

2016 Instream Flow Proposals



**AMERICAN RIVERS
&
HIGH COUNTRY CONSERVATION
ADVOCATES**

Streams in Water Division 4



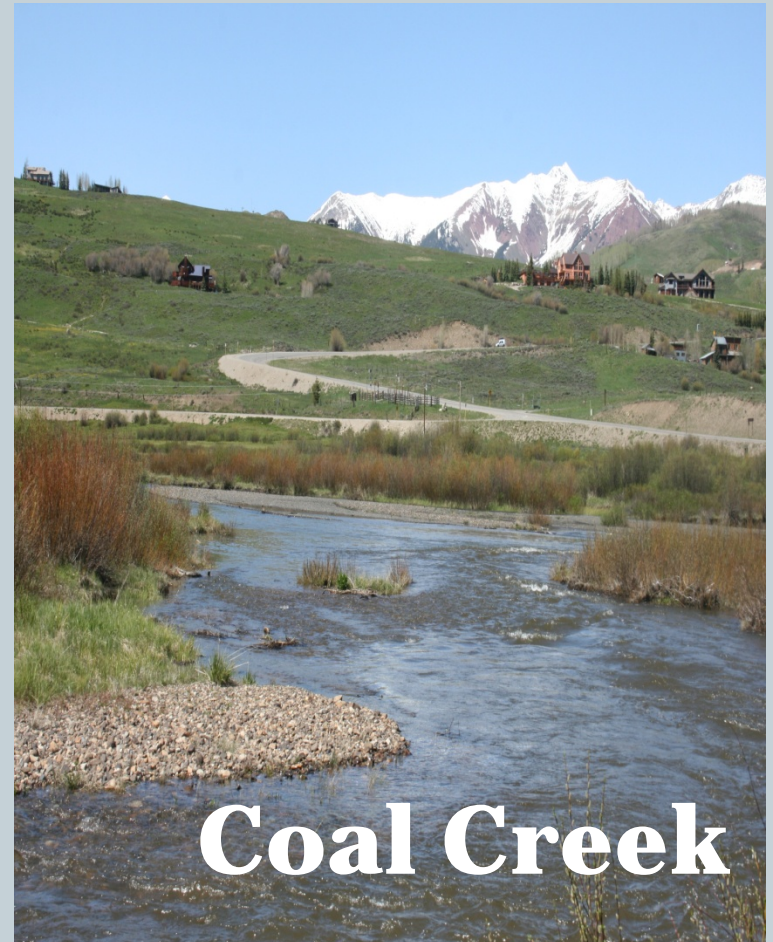
- **Brush Creek**
- **Coal Creek**

A wide-angle photograph of a mountain valley. In the foreground, a small stream flows through a grassy area with some yellow wildflowers. The middle ground is dominated by a dense forest of tall, dark green evergreen trees. In the background, rugged mountains are visible under a clear sky. The overall scene is a natural, mountainous landscape.

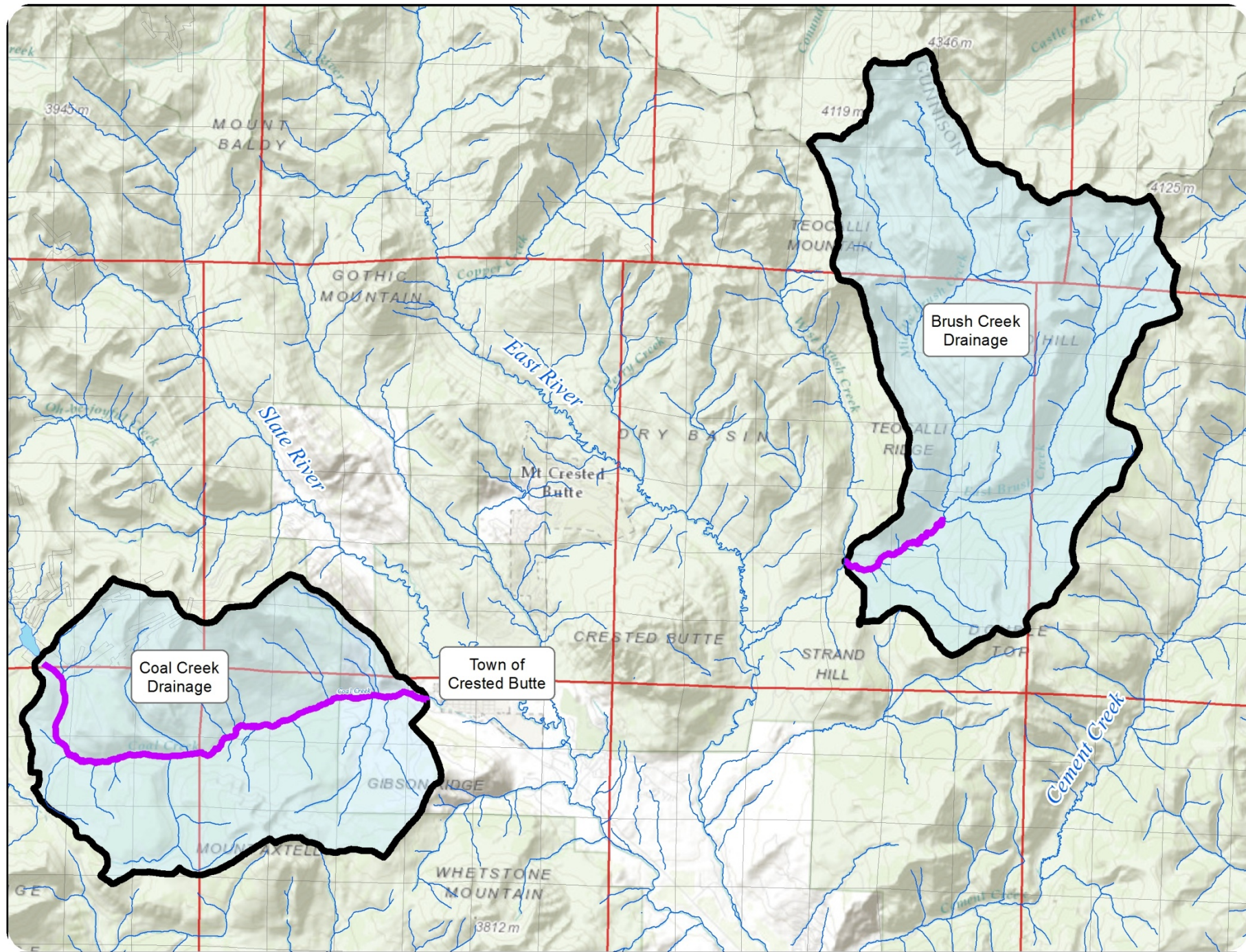
Coal Creek

2016 Recommendation Emphasis

New, junior ISF enlargements on creeks with existing, decreed ISF rights to more fully “preserve the natural environment to a reasonable degree” by current R2Cross standards and criteria



Coal Creek





Natural Environment

- Cutthroat fishery
- Healthy riparian area featuring willows

Brush Creek





Existing ISF Water Right

- Case Number
4-83CW236
- 8 cfs summer
- 5 cfs winter
- Appropriated
6/3/1982

Brush Creek





Stakeholders



US Forest Service

Colorado Parks & Wildlife

Gunnison County

Water rights owners

**The Upper Gunnison River
Water Conservancy District**

Local guiding businesses



Natural Environment

- Healthy brook and brown trout fishery
- Riparian community with willows and alders

Coal Creek





Existing ISF Water Right

- Case Number
4-80CW102
- 2 cfs year round
- Appropriated
3/17/1980

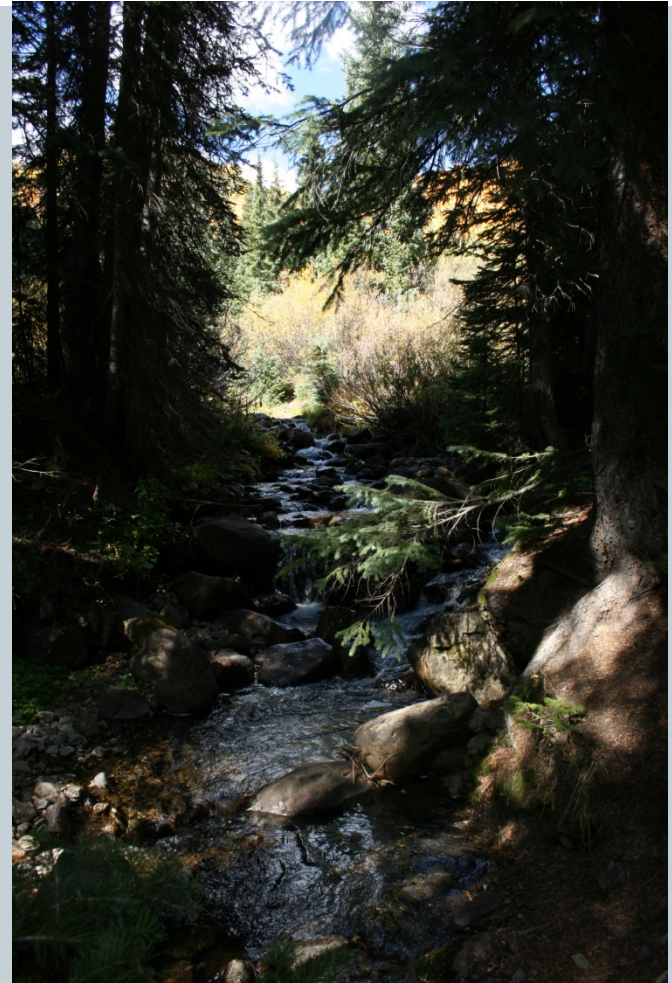
Coal Creek



Coal Creek

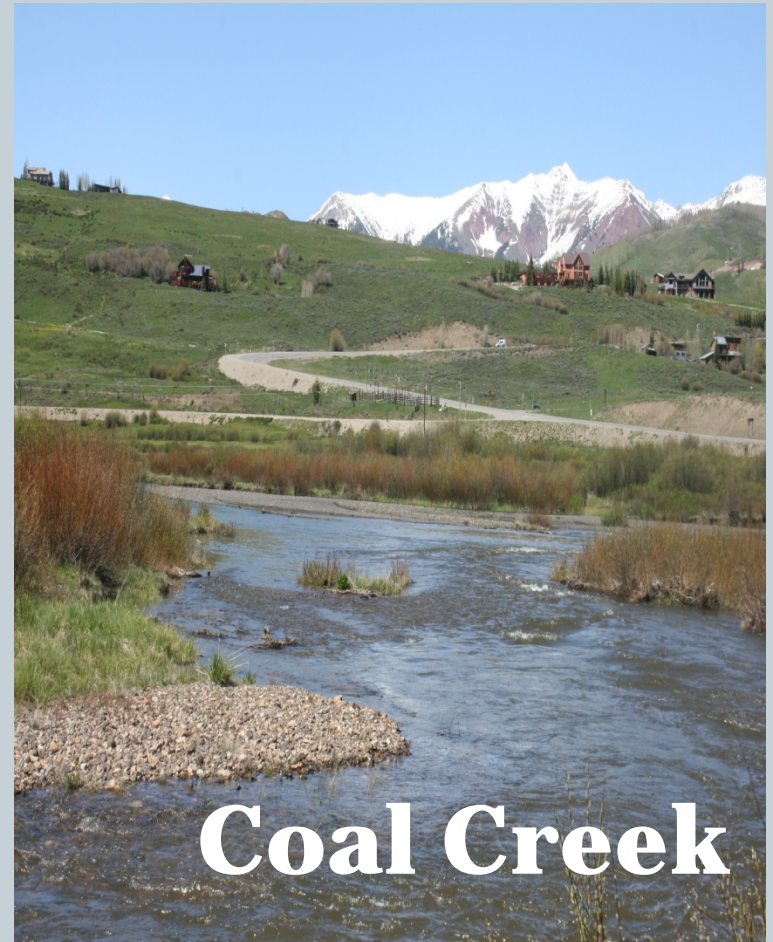


- Stakeholders
 - US Forest Service
 - Bureau of Land Management
 - Gunnison County
 - Town of Crested Butte
 - Water rights owners in the Coal Creek watershed
 - Upper Gunnison River Water Conservancy District



2016 Recommendation Emphasis

New, junior ISF enlargements on creeks with existing, decreed ISF rights to more fully “preserve the natural environment to a reasonable degree” by current R2Cross standards and criteria



Current R2Cross Criteria



Hydraulic Criteria

- 1 ft/sec Average Velocity
- 50% Wetted Perimeter
- Average Depth 1% of Top Width

Flow Recommendations

- Summer flow meets all 3 hydraulic criteria
- Winter flow meets 2 of 3 hydraulic criteria

Land Ownership	
Private (%)	Public (%)
Riparian Corridor	Riparian Corridor
0%	100% (USFS)
Watershed Composition	Watershed Composition
0.6%	99.4%

Brush Creek ISF reach

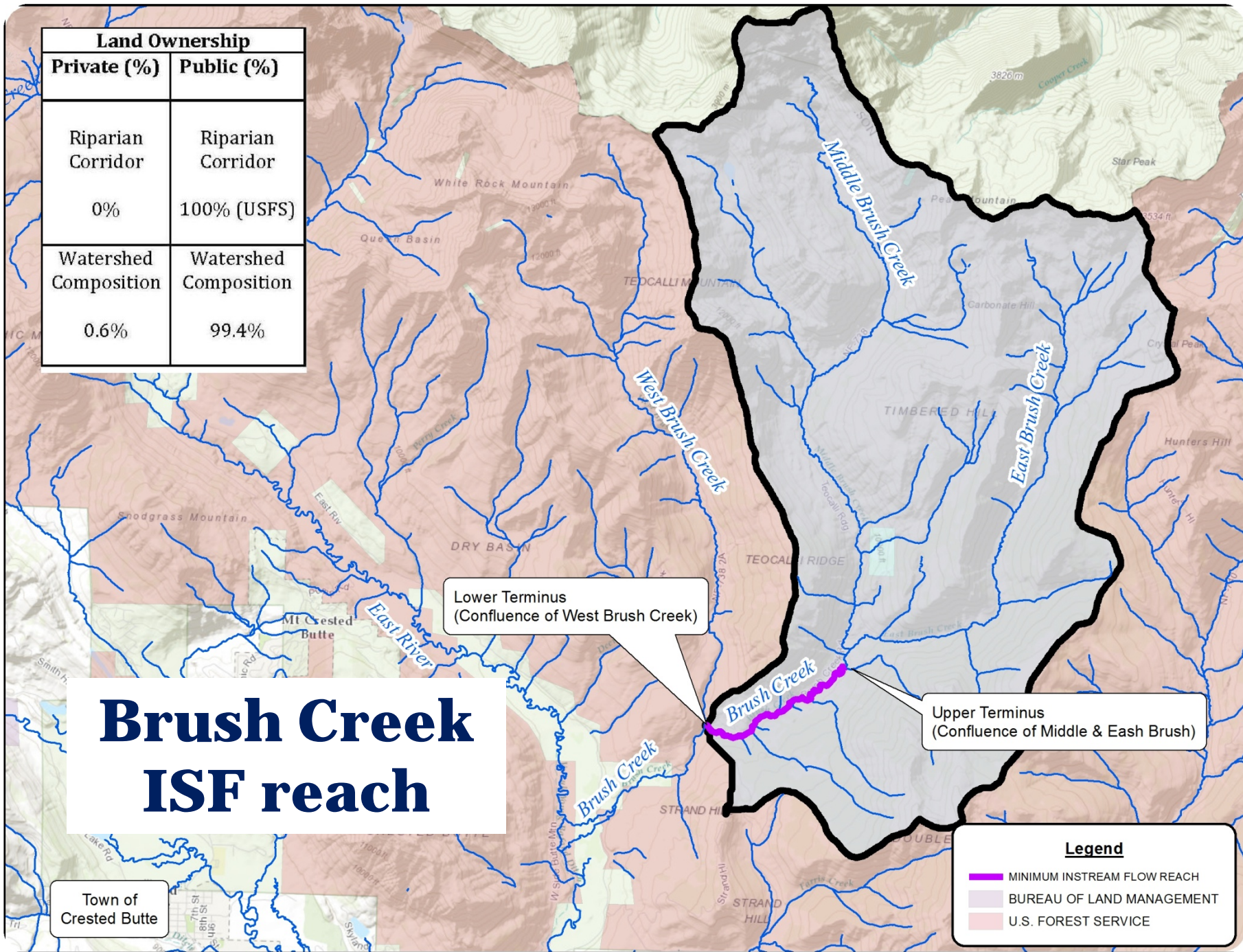
Town of
Crested Butte

Lower Terminus
(Confluence of West Brush Creek)

Upper Terminus
(Confluence of Middle & East Brush)

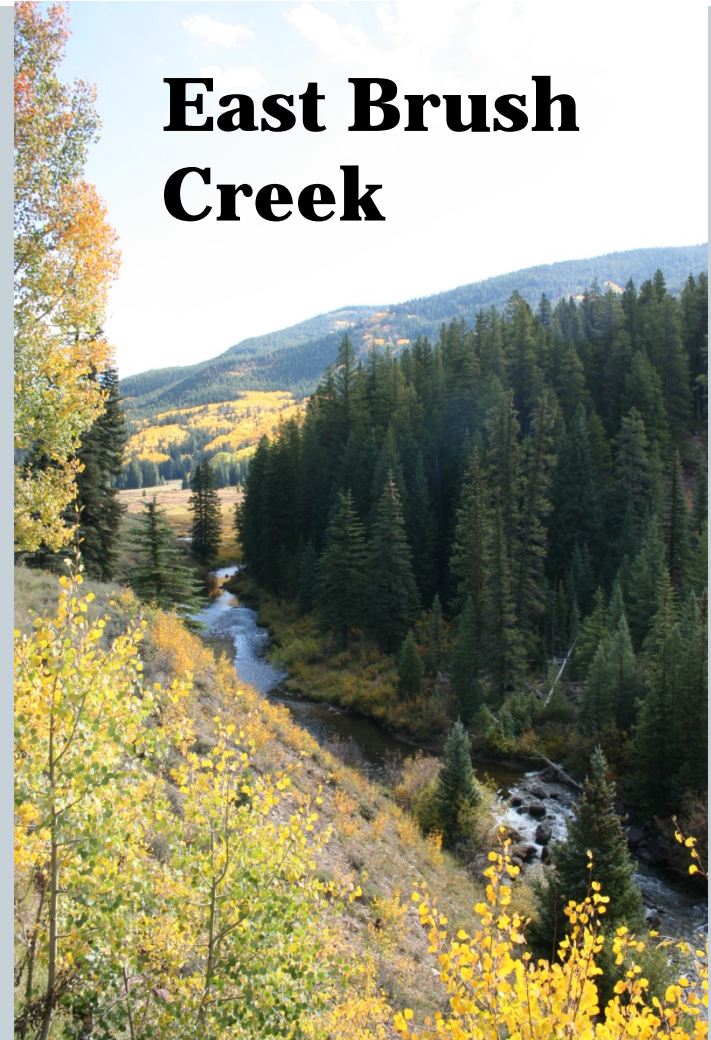
Legend

- MINIMUM INSTREAM FLOW REACH
- BUREAU OF LAND MANAGEMENT
- U.S. FOREST SERVICE



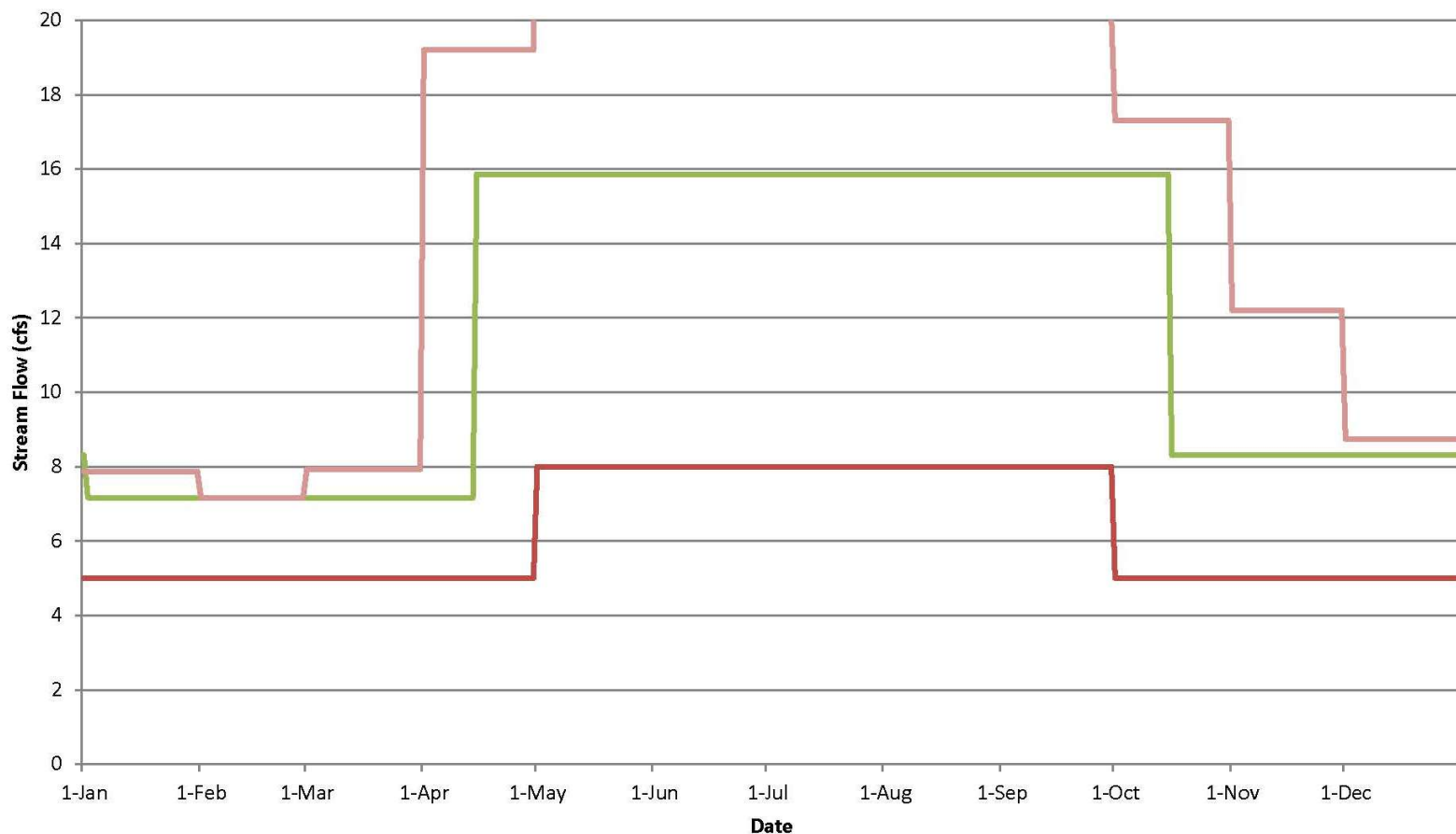
Brush Creek

- **Water Availability**
 - Tributaries are headwaters streams
 - Middle Brush Creek originates in the Maroon Bells-Snowmass Wilderness Area
 - East Brush originates on USFS lands
 - No gage data available data



Water Availability

Brush Creek Instream Flow Hydrology Assessment



- Instream Flow Recommendations
- Existing Instream Flow
- Streamstats above West Brush Cr

Requested Instream Flows:

January 1 - April 14: 7.17 cfs
April 15 - October 15: 15.86 cfs
October 16 - December 31: 8.31 cfs

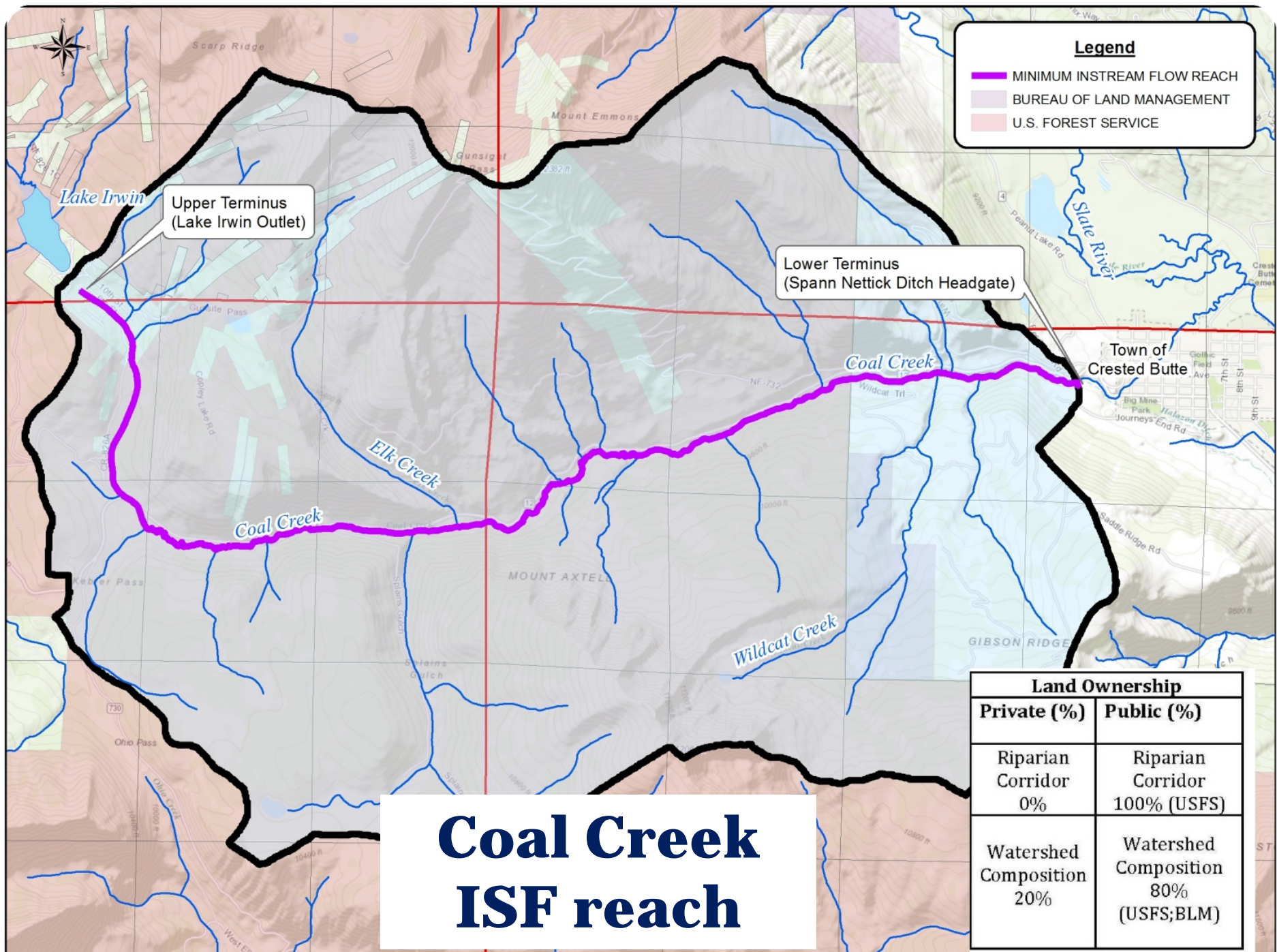
Brush Creek

Proposed ISF rates

- Apr. 15th- Oct. 15th
 - ✦ 15.86 cfs
- Oct. 16th- Jan. 1st
 - ✦ 8.31 cfs
- Jan. 1st- Apr. 14th
 - ✦ 7.17 cfs



East Brush Creek



Upper Terminus
(Lake Irwin Outlet)

Lower Terminus
(Spann Nettick Ditch Headgate)

Legend

- MINIMUM INSTREAM FLOW REACH
- BUREAU OF LAND MANAGEMENT
- U.S. FOREST SERVICE

Coal Creek ISF reach

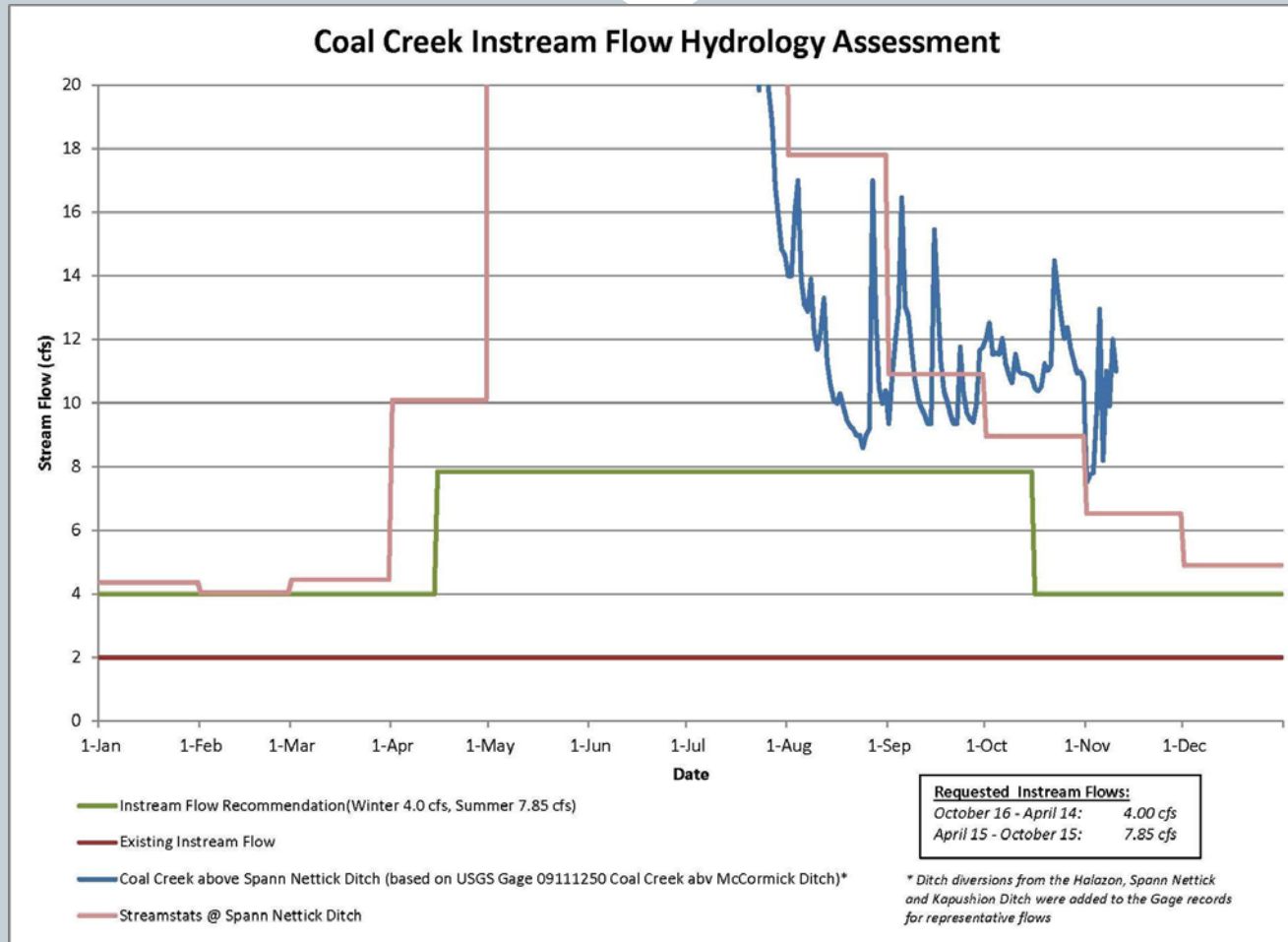
Land Ownership	
Private (%)	Public (%)
Riparian Corridor 0%	Riparian Corridor 100% (USFS)
Watershed Composition 20%	Watershed Composition 80% (USFS;BLM)

Water Availability



- Headwaters stream
- Originates on USFS lands
- Some gage data available data but short period of record

Water Availability





Proposed ISF rates

Apr. 15- Oct. 15

7.85 cfs

Oct. 16- Apr. 14

4 cfs

Coal Creek



Self-serving photo of big rainbow I caught 😊

