### 2019 BLM Instream Flow Recommendations



#### Streams in Water Division 2



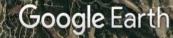
East Fork Arkansas River

#### Lake County



#### East Fork Arkansas River Location

Lower Terminus: Confluence With Chalk Creek



Climax

Mine

# East Fork Arkansas River



Natural Environment:

Fishery:

- Brook trout
   Water Quality:
- Consistently cold stream temperatures
- Ideal pH for salmonids
- Low TDS
- Some heavy metals from historic mining
   Riparian community:
  - Spruce, willow, river birch

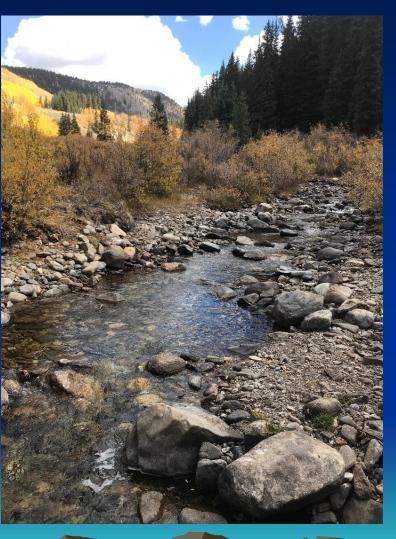


# East Fork Arkansas River

#### **Proposed Flow Rates:**

7.0 cfs May 1 – Jul 31
2.8 cfs Aug 1 – Sep 30
1.2 cfs Oct 1 – Apr 30

# East Fork Arkansas River



Water Availability:

- Snowmelt hydrograph
- At top of watershed
- Existing ISF right located downstream, starting at Chalk Creek -- 15 cfs, year round
- Gage data available downstream
- Water Rights:

None

# East Fork Arkansas River



#### Stakeholders:

- Upper Arkansas Water Conservancy District
- Lake County
- Private land owners along reach
- US Forest Service
- Climax Molybdenum
   Mine

## Iowa Gulch Lake County



### Iowa Gulch Location

Highway 50

5

Lower Terminus: Little Cimarron River

Upper Terminus: Headwaters

© 2017 Google

Imagery Date: 10/13/2015 38°14'26.98" N 107°15'47.94" W elev 8313 ft eye alt 32.44 mi

Google earth

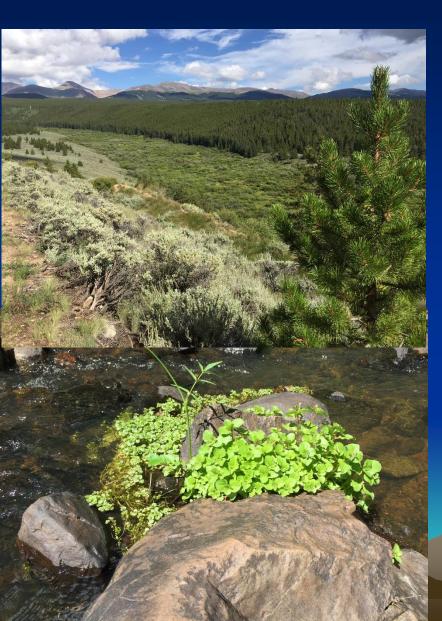
Powderhorn

Leadville North

Leadville

Lower Terminus: lowa Gulch Intake

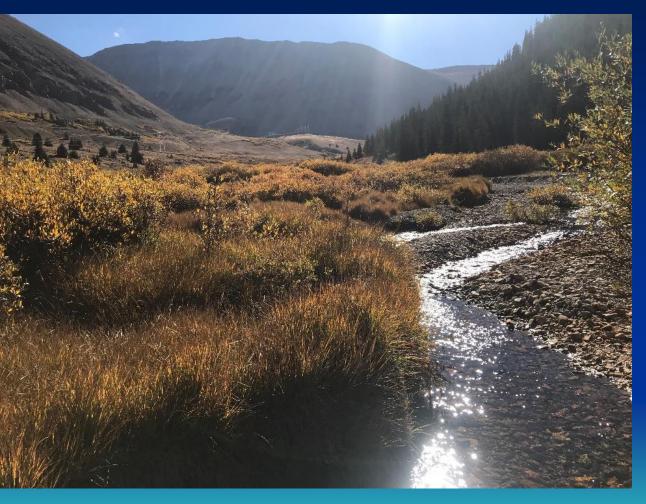
> Upper Terminu Headwaters



#### Natural Environment:

- Fishery: brook trout
- Macros: mayfly
- Riparian community: willow, grasses, sedges

Proposed Flow Rates: 3.5 cfs May 1 – Jun 30 1.5 cfs Jul 1 – Sep 15 0.6 cfs Sep 16 – Apr 30



#### Water Availability:

- Snowmelt driven
- At top of watershed
- Gage data is not available

Water Rights:

- None
- Water Quality:
- Some influence from historic mining



#### Stakeholders:

- Private landowners along creek
- Lake County
- US Forest
   Service

#### Streams in Water Division 6



# Willow Creek Routt County



### Willow Creek Location

© 2018 Google

Little Snake River

Wyoming Border

West Branch Willow Creek

> Willow Creek Main Stem

> > Google Earth



#### Natural Environment:

- Fishery: speckled dace, mountain sucker, creek chub, fathead minnow
- Macros: mayfly,
   caddisfly and other
   species typical of cool
   to warm water
- Riparian community: alder, willow, sedges, rushes

### Proposed Flow Rates

Main Stend 1.05 cis Apr 1 + Oct 31 0.7 cis Nov 1 - Mar 31

<u>West Branch</u> 0.65 cfs Apr 1 - Oct 31 0.45 cfs Nov 1 - Ma 31



Water Availability:

- In headwaters of watershed
- Snowmelt driven hydrograph
- No gage date available
- Main stem can be affected by diversions, return flows

#### Water Rights:

- Main stem:
- Pine Scope Ditch 1 5.0 cfs
- Pine Scope Ditch 2 3.0 cfs
- West Branch: None



#### Stakeholders:

- Routt County
- Three Forks Ranch

   lands owned by
   the ranch surround
   the BLM parcels

## Sunbutter Creek Rio Blanco County



### Sunbutter Creek Location

**Dunckley Pass** 

Phippsburg

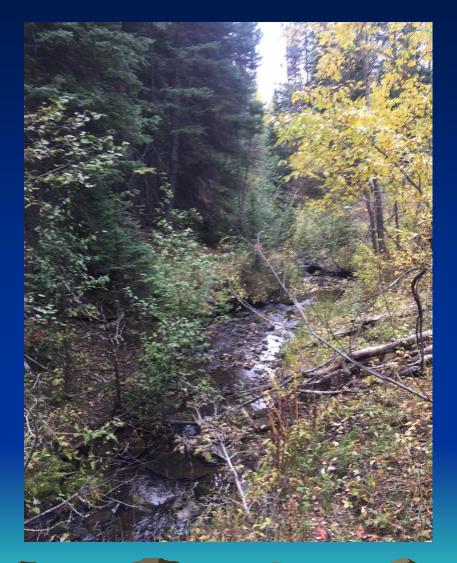
Google Earth

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Upper Terminus: Headwaters

Gooale

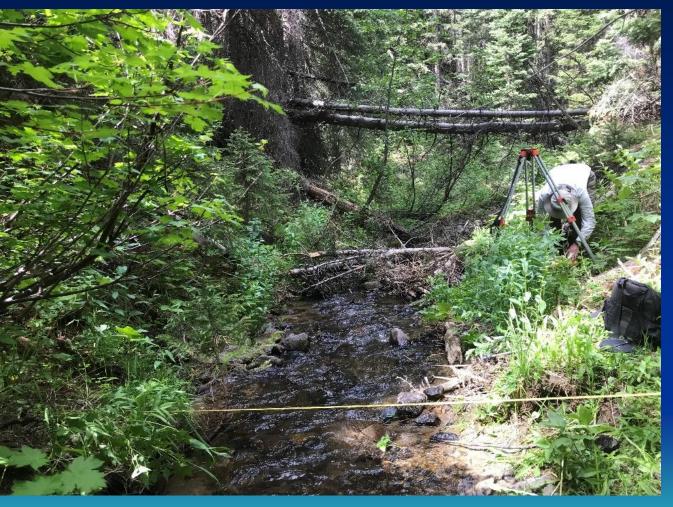
Lower Terminus: Headgate of Bunker Ditch



#### Natural Environment:

- Fishery: Colorado River Cutthroat Trout – genetic testing underway
- Macros: stonefly and caddisfly
- Riparian Community: alder, maple, spruce dogwood

Proposed Flow Rates: 1.75 cfs May 1 – Jul 1 0.7 cfs Aug 1 – Nov 30 0.4 cfs Dec 1 – Apr 30



#### Water Availability:

- Snowmelt driven
- Reliable base
   flow provided by
   spring discharge
- Gage data not available
- Downstream diversion data available
   Water Rights:
  - None



#### Stakeholders:

- Rio Blanco County
- U.S. Forest Service
- Cross Mountain Ranch owns lands at end of reach

## **Questions for BLM?**

Contact Roy Smith at <u>r20smith@blm.gov</u> or 303-239-3940

Big Dominguez Creek near Grand Junction