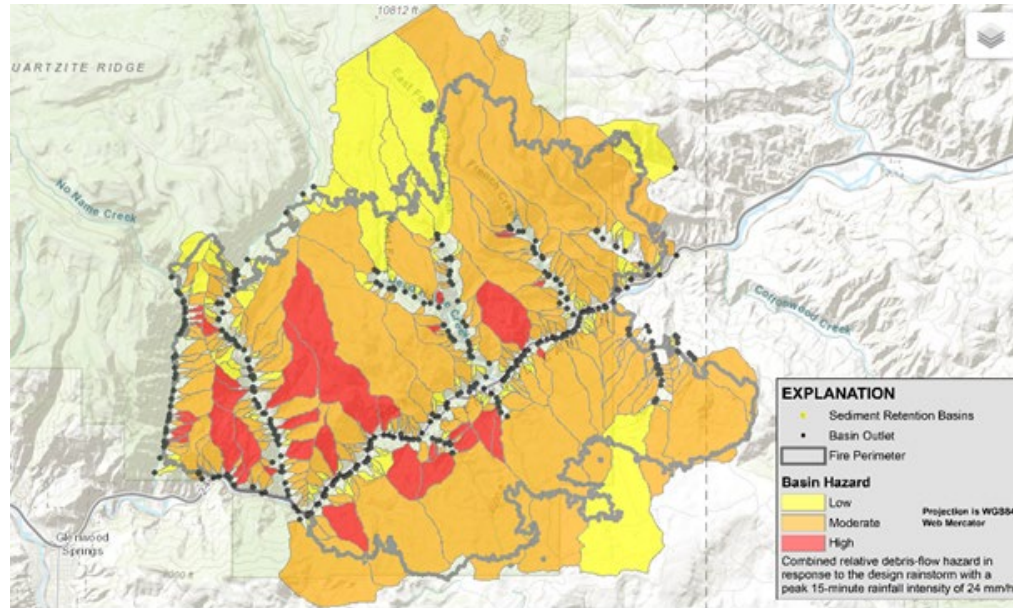
MIDDLE COLORADO
WATERSHED COUNCIL

The background of the slide is a large, scenic photograph of a river. The river is calm, reflecting the sky and the surrounding landscape. On the left bank, there are trees with vibrant autumn foliage in shades of orange, yellow, and brown. In the background, there are rugged mountains under a dramatic sky with large, grey clouds and patches of blue. The overall mood is serene and natural.

State of the River
MCWC 2021 Fire Restoration Projects
May 26, 2021

MCWC's mission: Evaluate, protect and enhance the health of the Middle Colorado River through the cooperative effort of watershed stakeholders

Post Fire Monitoring Efforts



- ❑ Enhanced Water Quality Monitoring
- ❑ Downstream Alert System During Post Fire Event
- ❑ Enhance weather monitoring in Glenwood Canyon



Grizzly Creek and Pine Gulch post fire impacts in Garfield County

- *Health and Safety of Citizens**

- *Buildings/Infrastructure**

- *Public Water Systems**

- *Ditches and Headgates in Agriculture
Community**

- Understanding these risks to water quantity and water quality are essential to managers facing decisions regarding water-supply protection.
- Tracking changes in river condition can alert downstream users, allowing for mitigation of these water-quality affects.



Post Fire Water Quality Monitoring in the Middle Colorado Watershed

Synoptic 'snapshots' to assess fire effects to water quality

Manually collected discrete samples

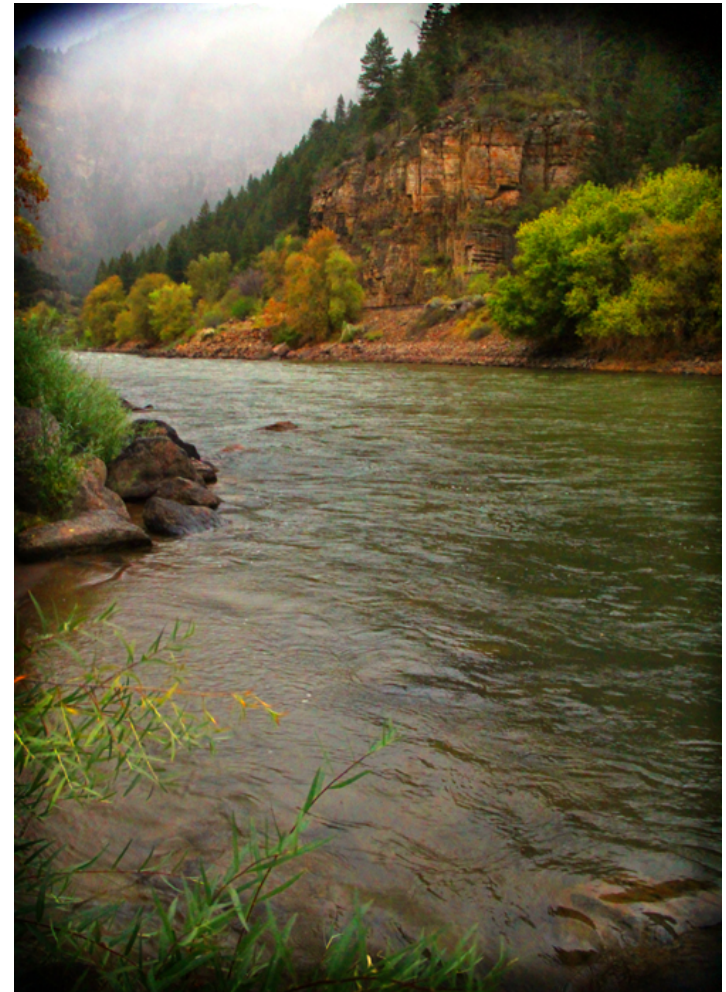
- At 4 locations: 2 burned (Grizzly and No Name Creeks) 1 un-burned tributary (Mitchell Creek), and the Colorado River above Roaring Fork confluence
- At 4 times this season: Before, during, and after snowmelt runoff

Analyzed for nutrients, dissolved organic matter, suspended sediment, trace metals, major and minor inorganic ions (salts), source-water stable isotopes, and polyfluoroalkyl substances (PFAS)

Sensor deployment(s) in the Colorado River to monitor and 'alert'

Measured instream conditions every 15 minutes:

- Water temperature, specific conductance, turbidity, pH, dissolved oxygen (leveraging existing site deployments)
- Fluorescent dissolved organic matter (1 new site deployment)

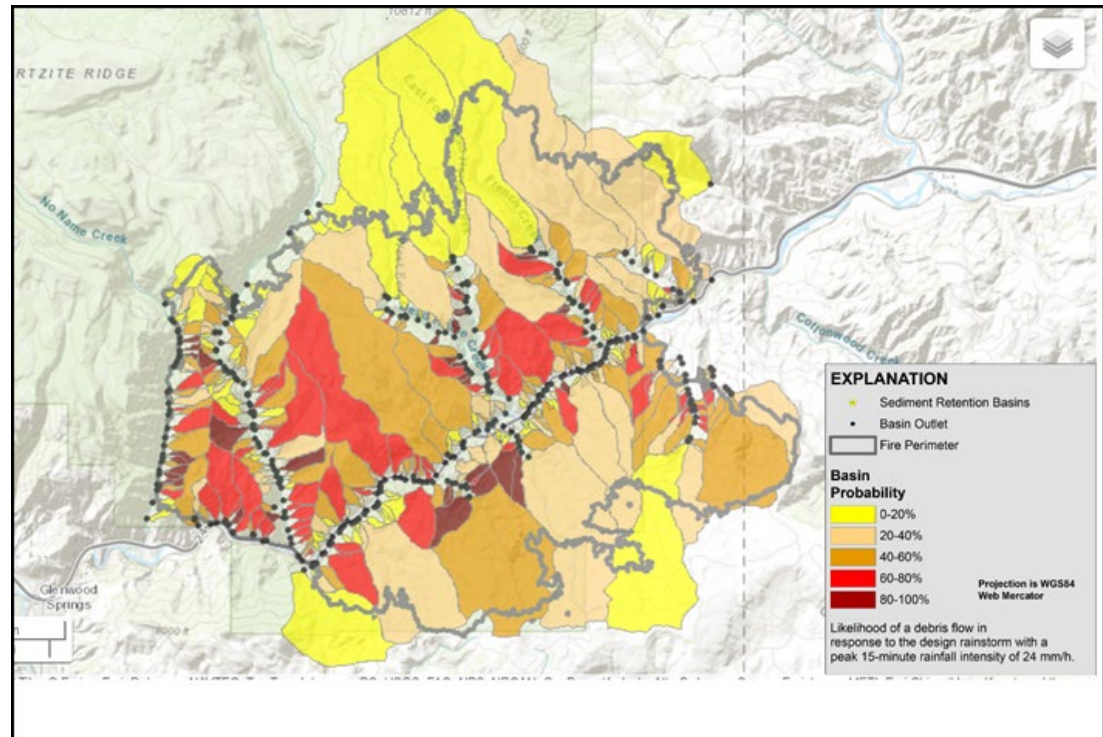


Monitoring Weather Glenwood Canyon

Enhancing weather predictability in Glenwood Canyon is urgent because of the number of drainages with heavy burn areas and the potential for flooding and debris flow events.

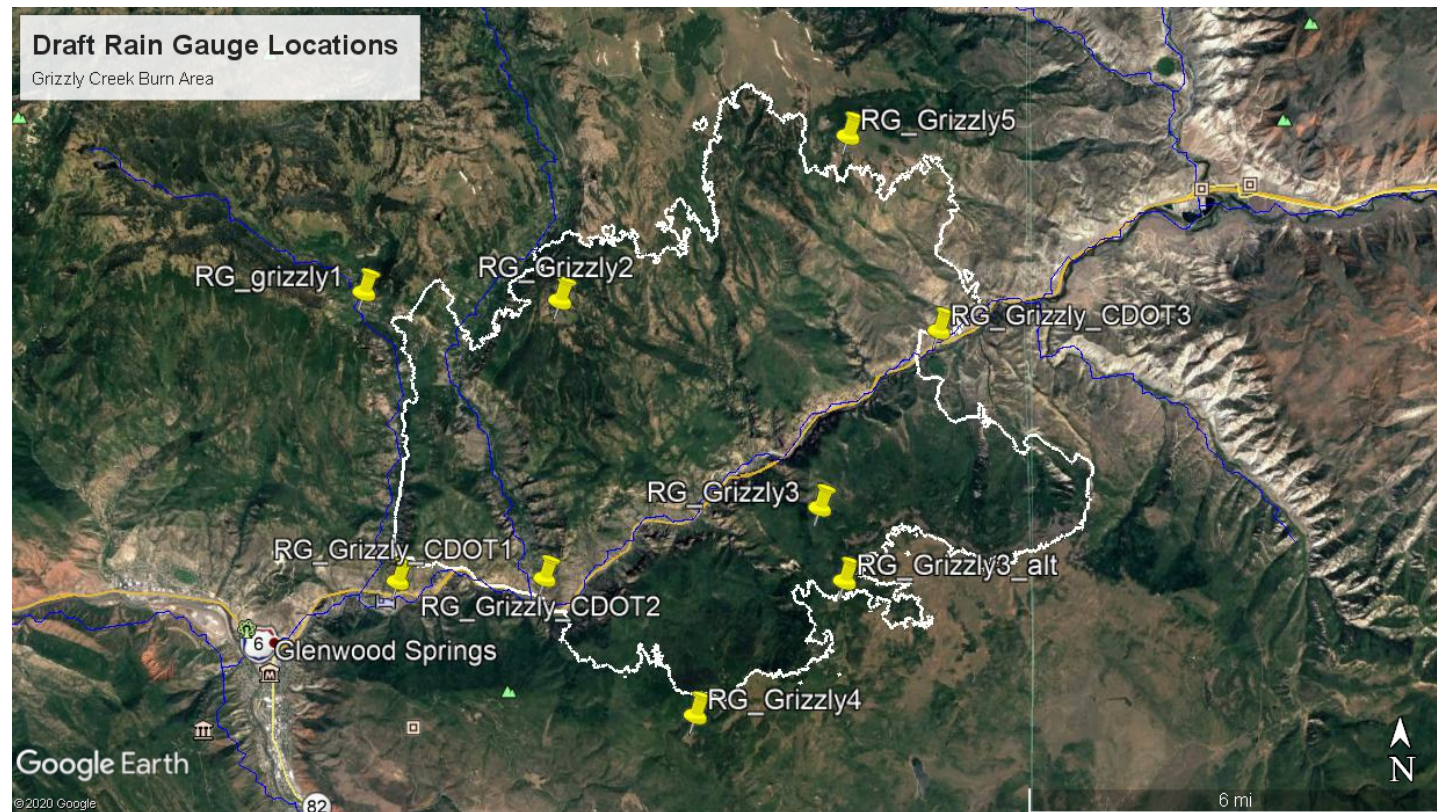
Communication Strategy

1. Rain Gauges to National Weather Service (NOAA)
2. NOAA to CDOT



Placement Rain Gauges

Placement of rain gauges at key points on the perimeter of the canyon and inside certain canyon drainages will increase awareness of rapid changes in weather.



Downstream Users

- ❖ Glenwood Springs, New Castle, Silt, Rifle, Parachute, Battlement Mesa Metro District, De Beque
- ❖ Conservation Districts and ditch companies and Conservancy Districts on the Middle Colorado River (GarPit CD, Blue Stone, Silt Conservancy),
- ❖ Users of the Lower Colorado River (De Beque Canyon to the border).

Project Supporters

- Colorado River District
- Colorado Rural Water Association
- Colorado Water Conservation Board
- USFS
- CDOT
- BLM
- City of Glenwood Springs
- Garfield County
- Downstream municipalities
- Glenwood Canyon Restoration Alliance
- Colorado Basin Roundtable
- USGS
- Colorado Department of Natural Resources
- Roaring Fork Outdoor Volunteers
- Conservancy and Conservation Districts
- Roaring Fork Conservancy
- Eagle River Watershed Council.

Thank you!

Middle Colorado Watershed Council

Paula Stepp/Executive Director

pstepp@midcowatershed.org, 970-404-0162

Please visit our website: www.midcowatershed.org

Follow us on social media: @midcowatershed

Water Quality Alert

USGS WaterAlert signup for email or text notifications

<https://maps.waterdata.usgs.gov/mapper/wateralert/>

Select data type 'Surface-Water Sites, Water-quality'