

2015 BLM Instream Flow Recommendations



2015 Recommendations Emphasis

- Recommendations from previous years-complete work
- Protect streams that provide habitat for sensitive and native fish species – work to prevent listing under Endangered Species Act
- Decree instream flow increases for streams where existing instream flow could more fully protect the natural environment
- Protect small streams that were previously overlooked



Streams in Water Division 1

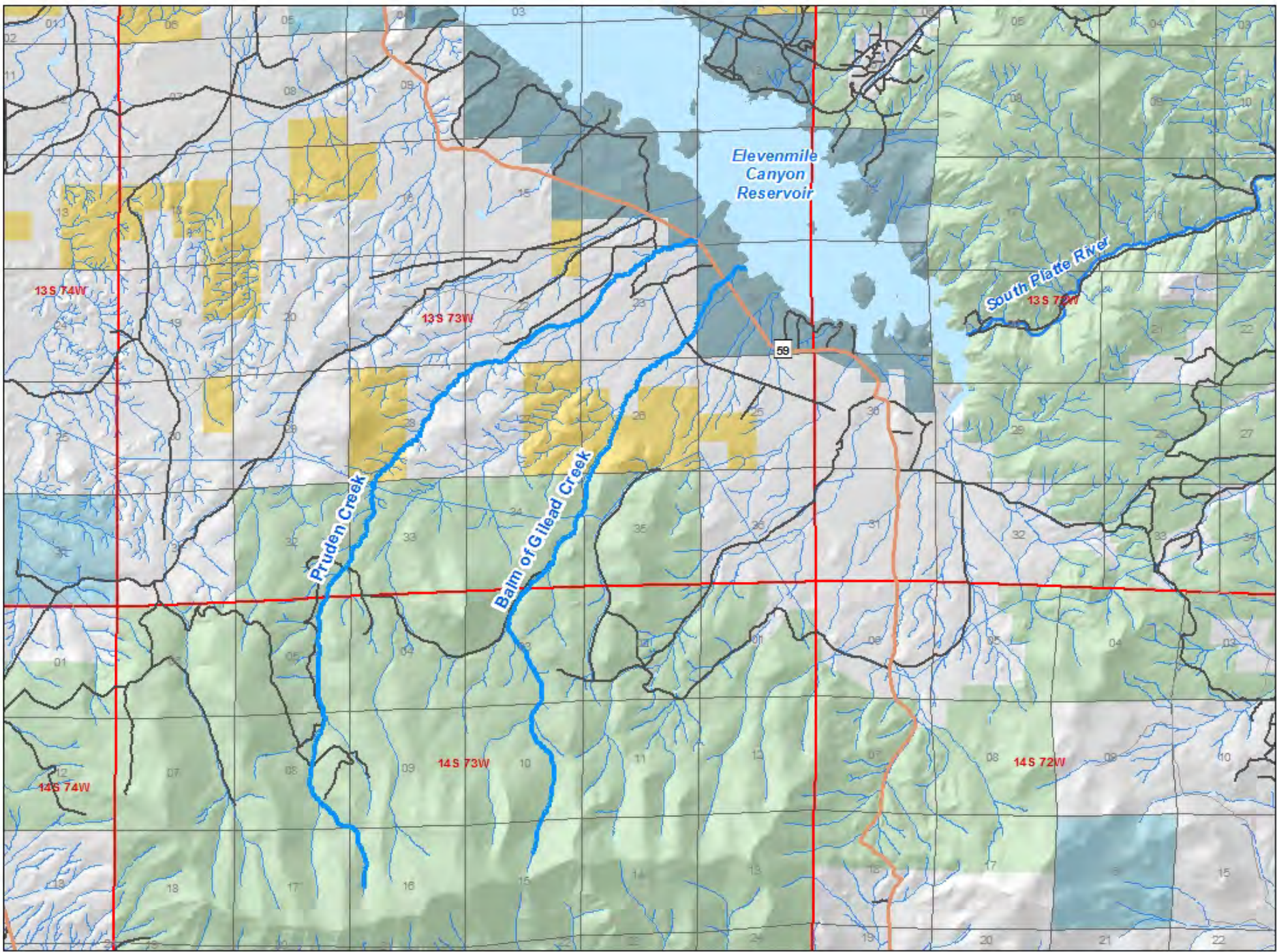


Pruden Creek

Pruden Creek & Balm of Gilead Creek Park County



Pruden Creek



Pruden Creek & Balm of Gilead Creek



Balm of Gilead Creek

Natural Environment:

- Fishery – Brook Trout
- Good macroinvertebrate community for trout
- Riparian community – willow species, potentilla, alder, river birch
- Heavy usage by big game animals, including deer, elk, and antelope

Pruden Creek & Balm of Gilead Creek



Proposed ISF rates:

Pruden Creek - *Headwaters to headgate of Pruden Ditch (abandoned)*

1.1 cfs May 1 to Aug 31

0.4 cfs Sep 1 to Nov 30

0.3 cfs Dec 1 to Mar 31

0.4 cfs Apr 1 to Apr 30

Balm of Gilead Creek - *Headwaters to BLM boundary*

0.6 cfs May 1 to Aug 31

0.35 cfs Sep 1 to April 30

0.25 cfs Dec 1 to Mar 31

0.35 cfs Apr 1 to Apr 30

Pruden Creek & Balm of Gilead Creek



Water Availability:

- Headwaters streams
- Springs and groundwater provide base flow; some snowmelt runoff
- No gage data available

Water Rights:

- Pruden – none
- Balm of Gilead - none

Pruden Creek



Pruden Creek & Balm of Gilead Creek

Stakeholders:

- US Forest Service
- Colorado Parks and Wildlife
- Park County
- Park County Advisory Board on the Environment
- Water rights owners in Elevenmile Canyon Reservoir
- Private landowners near lower terminus



Streams in Water Division 2

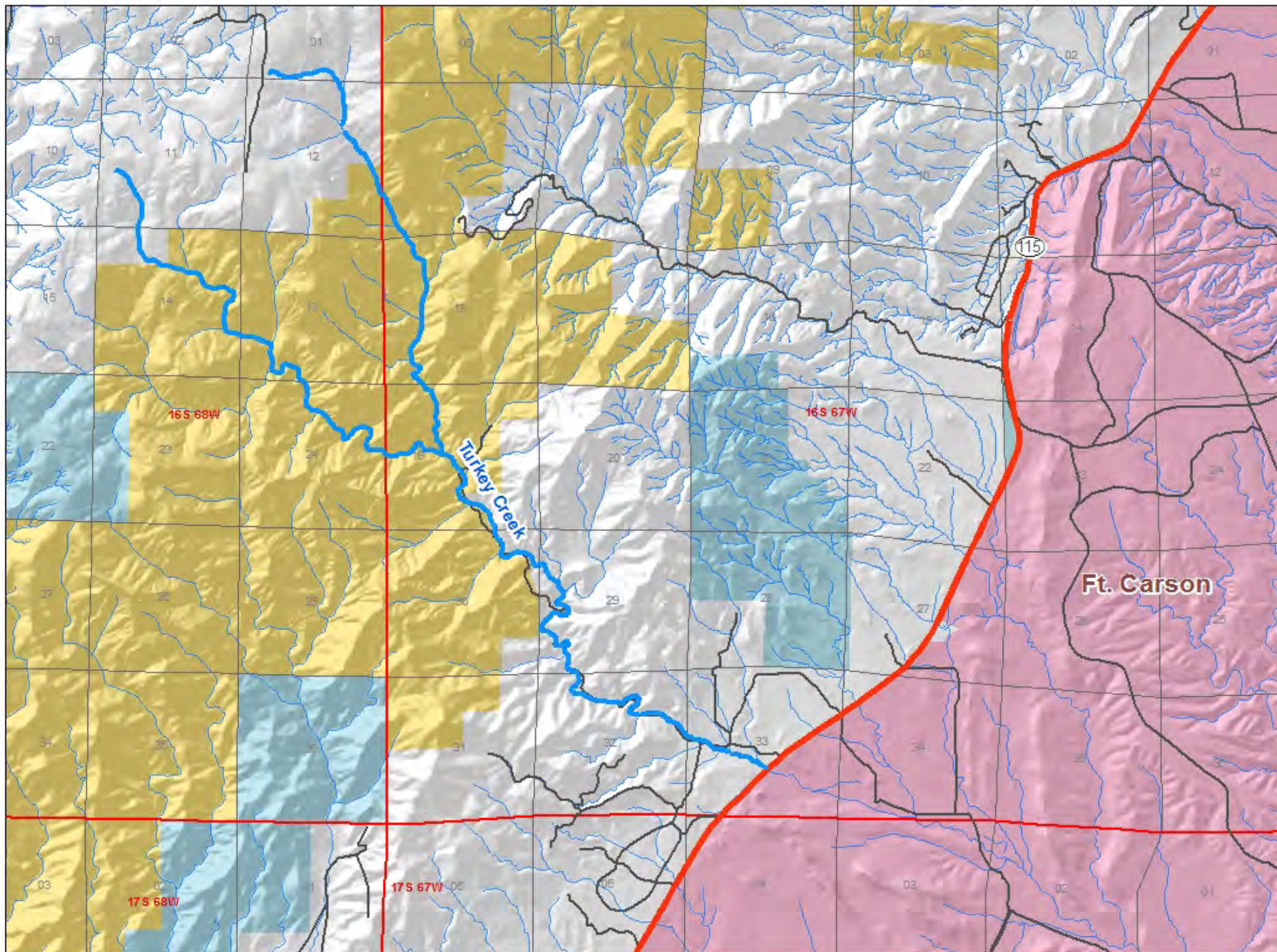


Turkey Creek

Turkey Creek & East/West Forks El Paso County



West Fork Turkey Creek



Turkey Creek & East/West Forks



Natural Environment:

- Fishery – Brook Trout
- Good macroinvertebrate community for trout
- Riparian community – cottonwood, willow, alder, many herbaceous species
- Heavy usage by big game animals, including deer, elk, and antelope

Turkey Creek & East/West Forks



West Fork Turkey Creek

Proposed ISF rates:

East Fork Turkey Creek

1.3 cfs May 1 to Aug 31

0.6 cfs Sep 1 to Nov 30

0.3 cfs Dec 1 to Mar 31

0.6 cfs Apr 1 to Apr 30

West Fork Turkey Creek

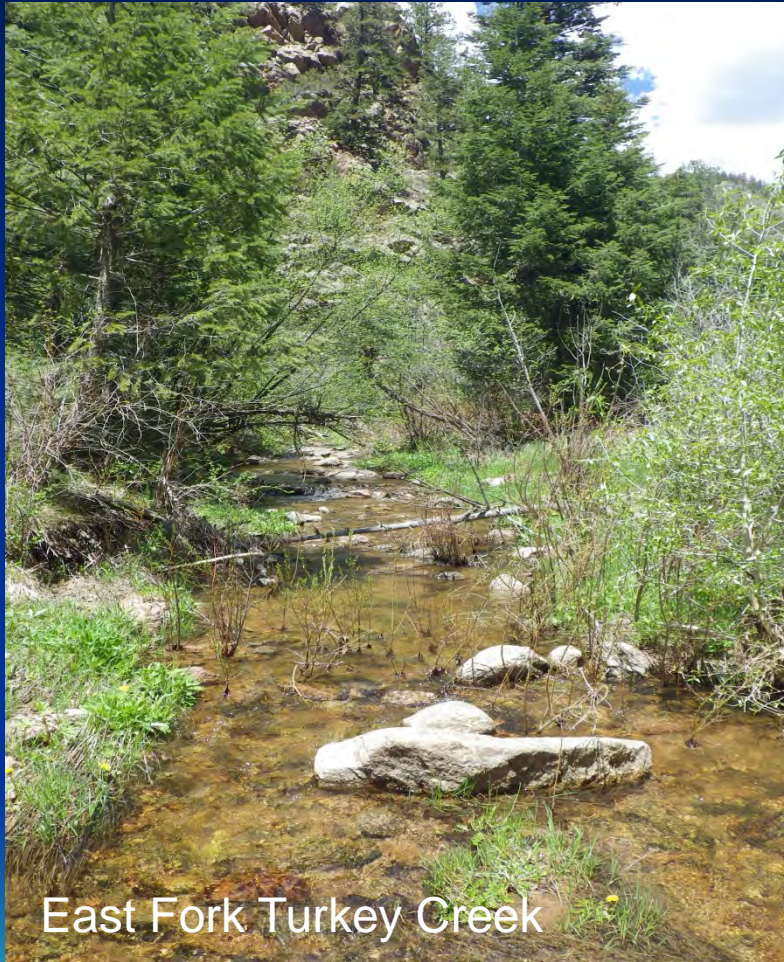
2.1 cfs May 1 to Aug 31

0.75 cfs Sep 1 to Nov 30

0.5 cfs Dec 1 to Mar 31

0.75 cfs Apr 1 to Apr 30

Turkey Creek & East/West Forks



Proposed ISF rates:

Main Stem Turkey Creek

*Confluence of East & West Forks
to Strobel Ditch*

3.7 cfs May 1 to Aug 31

1.8 cfs Sep 1 to Nov 30

1.0 cfs Dec 1 to Mar 31

3.0 cfs Apr 1 to Apr 30

Turkey Creek & East/West Forks



Main Stem Turkey Creek

Water Availability:

- Headwaters streams
- Large springs and groundwater provide base flow; some snowmelt runoff
- Gage data available from adjacent watersheds

Water Rights:

- Strobel Ditch – 4.5 cfs (proposed lower terminus)

Turkey Creek & East/West Forks



Main Stem Turkey Creek

Stakeholders:

- Owner of Strobel Ditch
- Colorado Parks and Wildlife
- El Paso County
- Fort Carson
- Schmidt Company – owner of quarry adjacent to creek
- Private land owners along main stem

Streams in Water Division 4

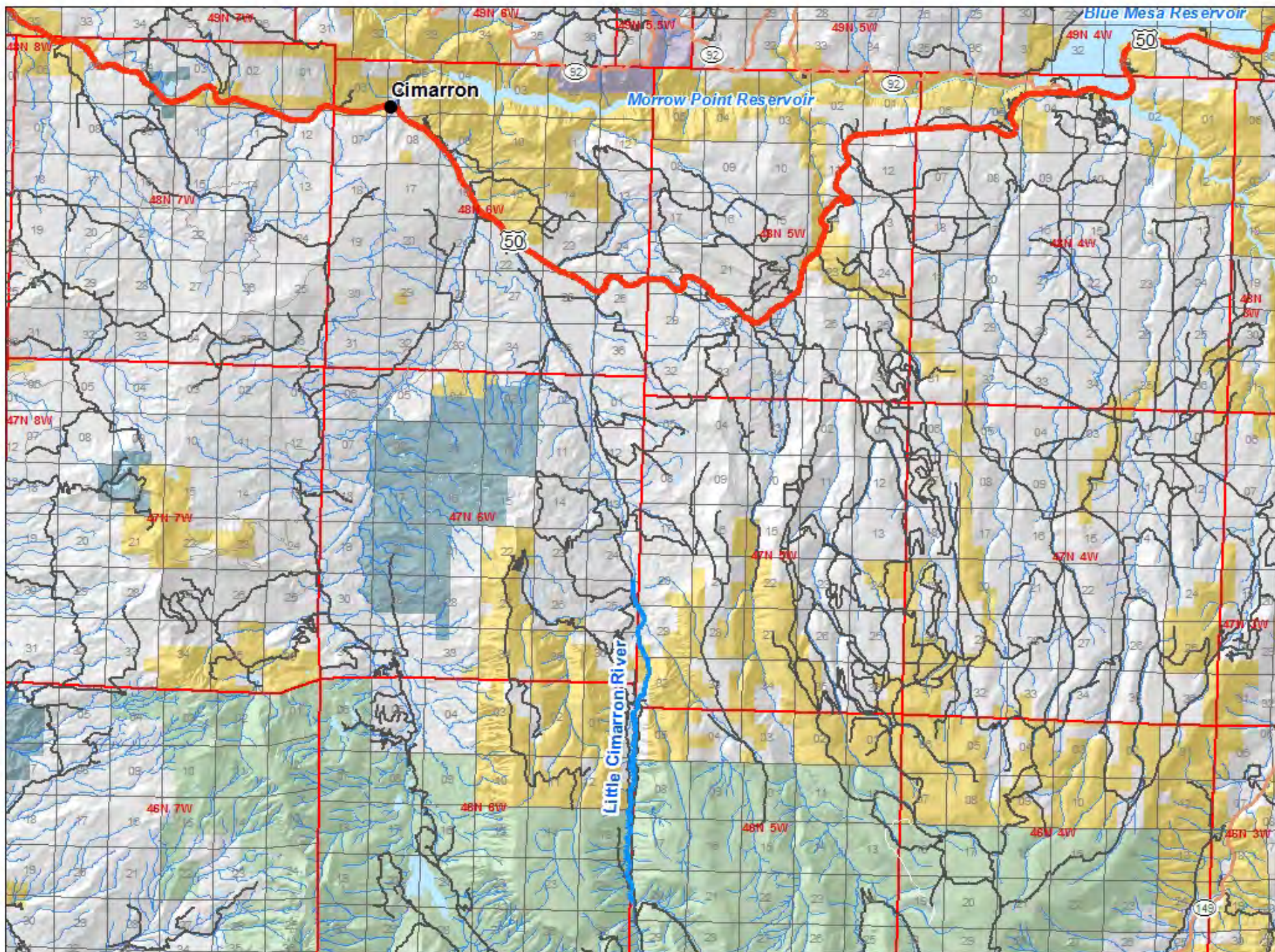


Little Cimarron River

Little Cimarron River

Gunnison County





Little Cimarron River



Natural Environment:

- Fishery – Brook Trout and Lake Trout
- Good macroinvertebrate community and good stream morphology for trout species
- Riparian community – spruce and willow species

Little Cimarron River



Proposed ISF Rates:

*Existing ISF Right – 2.0 cfs
year round, 1984 priority
headwaters to Butte Ditch*

*Proposed Increase – Firebox
Creek to East Fork Little
Cimarron:*

- 9.0 cfs Apr 1 to Oct 31
(total 11.0 cfs)
- 7.6 cfs Nov 1 to Mar 31
(total 9.6 cfs)

Little Cimarron River



Water Availability:

- Headwaters stream; proposed increase in middle of river; no increase proposed for upper reaches
- Snowmelt driven hydrograph
- Gage data available from Cimarron River gage, but influenced by irrigation

Water Rights:

- None

Little Cimarron River

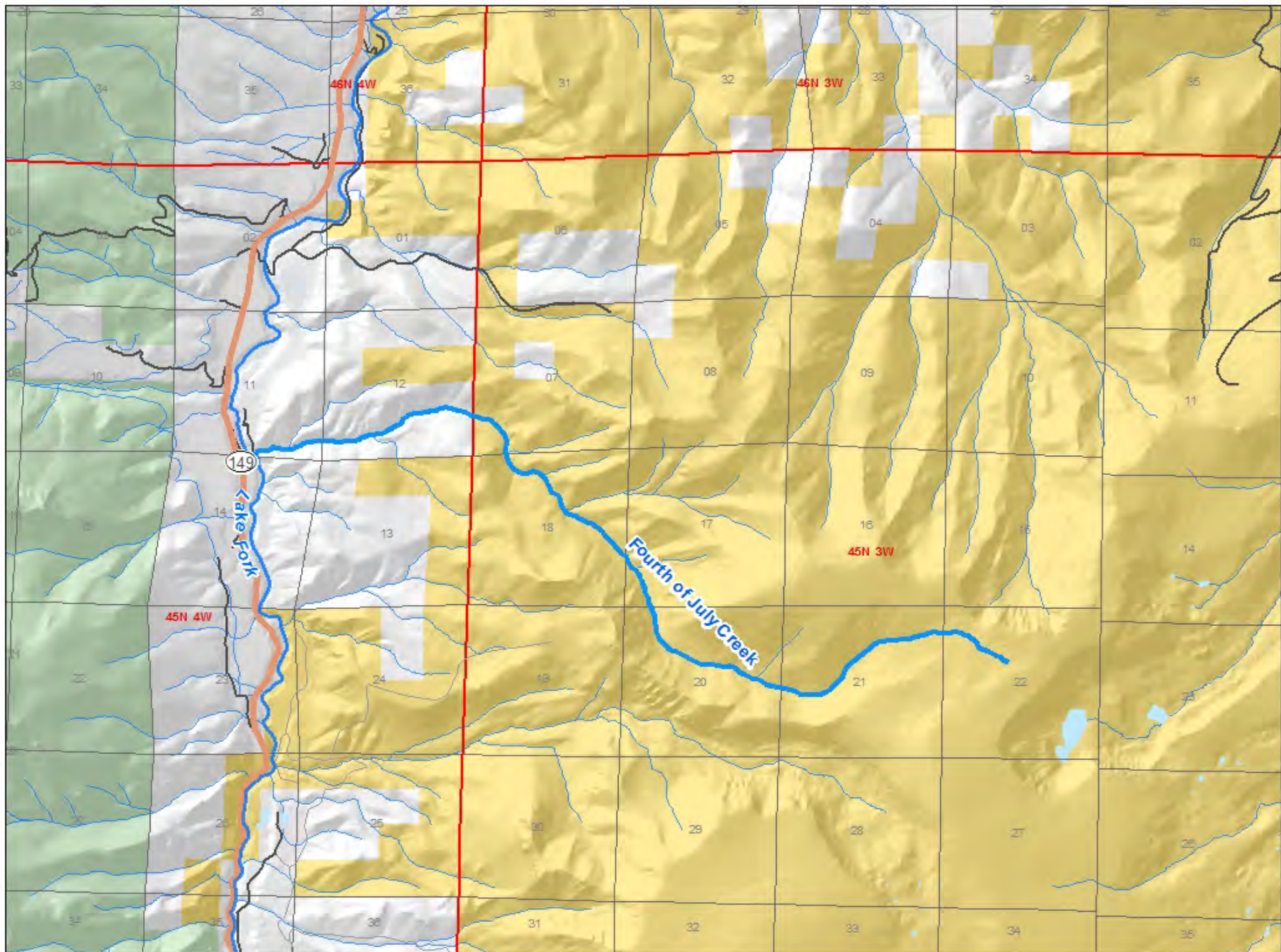


Stakeholders:

- US Forest Service
- Colorado Parks and Wildlife
- Private landowners along river
- Gunnison County

Fourth of July Creek Gunnison and Hinsdale Counties





Fourth of July Creek



Natural Environment:

- Fishery – Brook Trout
- Spruce-Aspen-Willow-alder riparian community
- Upper part of reach flows through Powderhorn Wilderness Area

Fourth of July Creek



Proposed ISF rates:

Headwaters to headgate
of Carris Thompson
Ditch

- 0.8 cfs Apr 1 to June 30
- 0.6 cfs July 1 to Mar 31

Fourth of July Creek



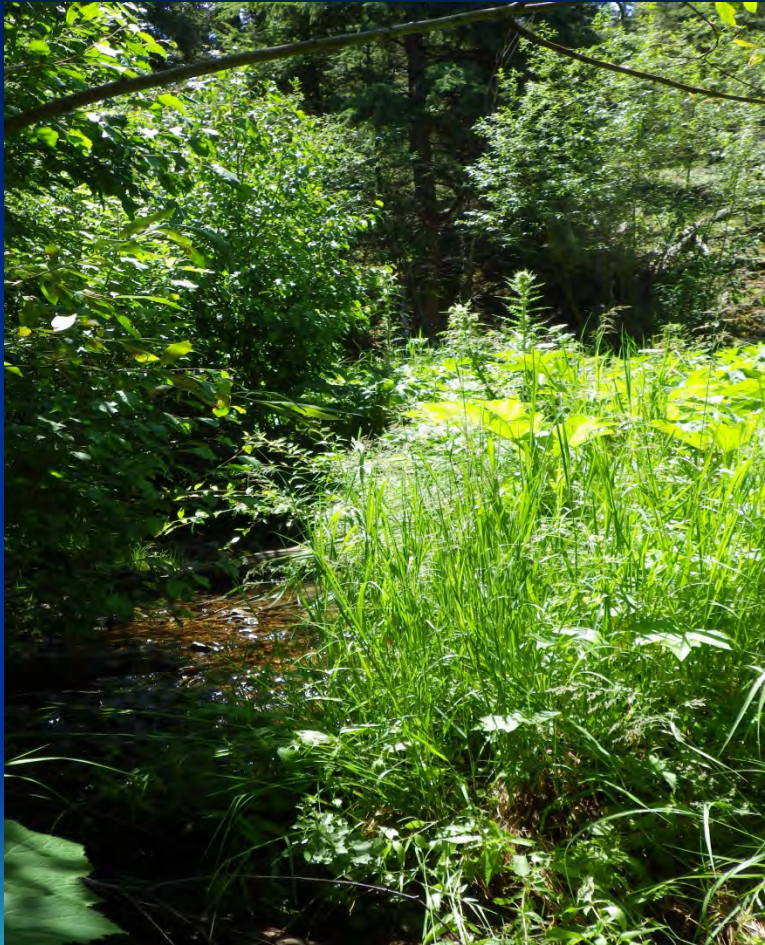
Water Availability:

- Headwaters stream
- Snowmelt driven hydrology
- Gage data available from adjacent watersheds

Water Rights:

- Fourth of July Pipeline – 2.0 cfs

Fourth of July Creek



Stakeholders:

- Upper Gunnison Water Conservancy District
- Private land owner along lower portion of creek
- Gunnison and Hinsdale Counties

Streams in Water Division 5

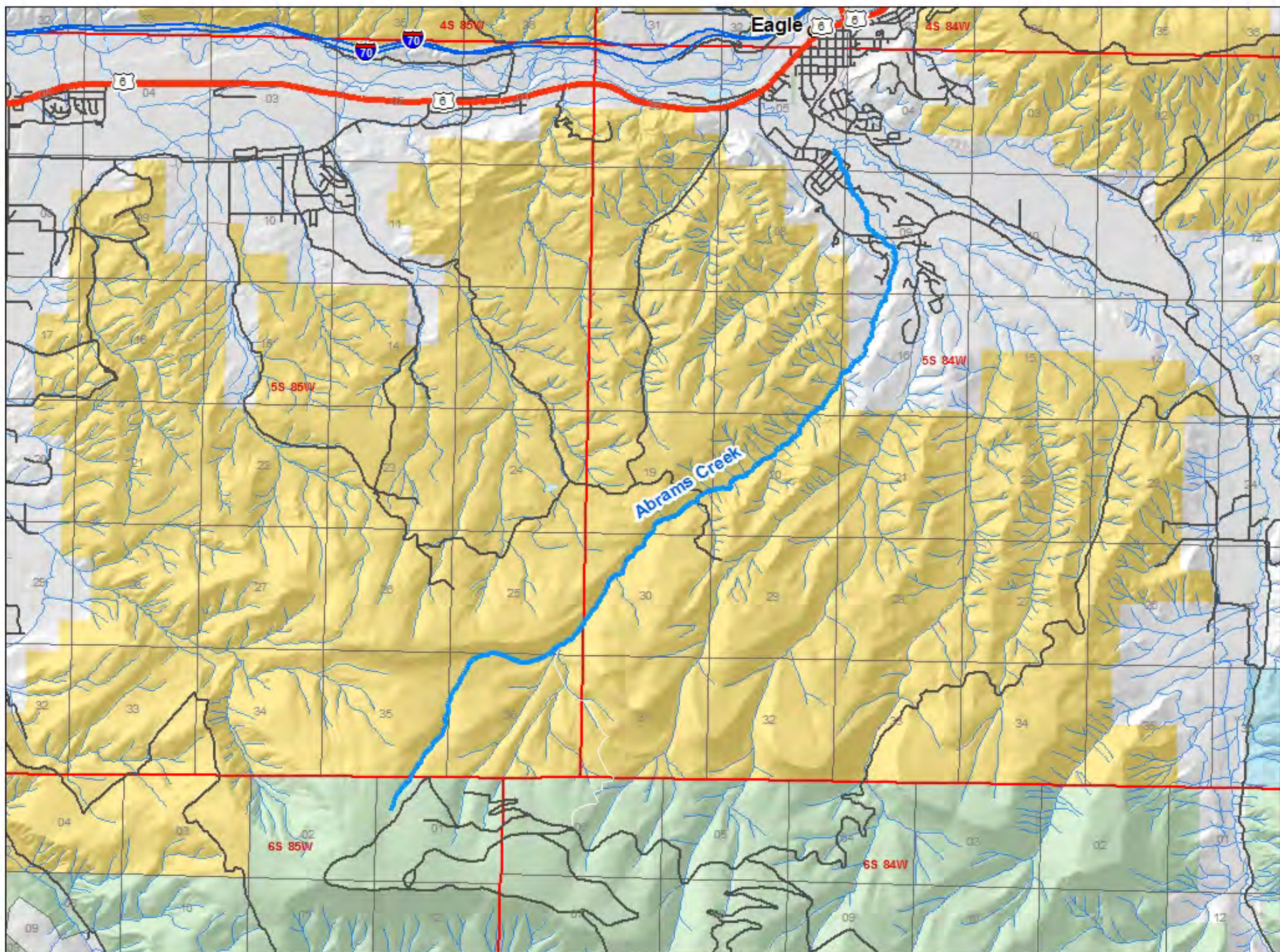


Abrams Creek

Abrams Creek

Eagle County





Abrams Creek

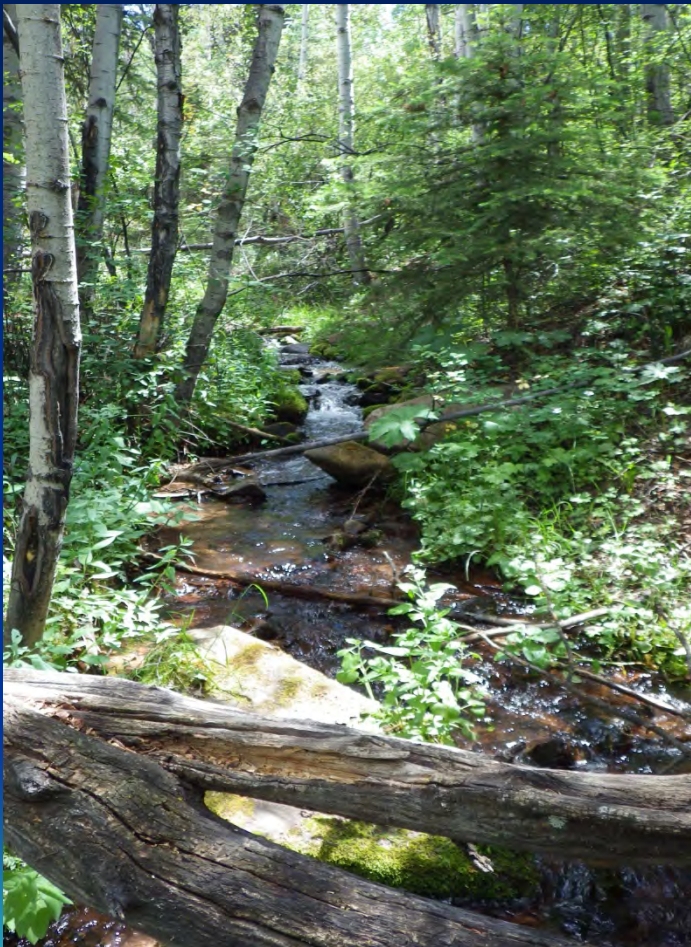


Natural Environment:

- Core conservation population of pure Green Lineage Colorado River Cutthroat Trout
- Only core population in the Eagle River watershed
- Riparian community – spruce/ aspen at high elevation; cottonwood/willow at low elevation; extremely vigorous

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Abrams Creek



Proposed ISF Flow Rates:

*Existing ISF water right: 0.5
cfs year round, 1984
priority*

Proposed increases:

- 0.75 cfs Apr 1 to Jul 15
(1.25 cfs total)
- 0.2 cfs Jul 16 to Mar 31
(0.7 cfs total)

Abrams Creek



Water Availability:

- Base flow is highly reliable; dependent upon flow from spring complexes
- Snowmelt influenced April through July

Water Rights:

- JPO Ditch #2 – 3.0 cfs
- Mrs. Paye Ditch – 2.2 cfs (recommended as lower terminus)

Abrams Creek



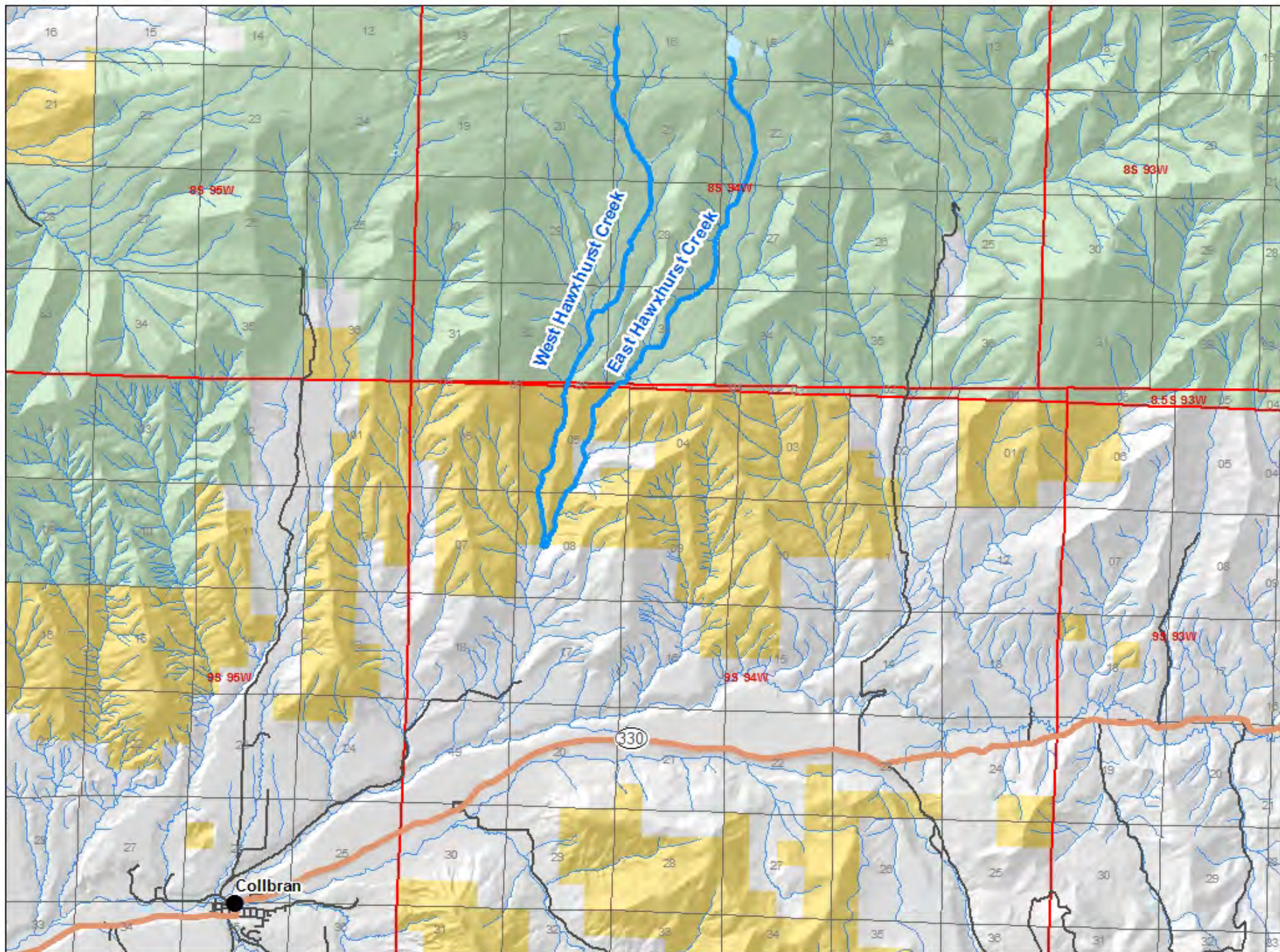
Stakeholders:

- Eagle County
- Town of Eagle
- Colorado Parks and Wildlife
- Buckhorn Metropolitan District (exploring measures to reduce JPO Ditch #2 demand)

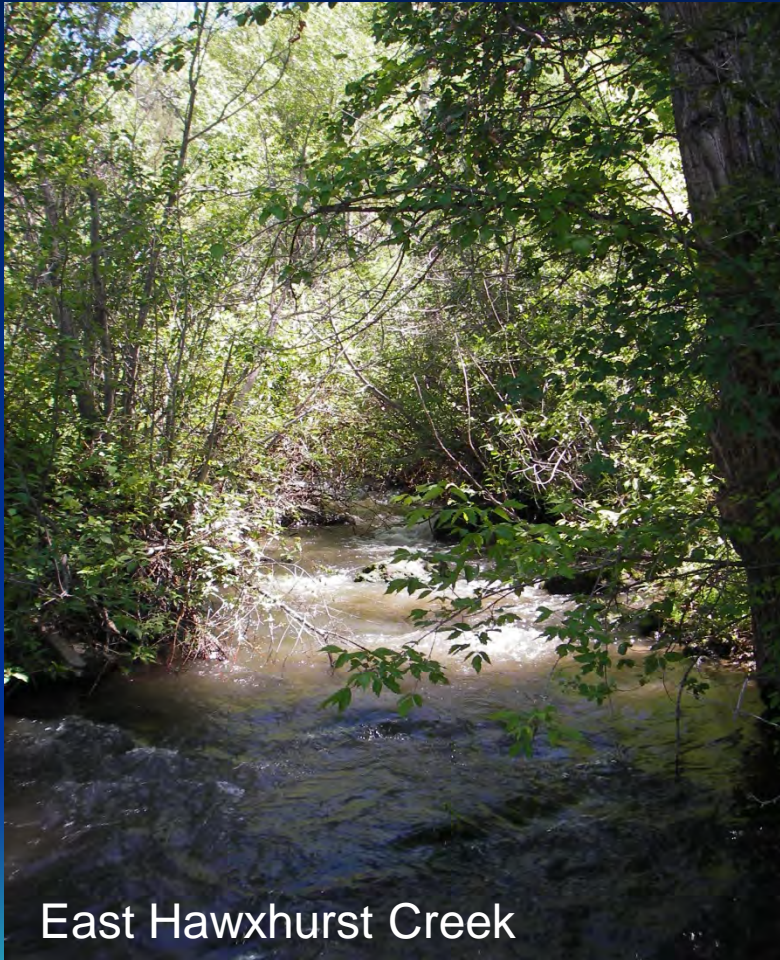
East and West Hawxhurst Creek Mesa County



West Hawxhurst Creek



East and West Hawxhurst Creek



East Hawxhurst Creek

Natural Environment:

- Fishery: East contains 95% Green Lineage cutthroat trout (conservation population). West contains hybridized cutthroats and rainbows.
- Riparian: box elder, red osier dogwood, river birch, alder, and willow species
- High gradient streams with heavy riparian cover

East and West Hawxhurst Creek



Proposed ISF Rates:

East Hawxhurst Creek

- 1.7 cfs Apr 1 to Sep 30
- 0.65 cfs Oct 1 to Mar 31

West Hawxhurst Creek

- 1.6 cfs Apr 1 to Sep 30
- 0.9 cfs Oct 1 to Mar 31

East and West Hawxhurst Creek



Lands irrigated by
Hawxhurst Smalley Ditch

Water Availability:

- Headwaters streams
- Gage data available from other creeks in Plateau Ck watershed
- East Hawxhurst influenced by reservoir operations

Water Rights:

- East: Hawxhurst Reservoir – 283 acre feet
- West: Hawxhurst Smalley Ditch – 4.8 cfs

East and West Hawxhurst Creek



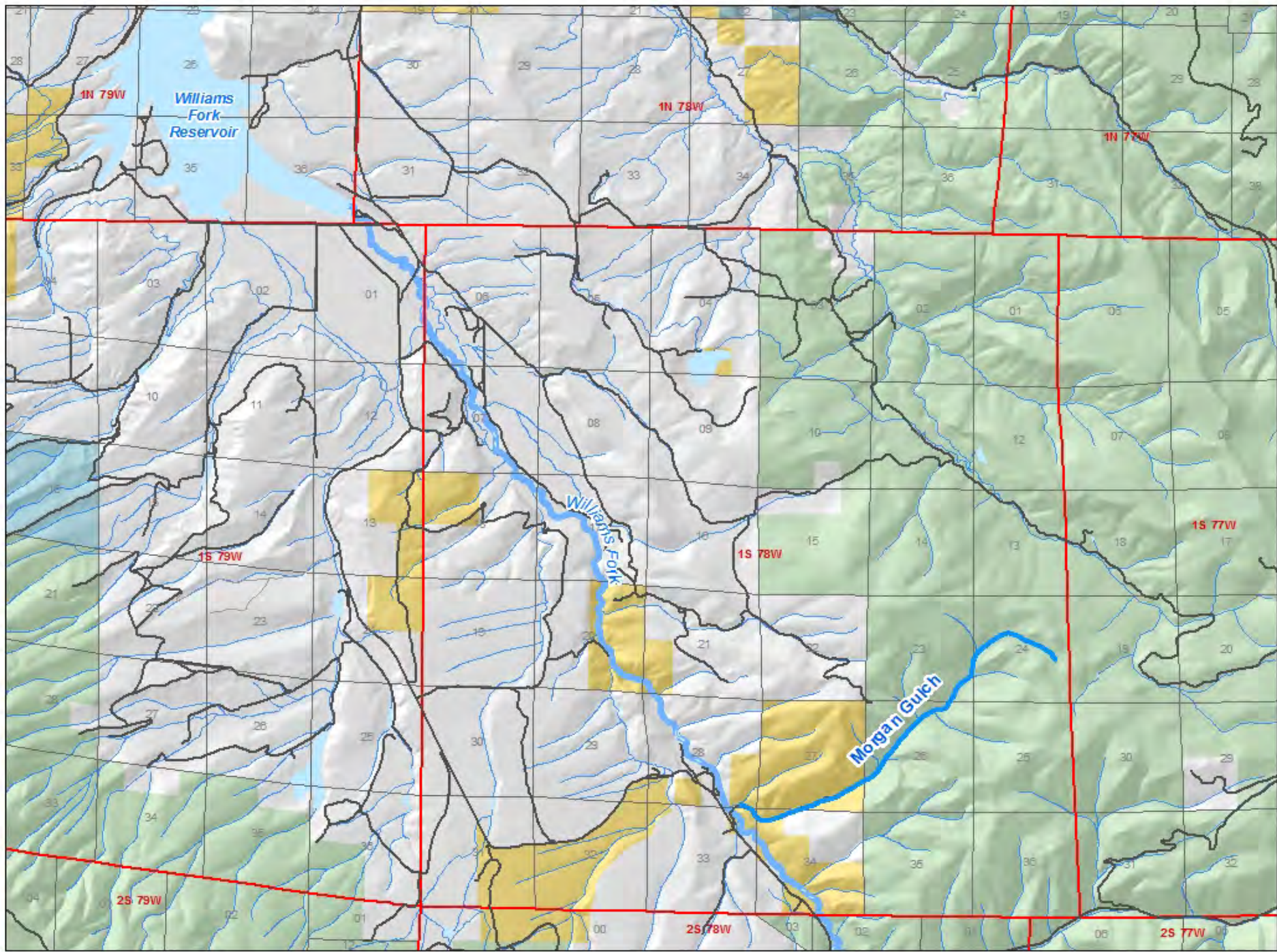
Stakeholders:

- Mesa County
- Colorado Parks and Wildlife
- Ditch and reservoir owners
- Trout Unlimited

Morgan Gulch

Grand County





Morgan Gulch



Natural Environment:

Fishery – Brook Trout

Riparian – Blue Spruce,
Willow, Alder;
excellent condition

High gradient alpine
stream environment

Morgan Gulch



Proposed ISF Rates:

2.1 cfs May 1 to July 31

0.8 cfs Aug 1 to Sep 30

Morgan Gulch



Water Availability:

Headwaters stream

Snowmelt runoff hydrology

Gage data available from
adjacent watershed

Water Rights:

None

Morgan Gulch



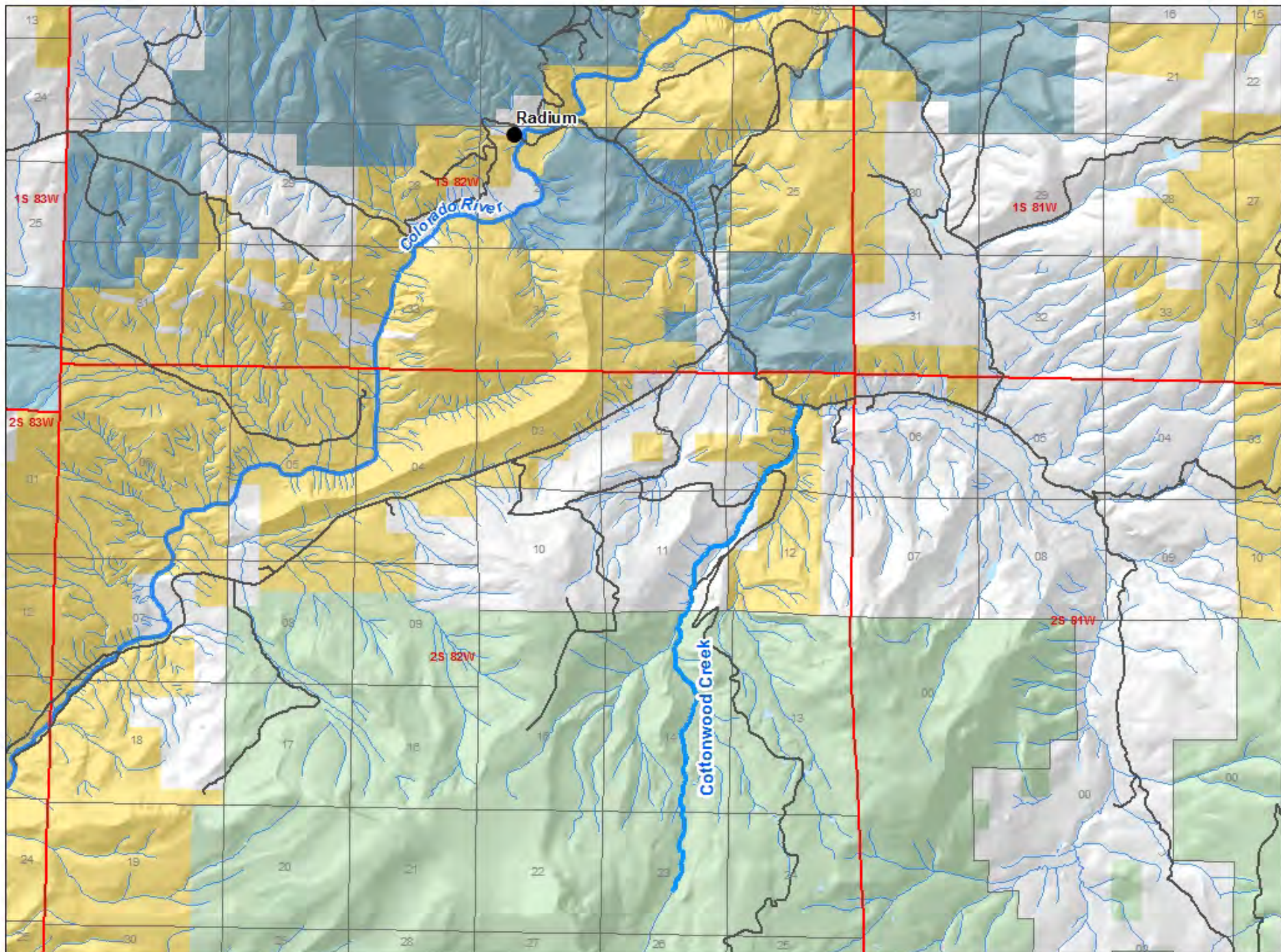
Stakeholders:

- Grand County
- US Forest Service

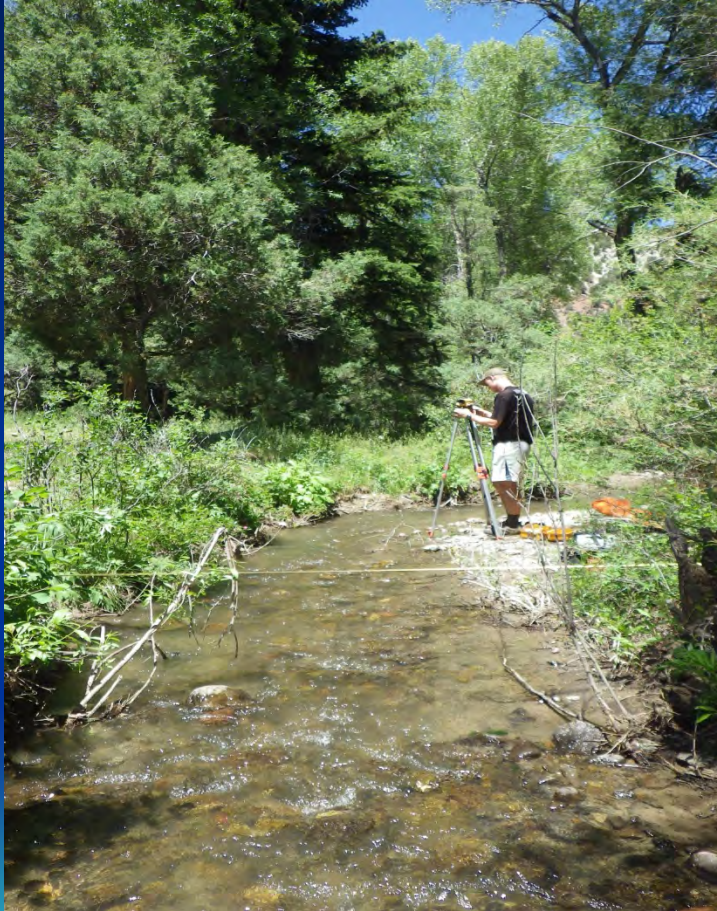
Cottonwood Creek

Grand County





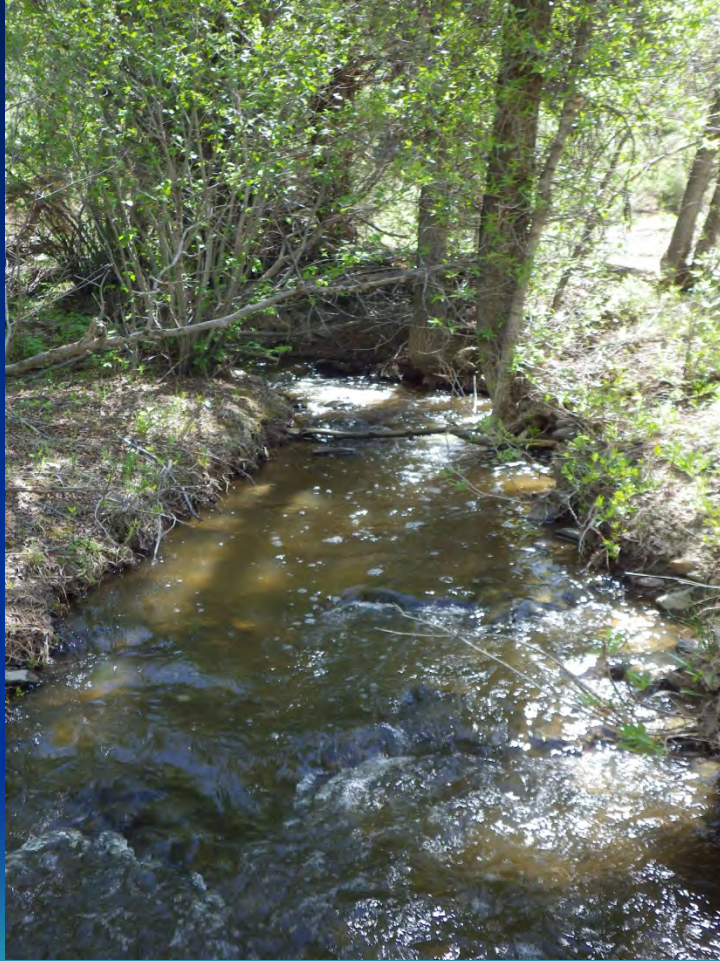
Cottonwood Creek



Natural Environment:

- Fishery: Brook Trout
- Riparian Community: Red osier dogwood, cottonwood, alder
- Recovering from historic livestock grazing practices

Cottonwood Creek



Proposed Flow Rates:
1.4 cfs Apr 1 to Sep 30
0.7 cfs Oct 1 to Mar 31

Cottonwood Creek



Water Availability:

- Headwaters stream
- Snowmelt runoff driven; base flows well supported by groundwater discharge
- No gage data available in this vicinity
- Flows influenced by irrigation operations

Cottonwood Creek



Stakeholders:

- Grand County
- US Forest Service
- Water rights owners

Water Rights:

- Anghern No. 2 – 3.6 cfs
- Winslow Ditch - 4.8 cfs

Streams in Water Division 6

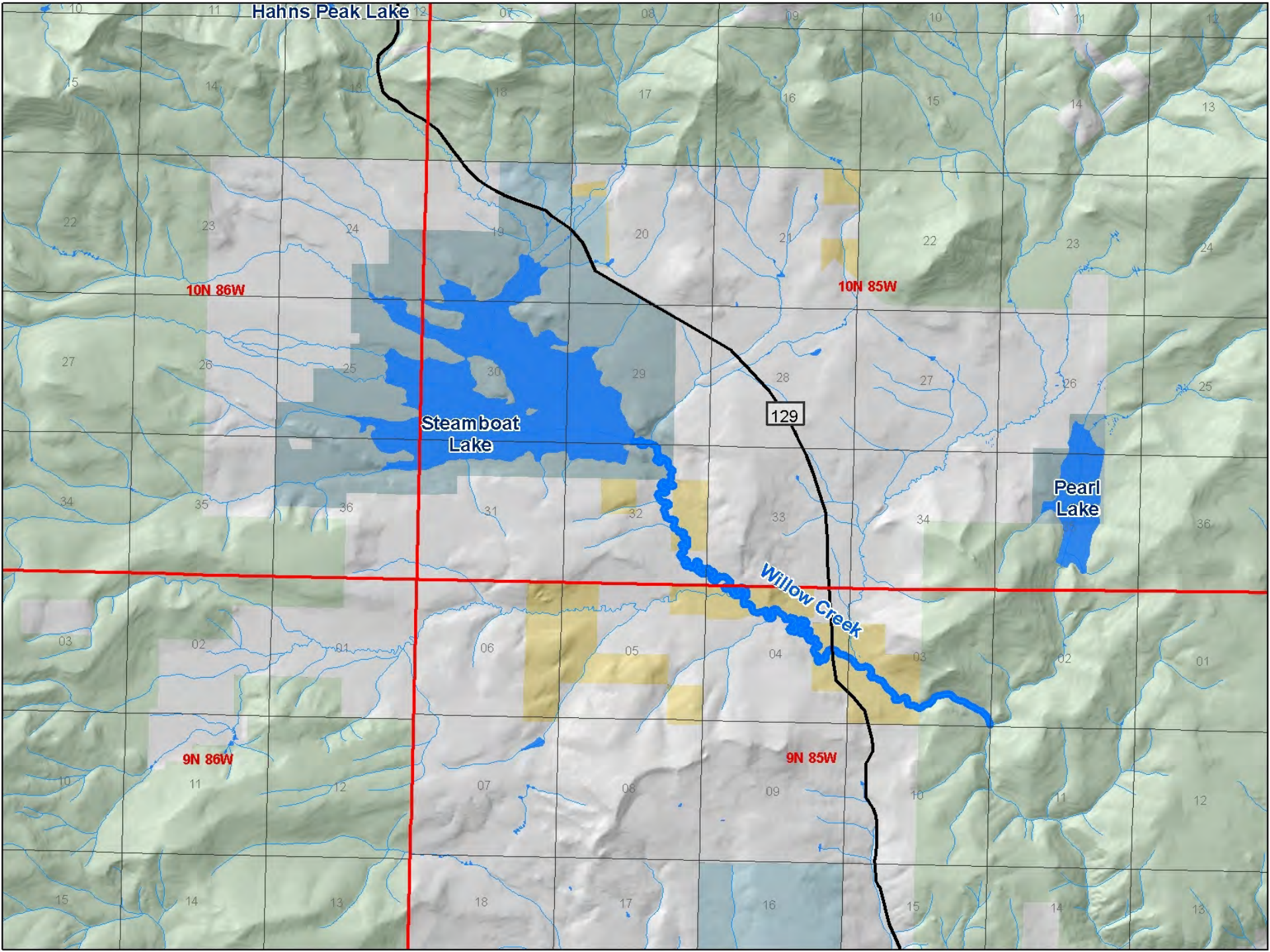


Yampa River near Maybell

Willow Creek

Routt County





Willow Creek



Natural Environment:

- Native fishery – mountain suckers, mottled sculpin, speckled dace
- Willow/sedge riparian zone – much of stream channel is not shaded
- Low gradient stream in wide valley

Willow Creek



Existing ISF water right,
appropriated in 1977:

- Steamboat Lake to Beaver Creek – 5.0 cfs, year round
- Beaver Creek to Elk River – 7.0 cfs, year round

Willow Creek



Proposed Increases:

Steamboat Lake to Beaver Creek –

- 6.9 cfs April 1 to July 31
(11.9 cfs total ISF right)
- 2.7 cfs August 1 to March 31
(7.70 total ISF right)

Willow Creek

Proposed Increases:

Beaver Creek to Lester
Creek Segment:

- 13.3 cfs April 1-July 31
(20.3 cfs total ISF right)
- No enlargement
proposed for rest of year



Willow Creek



Water Availability:

Snowmelt hydrology

Base flows controlled by
releases from
Steamboat Lake

Two upstream ditches



Willow Creek



Stakeholders:

- Upper Yampa Water Conservancy District
- Steamboat Lake Water and Sanitation District – owns conditional rights
- Tri-State Generation and Transmission Association
- Multiple small landowners
- Colorado Parks & Wildlife



Willow Creek



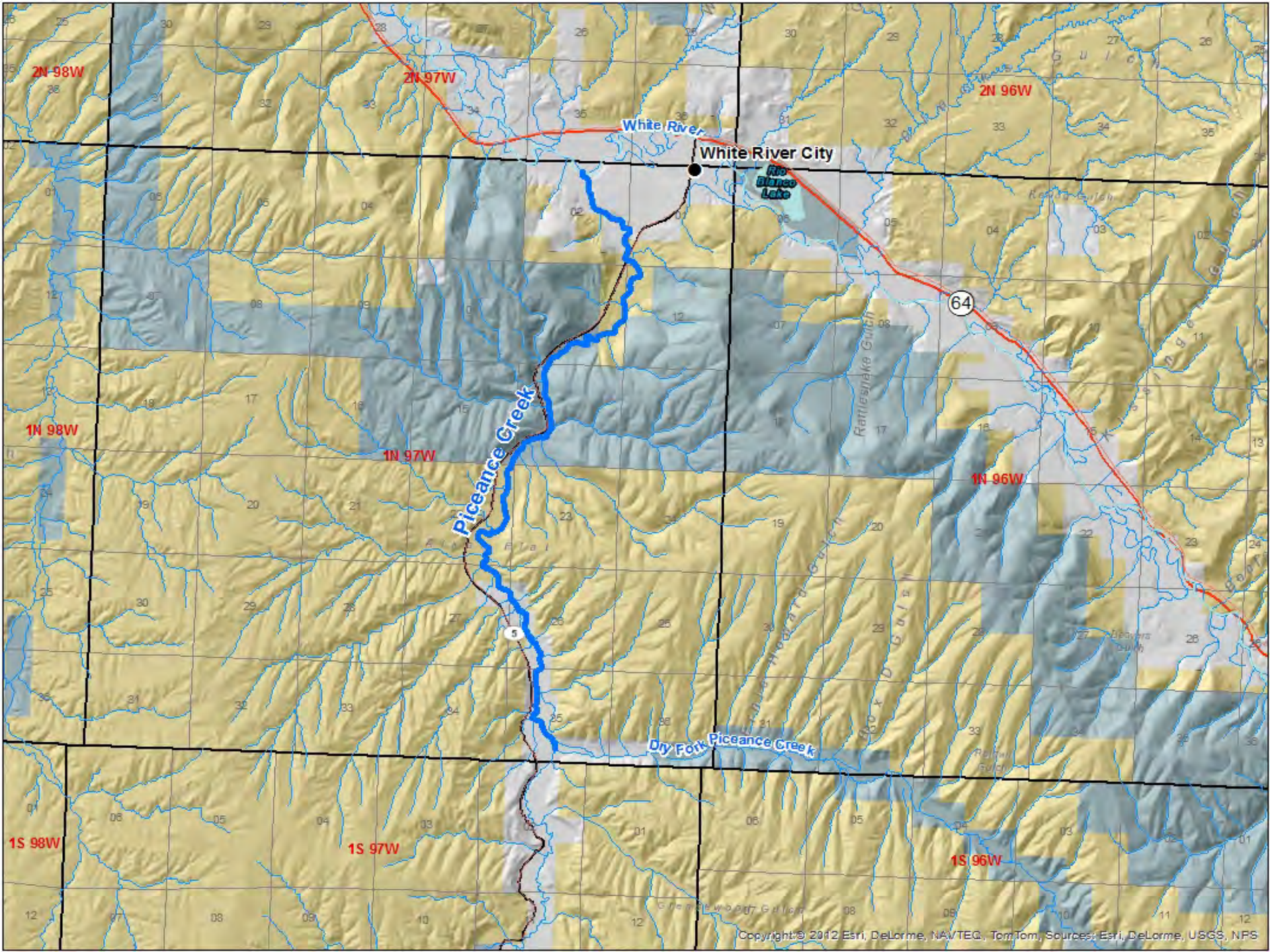
Water Rights:

- Storage rights in Steamboat Lake – 23,000 AF
- Decrees allow part of storage right to be used for augmentation
- Upper Yampa District has requested agreement with CPW to use part of storage to augment out-of-priority depletions in Elk River watershed
- CPW releases 5 cfs from lake outside of snowmelt season

Piceance Creek

Rio Blanco County





Piceance Creek



Natural Environment:

- Native Fishery: Flannelmouth Sucker, Speckled Dace, Mountain Sucker – important tributary to White River
- Amphibians: Leopard Frog
- Riparian: Willow-Sedges-Rushes
- Moderate gradient stream; confined by bedrock in some locations and meandering in other locations

Piceance Creek



Proposed Flow Rates:

- 4.0 cfs January 1 to December 31
- R2Cross modeling shows flow rates that meet wetted perimeter, average depth, and average velocity criteria are very close to one another

Piceance Creek



Water Availability:

- Segment is at bottom of watershed below numerous diversions
- Excellent gage data available to support water availability
- Recommended flows available 50% of the time June-July; available at least 75% of the time August through May

Water Rights:

- Two rights within reach
- More than 100 rights upstream

Piceance Creek



Stakeholders:

- Rio Blanco County
- Owners of working ranches
- Numerous energy companies, including ExxonMobil, Williams, Barrett, Occidental, Encana

Questions for BLM?

Contact Roy Smith at r20smith@blm.gov or 303-239-3940



Big Dominguez Creek
near Grand Junction