

# CPW Proposed 2013 Instream Flow Recommendations

## WATER DIVISION 1

North Clear Creek (Gilpin County)  
Graves Creek (Larimer County)  
Spottlewood Creek #1 (Larimer County)  
Spottlewood Creek #2 (Larimer County)  
Lone Tree Creek (Weld County)

## WATER DIVISION 2

Arkansas River #1 (Pueblo County)  
Arkansas River #2 (Pueblo County)  
Apishapa River (Las Animas County)  
Beaver Creek (Teller & Fremont Counties)

## WATER DIVISION 5

Beaver Creek (Mesa County)  
Beaver Dams Creek (Mesa County)  
East Divide Creek #1 (Mesa & Garfield Counties)  
East Divide Creek (Garfield County)  
Meadow Creek (Garfield County)  
West Divide Creek (Mesa County)



**The CPW is forwarding these instream flow recommendations to the Board to meet the State of Colorado's policy "... that the wildlife and their environment are to be protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people of this state and its visitors ... and that, to carry out such program and policy, there shall be a continuous operation of planning, acquisition, and development of wildlife habitats and facilities for wildlife-related opportunities" (See §33-1-101 (1) C.R.S.).**

**The CPW Strategic Plan states "[h]ealthy aquatic environments are essential to maintain healthy and viable fisheries, and critical for self-sustaining populations. The [CPW] desires to protect and enhance the quality and quantity of aquatic habitats."**

# **Stream: Apishapa River**

## **Executive Summary**

Water Division: 2

Water District:

CDOW#: 28945

## **Segment: Headwaters to Herick Canyon Creek**

### **Upper Terminus: Headwaters**

Latitude: 37° 21' 12.8"N      Longitude: 105° 01' 00.7"W

### **Lower Terminus: Herick Canyon Creek**

Latitude: 37° 19' 34.4"N      Longitude: 104° 57' 04.6"W

### **ISF Appropriation**

2.85 cfs (04/15 – 06/30)

2.00 cfs (07/01 – 07/31)

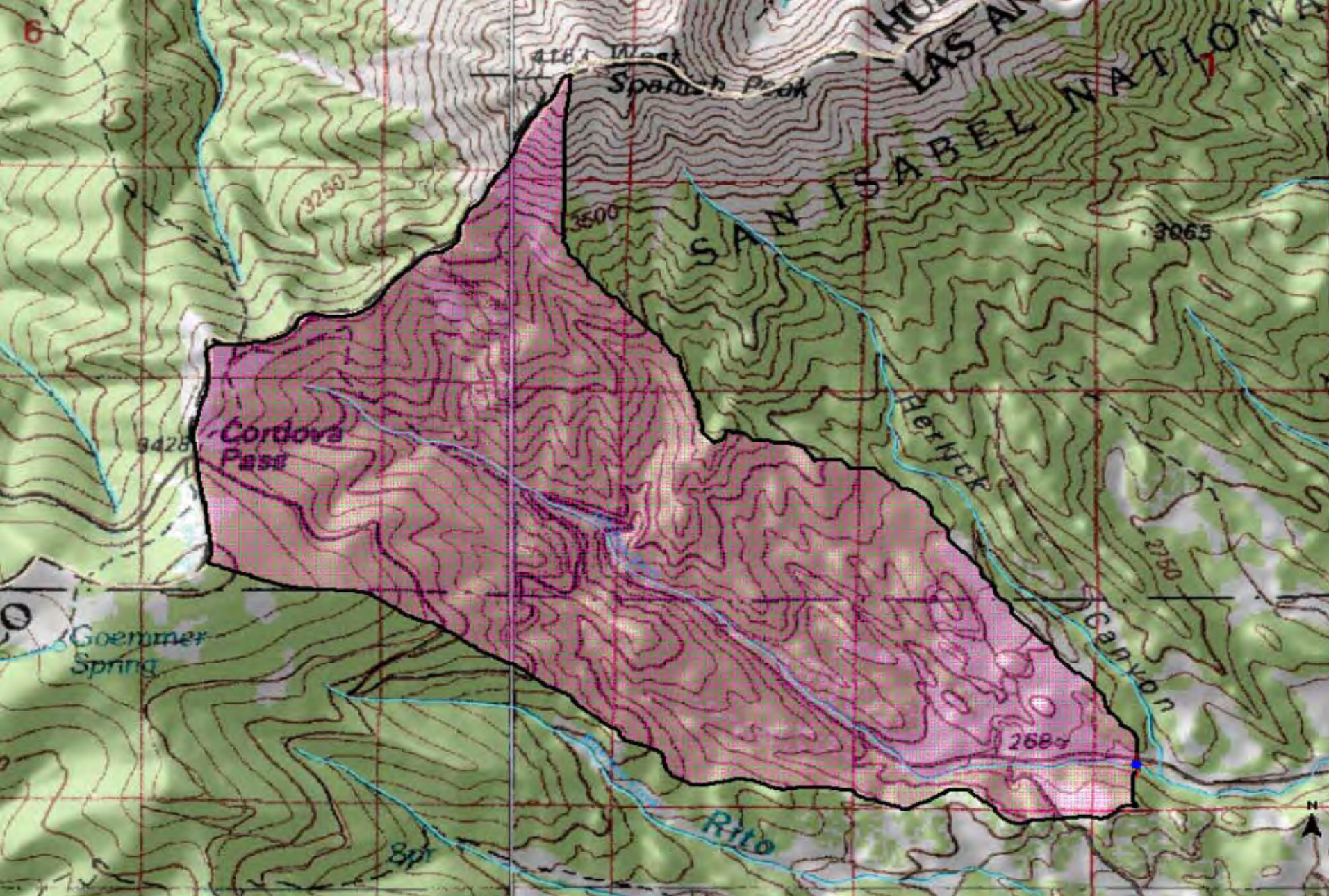
1.10 cfs (08/01 – 10/31)

0.75 cfs (11/01 – 04/14)

Las Animas County

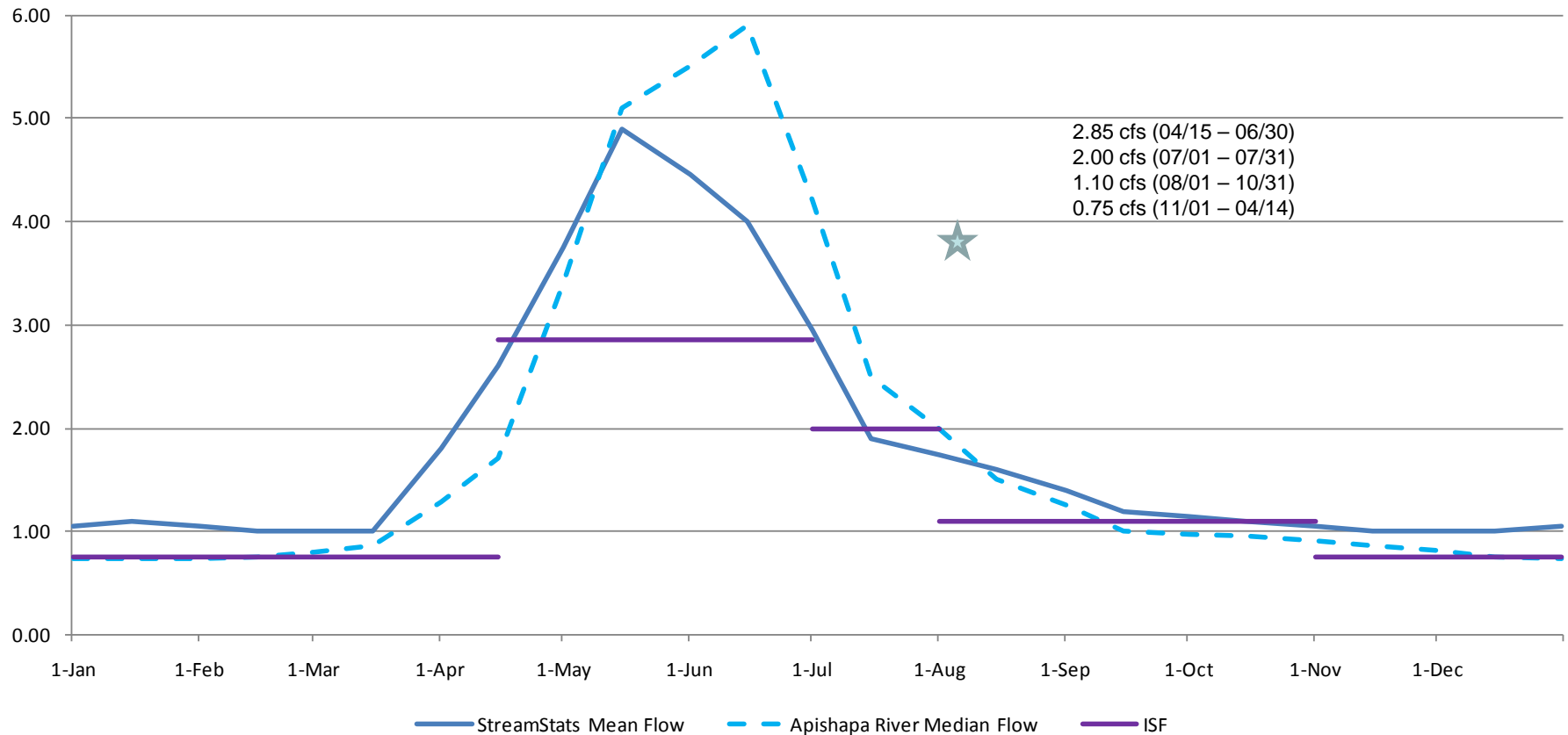






The total drainage area upstream of this ISF segment of Apishapa River is 6.0 square miles.

## Apishapa River - Estimated Streamflow



### Instream Flow Recommendation(s)

The CDOW is recommending 2.85 cfs, summer, and 2.0 cfs, winter, based on data collection efforts.

### Biological Data

Brook and Brown Trout Fishery. (Additional data needed.)

### Hydrologic Data

The hydrographs above were derived from data collected by the USGS stream gage for Cucharas River at Boyd Ranch, near La Veta, CO (#07114000) and by the USGS StreamStats Water Resources Web Application Program.

# **Stream: Beaver Creek**

## **Executive Summary**

Water Division: 2

Water District: 12

CDOW#: 29173 & 29149

## **Segment: Douglas Gulch to Patton Canyon**

### **Upper Terminus: Douglas Gulch**

Latitude: 38° 41' 02.5"N      Longitude: 105° 02' 47.0"W

### **Lower Terminus: Patton Canyon**

Latitude: 38° 30' 09.6"N      Longitude: 104° 59' 55.0"W

Counties: Teller and Fremont

### **ISF Appropriation**

10.5 cfs (04/01 – 10/31)

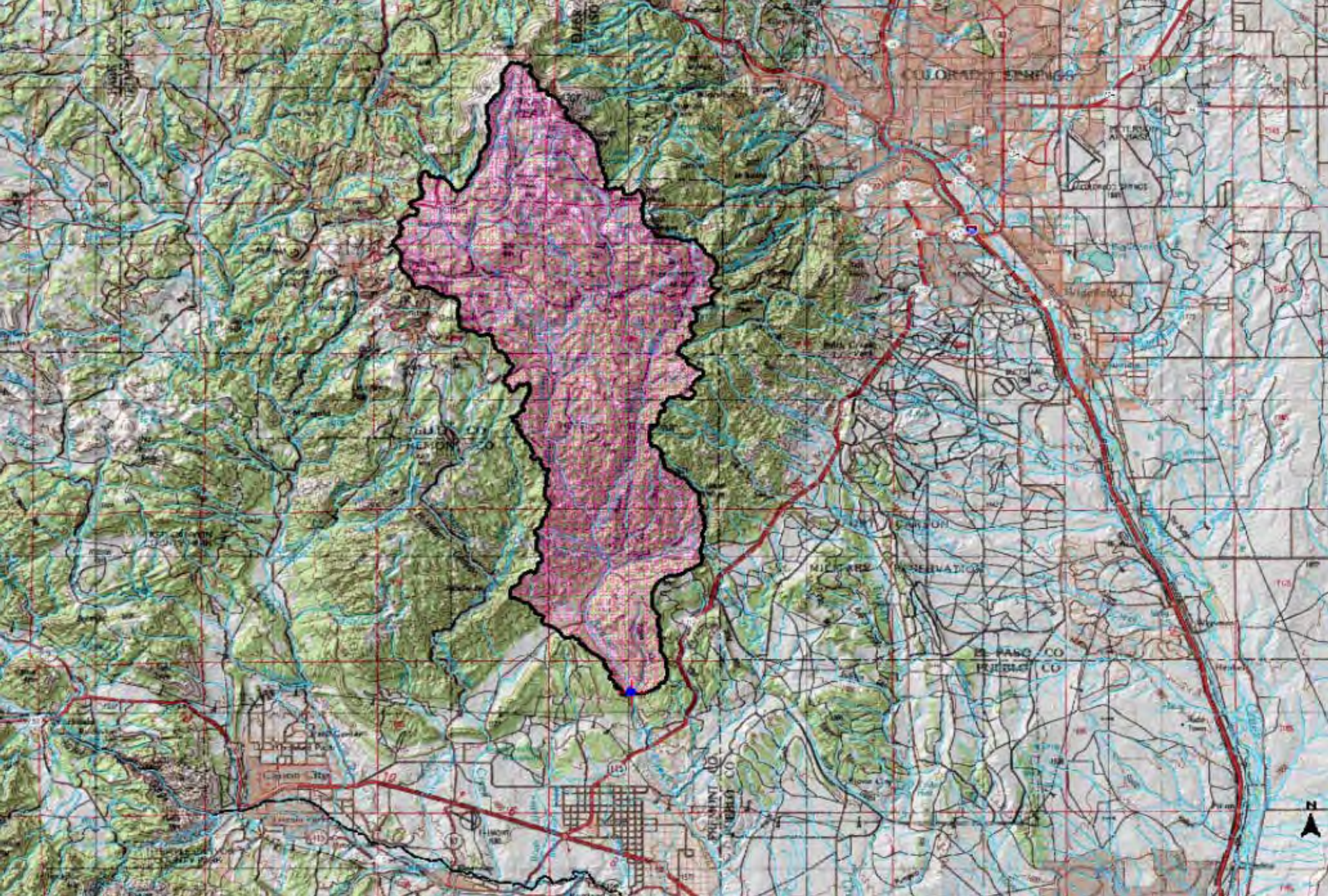
6.0 cfs (11/01 – 03/31)

Teller and Fremont Counties



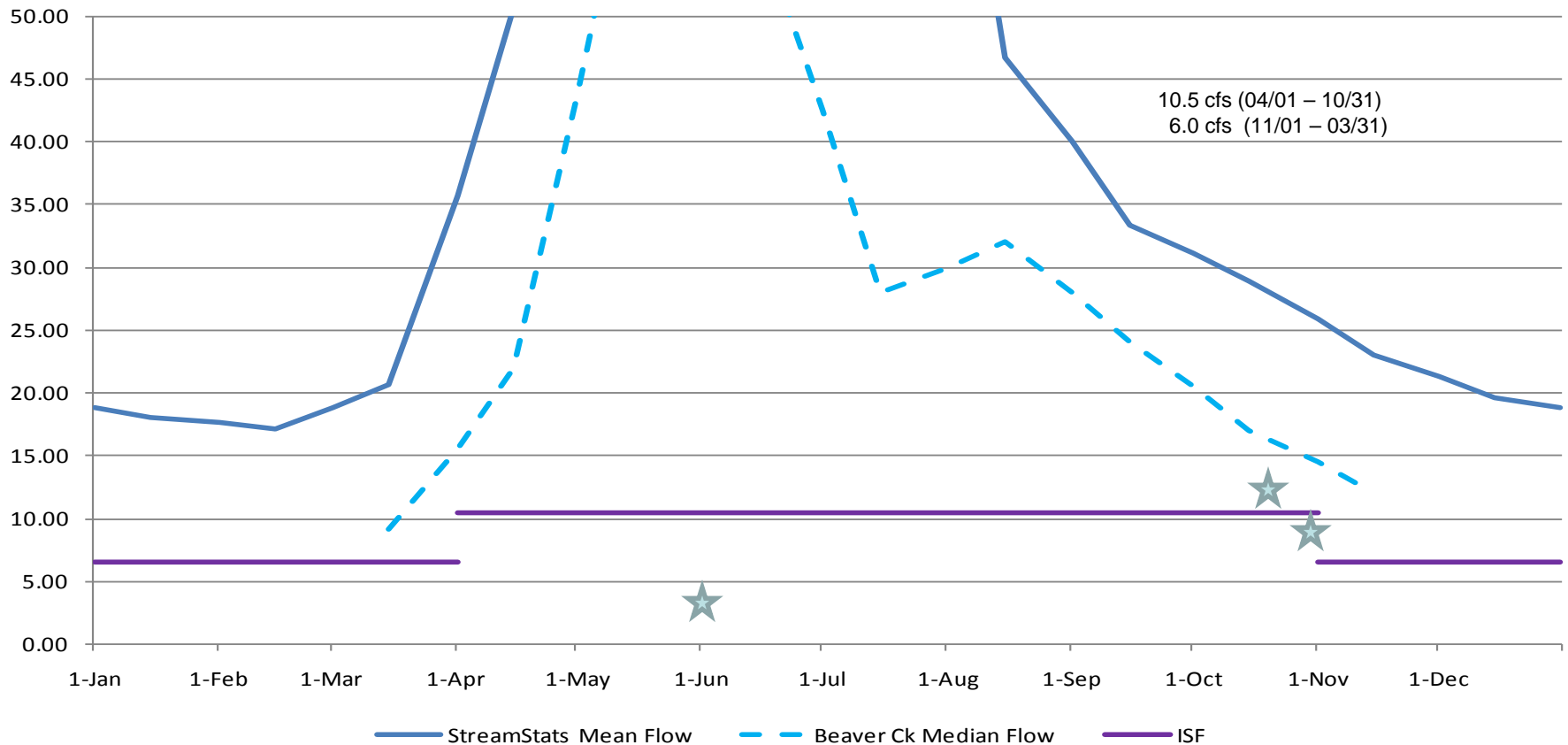
0 0.5 1 2 3 4 Miles





The total drainage area upstream of these ISF segments is 122 square miles (upstream of Patton Canyon) and 78 square miles (upstream of East Beaver Creek).

## Beaver Creek - Estimated Streamflow



### Instream Flow Recommendation(s)

The CDOW is recommending 10.5 cfs, summer, and 6.6 cfs, winter, based on their data collection efforts.

### Biological Data

Rainbow and Brown Trout Fishery.

### Hydrologic Data

The hydrographs above were derived from data collected by the USGS stream gage for Beaver Creek above upper Beaver Creek cemetery near Penrose, CO (#07099050) and by the USGS StreamStats Water Resources Web Application Program.

# **Stream: Beaver Creek**

## **Executive Summary**

Water Division: 5

Water District: 45

CDOW#: 19097

## **Segment: Headwaters to Rifle Town Intake**

### **Upper Terminus: Headwaters**

Latitude: 39° 22' 39.8"N      Longitude: 107° 51' 45.0"W

### **Lower Terminus: Rifle Town Intake**

Latitude: 39° 26' 43.1"N      Longitude: 107° 49' 55.1"W

### **ISF Appropriation**

4.75 cfs (05/01 – 06/30)

2.85 cfs (07/01 – 07/31)

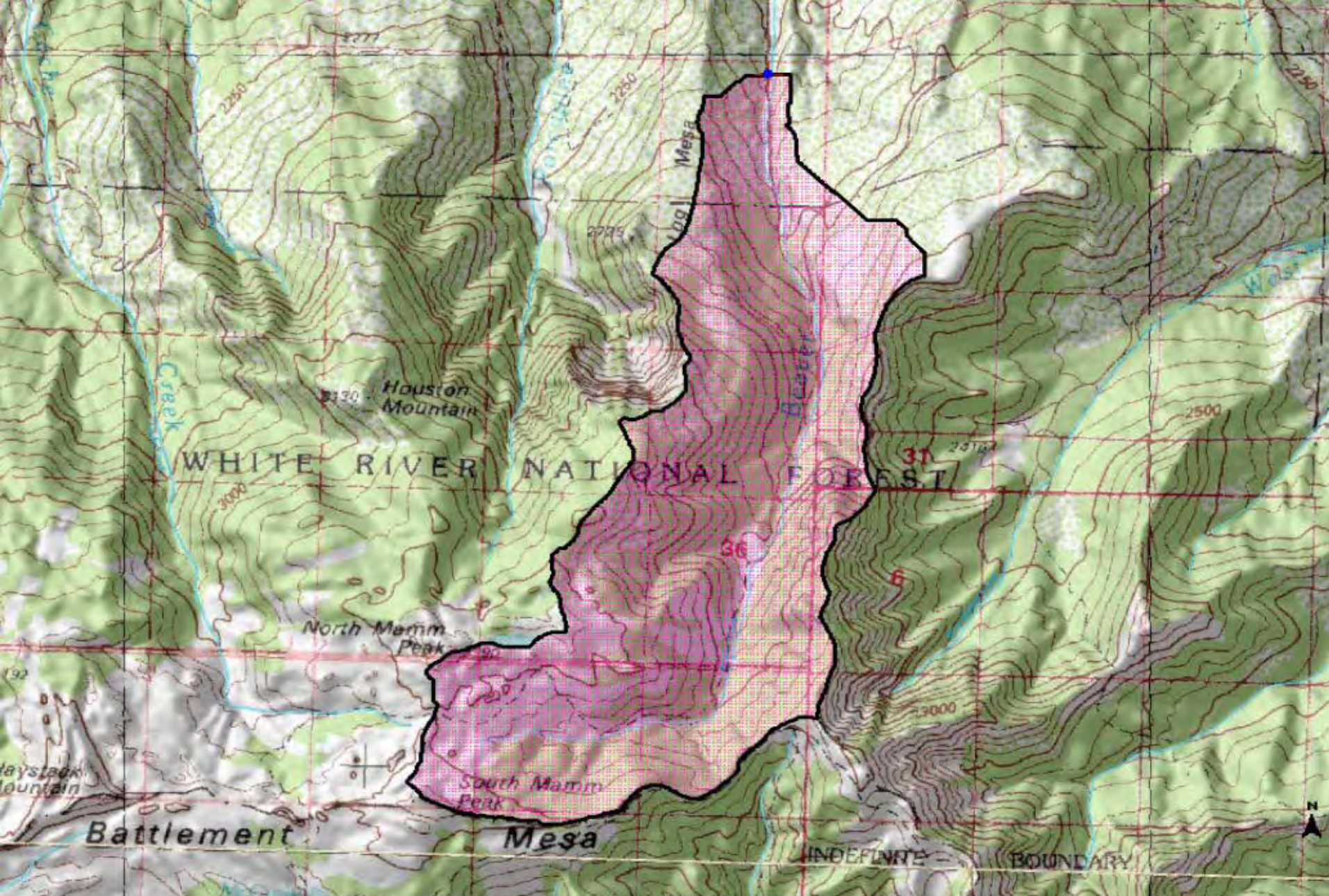
1.00 cfs (08/01 – 11/30)

0.70 cfs (12/01 – 04/30)

Mesa County

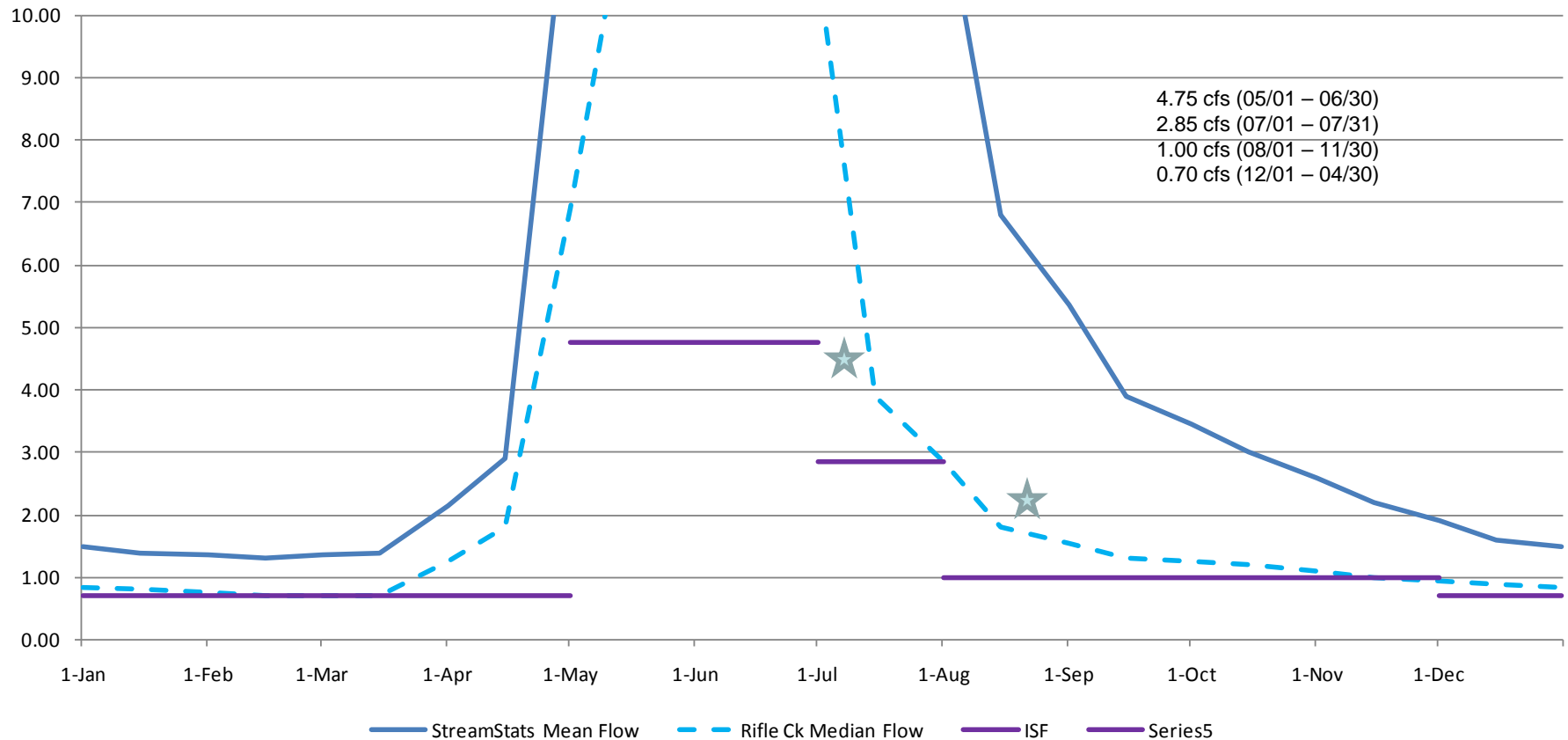






The total drainage area upstream of this ISF segment of Beaver Creek is 7.3 square miles.

## Beaver Creek - Estimated Streamflow



### Instream Flow Recommendation(s)

The CDOW is recommending 4.75 cfs, summer, and 1.65 cfs, winter, based on data collection efforts.

### Biological Data

Colorado River Cutthroat and Brown Trout Fishery.

### Hydrologic Data

The hydrographs above were derived from data collected by the USGS stream gage for Beaver Creek, near Rifle, CO (#09092500) and by the USGS StreamStats Water Resources Web Application Program.

# **Stream: Beaver Dams Creek**

## **Executive Summary**

Water Division: 5

Water District: 45

CDOW#: 20979

## **Segment: Headwaters to East Divide Creek**

### **Upper Terminus: Headwaters**

Latitude: 39° 21' 29.5"N      Longitude: 107° 26' 54.8"W

### **Lower Terminus: East Divide Creek**

Latitude: 39° 21' 51.8"N      Longitude: 107° 28' 22.2"W

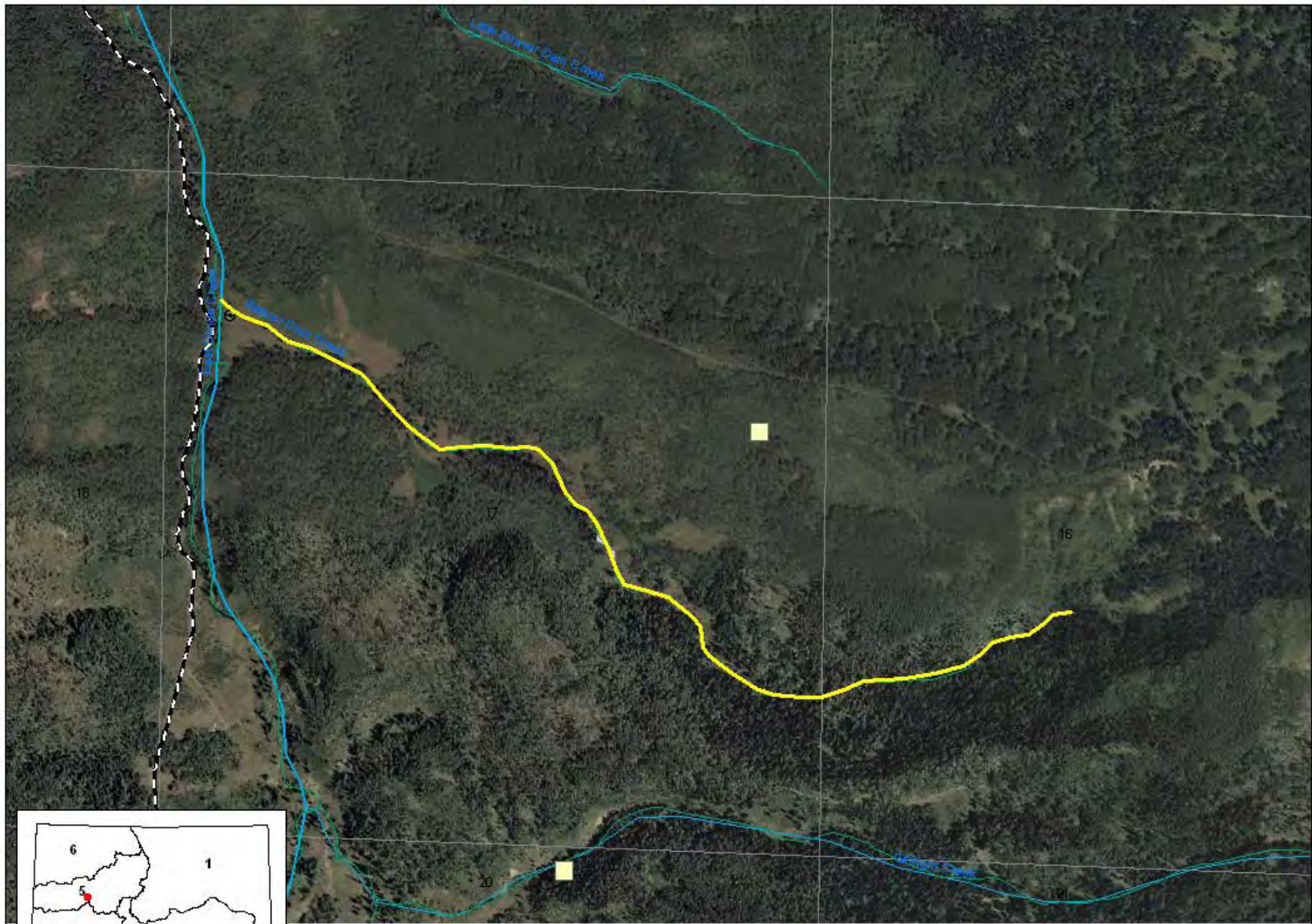
### **ISF Appropriation**

1.50 cfs (05/01 – 05/31)\*

0.70 cfs (06/01 – 06/30)\*

0.15 cfs (07/01 - 04/30)

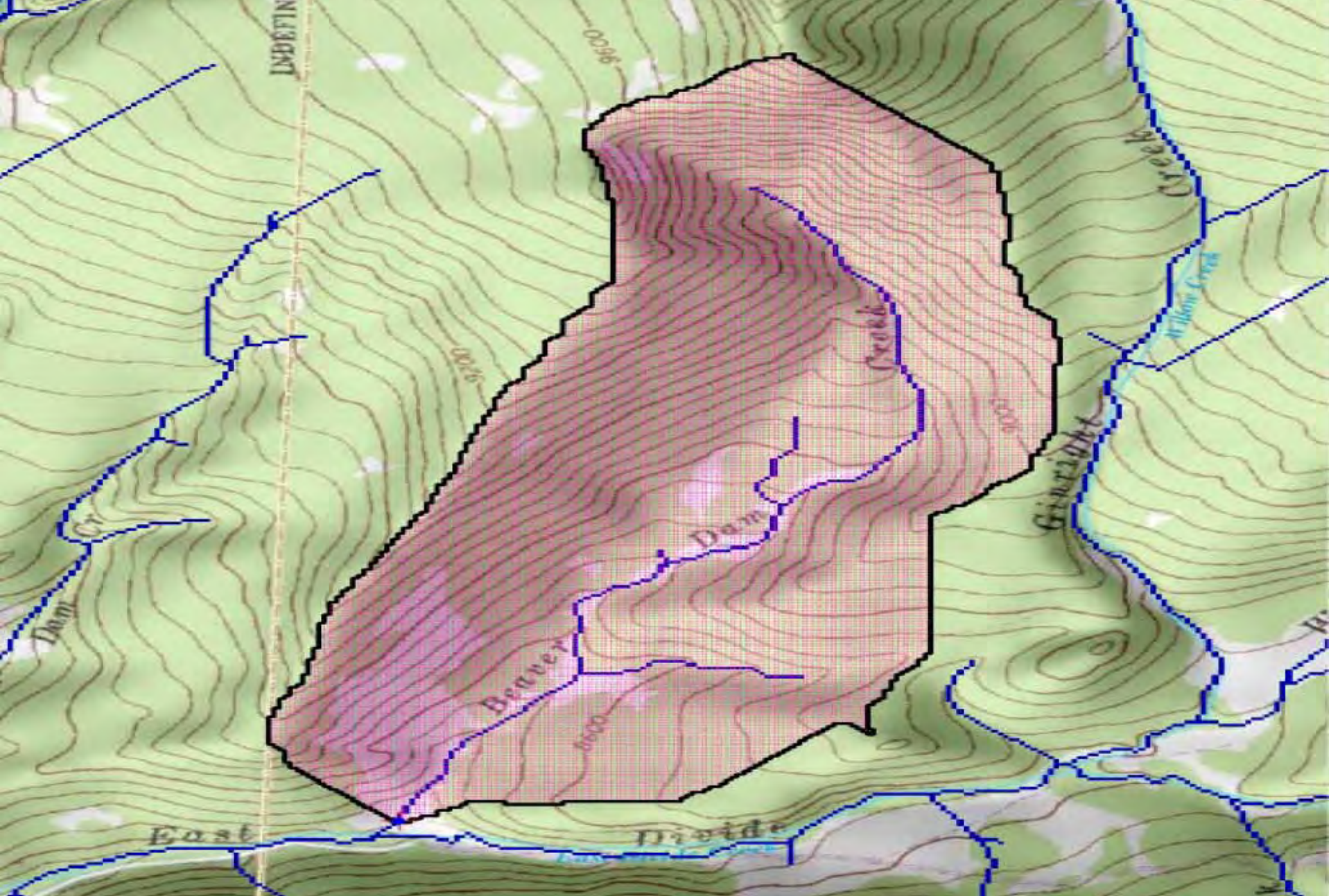
Mesa County



**Colorado Division of Wildlife**  
**Beaver Dams Creek**

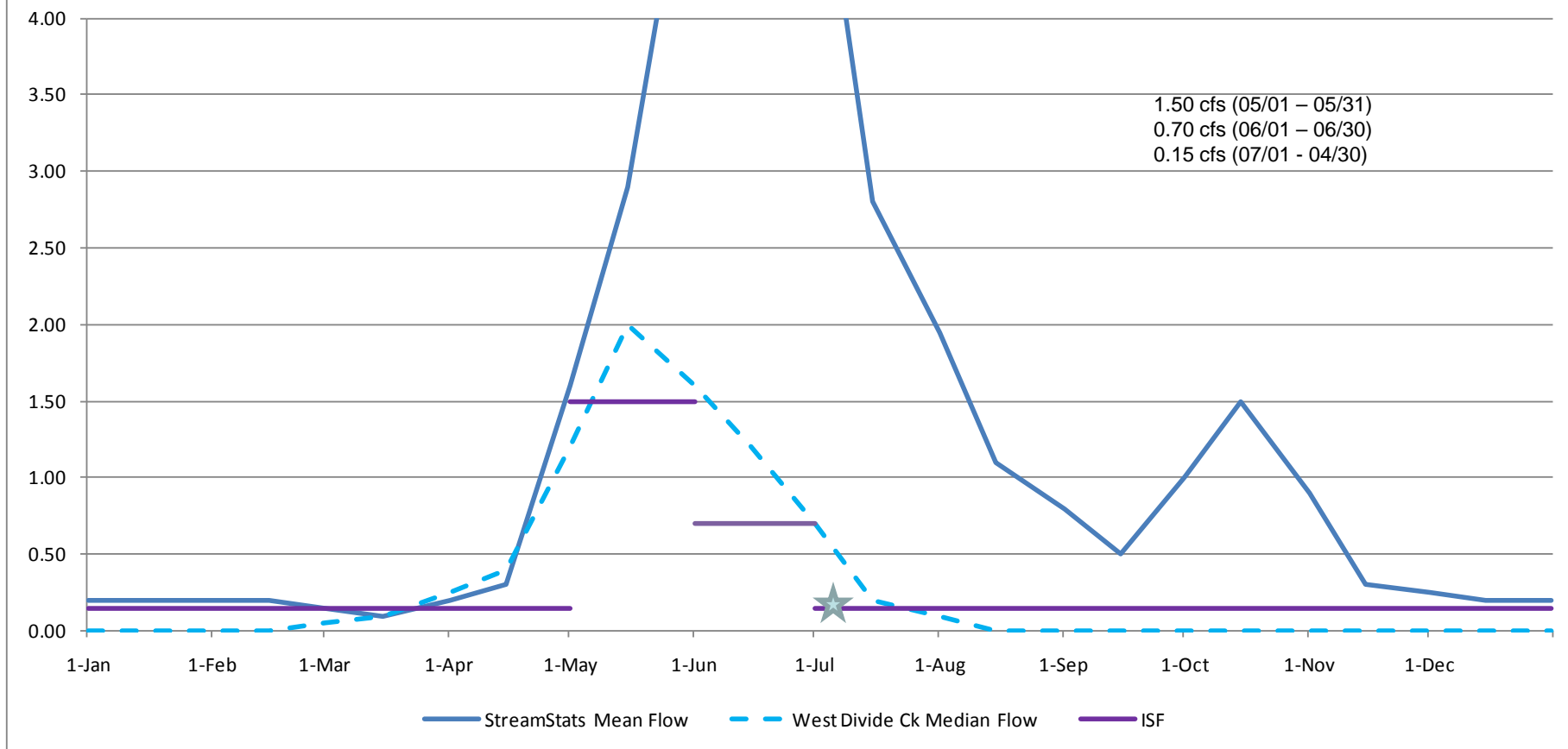
0 0.05 0.1 0.2 0.3 0.4  
Miles





The total drainage area upstream of this ISF segment of Beaver Dams Creek is 0.8 square miles.

## Beaver Dams Creek Estimated Streamflow



### Instream Flow Recommendation(s)

The CDOW is estimating 1.5 cfs, summer, and 0.5 cfs, winter, based on data collection efforts.

### Biological Data

Colorado River Cutthroat Trout Fishery.

### Hydrologic Data

The hydrographs above were derived from data collected by the USGS stream gage for West Divide Creek, near Raven, CO (#09089500) and by the USGS StreamStats Water Resources Web Application Program.

# **Stream: East Divide Creek #1**

## **Executive Summary**

Water Division: 5

Water District: 45

CDOW#: 20830

## **Segment: Gennings Creek to Camp Creek**

### **Upper Terminus: Gennings Creek**

Latitude: 39° 20' 25.9"N      Longitude: 107° 28' 24.1"W

### **Lower Terminus: Camp Creek**

Latitude: 39° 23' 02.3"N      Longitude: 107° 28' 31.7"W

### **ISF Appropriation**

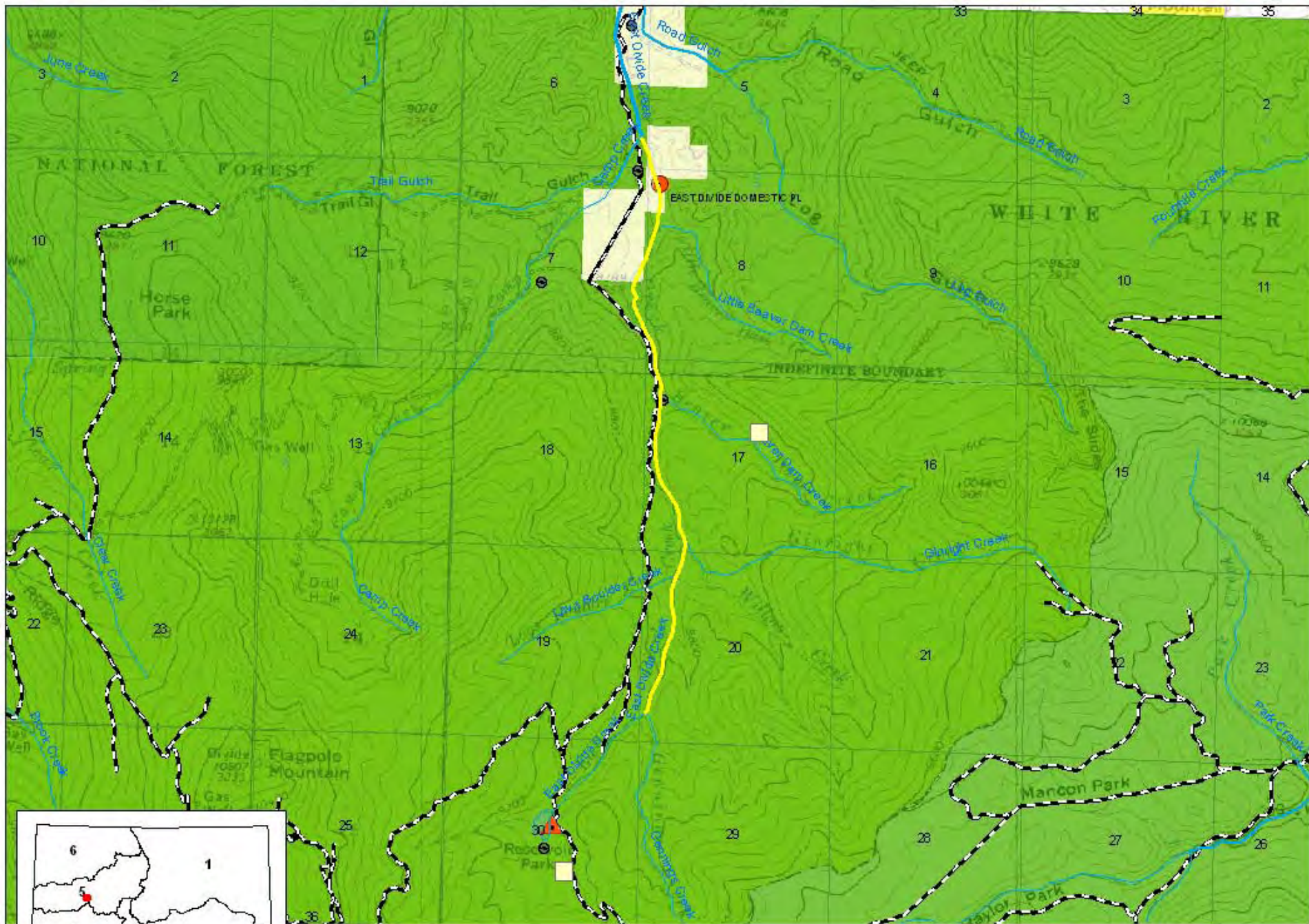
2.3 cfs (03/15 – 04/14)

4.8 cfs (04/15 – 07/14)

1.2 cfs (07/15 – 08/14)

0.5 cfs (08/15 – 03/14)

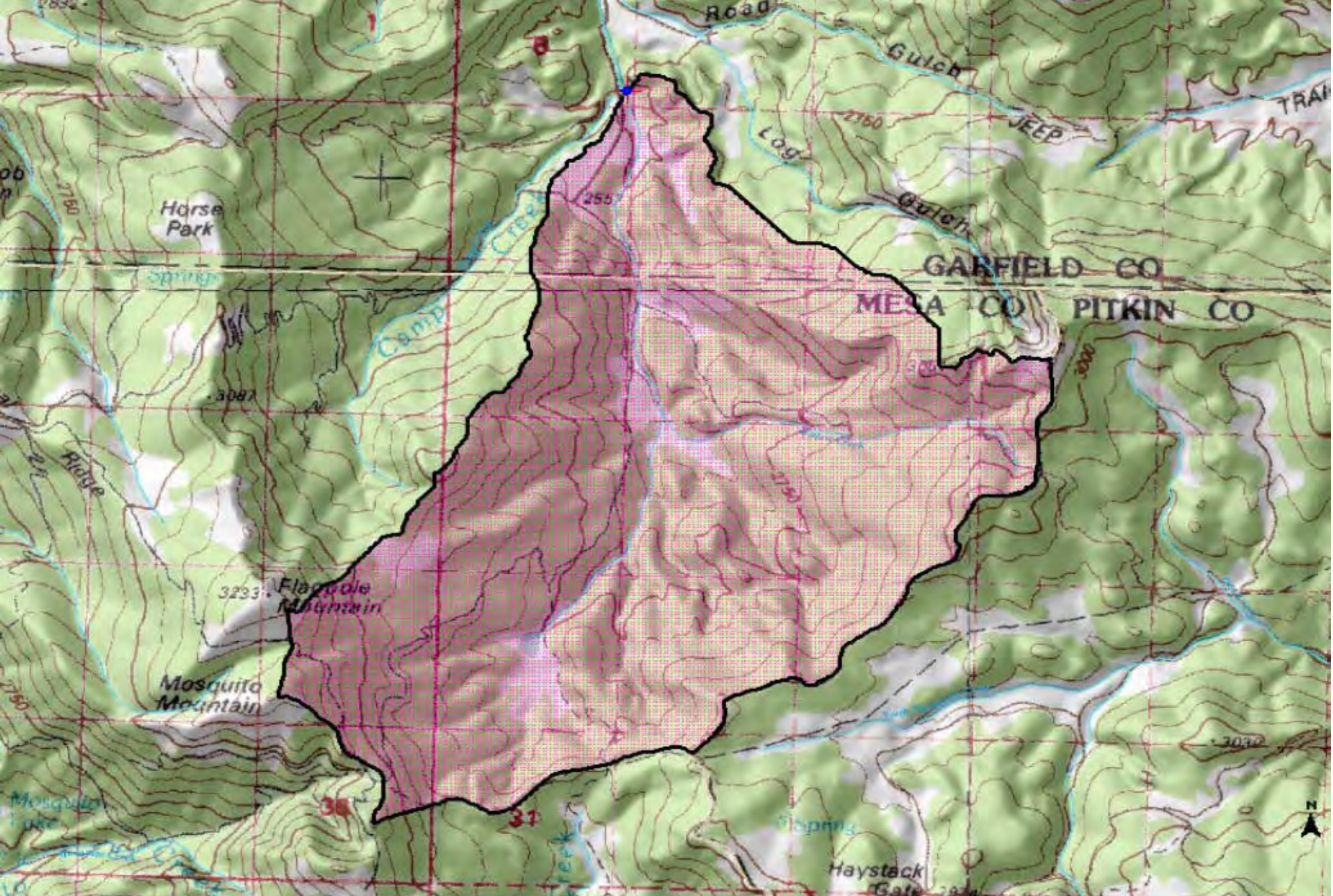
Mesa & Garfield Counties



**Colorado Division of Wildlife**  
**East Divide Creek #1**

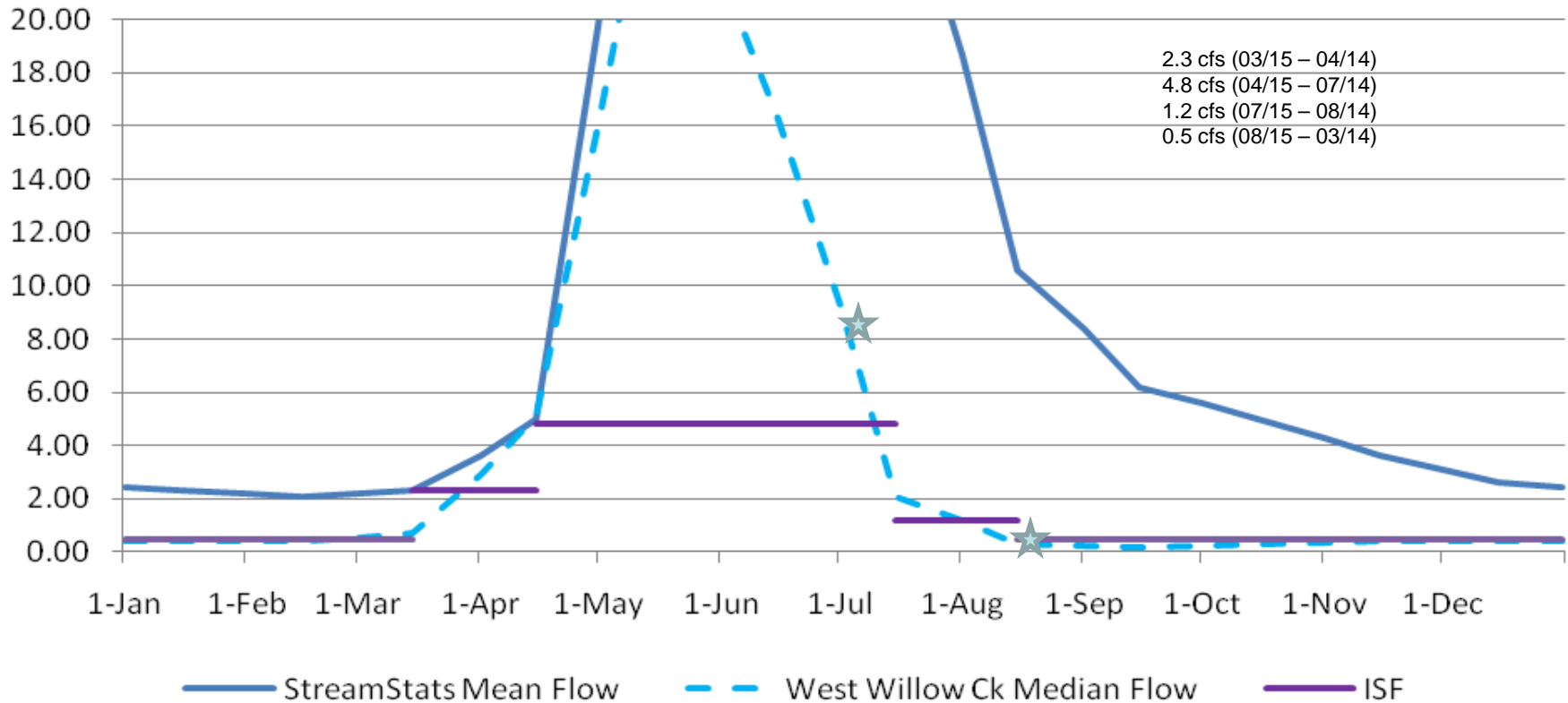
0 0.25 0.5 1 1.5 2 Miles





The total drainage area upstream of this ISF segment of East Divide Creek is 10.6 square miles.

# East Divide Creek #1 - Estimated Streamflow



## Instream Flow Recommendation(s)

The CDOW is recommending 4.8 cfs, summer, and 0.5 cfs, winter, based on data collection efforts.

## Biological Data

Colorado River Cutthroat and Rainbow Trout Fishery.

## Hydrologic Data

The hydrograph below was derived from data collected by the USGS stream gage for West Divide Creek, near Raven, CO (#09089500) and by the USGS StreamStats Water Resources Web Application Program.

# **Stream: East Divide Creek #2**

## **Executive Summary**

Water Division: 5

Water District: 45

CDOW#: 20830

## **Segment: Camp Creek to June Creek**

### **Upper Terminus: Camp Creek**

Latitude: 39° 23' 02.3"N      Longitude: 107° 28' 31.7"W

### **Lower Terminus: June Creek**

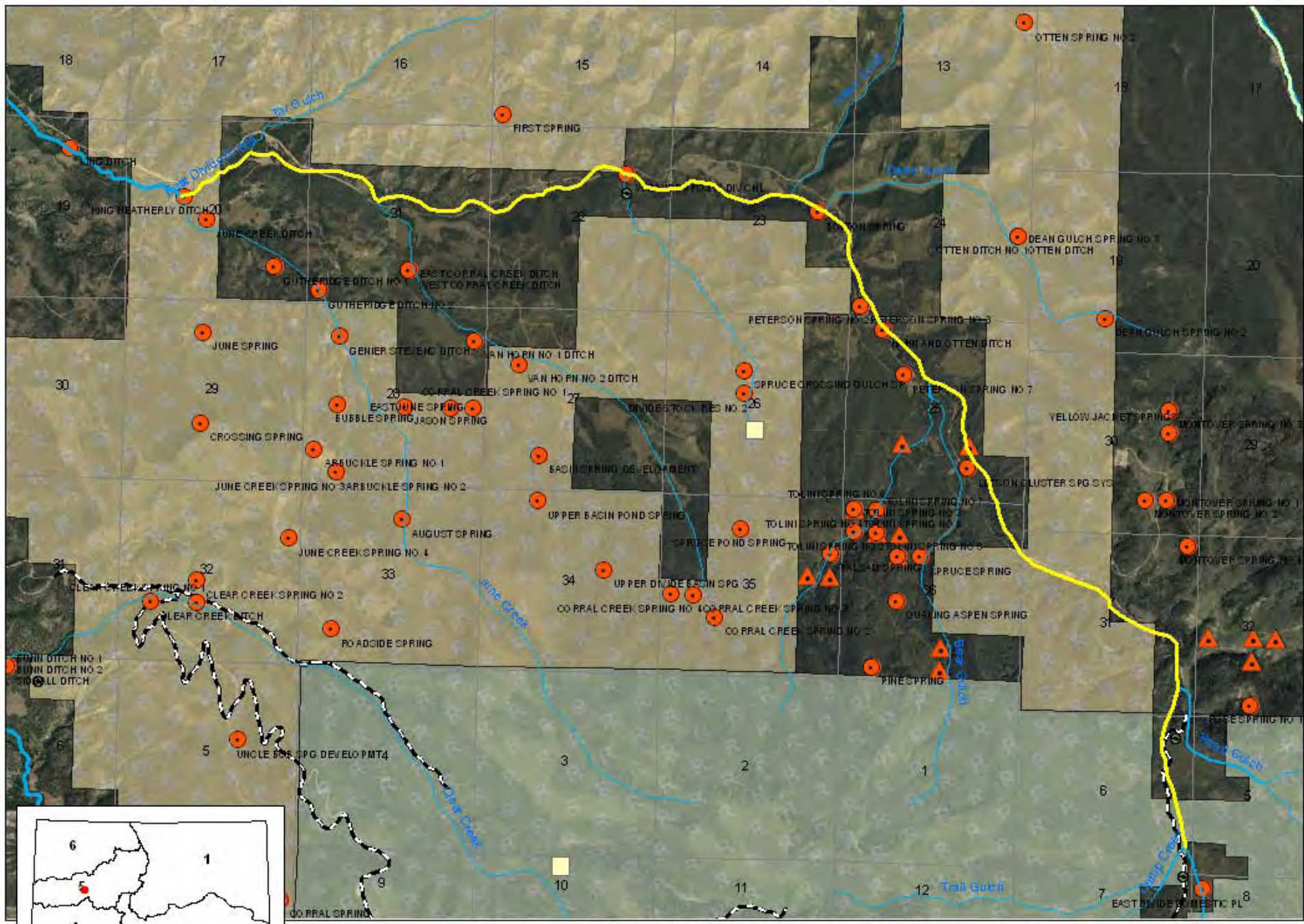
Latitude: 39° 26' 01.8"N      Longitude: 107° 34' 51.0"W

### **ISF Appropriation**

7.2 cfs (03/15 – 07/31)

1.6 cfs (08/01 – 03/14)

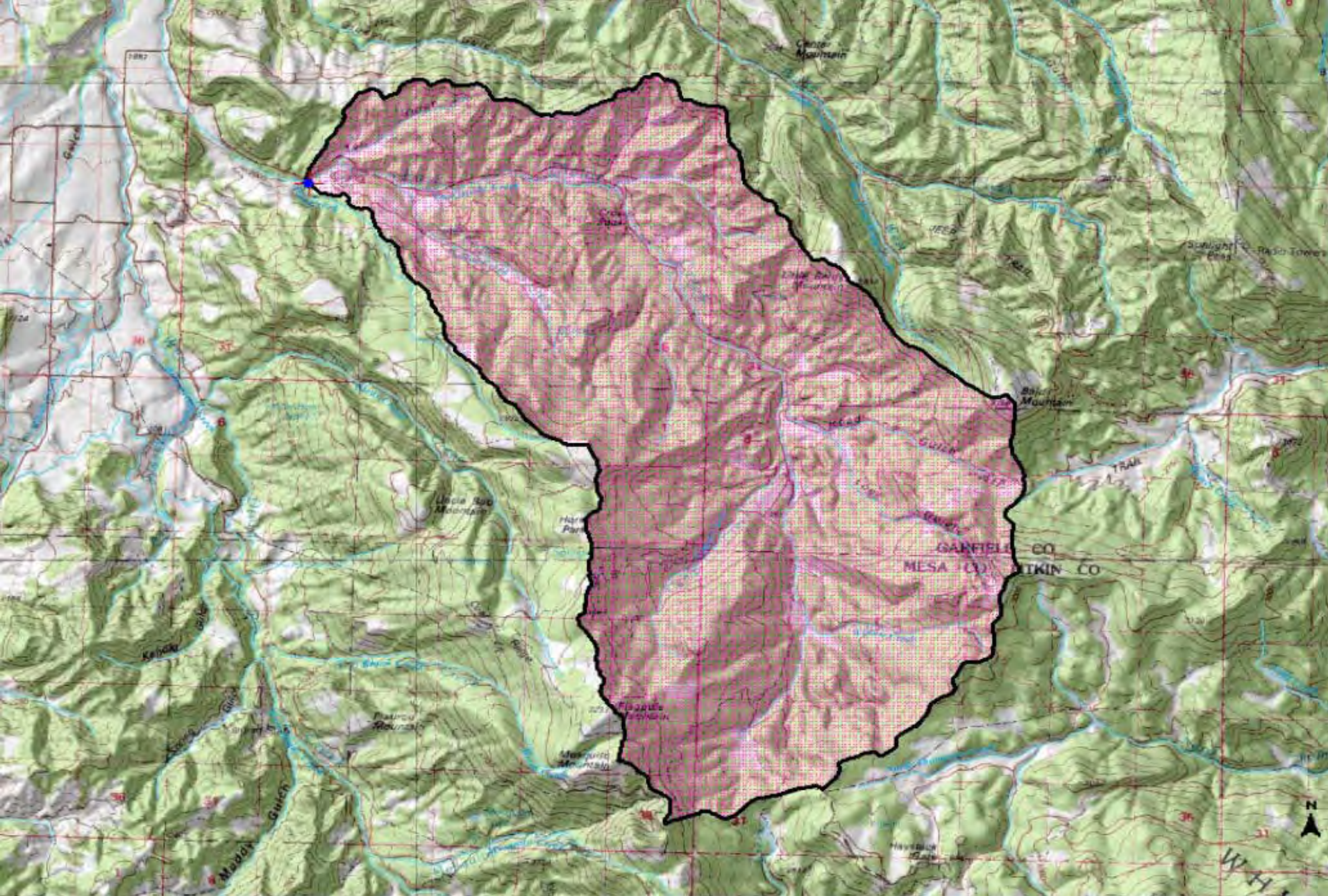
Garfield County



**Colorado Division of Wildlife**  
**East Divide Creek**

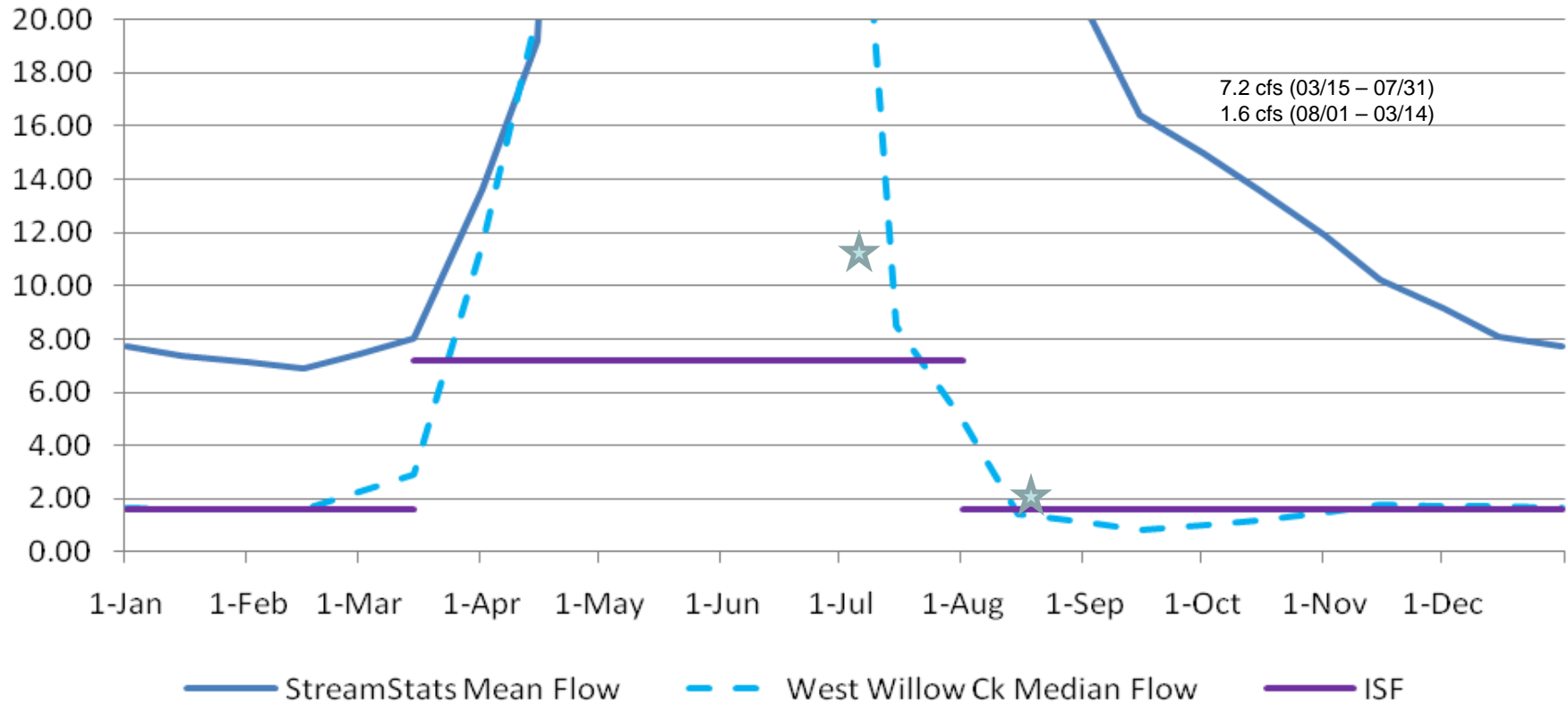
0 0.3 0.6 1.2 1.8 2.4  
 Miles





The total drainage area upstream of this ISF segment of East Divide Creek is 42.1 square miles.

# East Divide Creek #2 - Estimated Streamflow



## Instream Flow Recommendation(s)

The CDOW is recommending 7.2 cfs, summer, and 3.0 cfs, winter, based on data collection efforts.

## Biological Data

Colorado River Cutthroat and Rainbow Trout Fishery.

## Hydrologic Data

The hydrograph below was derived from data collected by the USGS stream gage for West Divide Creek, near Raven, CO (#09089500) and by the USGS StreamStats Water Resources Web Application Program.

# **Stream: West Divide Creek**

## **Executive Summary**

Water Division: 5

Water District: 45

CDOW#: 22967

## **Segment: Little Beaver Creek to Mosquito Creek**

### **Upper Terminus: Little Beaver Creek**

Latitude: 39° 16' 13.8"N      Longitude: 107° 27' 32.3"W

### **Lower Terminus: Mosquito Creek**

Latitude: 39° 18' 26.1"N      Longitude: 107° 33' 43.9"W

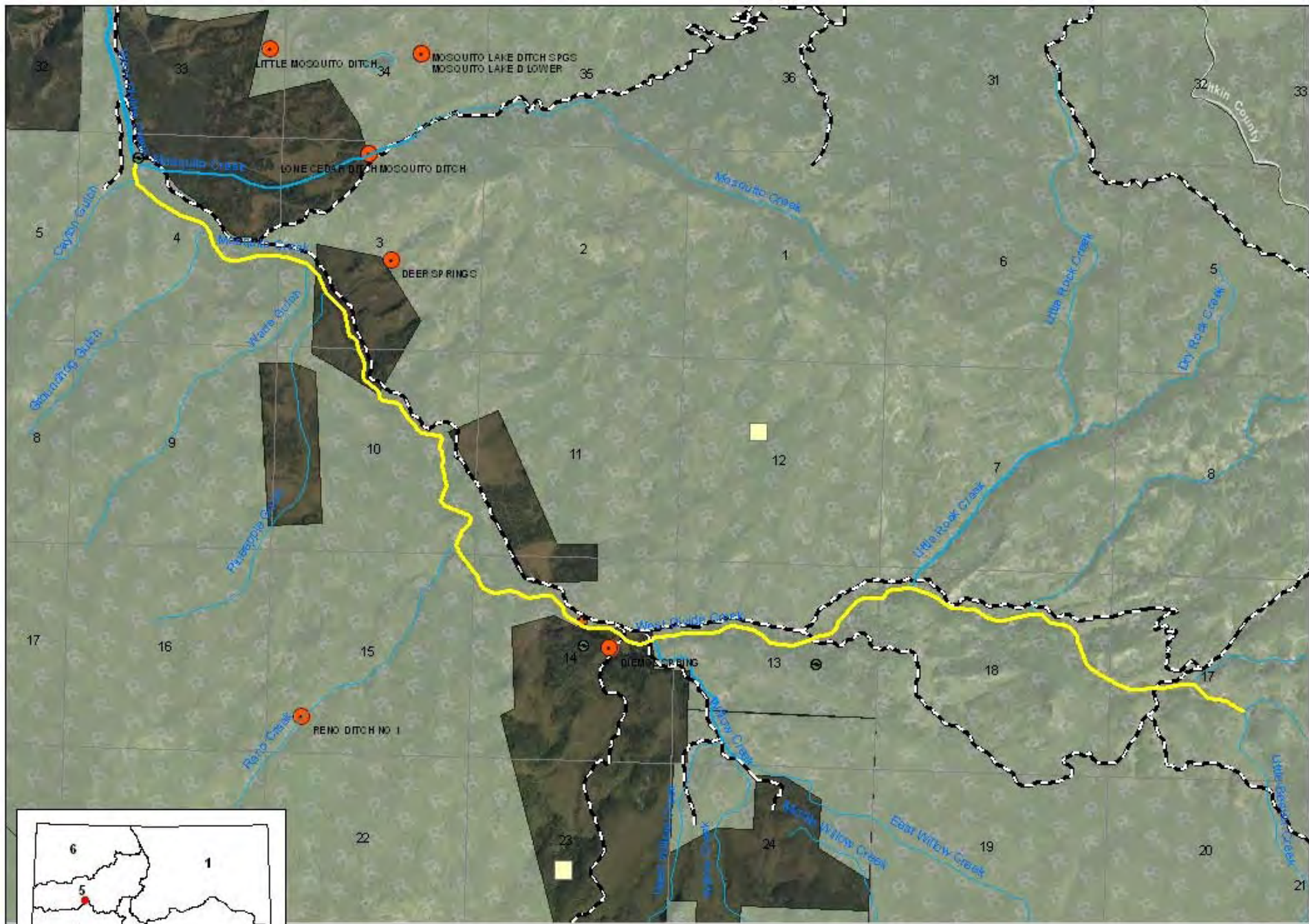
### **ISF Appropriation**

14.1 cfs (04/01 – 07/14)

5.50 cfs (07/15 – 08/14)

1.80 cfs (08/15 – 03/31)

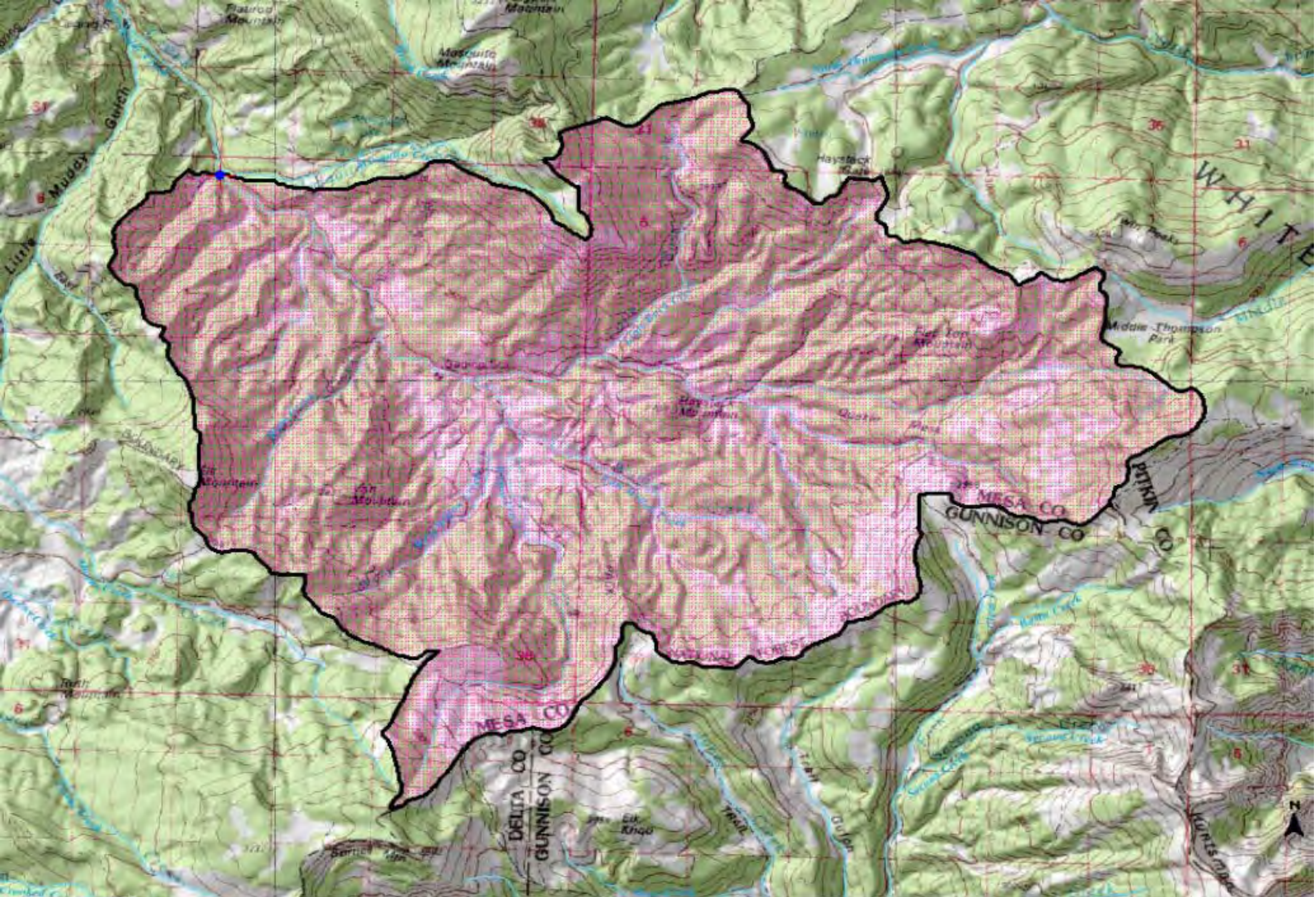
Mesa County



**Colorado Division of Wildlife**  
**West Divide Creek**

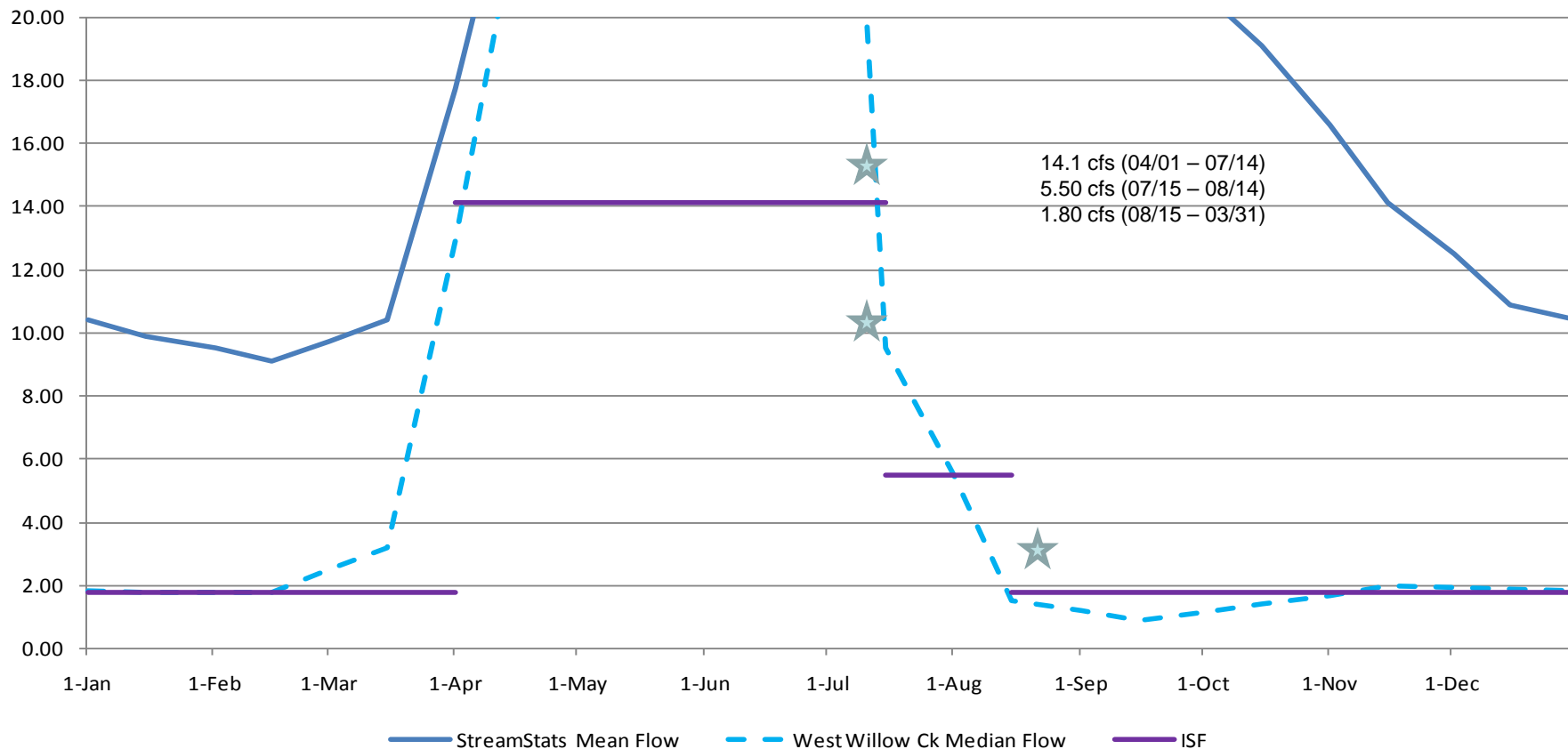
0 0.25 0.5 1 1.5 2 Miles





The total drainage area upstream of this ISF segment of West Divide Creek is 47.1 square miles.

## West Divide Creek - Estimated Streamflow



### Instream Flow Recommendation(s)

The CDOW is recommending 14.1 cfs, summer, and 7.1 cfs, winter, based on data collection efforts.

### Biological Data

Cutthroat and Rainbow Trout , Bluehead Sucker, Mottled Sculpin, Speckled Dace Fisheries

### Hydrologic Data

The hydrograph below was derived from data collected by the USGS stream gage for West Divide Creek, near Raven, CO (#09089500) and by the USGS StreamStats Water Resources Web Application Program.

# **Stream: Meadow Creek**

## **Executive Summary**

Water Division: 5

Water District: 39

CDOW#: 21131

## **Segment: Outlet Meadow Creek Reservoir to Main Elk Creek**

### **Upper Terminus: Meadow Creek Reservoir**

Latitude: 39° 48' 24.3"N      Longitude: 107° 32' 43.7"W

### **Lower Terminus: Main Elk Creek**

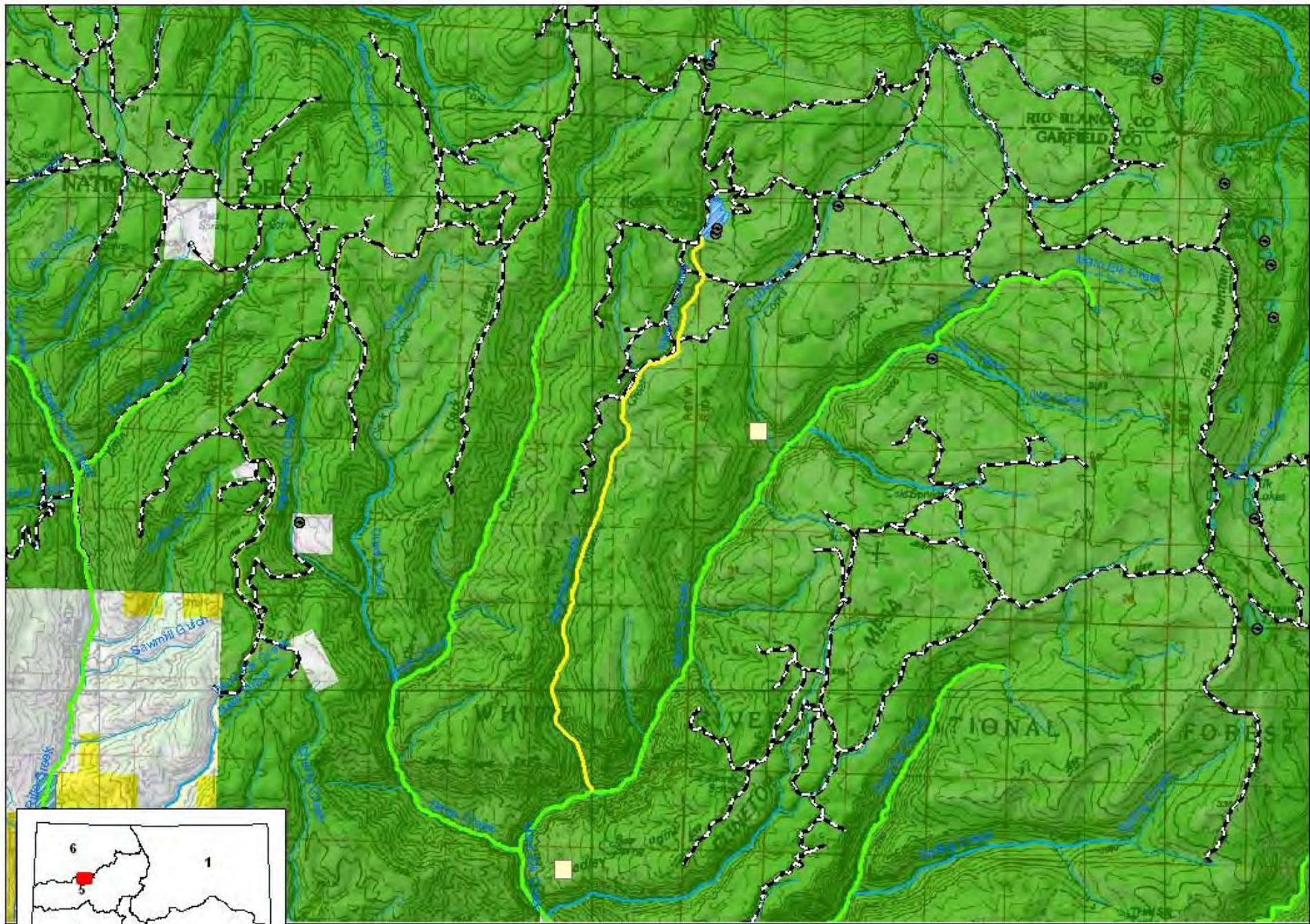
Latitude: 39° 42' 18.6"N      Longitude: 107° 34' 03.5"W

### **ISF Appropriation**

2.1 cfs (04/01 – 09/30)

1.3 cfs (10/01 – 03/31)

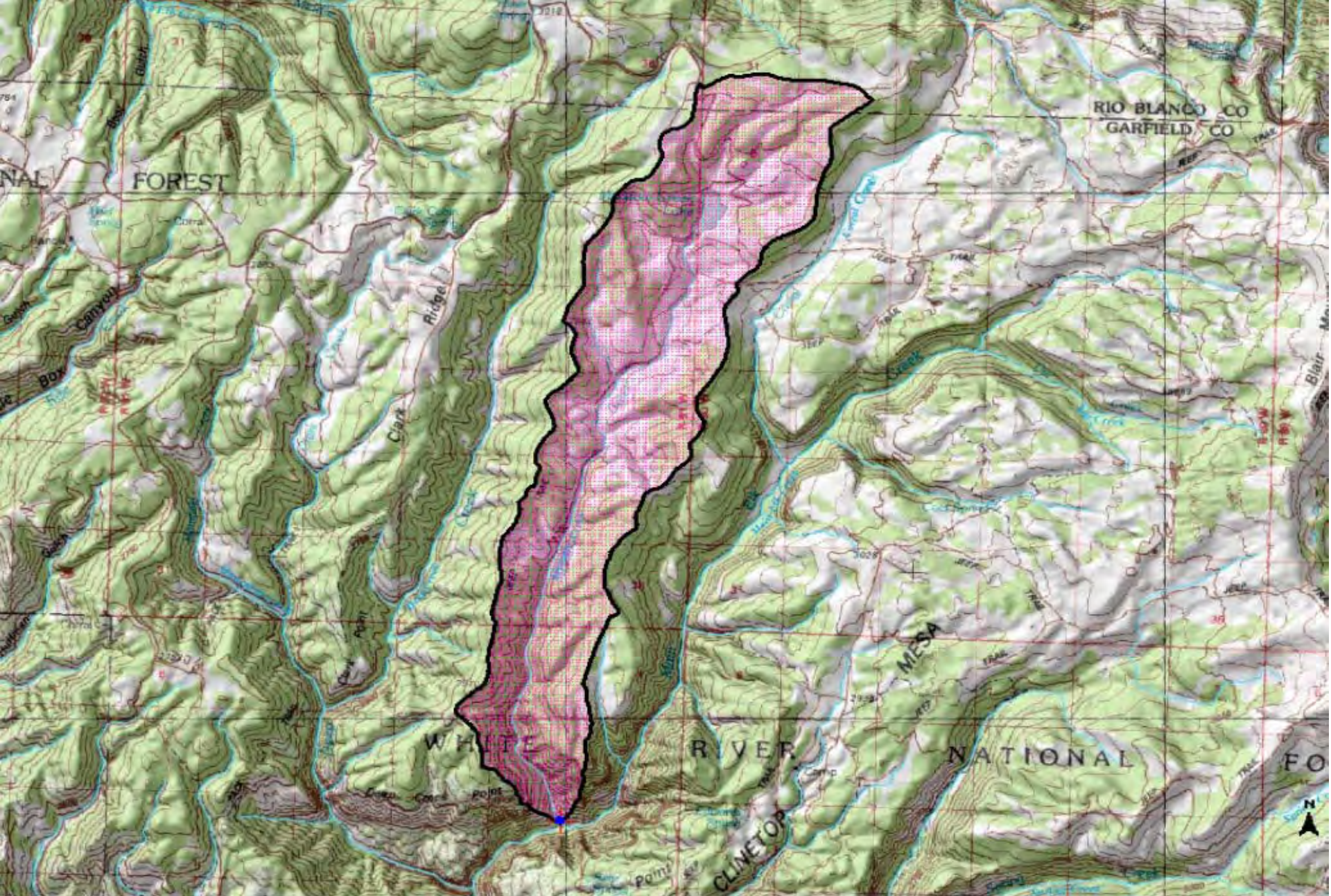
Garfield County



**Colorado Division of Wildlife**  
**Meadow Creek**

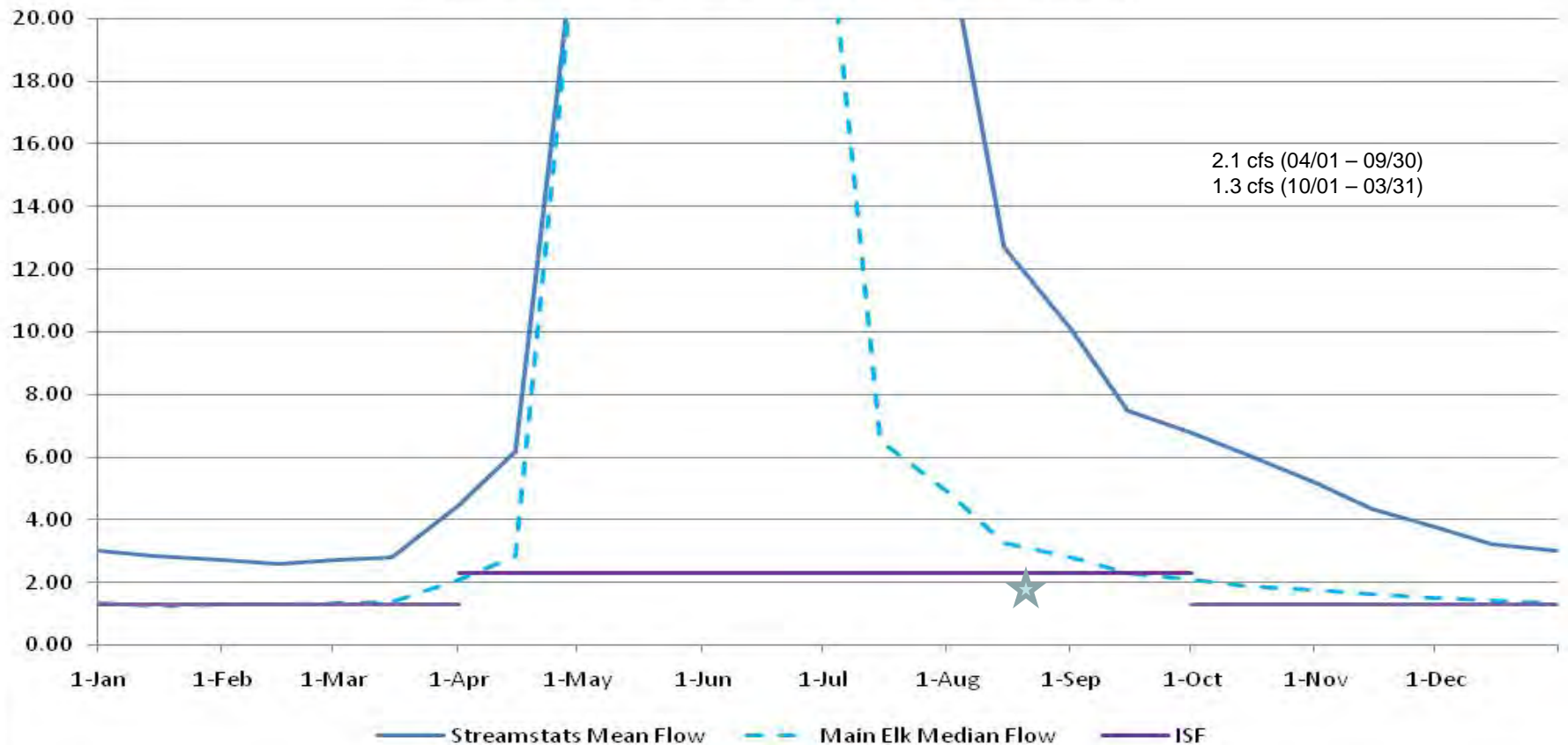
0 0.5 1 2 3 4  
Miles





The total drainage area upstream of this ISF segment of Meadow Creek is 12.4 square miles.

## Meadow Creek Estimated Streamflow



### Instream Flow Recommendation(s)

The CDOW is recommending 2.1 cfs, summer, and 1.3 cfs, winter, based on data collection efforts.

### Biological Data

Brook and Rainbow Trout Fishery

### Hydrologic Data

The hydrograph below was derived from data collected by the USGS stream gage for Main Elk Creek, near New Castle, CO (#09086470) and by the USGS StreamStats Water Resources Web Application Program.



Is working with:

The Colorado Department of Public Health and Environment

City of Fort Collins Natural Areas Department

City of Pueblo

# **Stream: North Clear Creek**

## **Executive Summary**

Water Division: 1

Water District: 7

CDOW#: 10568

## **Segment: Chase Gulch to Clear Creek**

### **Upper Terminus: Chase Gulch**

Latitude: 39° 48' 14.2"N      Longitude: 105° 29' 47.9"W

### **Lower Terminus: Clear Creek**

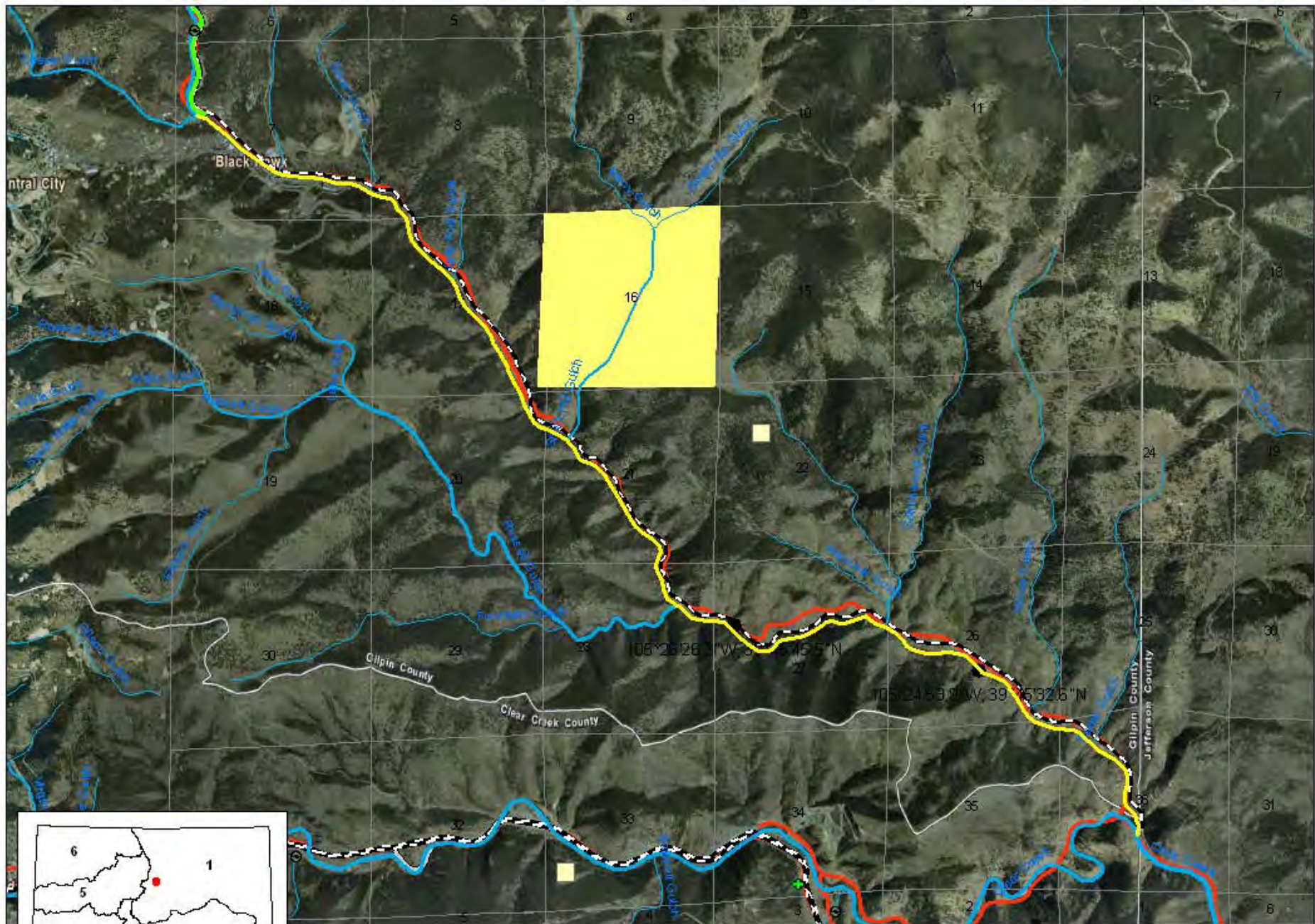
Latitude: 39° 44' 45.1"N      Longitude: 105° 23' 52.8"W

### **ISF Appropriation**

3.75 cfs (03/15 – 10/31)

2.25 cfs (11/01 – 03/14)

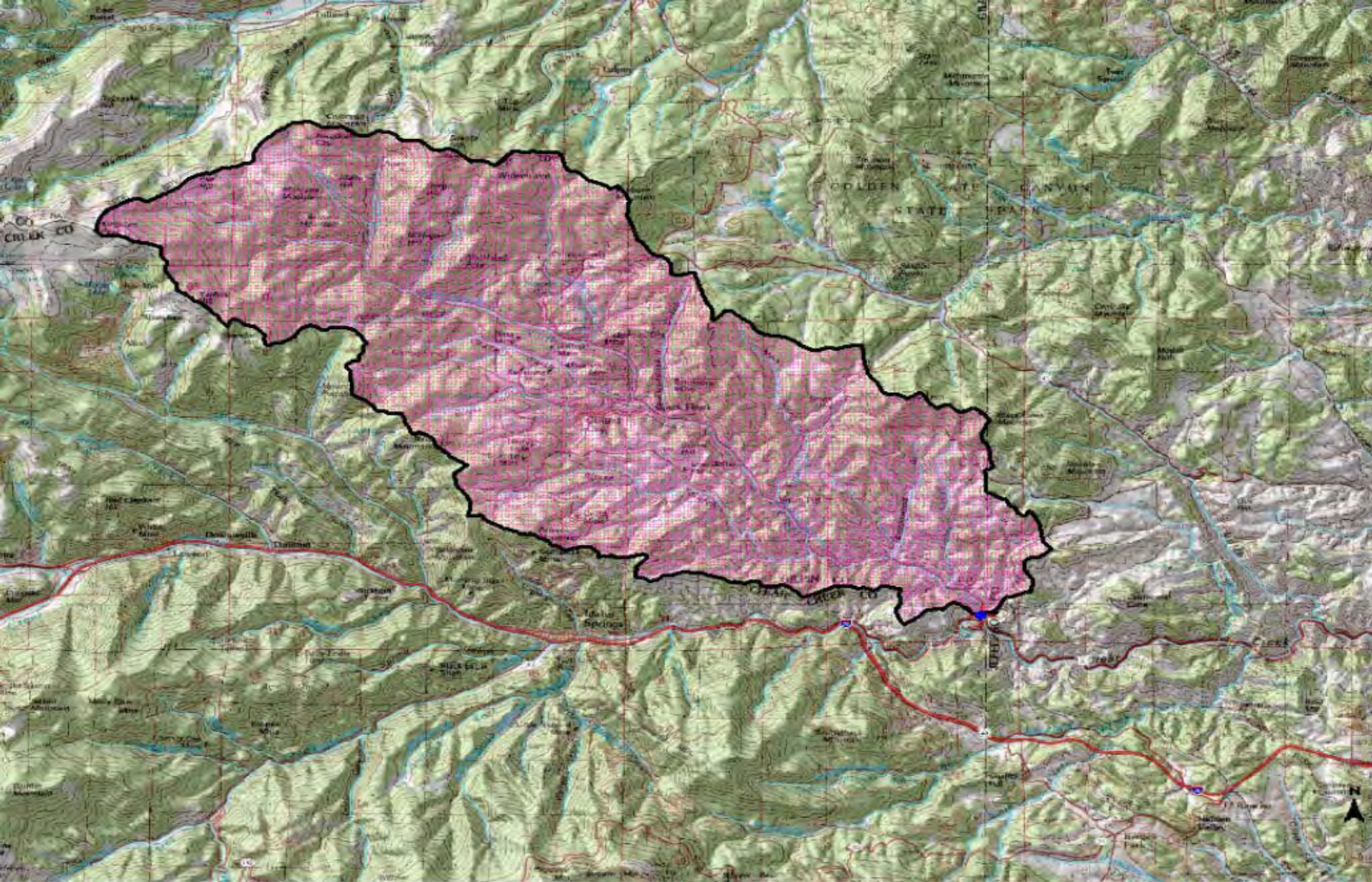
Gilpin County



**Colorado Division of Wildlife**  
**North Clear Creek**

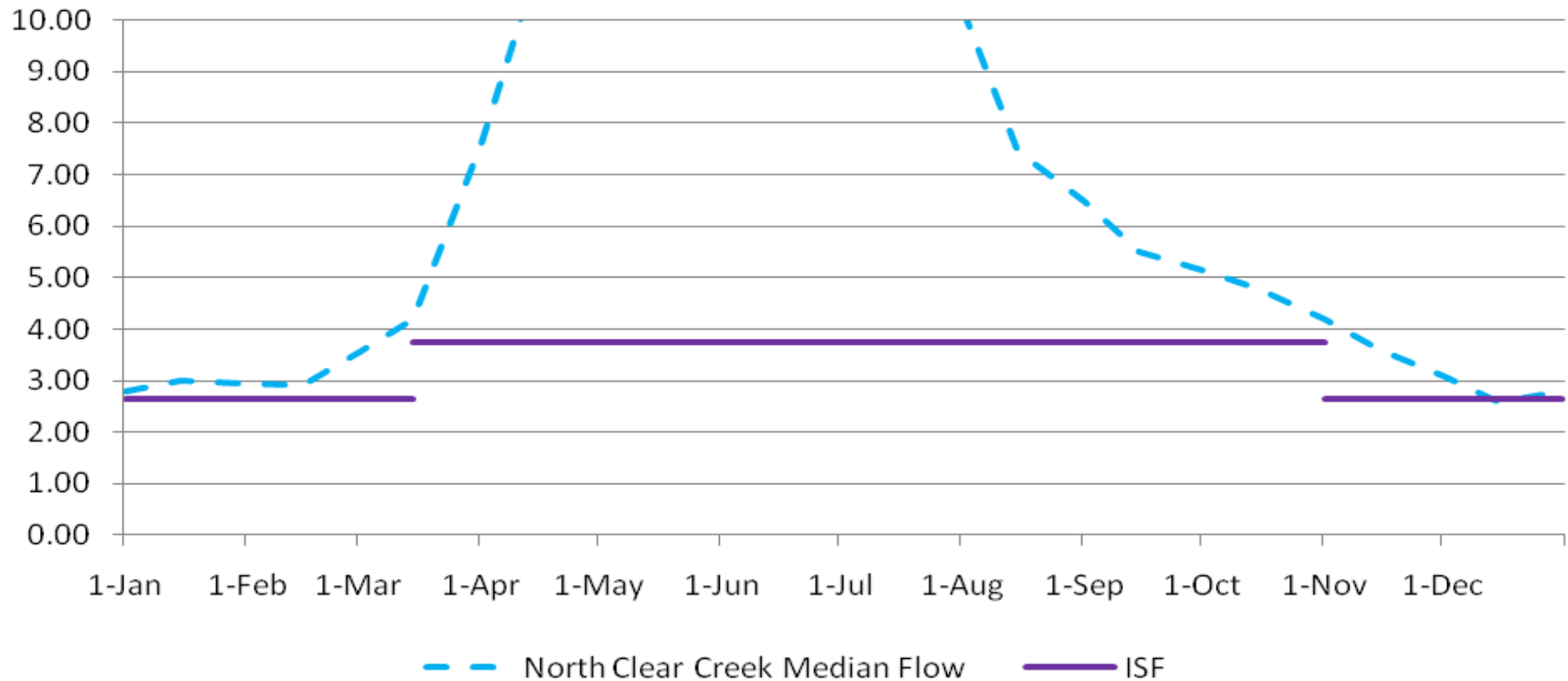
0 0.25 0.5 1 1.5 2  
 Mile





The total drainage area upstream of this ISF segment of North Clear Creek is 60.2 square miles.

# North Clear Creek - Estimated Streamflow



## Instream Flow Recommendation(s)

The CDOW is recommending 3.75 cfs, summer, and 2.25 cfs, winter, based on data collection efforts.

## Biological Data

Brook and Brown Trout Fishery

## Hydrologic Data

The hydrograph below was derived from data collected by the USGS stream gage for North Clear Creek, near Blackhawk, CO (#06718550) and by the USGS StreamStats Water Resources Web Application Program.

# **Stream: Graves Creek**

## **Executive Summary**

Water Division: 1

Water District: 3

**Segment: Wyoming State Line to South Line S27 T12N R68W**

### **Upper Terminus: Wyoming State Line**

Latitude: 40° 59' 53.8"N      Longitude: 105° 01' 29.4"W

### **Lower Terminus: South Line S27 T12N R68W**

Latitude: 40° 58' 18.6"N      Longitude: 104° 59' 42.0"W

### **ISF Appropriation**

?

### **Biological Data**

Potential Habitat for Native Aquatic Species

Brassy Minnow (ST)

Iowa Darter (SSC)

Larimer County



**Graves Creek**  
**City of Fort Collins**  
**Natural Areas Department**

# **Stream: Spottlewood Creek #1**

## **Executive Summary**

Water Division: 1

Water District: 3

CDOW#: 10803

**Segment: NW S29 T12N R68W to Road at NW S33 T12N R68W**

### **Upper Terminus: NW S29 T12N R68W**

Latitude: 40° 59' 05.0"N      Longitude: 105° 01' 48.3"W

### **Lower Terminus: Road at NW S33 T12N R68W**

Latitude: 40° 57' 54.8"N      Longitude: 105° 00' 55.3"W

### **ISF Appropriation**

?

### **Biological Data**

Potential Habitat for Native Aquatic Species

Brassy Minnow (ST)

Iowa Darter (SSC)

Larimer County



**Spottlewood Creek #1**  
**City of Fort Collins**  
**Natural Areas Department**

0 0.2 0.4 0.6 0.8  
Miles

# **Stream: Spottlewood Creek #2**

## **Executive Summary**

Water Division: 1

Water District: 3

CDOW#: 10803

**Segment: NW S34 T11N R68W to SW S34 T11N R68W**

**Upper Terminus: NW S34 T11N R68W**

Latitude: 40° 53' 05.3"N      Longitude: 104° 59' 40.0"W

**Lower Terminus: SW S34 T11N R68W**

Latitude: 40° 52' 13.7"N      Longitude: 104° 59' 55.8"W

## **ISF Appropriation**

?

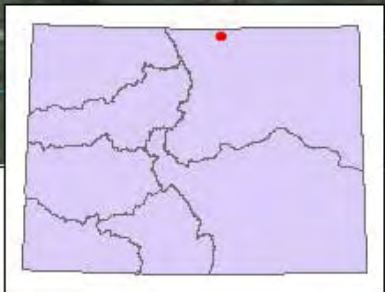
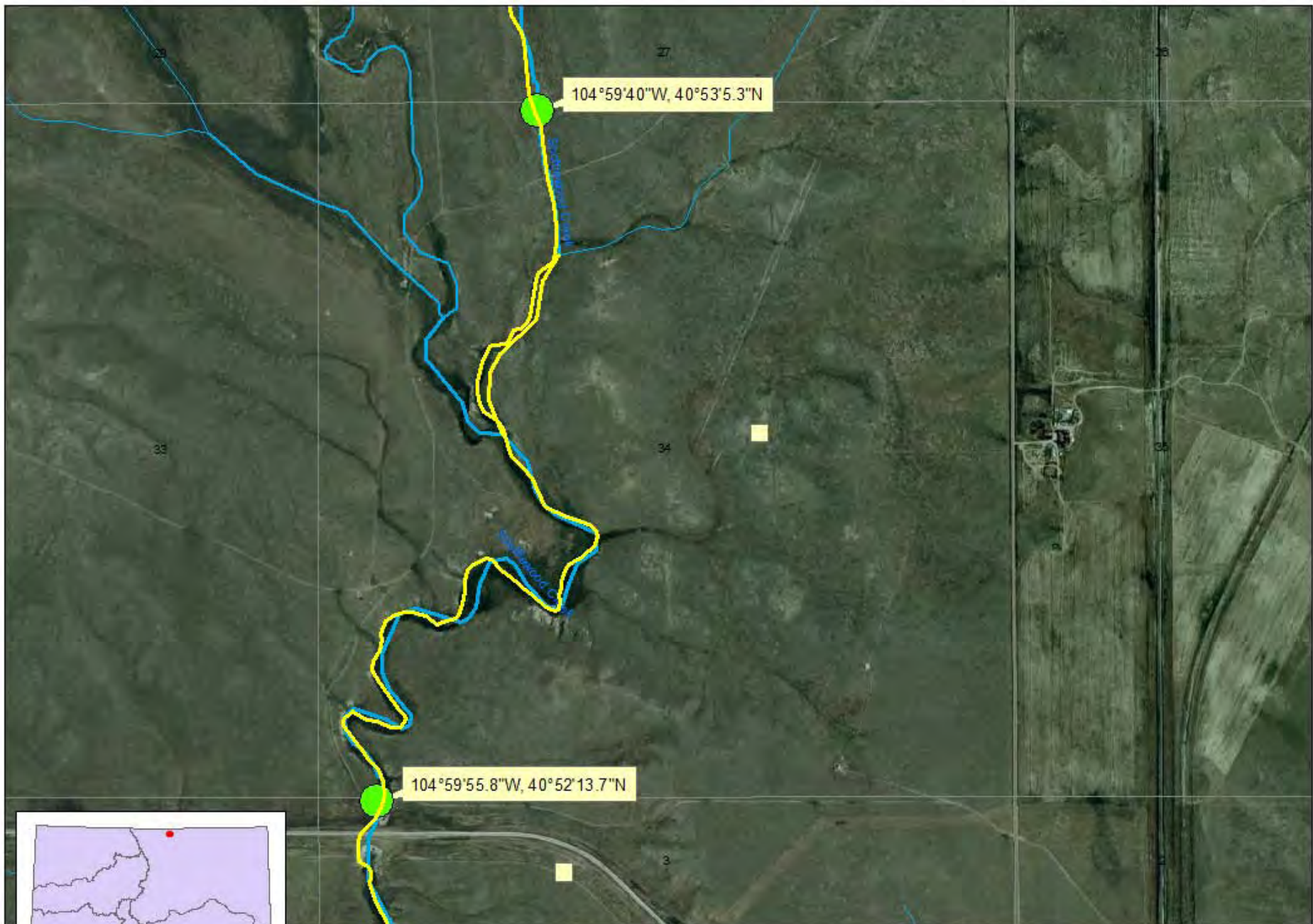
## **Biological Data**

Habitat for Native Aquatic Species

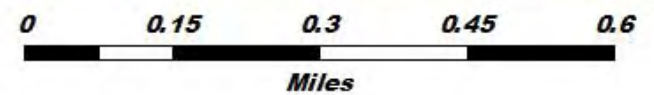
Brassy Minnow (ST)

Iowa Darter (SSC)

Larimer County



**Spottlewood Creek #2**  
**City of Fort Collins**  
**Natural Areas Department**



# **Stream: Lone Tree Creek**

## **Executive Summary**

Water Division: 1

Water District: 1

CDOW#: 10738

**Segment: NW S29 T12N R67W to SE S31 T12N R67W**

**Upper Terminus: NW S29 T12N R67W**

Latitude: 40° 59' 10.0"N      Longitude: 104° 54' 56.5"W

**Lower Terminus: SE S31 T12N R67W**

Latitude: 40° 57' 27.1"N      Longitude: 104° 55' 37.4"W

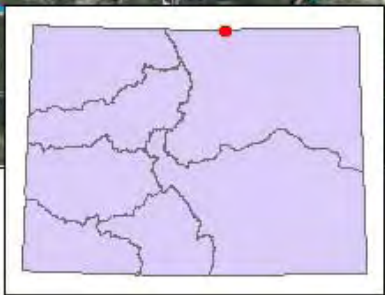
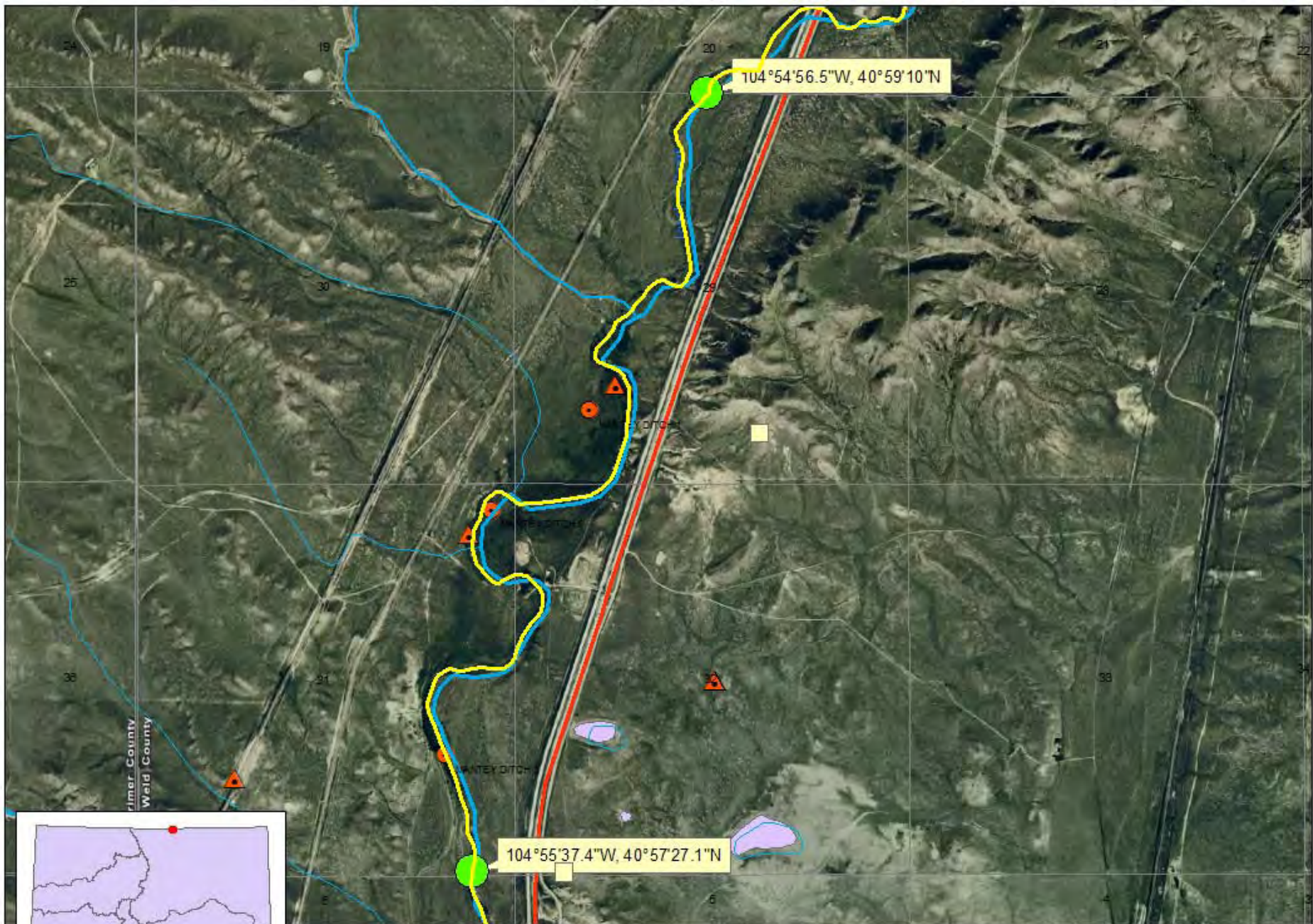
## **ISF Appropriation**

?

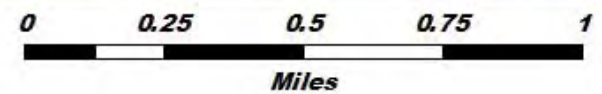
## **Biological Data**

Habitat for Native Aquatic Species  
Iowa Darter (SSC)

Weld County



**Lone Tree Creek**  
**City of Fort Collins**  
**Natural Areas Department**



# **Stream: Arkansas River #1**

## **Executive Summary**

Water Division: 2

Water District: 10

CDOW#: 28971

## **Segment: Outlet of Fish Hatchery to Start of Levee**

### **Upper Terminus: Outlet of Fish Hatchery**

Latitude: 38° 16' 00.0"N      Longitude: 104° 42' 44.0"W

### **Lower Terminus: Start of Concrete Levee**

Latitude: 38° 16' 21.8"N      Longitude: 104° 38' 04.3"W

### **ISF Appropriation**

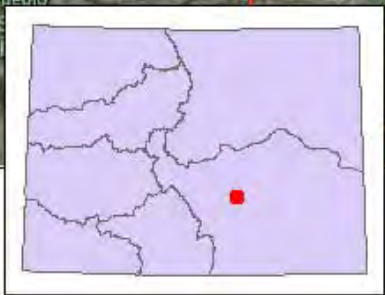
100 cfs (01/01 – 12/31)

### **Biological Data**

Rainbow/Cuttbow Trout

Brown Trout

Pueblo County



A scale bar labeled "Miles" with markings at 0, 0.5, 1, 1.5, and 2. The bar is divided into segments by vertical lines, with alternating black and white segments.

# **Stream: Arkansas River #2**

## **Executive Summary**

Water Division: 2

Water District: 10

CDOW#: 28971

## **Segment: End of Levee to Fountain Creek**

### **Upper Terminus: End of Concrete Levee**

Latitude: 38° 15' 15.8"N      Longitude: 104° 36' 23.3"W

### **Lower Terminus: Fountain Creek**

Latitude: 38° 15' 09.8"N      Longitude: 104° 35' 13.2"W

### **ISF Appropriation**

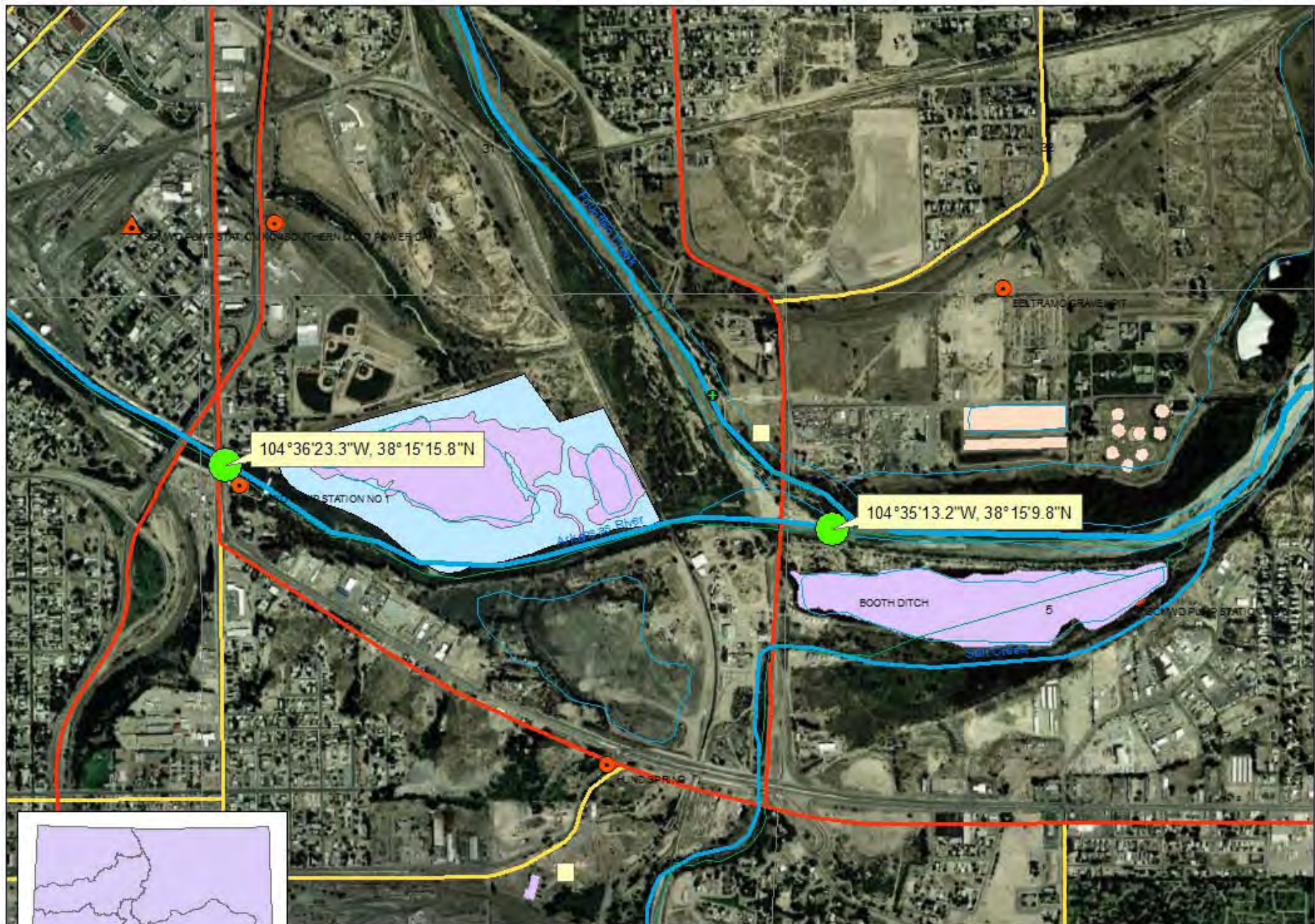
100 cfs (01/01 – 12/31)

### **Biological Data**

Rainbow/Cuttbow Trout

Brown Trout

Pueblo County



Arkansas River  
City of Pueblo

0 0.15 0.3 0.45 0.6  
Miles