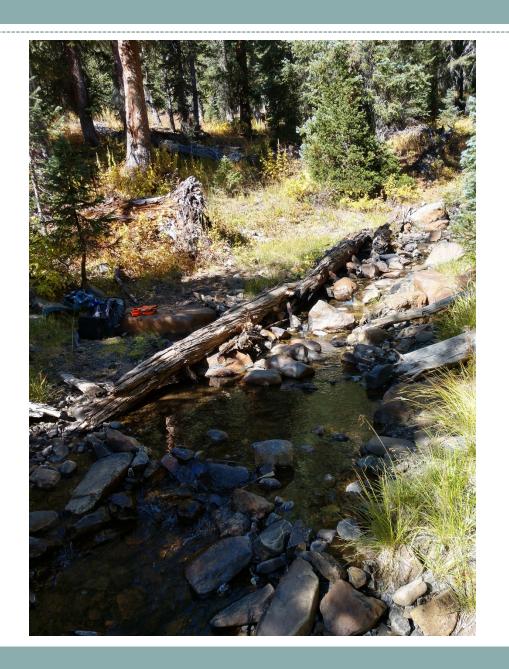
# 2020 Instream Flow Proposals



# Water Division 4

Elk Creek



# **Instream Flow Right**

- Proposing winter and summer instream flow protection on Elk Creek
  - No existing ISF right
  - Water quality improvements from mine reclamation at the headwaters
  - Natural habitat including salamanders, recovering brook trout population, and healthy macroinvertebrate population



#### Natural Environment

Brook trout fishery

Tiger Salamander

Healthy macroinvetebrate community

Riparian area featuring mixed forest, pine/willow

Steep pool-drop system





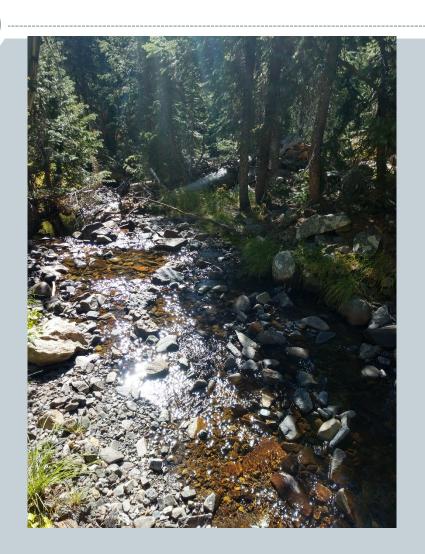
#### **Current R2Cross Criteria**

#### **Hydraulic Criteria**

- 1 ft./sec Average Velocity
- 50% Wetted Perimeter
- Average Depth

#### Flow Recommendations

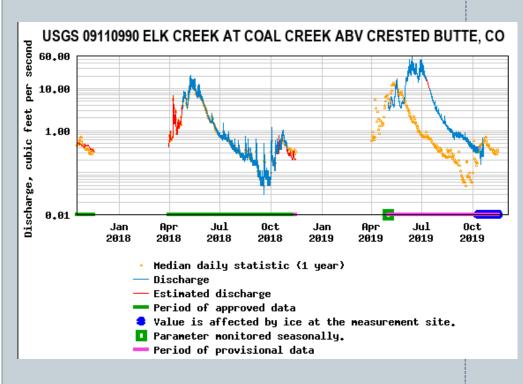
- Flow recommendation meets 2 of 3 hydraulic criteria
- To obtain a summer recommendation will need to return to collect data that meets 3 of 3 hydraulic criteria





Cross Section	Winter Flow	Summer Flow
(Date &	Recommendation	Recommendation
Location)	(cfs)	(cfs)
Elk Creek 10/3/19	0.2 cfs	TBD with additional data collection

# **Water Availability**



#### **Physical**

 Used a combination of StreamStats, R2Cross, and gage records to look at physical availability

#### Legal

- No current diversions on Elk Creek
- Conditional water rights



#### **Stakeholders**

**US Forest Service** 

Colorado Parks & Wildlife

**Gunnison County** 

Water rights owners

The Upper Gunnison River Water Conservancy District

					27 47
i	Upper	Lower	Total Length	Land Ownership	
	Terminus <sup>1</sup>	Terminus	(miles)	Private (%)	Public (%) <sup>2</sup>
			۵.1	Riparian	Riparian
	Headwaters with Coal			Corridor <sup>3</sup>	Corridor
		Confluence		15%	85%
		Creek		Watershed	Watershed
P				Composition	Composition
N. P.				16%	84%

# Water Division 4

# Wildcat Creek



# **Instream Flow Rights**

- Proposing a winter and summer instream flow protection on Wildcat Creek
  - No existing ISF right

#### Natural Environment

Cutthroats of unknown lineage

Small high altitude stream with a pool drop system

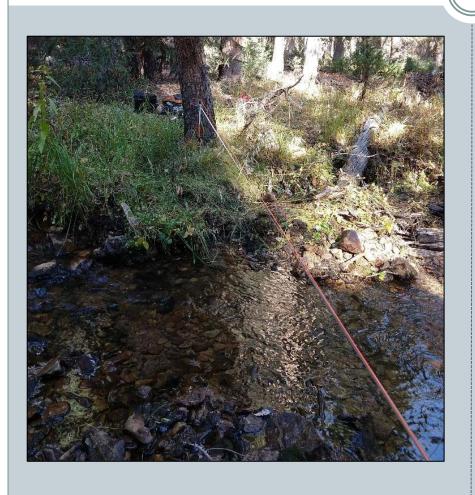
Healthy mixed pine and willow riparian area





Cross Section	Winter Flow	Summer Flow	
(Date &	Recommendation	Recommendation	
Location)	(cfs)	(cfs)	
Wildcat Creek 10/09/19	0.36 cfs	TBD with additional data collection	

## **Water Availability**



# **Physical**

 Used a combination of StreamStats and R2Cross to look at physical availability

### **Water Availability**

#### Legal

 There is one existing diversion on Wildcat Creek owned by the Town of Crested Butte. This diversion serves as a backup supply for the Town of Crested Butte. The Town of Crested Butte's water right can be exercised either from Wildcat Creek or Coal Creek.



**US Forest Service** 

Colorado Parks & Wildlife

**Gunnison County** 

**Town of Crested Butte** 

The Upper Gunnison River Water Conservancy District

BLM (partner in 2020)

Upper	Lower	Total Length	Land Ownership	
Terminus <sup>1</sup>	Terminus	(miles)	Private (%)	Public (%) <sup>2</sup>
Headwaters at Green Lake	Confluence with Coal Creek	2.6	Riparian Corridor <sup>3</sup> 59% Watershed Composition 13%	Riparian Corridor 41% Watershed Composition 87%

### **Questions?**



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