



## 10.d Proposed Acquisition of an Interest in the Shoshone Water Rights for Instream Flow Use on the Colorado River

Rob Viehl, Chief

Kaylea White, Senior Water  
Resource Specialist



**COLORADO**

Colorado Water  
Conservation Board

Department of Natural Resources



# TODAY'S PRESENTERS

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## **Acquisition Process, Proposal, Board Factors**

Rob Viehl and Kaylea White, CWCB

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## **Background, Project Support, and Funding**

Andy Mueller and Amy Moyer, CRWCD

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## **Water Right Owner**

Brad McCloud, Public Service Company of CO

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## **Colorado River Administration**

James Heath, DWR

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## **CPW Recommendation**

Katie Birch and Kendall Bakich, CPW

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# STAFF RECOMMENDATION

- No formal action is required at this time
- This agenda item starts the 120-day period for Board Review



Agenda 10 d.



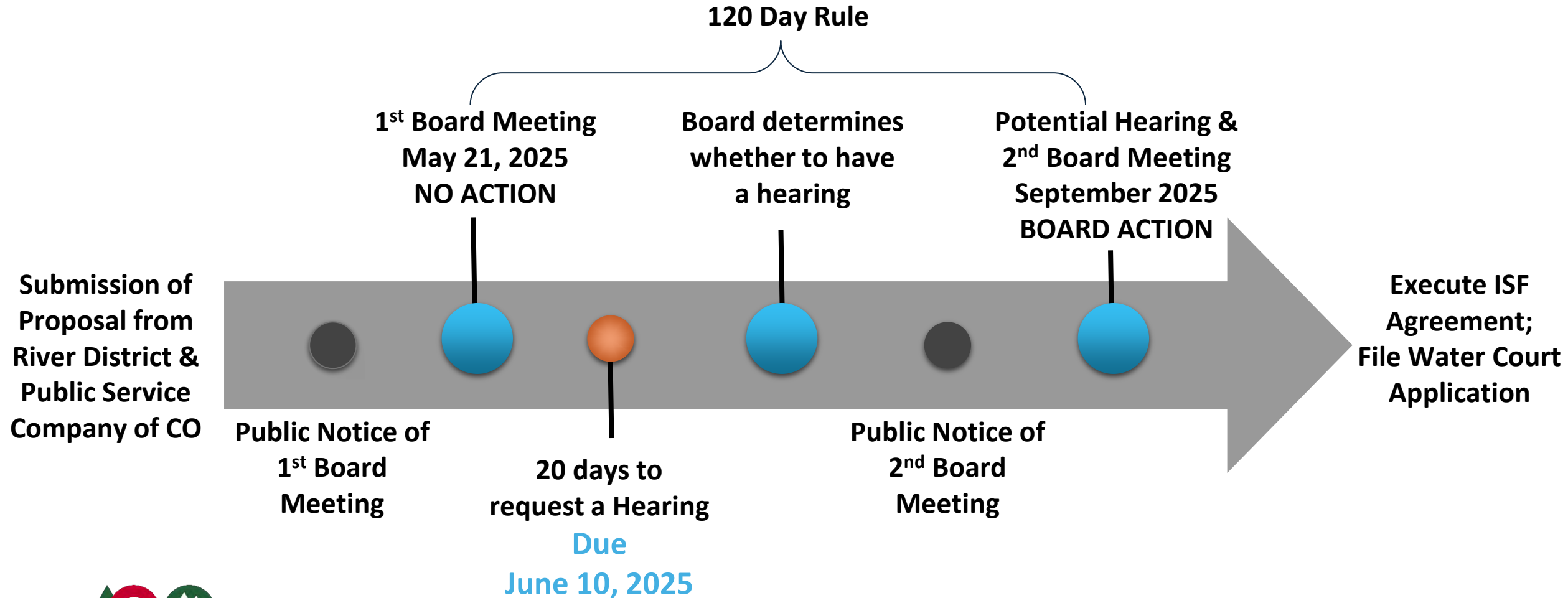
# ISF ACQUISITIONS

The Board can accept several types of ISF acquisitions for water, water rights, or interests in water, for various durations including temporary, long-term, and permanent acquisitions.

- 37-92-102(3) C.R.S Permanent Acquisitions operate under the jurisdiction of the Water Court;
- This will require the CWCB, River District, and PSCo file a joint water court application to change the water rights to add ISF use



# CWCB ACQUISITION PROCESS & TIMELINE



# REQUIRED NOTICES & REQUESTS

- Notices
  - Board Meeting Notice
  - ISF mailing list, SEO SWSP list
- Requests for recommendation
  - USDA, USDO, CPW
- CPW recommendation letter & report



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# CWCB ACTIONS TO DATE

- September 2023 CRWCD applied for a non-reimbursable project towards purchase of the Shoshone Water Rights
- January 2024 CWCB Shoshone Permanency Workshop
- January 2024 CWCB unanimously approved funding \$20 million
- May 2024 Projects Bill HB 24-1435 approved



# SHOSHONE ACQUISITION PROPOSAL



# THE PROPOSAL

1. River District will purchase the Shoshone Water Rights and maintain ownership.
2. PSCo will hold a lease for hydropower use.
3. CWCB will hold a perpetual lease for the exclusive right to use the water rights for ISF use in the Shoshone Reach when water is not being fully used, or is only partially used for hydropower.



# SHOSHONE WATER RIGHTS

| Priority Date*   | Appropriation Date | Adjudication Date/<br>Water Court Decree             | Decreed Rate of Diversion &<br>Diversion Rate Intended to Change |
|------------------|--------------------|------------------------------------------------------|------------------------------------------------------------------|
| December 5, 1905 | January 7, 1902    | December 9, 1907<br>Civil Action Nos. 466<br>and 553 | 1,250 cfs                                                        |
| May 31, 1940     | May 15, 1929       | February 7, 1956<br>Civil Action No. 1123            | 158 cfs                                                          |
|                  |                    |                                                      | <b>TOTAL 1,408 cfs</b>                                           |



# SHOSHONE WATER RIGHTS

Shoshone Diversion Dam



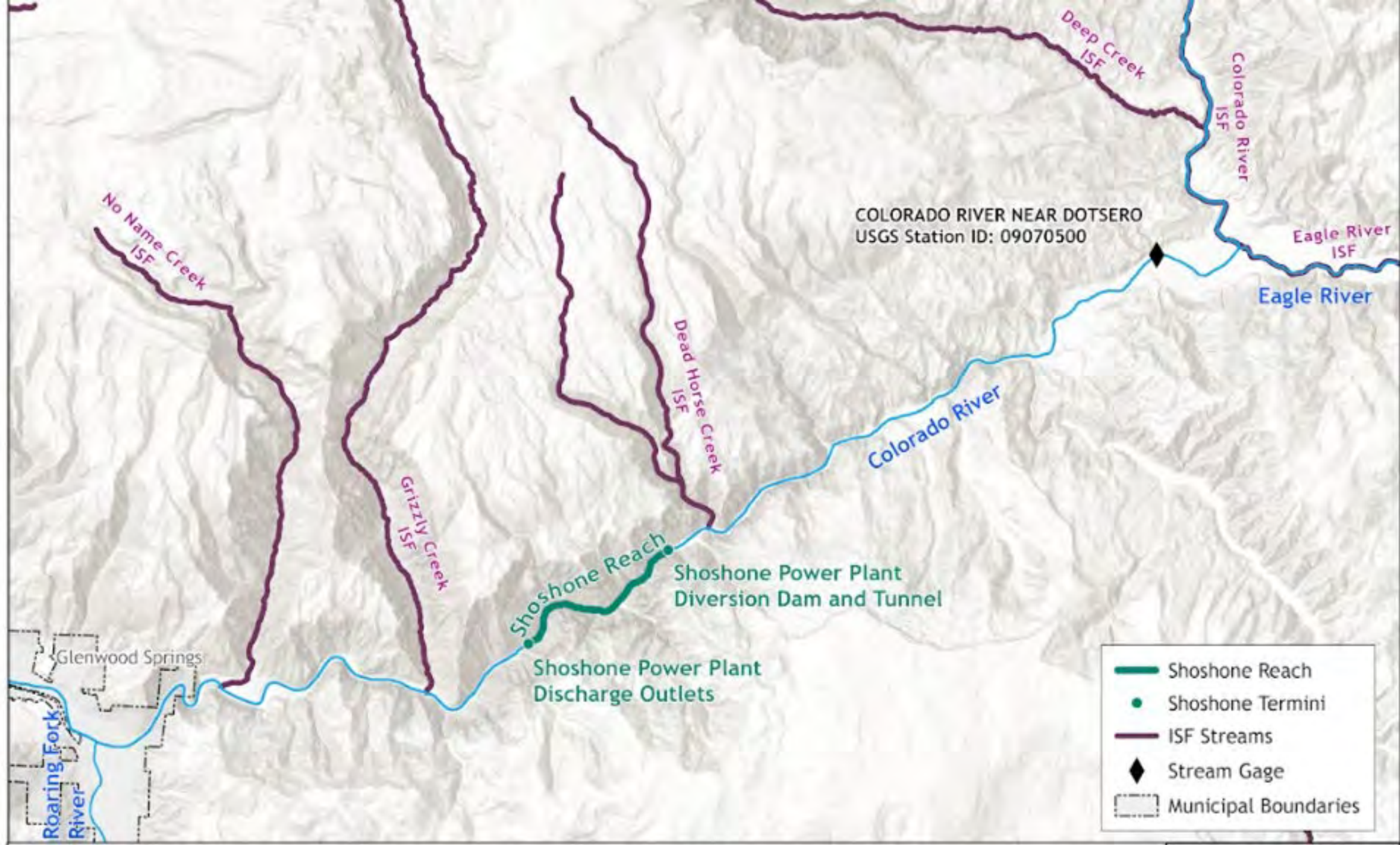
Shoshone Outlets



National Library of Congress

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National Library of Congress



# Shoshone Water Rights Preservation May 21, 2025



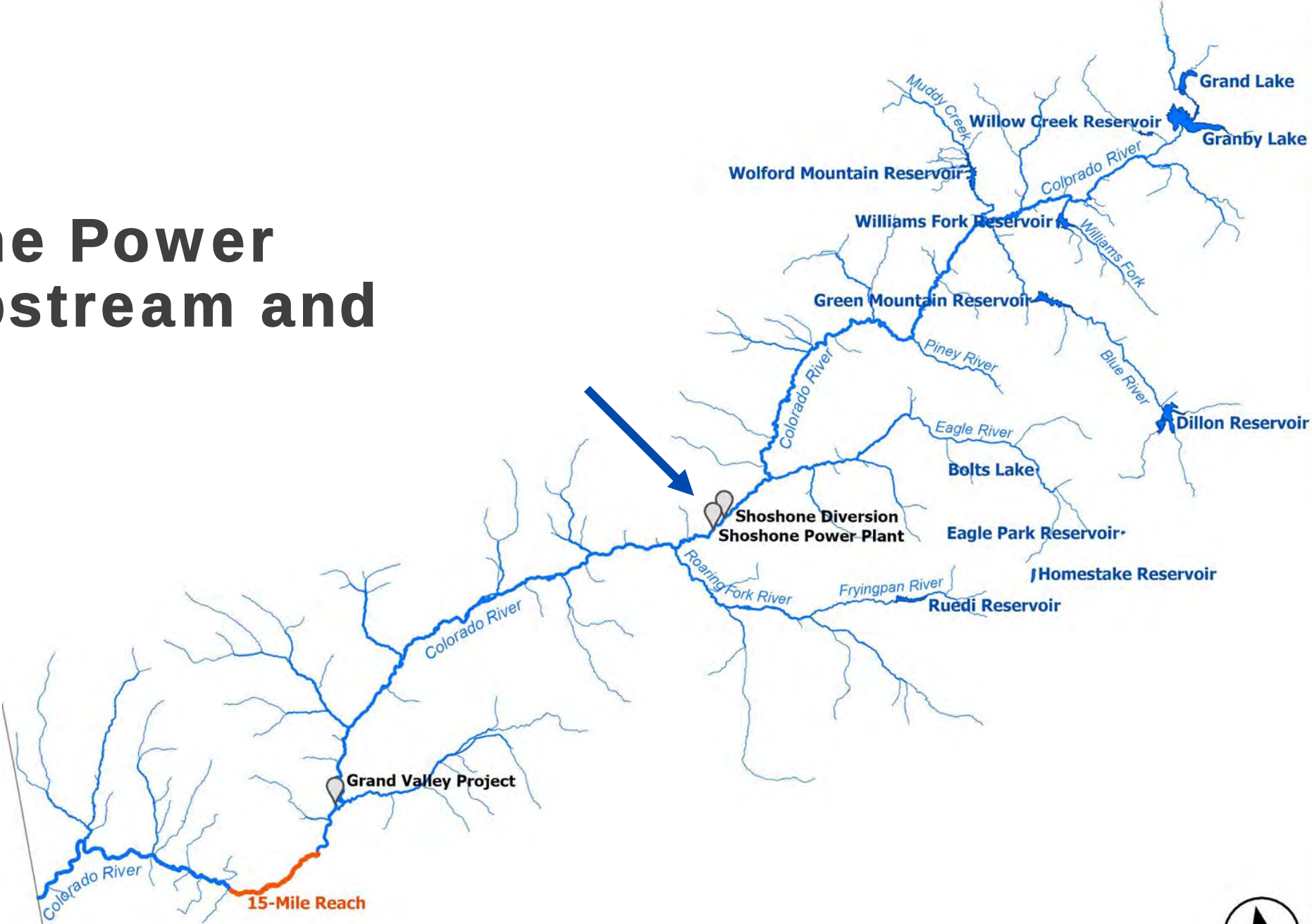


# ABOUT SHOSHONE WATER RIGHTS

- Large and senior non-consumptive rights on the Colorado River – 1250 cfs under a 1902 right & 158 cfs under a 1929 right
- Historical flow regime providing ecosystem, habitat, recreational, agricultural & economic benefits.
- Foundational to water management across the state.



# Shoshone Power Plant Upstream and Down



# The Shoshone Water Rights Preservation Project

## WILL

protect the historical flow regime  
of the river.

## WILL NOT

enlarge the Shoshone Water Rights.

The Western Slope is working to develop a solution that mimics the historical use of the Shoshone Water Rights to preserve the state of the river that we have known for the last 120 years.



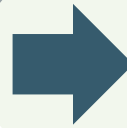
# A Coalition to Permanently Protect Shoshone's Flows

For over 20 years, the Colorado River District and a coalition of western Colorado governments and water entities have been working together to find a way to permanently preserve the Shoshone flows.

**2013**

## **Colorado River Cooperative Agreement Finalized**

Western slope entities, along with Denver Water, memorialize the need to protect the Shoshone flows.



**2023**

## **Purchase and Sale Agreement Signed**

In December 2023, the Colorado River District and Public Service Company of CO enter into an agreement to transfer ownership of the water rights for \$99 million.



# Purchase and Sale Agreement

Signed by Xcel Energy and Colorado River District in 2023 for \$99 million

Negotiating an Instream Flow Agreement between PSCo, CRD, and CWCB

Successful completion of a change case in water court

Anticipated Closing in 2027



Ongoing fundraising with support from local, state, and federal partners

Approval from Colorado's Public Utility Commission



**SHOSHONE**  
WATER RIGHT PRESERVATION

# SHOSHONE WATER RIGHT PRESERVATION COALITION

FINANCIAL COMMITMENTS  
- \$97 MILLION

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**BUREAU OF RECLAMATION  
STATE OF COLORADO  
COLORADO RIVER DISTRICT**

## MAINSTEM COUNTIES:

SUMMIT - GRAND - EAGLE  
GARFIELD - MESA - PITKIN

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- BASALT WATER CONSERVANCY DISTRICT
- CITY OF GLENWOOD SPRINGS
- CITY OF GRAND JUNCTION
- CITY OF RIFLE
- CLIFTON WATER DISTRICT
- CLINTON DITCH AND RESERVOIR COMPANY
- COLORADO MESA UNIVERSITY
- DE BEQUE SOIL CONSERVATION DISTRICT
- EAGLE RIVER WATER AND SANITATION DISTRICT
- EAGLE PARK RESERVOIR COMPANY
- GRAND VALLEY IRRIGATION COMPANY
- GRAND VALLEY POWER
- GRAND VALLEY WATER USERS ASSOCIATION
- KOBE WATER AUTHORITY
- MESA COUNTY IRRIGATION DISTRICT
- MIDDLE PARK WATER CONSERVANCY DISTRICT
- ORCHARD MESA IRRIGATION DISTRICT
- PALISADE IRRIGATION DISTRICT
- SNOWMASS WATER AND SANITATION DISTRICT
- TOWN OF BASALT
- TOWN OF DE BEQUE
- TOWN OF NEW CASTLE
- TOWN OF PARACHUTE
- TOWN OF SILT
- TOWN OF SILVERTHORNE
- UPPER EAGLE REGIONAL WATER AUTHORITY
- UTE WATER CONSERVANCY DISTRICT
- WEST DIVIDE WATER CONSERVANCY DISTRICT



**\$40M – Bureau  
of Reclamation**



**\$20M – State of  
Colorado**



**\$20M –  
Colorado River  
District**



**\$17M – 32 Local  
Partners**

**Over \$97  
million  
secured**



# 100+ SHOSHONE WATER RIGHTS PRESERVATION PROJECT SUPPORTERS



## **REGIONAL PARTNERS**

- ECONOMIC PARTNERSHIPS
- ENVIRONMENTAL & RECREATIONAL ORGS
- HIGHER EDUCATION & POWER PROVIDERS



## **GOVERNMENT & ELECTED OFFICIALS**

- STATE OF COLORADO ELECTED LEADERS
- COLORADO CONGRESSIONAL DELEGATION
- COLORADO BASIN ROUNDTABLES & CONSERVATION DISTRICTS
- FEDERAL AGENCIES



## **LOCAL GOVERNMENTS**

- COUNTIES
- MUNICIPALITIES



## **WATER PROVIDERS**

- IRRIGATION WATER
- DRINKING WATER





# Shoshone Reach

2.4 miles in Glenwood Canyon

## Termini:

Shoshone Diversion Dam  
(Hanging Lake)

Shoshone Power Plant



## Flows, Fish, and (fish) Food

- **Flows** - Elevated **reliable baseflows** in all year types, especially during the late irrigation season of dry years.
- **Fish** - Increased and **higher quality suitable habitat** for coldwater fish species and other regionally native fishes.
- **(fish) Food** - Improved flow conditions support a **healthy algae and macroinvertebrate community**.

## Enclosure F. River District Technical Memo

Attachment 5. 2024 Miller Report

Attachment 6. 2025 Ecosystem Report.

*Protecting the historical flow regime created by the Shoshone Water Rights will preserve and improve the natural environment of the Shoshone reach to a reasonable degree.*



On the mainstem and tributaries,  
the **State of Colorado** currently  
**holds:**

350 ISF decreed water rights **upstream** of the  
Shoshone Power Plant.

120+ ISF decreed water rights **downstream**  
of the Shoshone Power Plant.

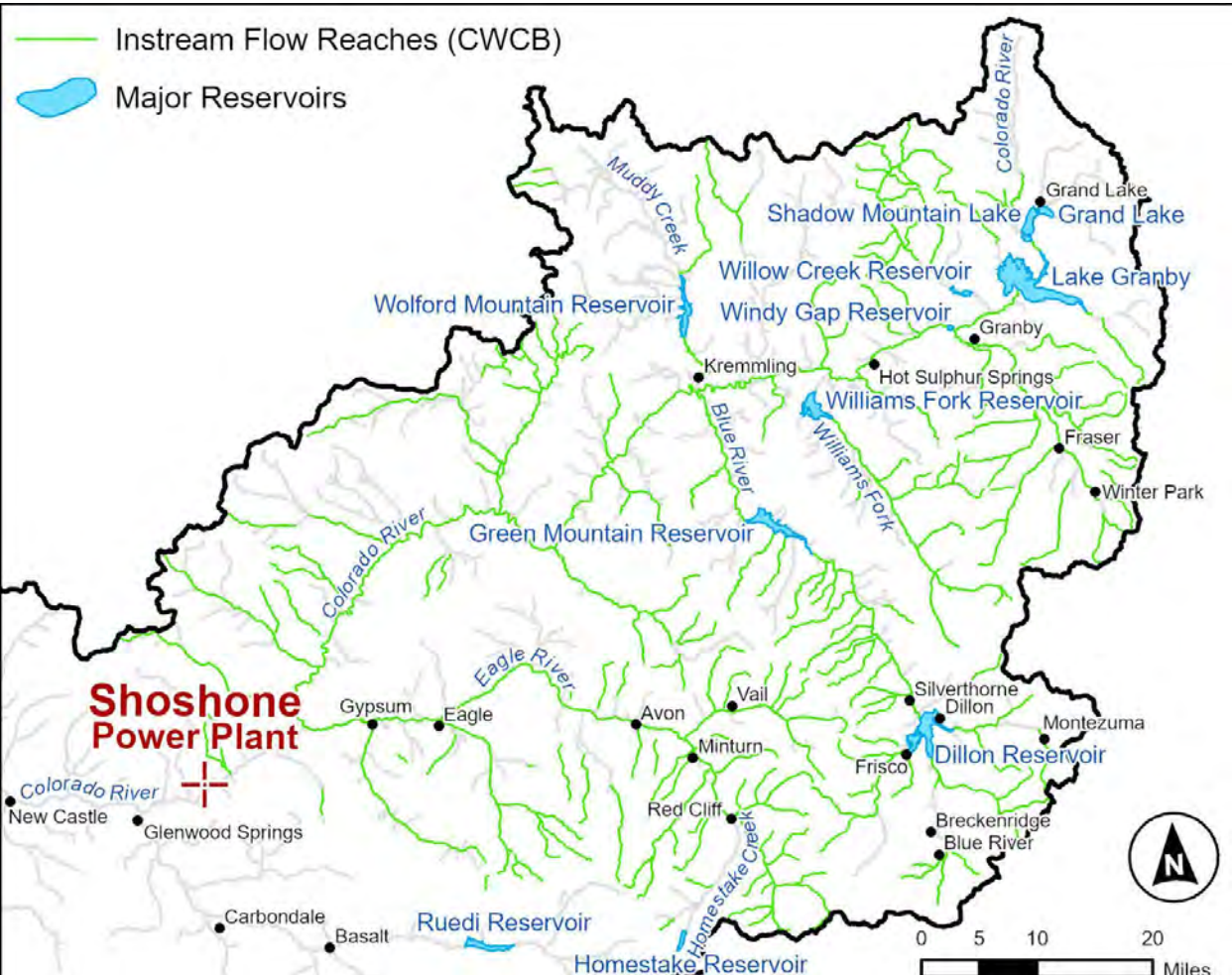
Because the Shoshone Water Rights  
can command flows on a **year-round**  
**basis**, the benefits they provide to  
ISF reaches include:

Mitigating high temperatures and other  
stressors **especially during late summer**  
**and early fall.**

Supporting upstream reaches in meeting  
**target flows.**

**Enclosure F. River District Technical Memo**  
**Attachment 13.** Shoshone Water Rights Analysis on Decreed  
Instream Flow Reaches in the Colorado River Watershed

*In coordination with CWCB, CRD also led an effort to review  
the benefits of the Shoshone Water Rights to current Instream  
Flow Reaches.*



Upper Colorado River Wild and Scenic Stakeholder Group lists the continuation of the Shoshone Water Rights as a long-term protection measure of the streamflow-influenced Outstandingly Remarkable Values.

## Enclosure F. River District Technical Memo

Attachment 7. USFS-BLM Report  
Biological & Recreational  
Resources Dependent on Colorado  
River Flows Through Glenwood  
Canyon





HAER No. CO-5-17

## IMPORTANCE OF HISTORICAL USE

Historical use is a required part of the water right change case to ensure there is no enlargement of the water rights and no injury to other water users.





## **Sustains River Health**

Maintains water levels essential for aquatic ecosystems.



## **Strengthens Communities and Economies**

Protects flows and fishing habitats that support Colorado's \$18.8 billion recreation industry and countless small businesses.



## **Enhances Water Quality**

Ensures cleaner drinking water for communities by diluting salinity and sediment.



## **Secures Agriculture**

Supports critical irrigation flows for farmers and ranchers, bolstering Colorado's \$47 billion agricultural economy, which includes 90% family-owned farms and ranches.





# SHOSHONE

WATER RIGHT PRESERVATION

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**COLORADO RIVER DISTRICT**  
PROTECTING WESTERN COLORADO WATER SINCE 1937



**Xcel Energy®**

# Water Division 5

## Mainstem Colorado River Administration

James R. Heath, P.E.  
Division Engineer

May 21, 2025

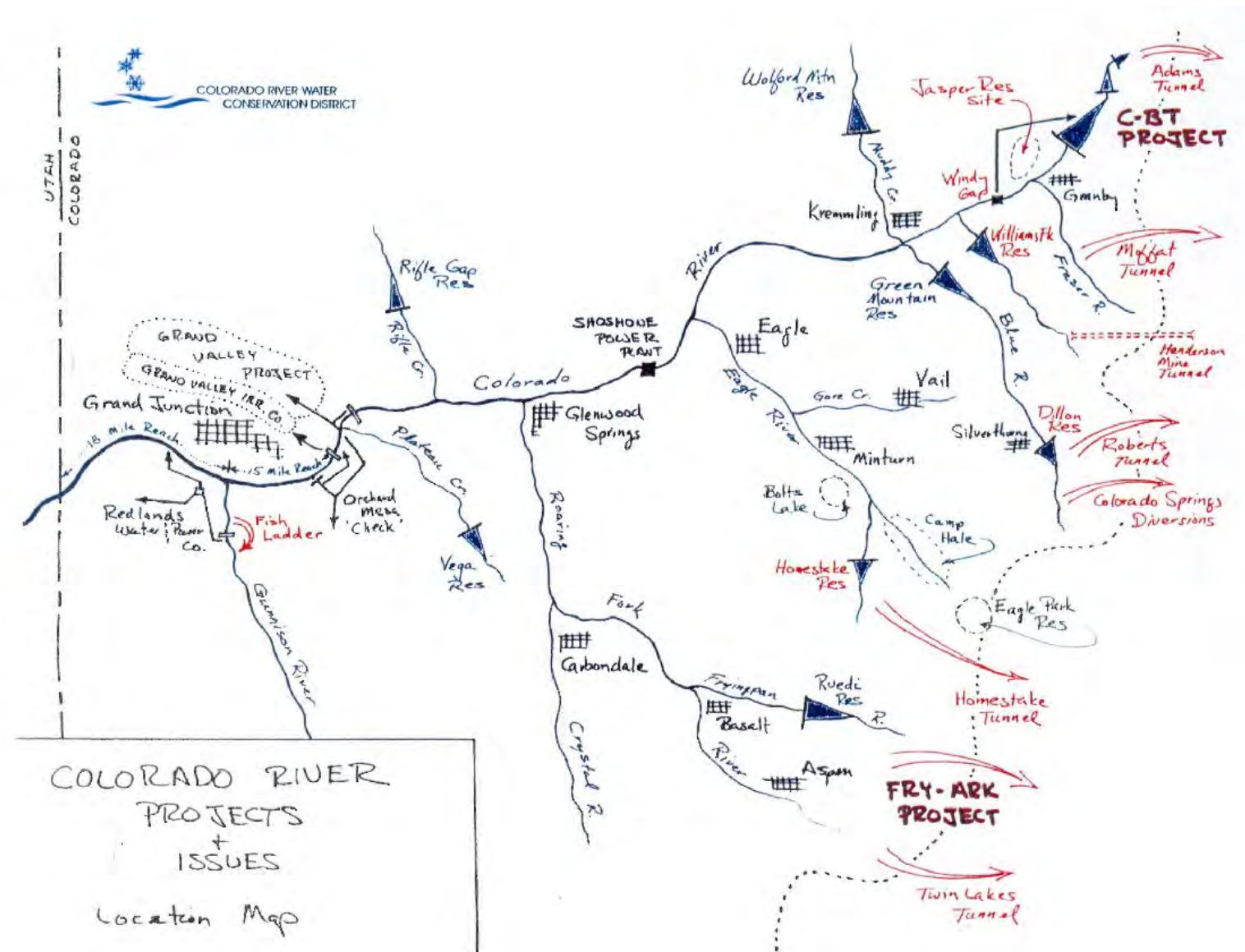


# Presentation Outline

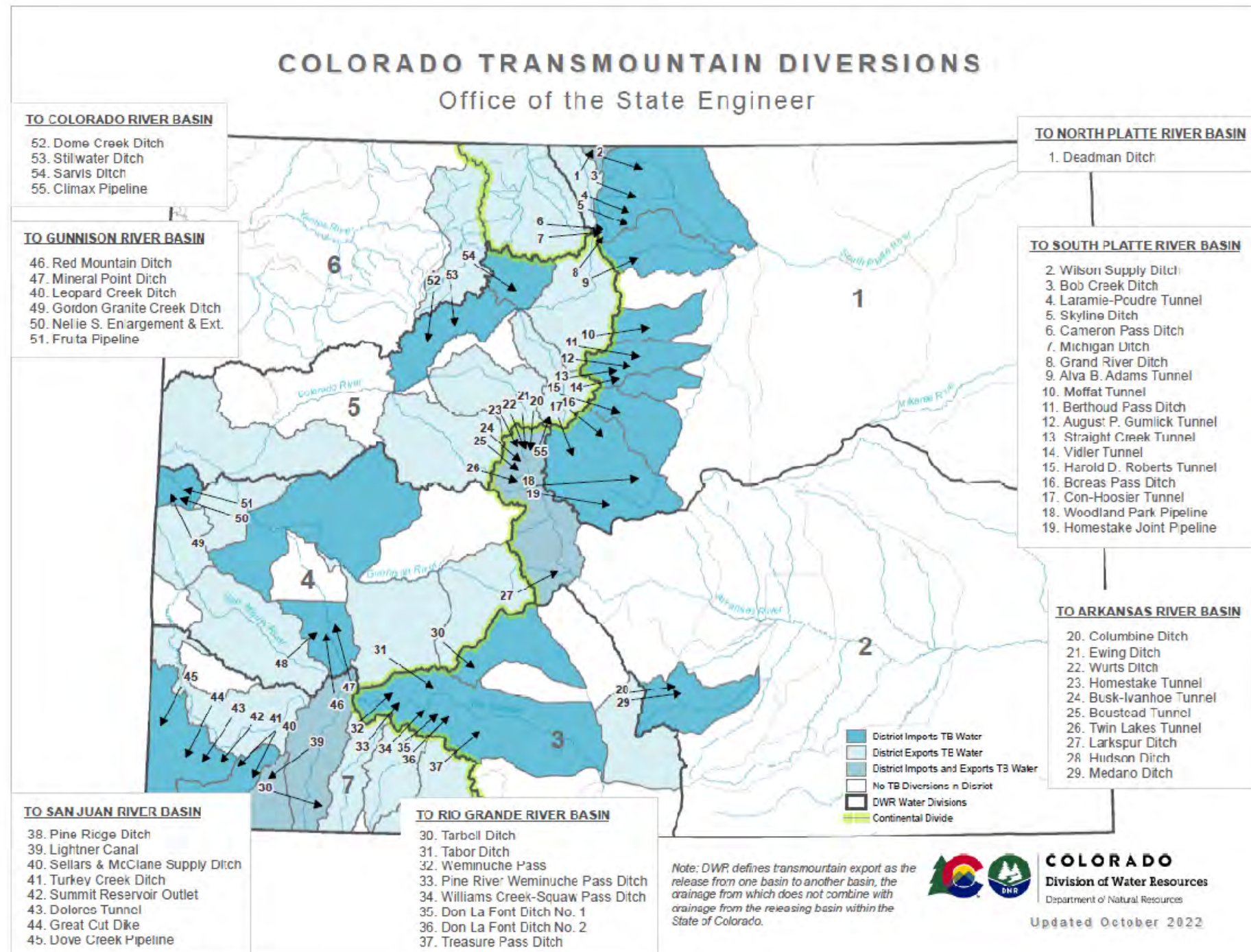
- Key Drivers of Mainstem Administration Within Division 5
- Shepherding Water Around the Call

# Key Drivers Within Division 5

- Large Transmountain Diversions
- Large Reservoirs
- Large Calling Water Rights
- Upper Colorado River Endangered Fish Recovery Program (15 Mile Reach)



# Key Drivers – Large Trans- mountain Diversions

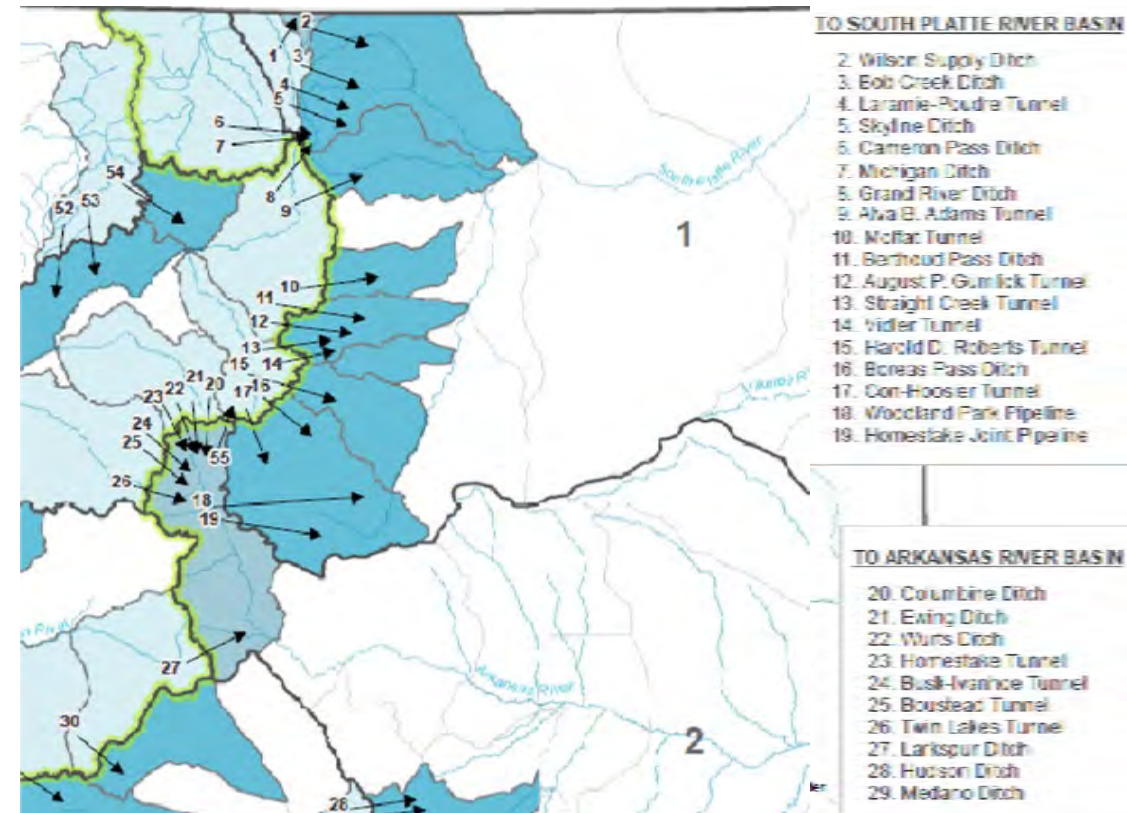


# Key Drivers - Large Transmountain Diversions

## ➤ 17 Transmountain Diversions

## ➤ Last 30 Year Average Diversions:

- Nearly 500,000 AF/yr
- 361,000 AF/yr – South Platte River Basin
- 137,000 AF/yr – Arkansas River Basin



# Key Drivers - Large Reservoirs

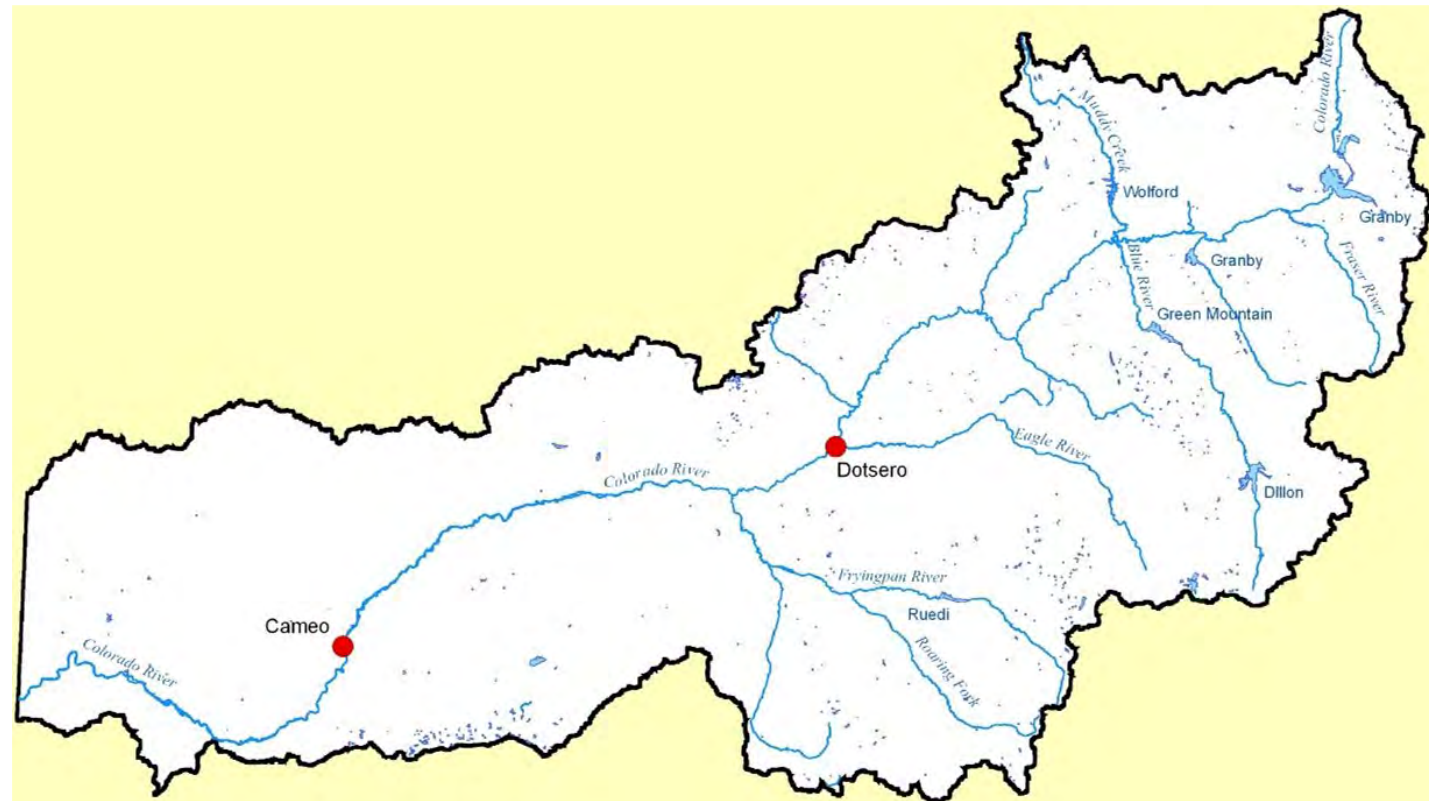
# Key Drivers - Large Reservoirs

- Large reservoirs typically are related to transmountain diversions and operate as:
  - Storage on the West Slope prior to being released through a tunnel
  - Augmentation supply to allow the diversions to continue out of priority
  - Compensatory storage for West Slope water users

# Key Drivers - Large Calling Water Rights

➤ Large calling water rights are generally senior to the transmountain diversions and reservoirs:

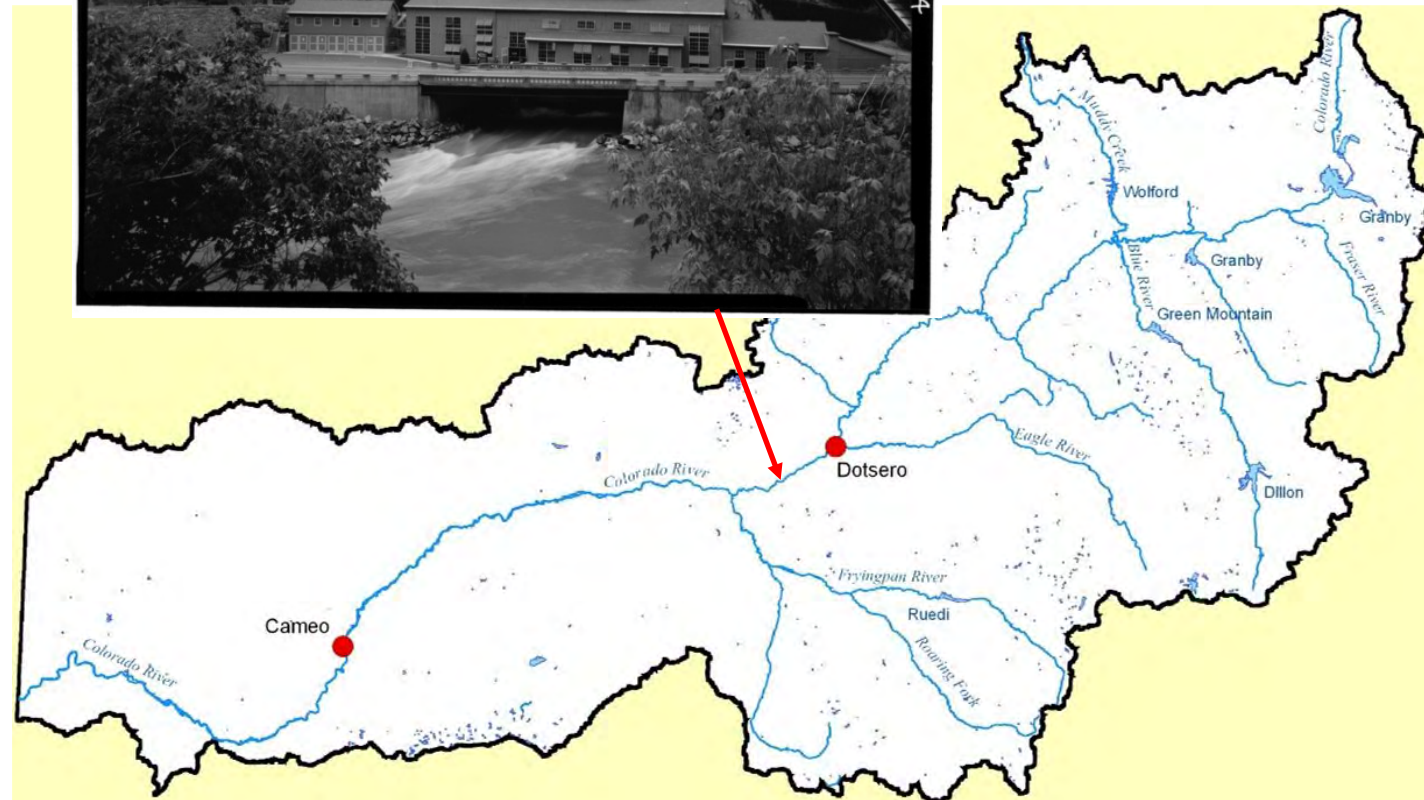
- Shoshone Power Plant (Shoshone call)
- Grand Valley Irrigators (Cameo call)



# Key Drivers - Large Calling Water Rights

## ➤ Shoshone Power Plant

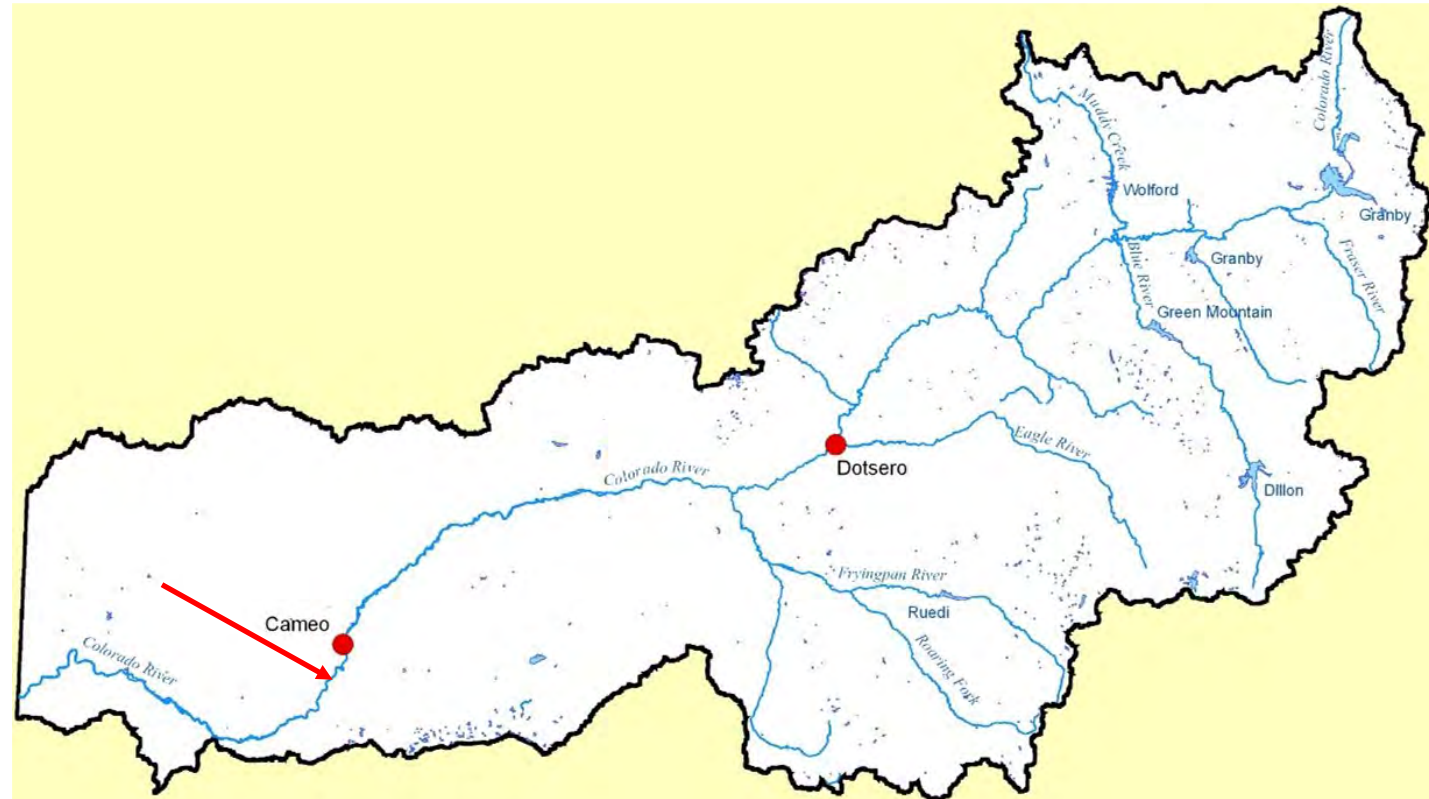
- 1250 cfs 12/05/1905 priority
- 158 cfs 5/31/1940 priority
- 1408 cfs total
- Year-round call for hydropower



# Key Drivers - Large Calling Water Rights

## ➤ Grand Valley Irrigators

- Grand Valley Water Users Association
- Orchard Mesa Irrigation District
- Mesa County Irrigation District
- Palisade Irrigation District
- Grand Valley Irrigation Company





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Department of Natural Resources

# Water Rights

➤ 1,950.48 cfs of total water rights that can call after Check Case stipulation

## Grand Valley Demand by Priority

| Owner                                        | Amount                          | Adj. Date            | Approp. Date         |
|----------------------------------------------|---------------------------------|----------------------|----------------------|
| Grand Valley Irrigation Company              | 520.81                          | 7/22/1912            | 8/22/1882            |
| Palisade Irrigation District <sup>3</sup>    | 80.0                            | 7/22/1912            | 10/1/1889            |
| Orchard Mesa Irrigation District             | 10.2                            | 7/22/1912            | 10/1/1900            |
| Mesa County Irrigation District <sup>4</sup> | 40.0                            | 7/22/1912            | 7/6/1903             |
| Orchard Mesa Irrigation District             | 450.0                           | 7/22/1912            | 10/25/1907           |
| Grand Valley Water Users Assoc.              | 730.0                           | 7/22/1912            | 2/27/1908            |
| <del>United States of America</del>          | <del>400/800 <sup>1</sup></del> | <del>7/25/1941</del> | <del>2/27/1908</del> |
| Grand Valley Irrigation Company              | 119.47                          | 7/25/1941            | 4/26/1914            |
| Palisade Irrigation District                 | 23.5 <sup>2</sup>               | 7/25/1941            | 6/1/1918             |

<sup>1</sup> Hydro-power generation right for 400 cfs during the irrigation season and 800 cfs during the non-irrigation season. Limited to 310 cfs based on canal capacity at full irrigation demand.

<sup>2</sup> Diverted only when space is available in Tunnel No. 3 of the Highline Canal

<sup>3</sup> Palisade Irrigation District, aka Price Ditch

<sup>4</sup> Mesa County Irrigation District, aka Stubbs Ditch

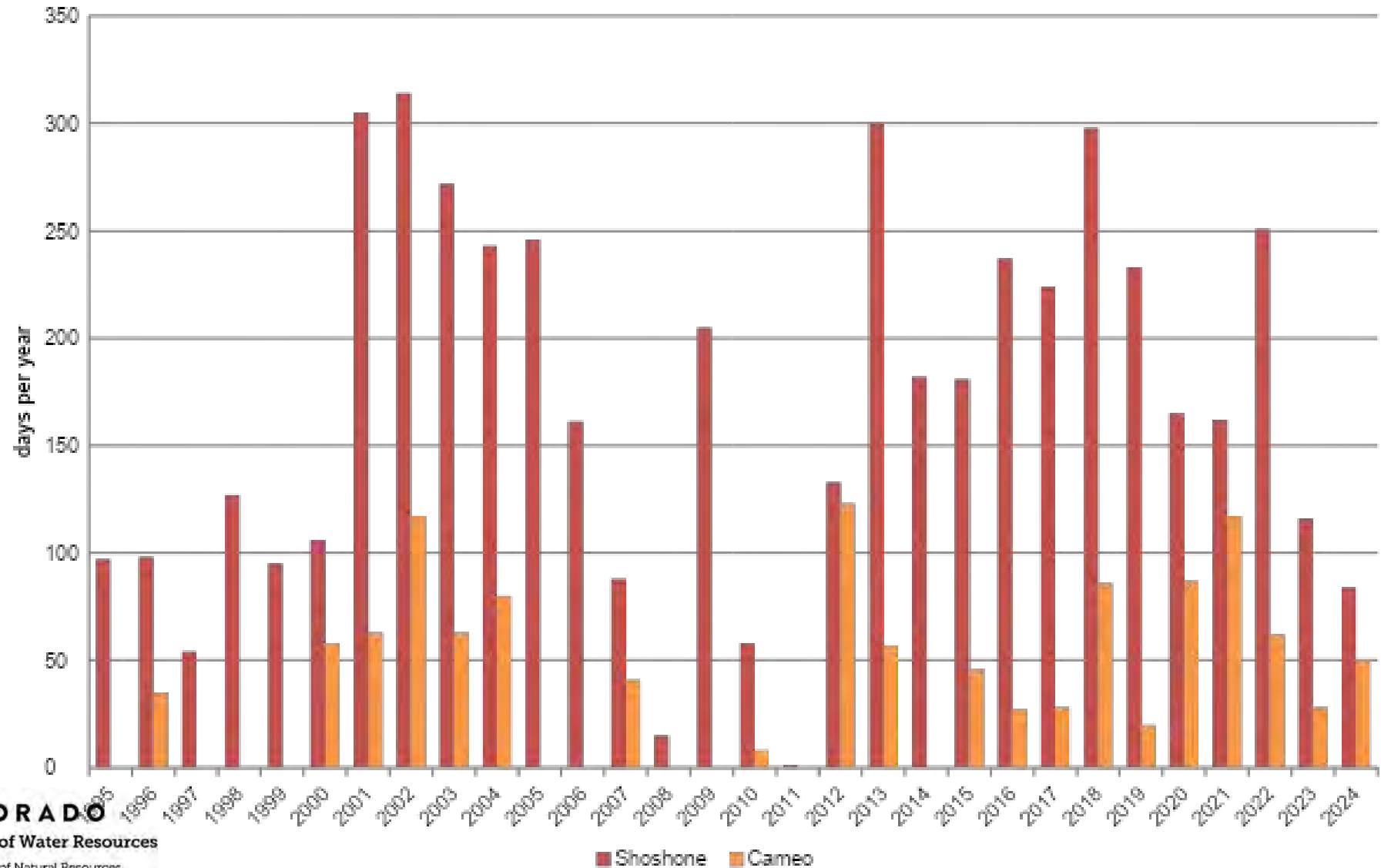
Highline Canal  
GVIC Canal  
OMID Canal



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# Key Drivers - Large Calling Water Rights

## Colorado River Mainstem Annual Call Days



# Key Drivers – Upper Colorado River Endangered Fish Recovery Program

➤ Bonytail



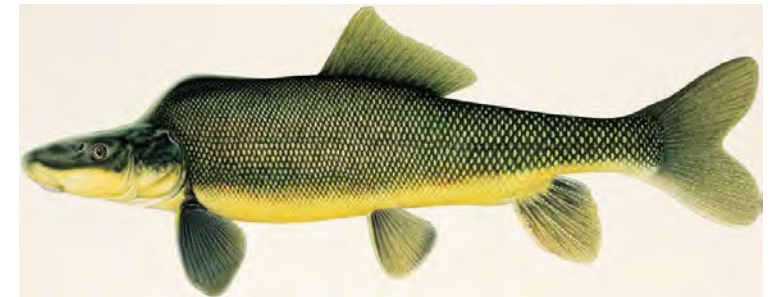
➤ Colorado Pikeminnow



➤ Humpback Chub



➤ Razorback Sucker

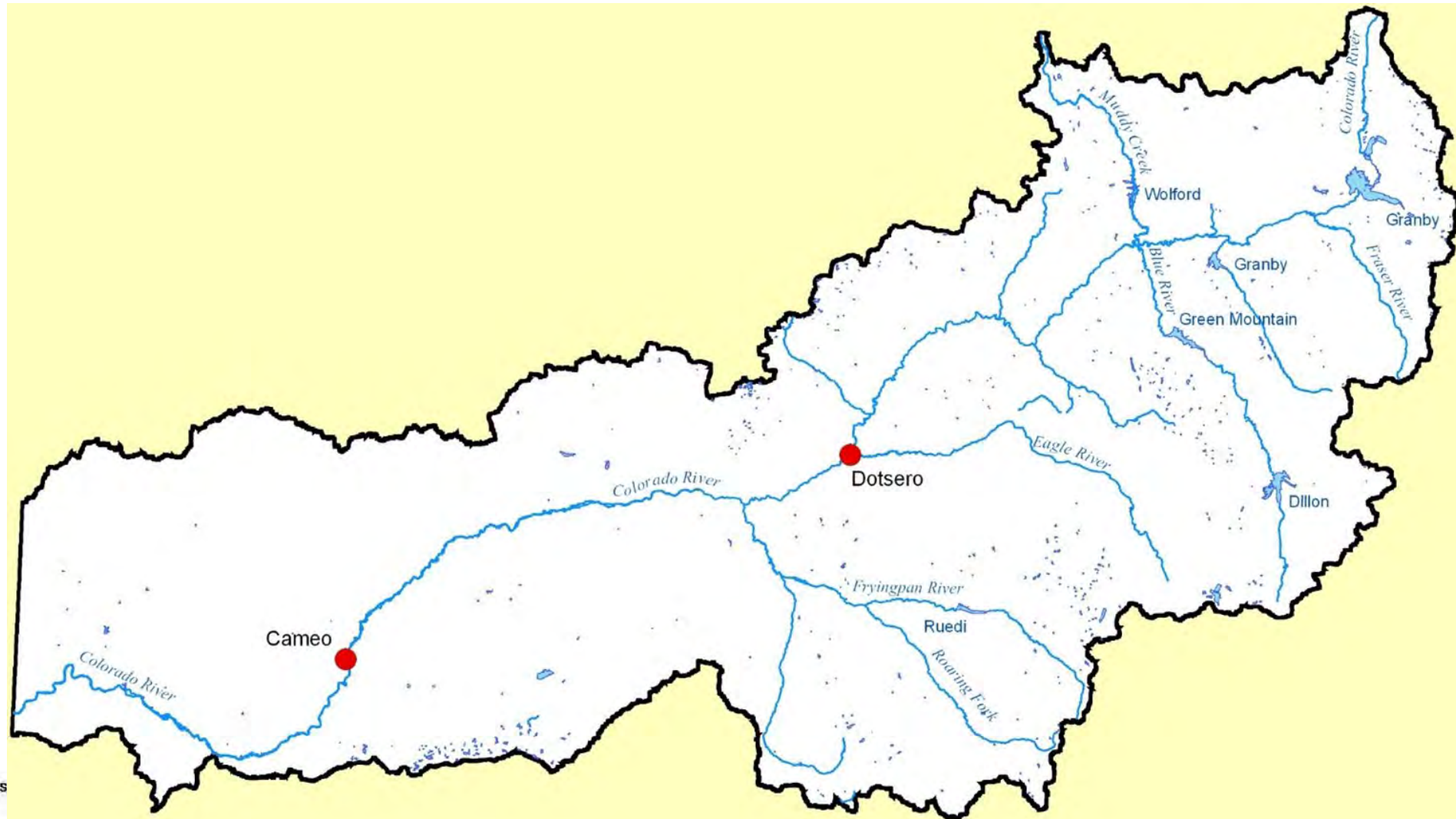


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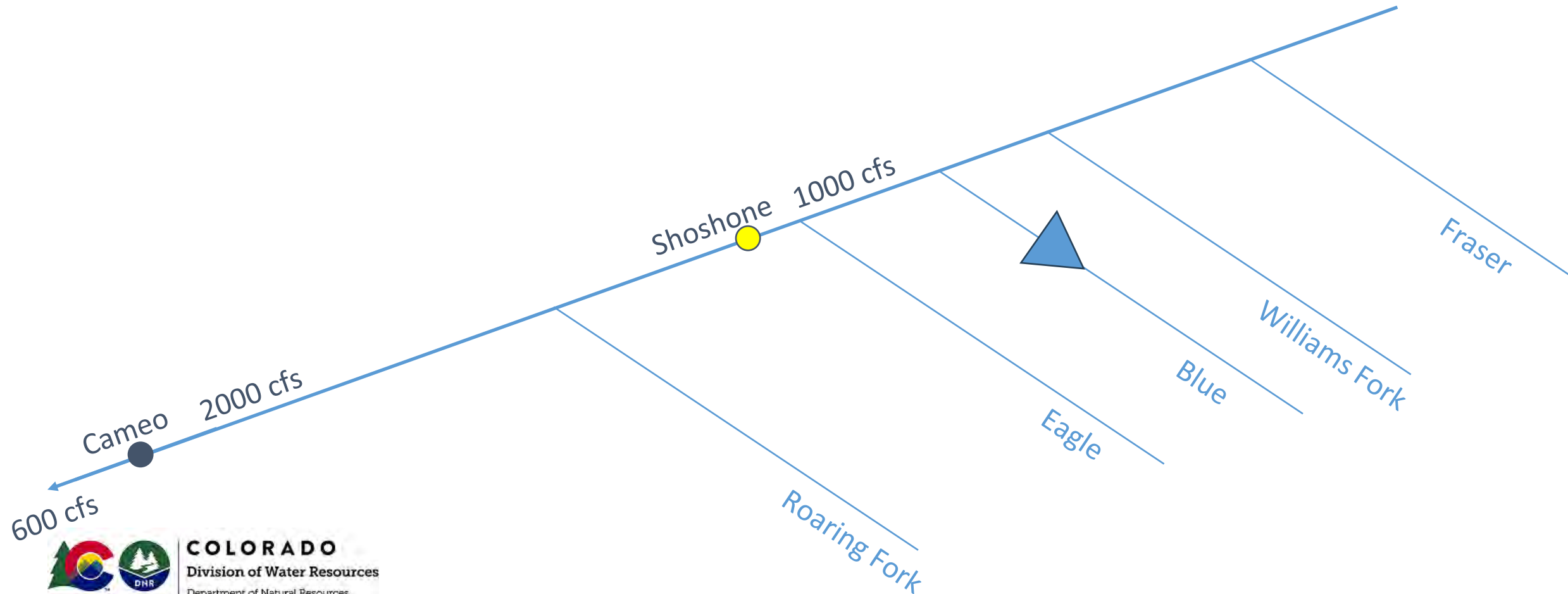
- Primary habitat focus on the Colorado River mainstem in Colorado is the 15-Mile Reach – from the Orchard Mesa tailrace to the Gunnison River confluence.



# Shepherding Water Around the Call



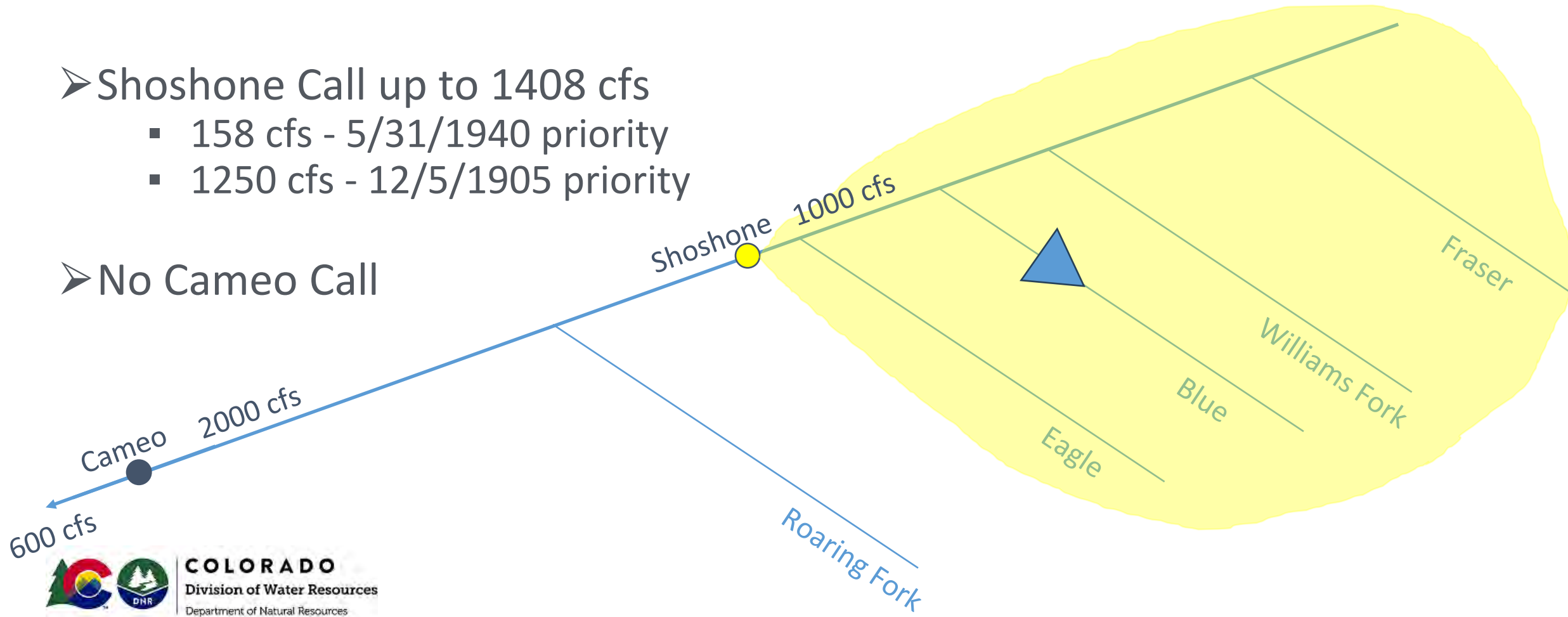
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  - 158 cfs - 5/31/1940 priority
  - 1250 cfs - 12/5/1905 priority

- No Cameo Call



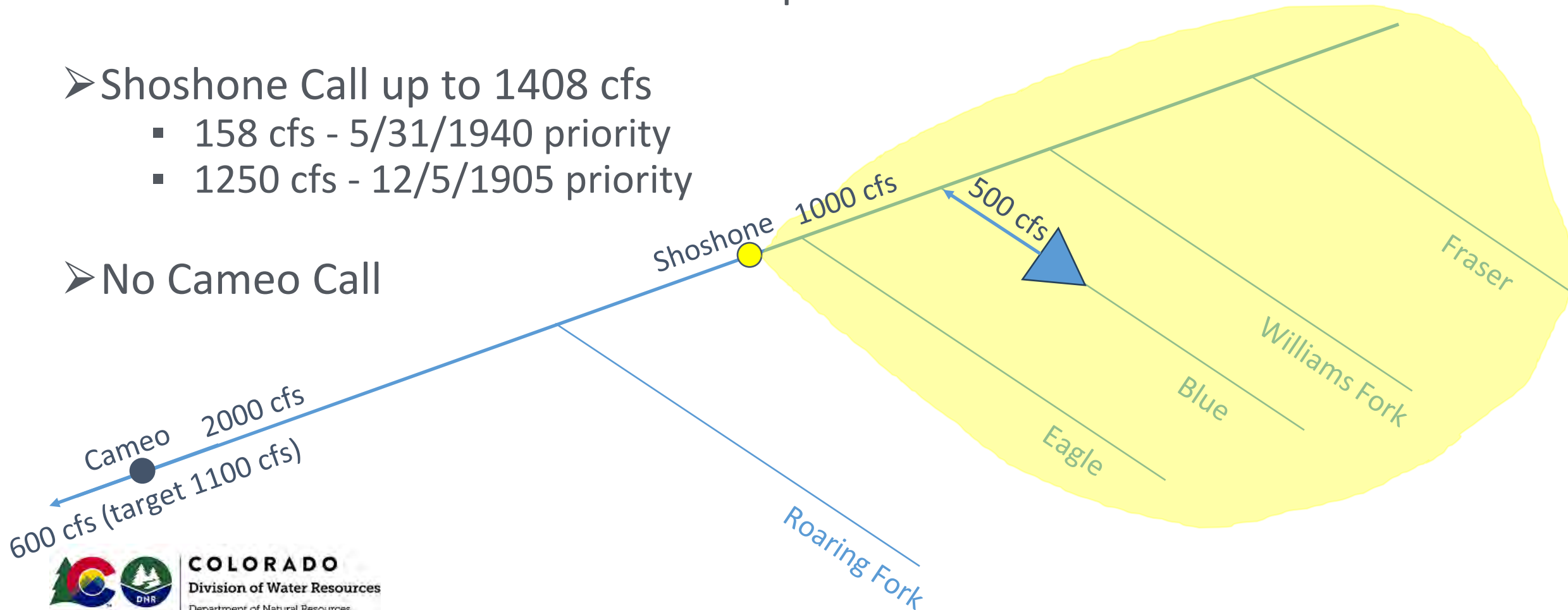
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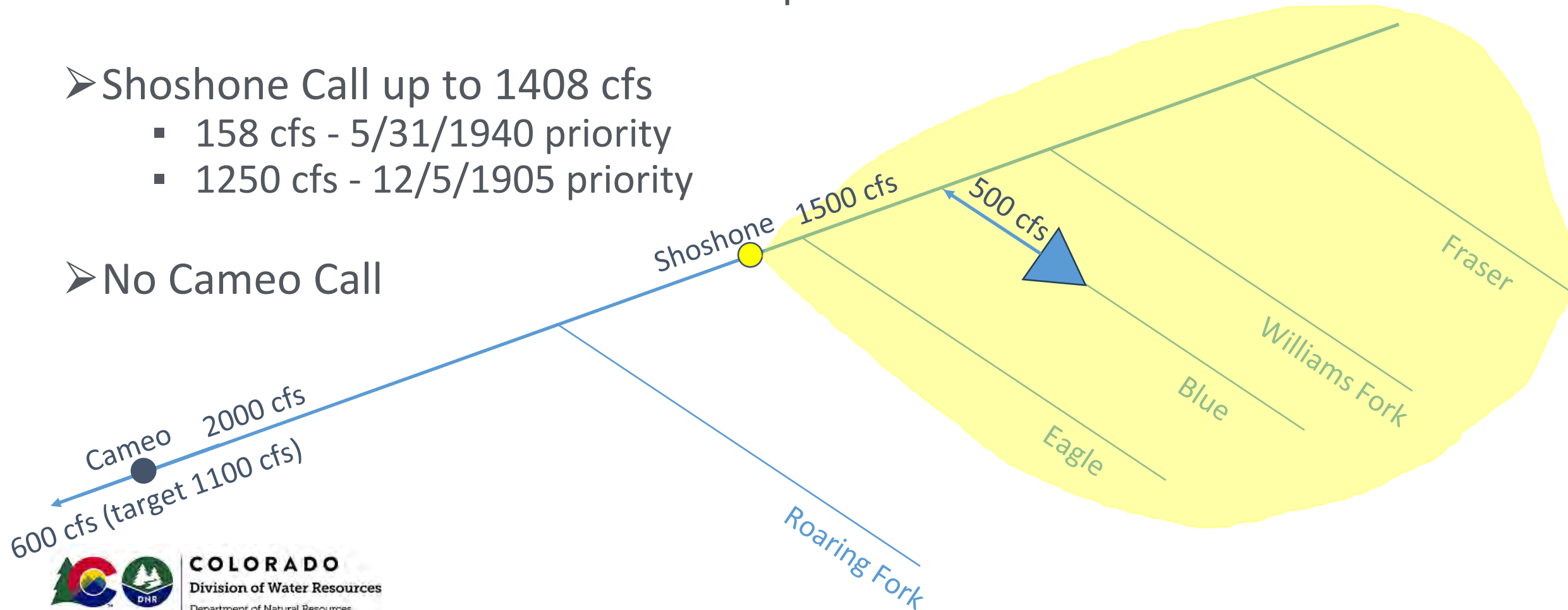
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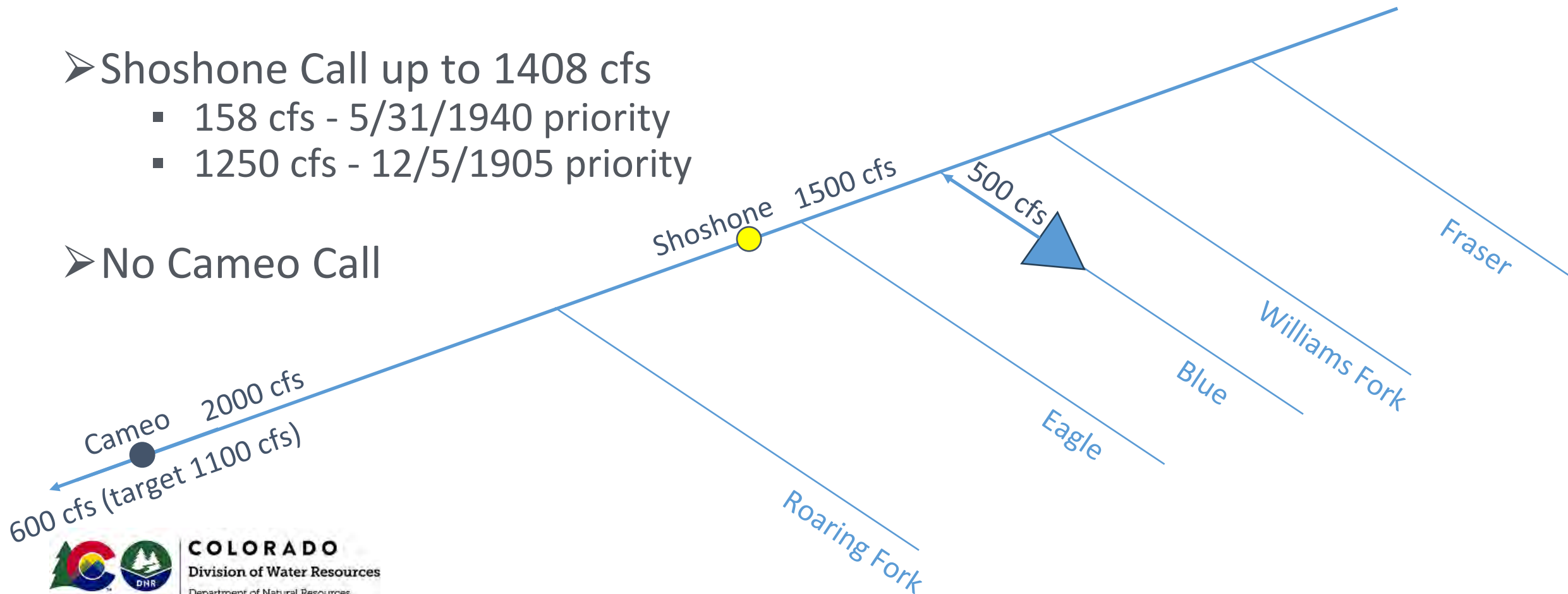
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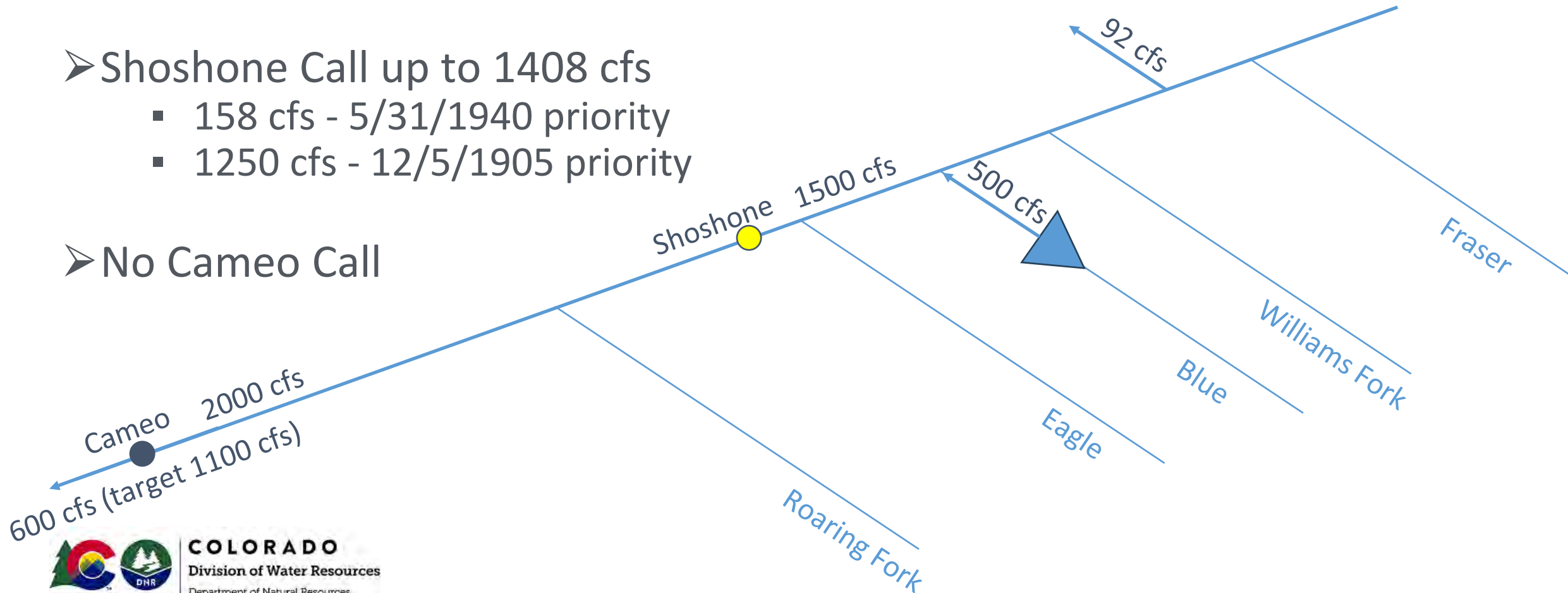
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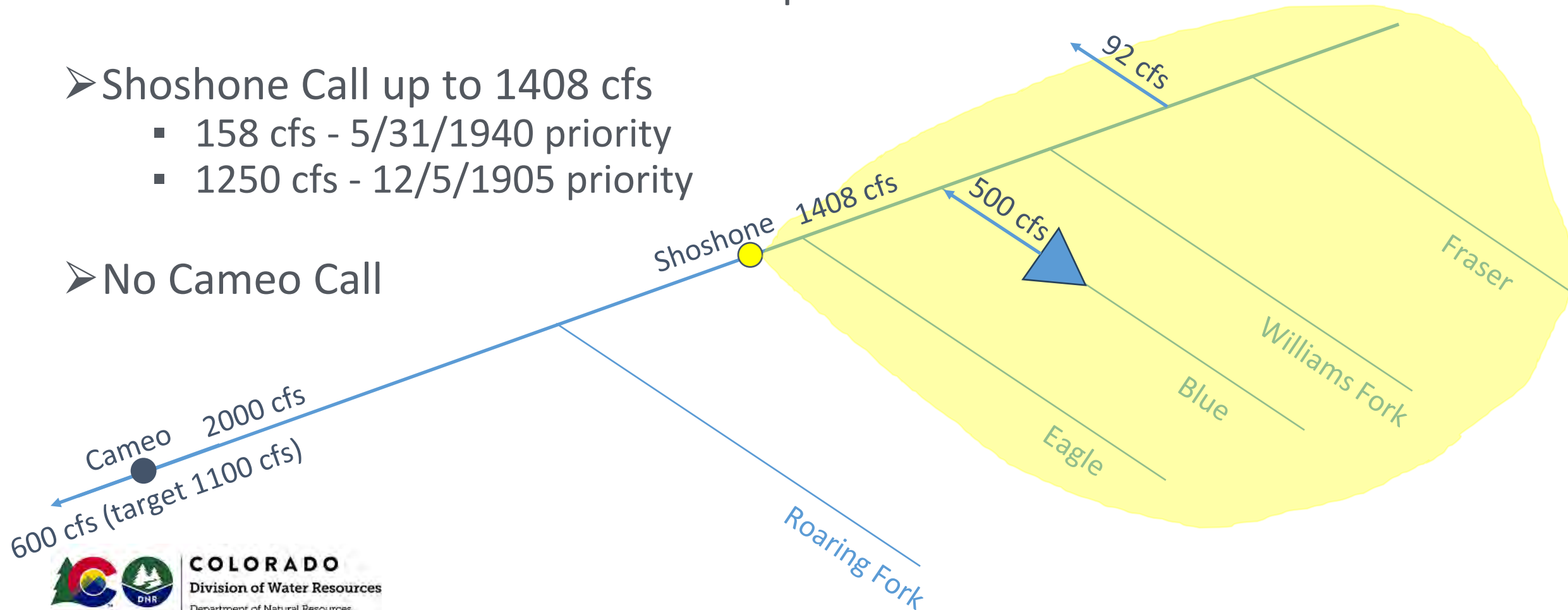
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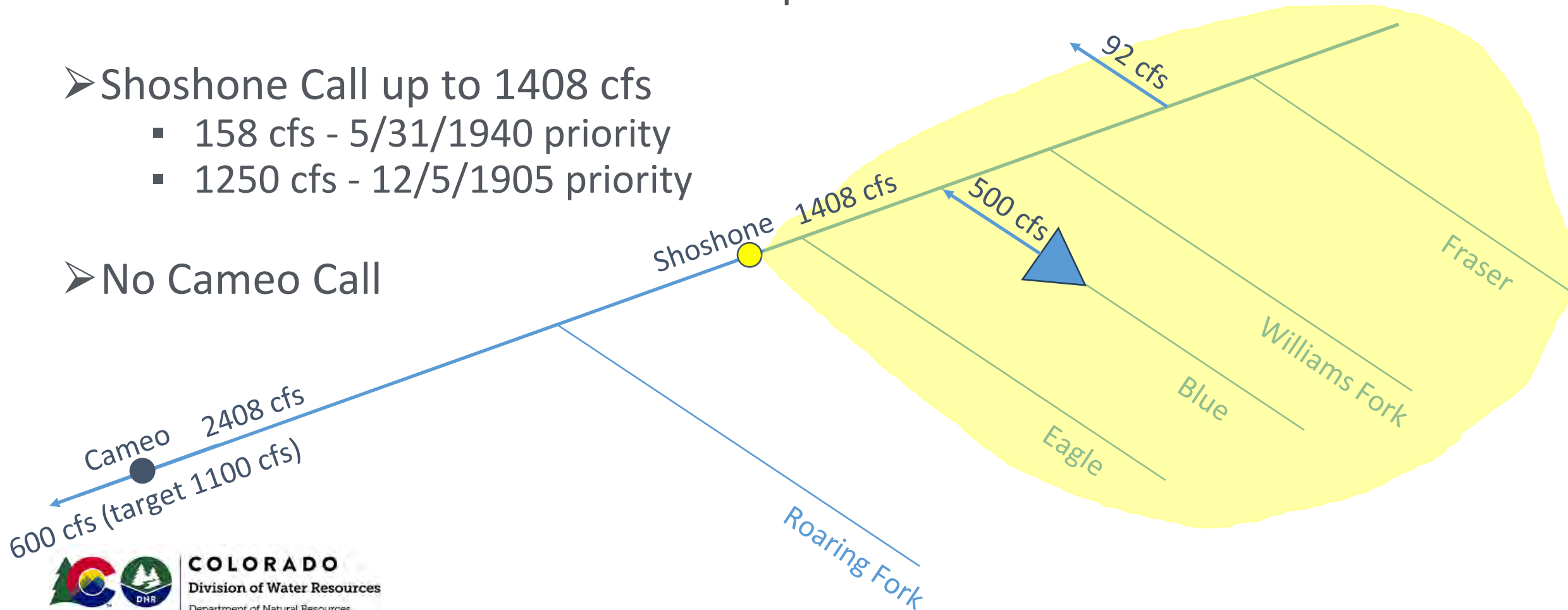
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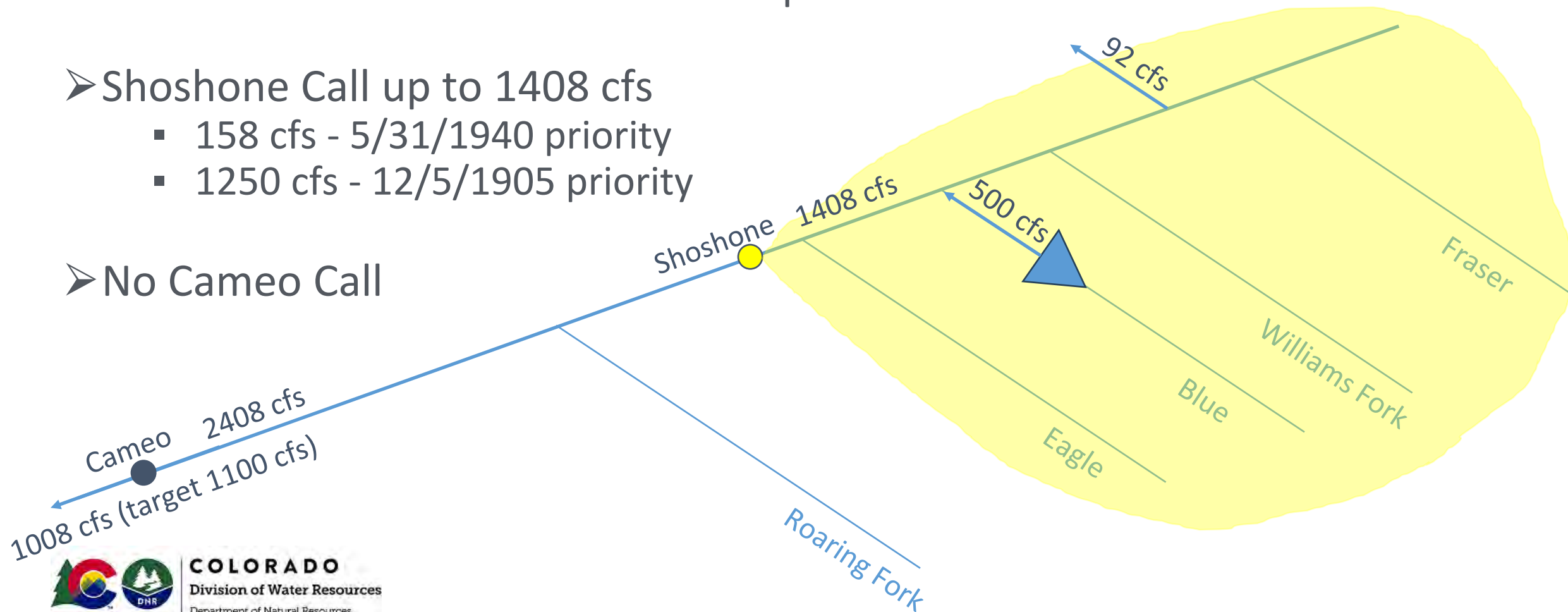
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# Shepherding Water Around the Call

- By not shepherding the reservoir water around the call, the intended benefit of the reservoir release does not occur.
  - Adding more water from the reservoir will only allow for more diversions above the call.

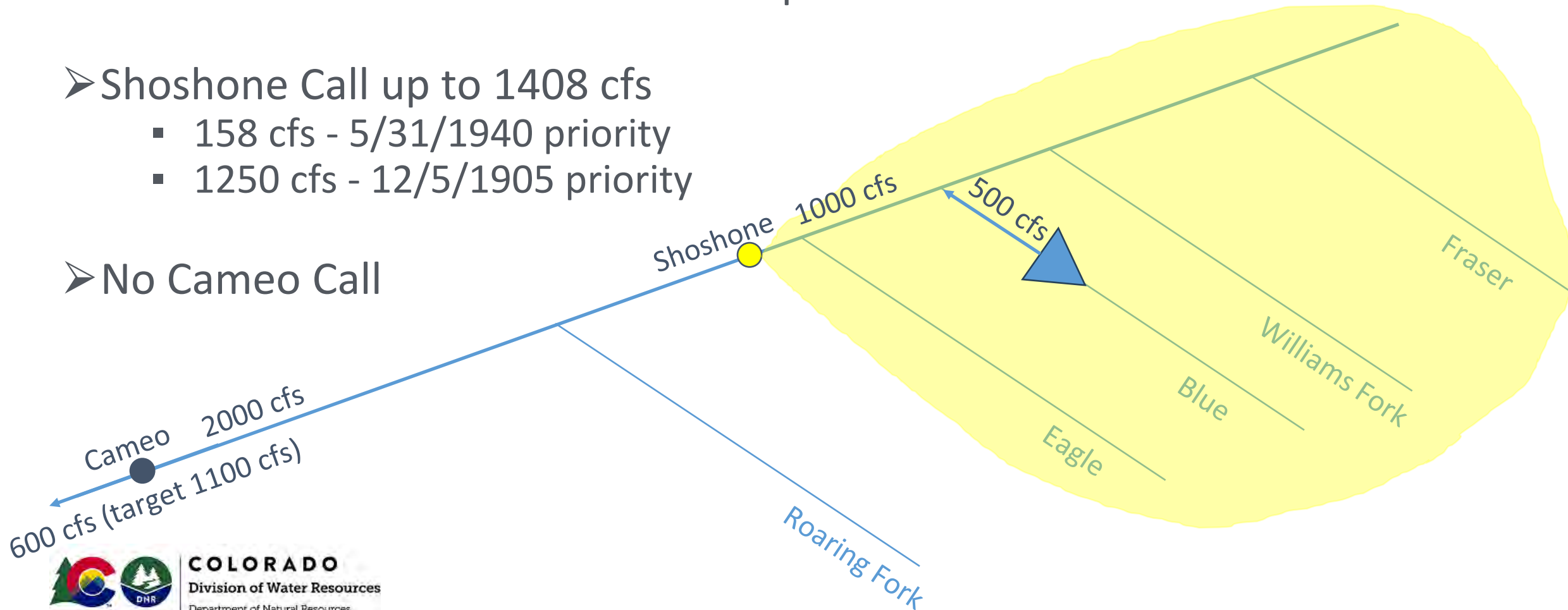
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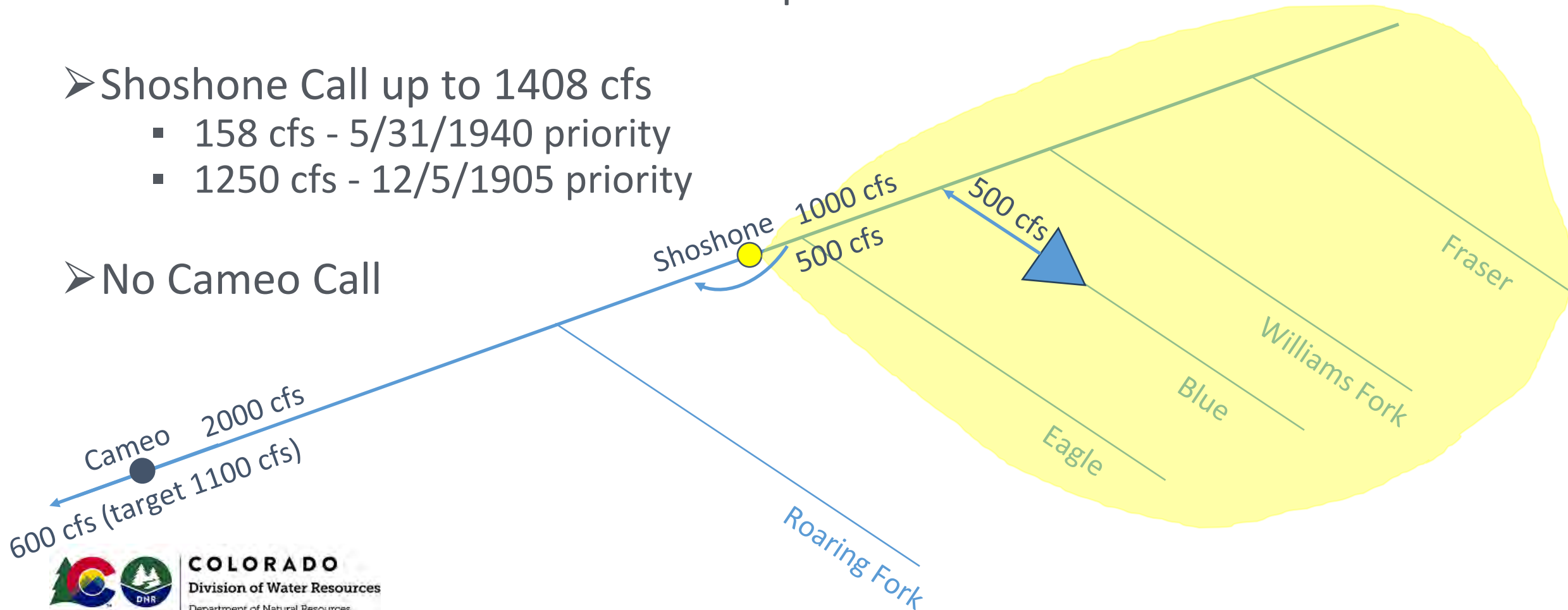
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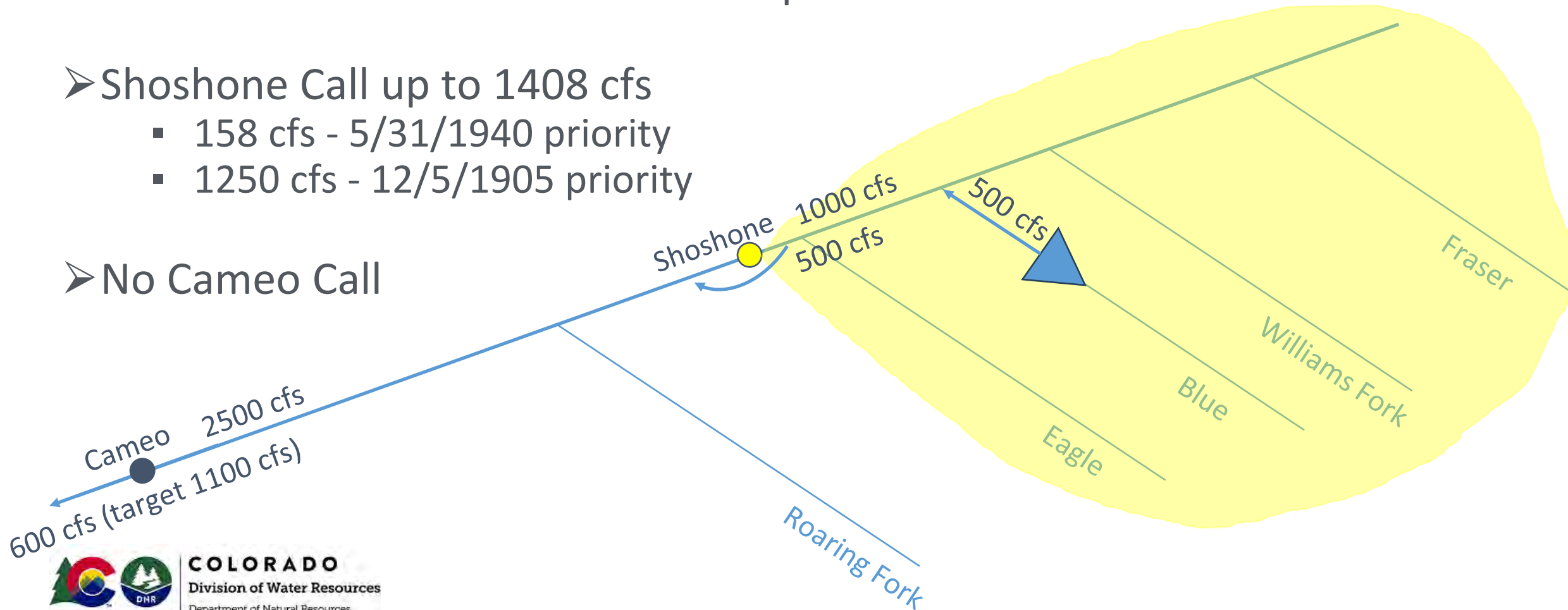
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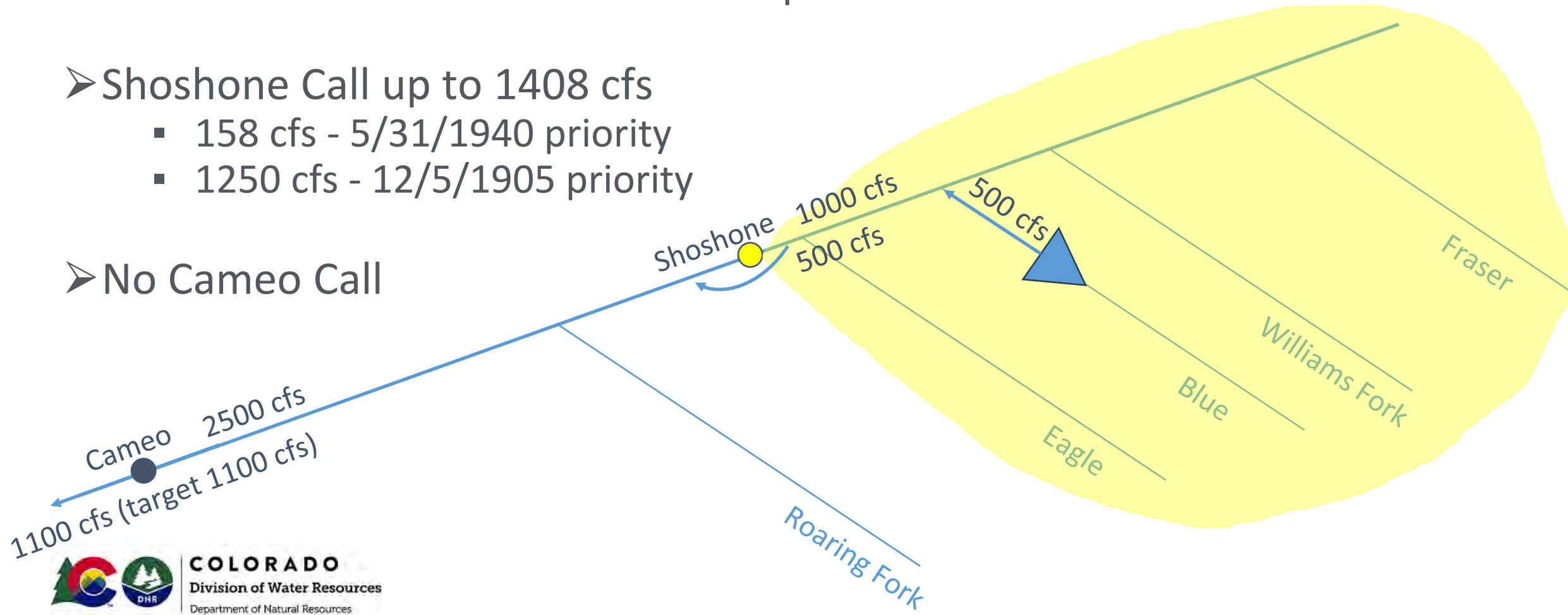
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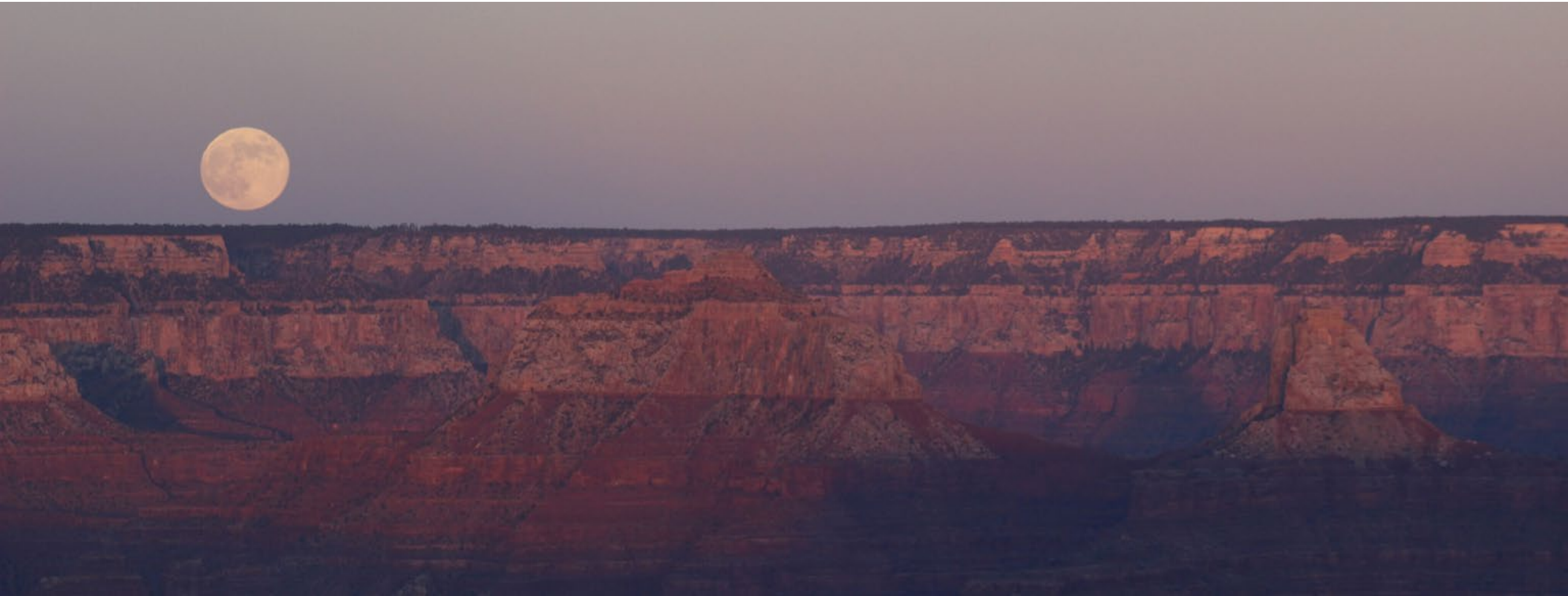
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# Shepherding Water Around the Call

- By shepherding the reservoir water around the call, the intended benefit of the reservoir release occurs.

# Questions?



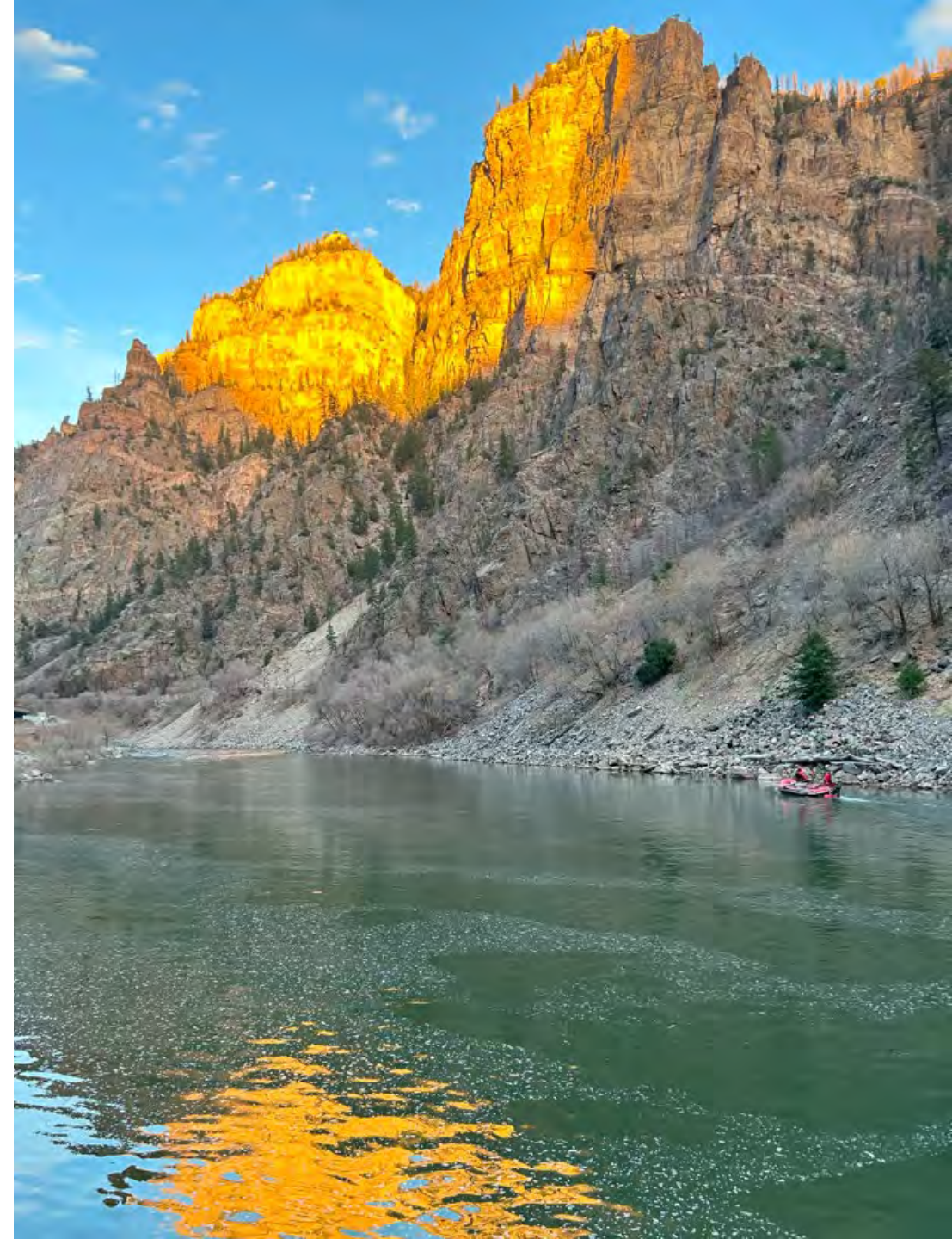
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Department of Natural Resources

# APPROPRIATENESS OF AN ACQUISITION

The Board shall evaluate the appropriateness of any acquisition of water, water rights, or interests in water to preserve or improve the natural environment. Such evaluation shall include but need not be limited to consideration of several factors to be covered today.



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# ISF Rule 6, Factors 1, 2, & 5 - Reach, Flow Regime, & Natural Environment

- No existing ISF water rights in the 2.4 mile Shoshone Reach
  - running through central part of Glenwood Canyon, which is
  - nearly 15 miles between 2,500 ft high walls of sedimentary rock
- From Rocky Mountain National Park
  - Origins along the continental divide @14,300 feet
  - Colo River flows 166 miles to the Shoshone plant, 4,470 sq mile basin
- Natural snowmelt runoff regime
  - significant flow alteration due to diversions
- The Shoshone Reach in Glenwood Canyon supports a high-quality fishery.
- This acquisition will restore habitat to this reach to preserve and improve the natural environment to a reasonable degree



# Shoshone ISF Acquisition – CPW Recommendation



Kendall Bakich, Aquatic Biologist

Katie Birch, Instream Flow Program Coordinator



# Colorado Parks & Wildlife

- Title 33: It is the policy of the state of Colorado 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.
- CPW's Mission: The mission of Colorado Parks and Wildlife is to perpetuate the wildlife resources of the state, to provide a quality state parks system, and to provide enjoyable and sustainable outdoor recreation opportunities that educate and inspire current and future generations to serve as active stewards of Colorado's natural resources.



# Colorado River - A Canyon Bound River

## Rivers in the Intermountain West

- Rivers flowing through semi-arid to arid environments provide otherwise limited resources that are vital for people and ecosystems.
- River ecosystems evolved around spatially and temporally available resources.

## Confined River Characteristics

- Constrained narrow channels
- High gradient drops
- Deep pools
- Complex rock formations



**DIVERSE AQUATIC HABITATS**

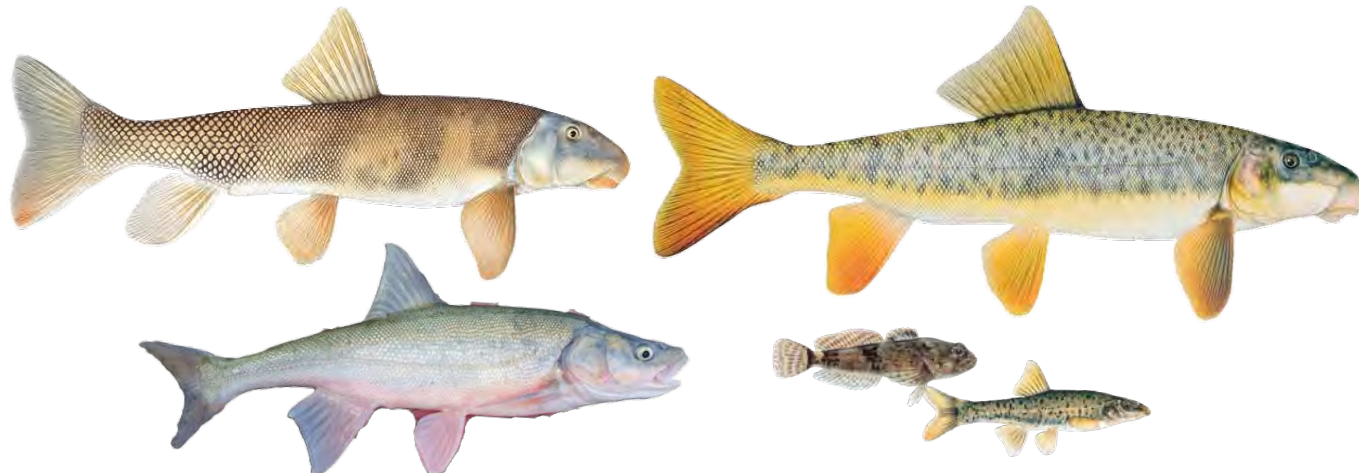


# CPW Aquatic Management - Colorado River

## *Colorado River Sportfishes*



## *Colorado River Native Fishes*



## **Aquatic Priorities**

*CPW Administrative Directive: OW-8*

1. Assure **long-term health of aquatic systems**, including both habitat and fisheries.
2. Provide **recreational fishing** to **contribute to Colorado's economy**.
3. **Conserve and recover** native aquatic species.
4. **Maintain environmental integrity** and **naturally reproducing fish populations**.

# Colorado River - Glenwood Canyon Area

## Fishery Survey Reaches



# Colorado River - Glenwood Canyon Area

## Resident Fishes



# Native Colorado River Species

- Colorado River Natives - The “Three Species”
  - Bluehead Sucker • Flannelmouth Sucker • Roundtail Chub
  - Uniquely adapted to western river systems
- Colorado’s Conservation Plans
  - **State Wildlife Action Plan** (2015)
  - Three Species - Tier 1 (Greatest Conservation Need)
- Three Species Conservation Strategy & Agreement
  - Cooperative agreement with neighboring states and tribes
- Priority Conservation Actions
  - Major Threats: alteration of natural flow regimes; habitat degradation; non–native fish
  - Priority Efforts: restore habitat & natural processes, secure ISFs, restore/maintain river connectivity, control NNF
  - Benefits to Endangered Species from Three Species conservation efforts



*Bluehead Sucker*

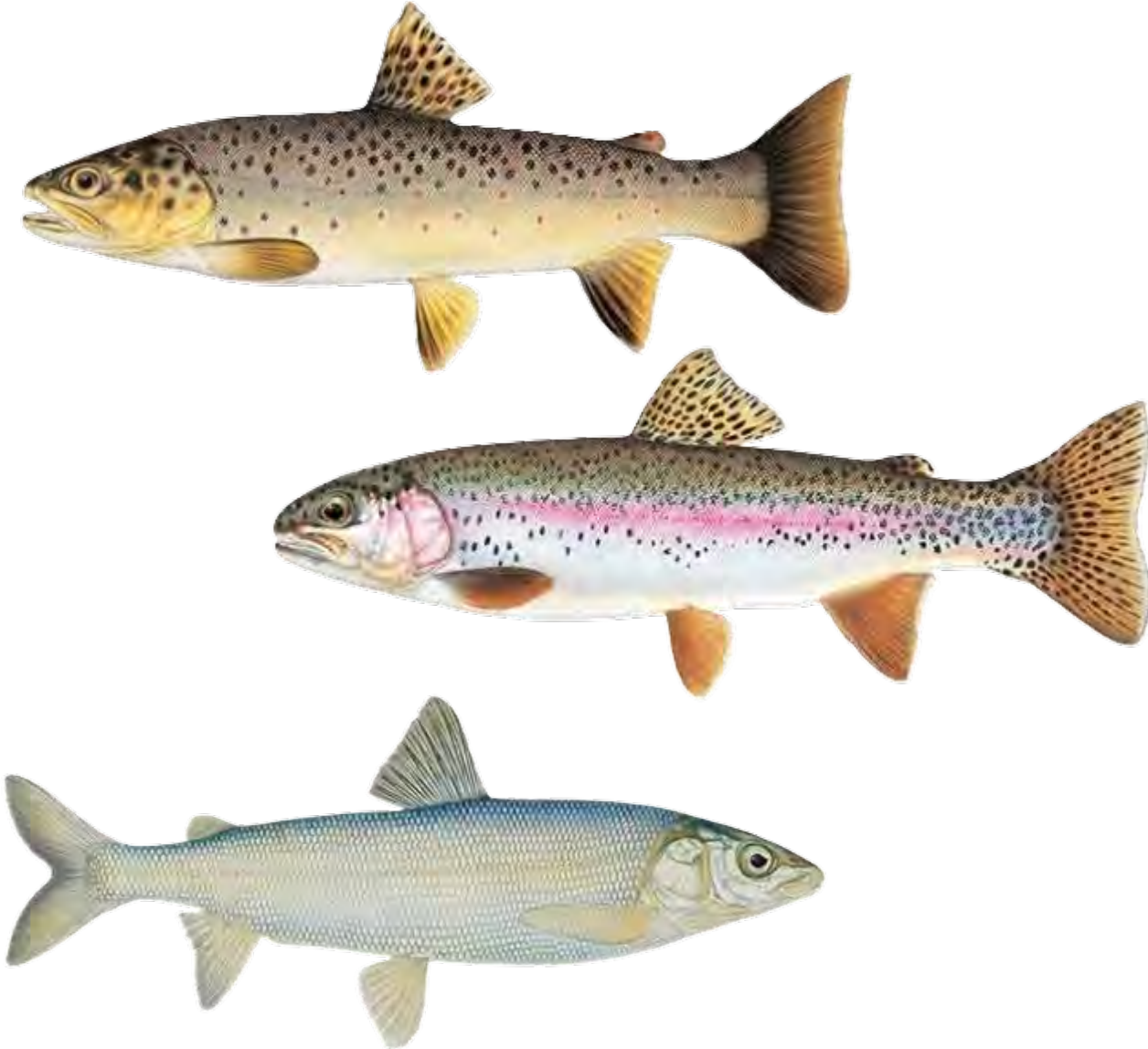


*Flannelmouth Sucker*



*Roundtail Chub*

# Colorado River - Quality Trout Water



## CPW Fishery Management

- Focused fishery management of fish populations sustained through natural reproduction.
- High priority for recreational angling for wild sportfishes (native and non-native salmonids).
- Quality Trout: 14+ inches in length

# Hydropower Operations, Flows, and the Shoshone Reach

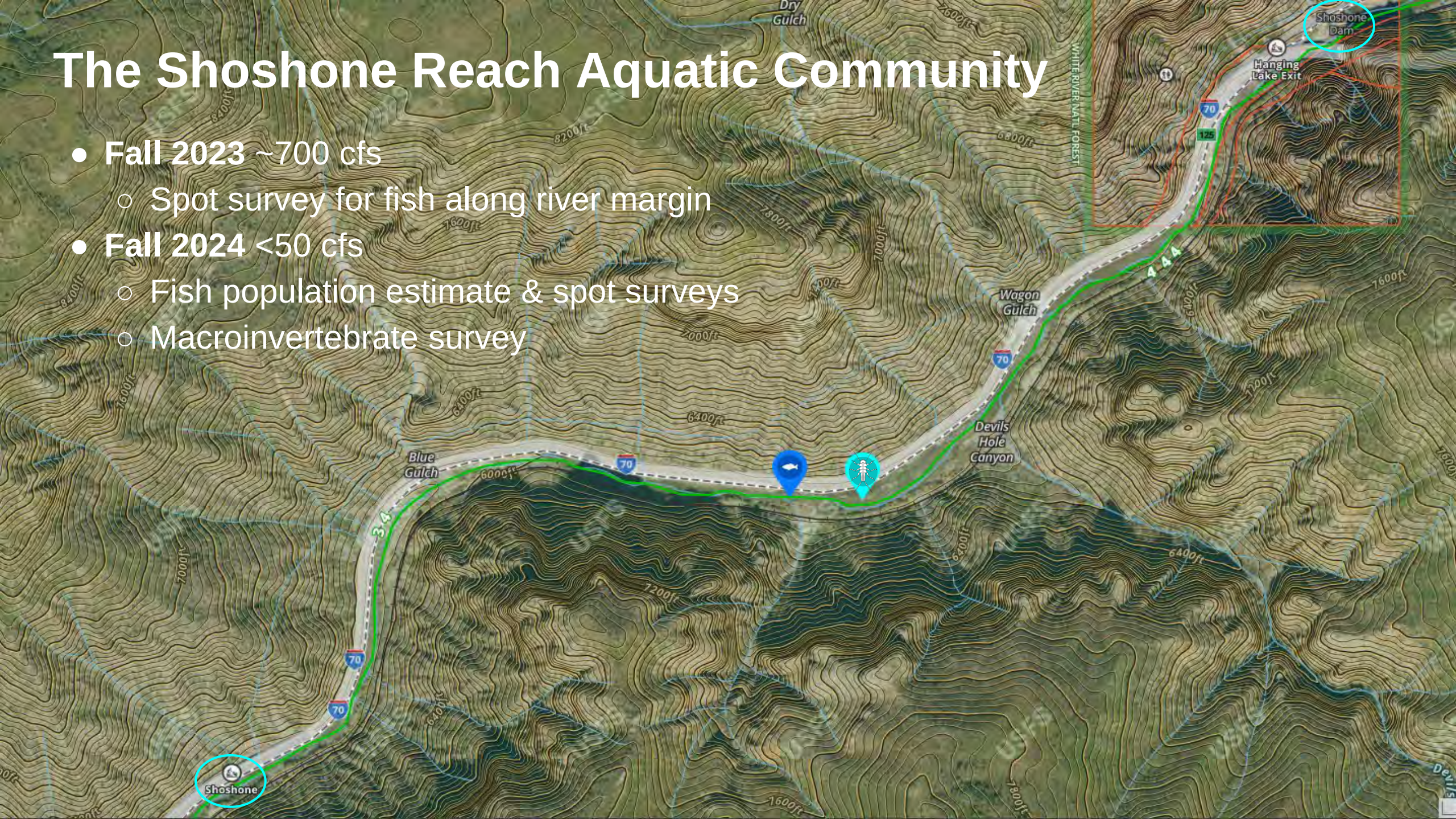


# The Shoshone Reach



# The Shoshone Reach Aquatic Community

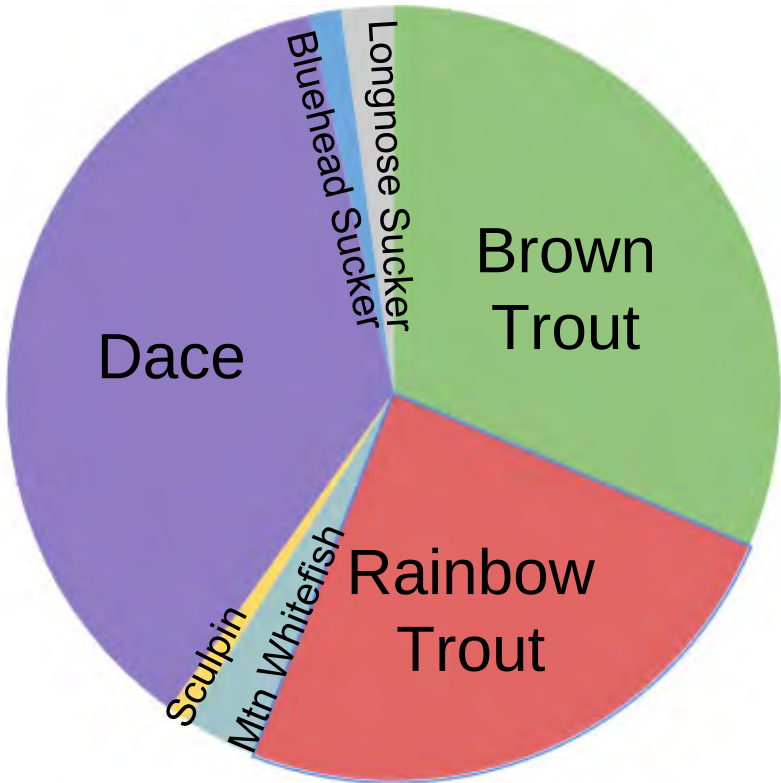
- **Fall 2023** ~700 cfs
  - Spot survey for fish along river margin
- **Fall 2024** <50 cfs
  - Fish population estimate & spot surveys
  - Macroinvertebrate survey



# The Shoshone Reach Fishery

Population summary for October 23, 2024 survey in a dewatered Colorado River reach between Shoshone Dam and Shoshone Hydropower Plant near Flag Buttruss.

Relative Fish Abundance



| Fish Species        | Abundance<br>fish/acre | Biomass<br>pounds/acre | Fish Total Length<br>Mean (Min-Max)<br>inches |
|---------------------|------------------------|------------------------|-----------------------------------------------|
| Brown Trout         | 205                    | 125.3                  | 11.3 (3.9 – 21.9)                             |
| Rainbow Trout       | 157                    | 125.6                  | 13.0 (8.2 – 15.6)                             |
| Mtn Whitefish       | 20                     | 10.2                   | 10.6 (5.6 – 12.3)                             |
| Sculpin <i>spp.</i> | 6                      | --                     | 3.4 (3.2 – 3.6)                               |
| Dace <i>spp.</i>    | 260                    | --                     | 3.8 (1.9 – 5.2)                               |
| Bluehead Sucker     | 8                      | 2.3                    | 8.3 (7.7 – 8.9)                               |
| Longnose Sucker     | 14                     | 7.1                    | 10.7 (10.0 – 11.3)                            |

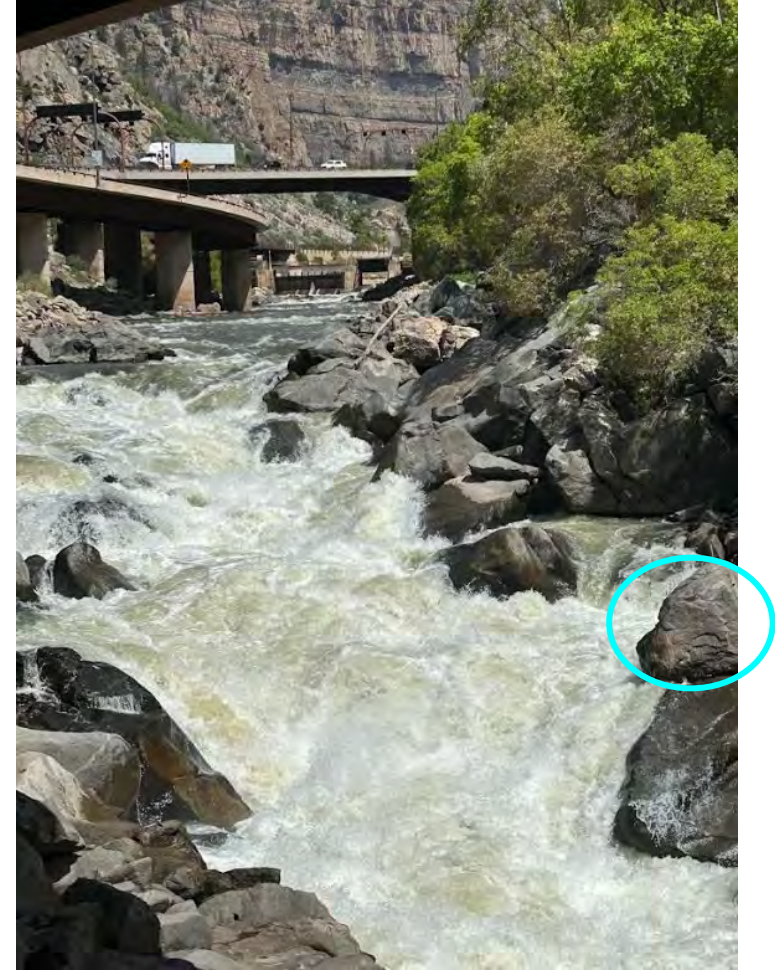
# The Shoshone Reach Macroinvertebrate Community

- 2024 Late Fall Survey
- Found abundant and diverse macro community
- Attains “Aquatic Life Use” under Colorado Water Quality Stds
  - MMI score (64.3) - “High Scoring Water” for macroinvertebrate diversity metrics
  - TIV score (5.63) - “Meets Thresholds” for expected abundance of sediment tolerant taxa
  - 90.5% EPT - no established threshold, but Baetidae *spp.* are the dominant present taxa
- Indications of intermittency are apparent -
  - Higher abundance of tolerant stonefly taxa (Baetidae)
  - Missing taxa that are present in upstream macroinvertebrate surveys in W&S monitoring



# Benefits of Flow

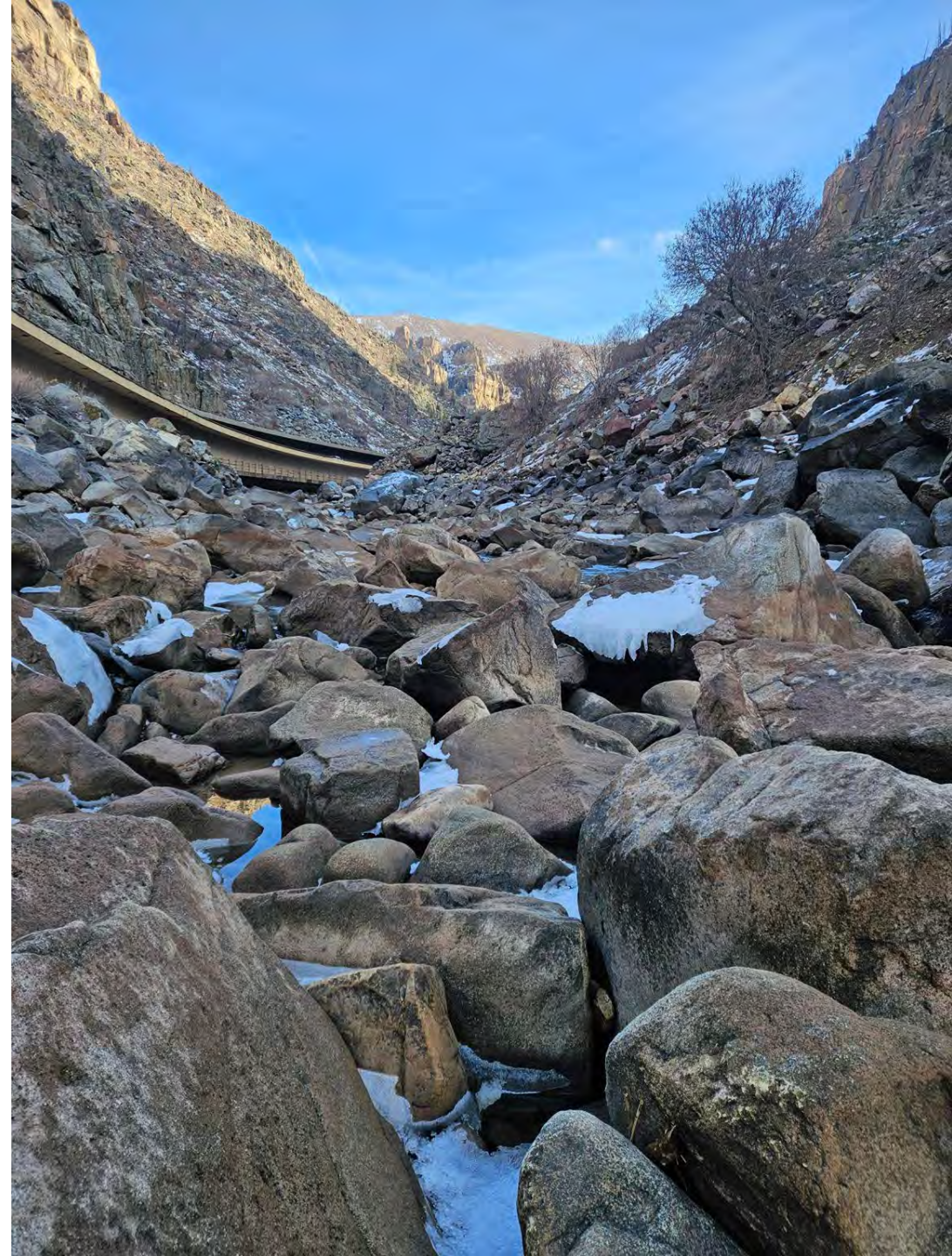
Instream flow at Shoshone provides:



# Benefits of Flow

Instream flow at Shoshone provides:

- Habitat connections for fish
  - Seek optimal conditions for temporally and spatially variable resources
  - Find refuge from stressors and predators
  - Native fish make BIG movements



# Benefits of Flow

Instream flow at Shoshone provides:

- Connects habitat for fish
- Thermal refugia
  - Dewatered river reaches and anchor ice - limits habitat for macros & fish
  - Winter issues @ Shoshone Dam - hot water fish kill
  - Hot temps during low flows - fish mortality/stress, W&S reaches, voluntary fishing closures



# Benefits of Flow

Instream flow at Shoshone provides:

- Connects habitat for fish
- Thermal refugia
- ↑ wetted river = ↑ aquatic habitat
  - Increased available habitat
  - Reduces fish stress & disease  
(concentrations of fish in low flows)



# Benefits of Flow

Instream flow at Shoshone provides:

- Connects habitat for fish
- Thermal refugia
- ↑ wetted river = ↑ aquatic habitat
- Increased flow = sediment transport
  - Creates & Maintains Habitat
  - Sculpin
  - Macroinvertebrates
  - Disadvantages NNF



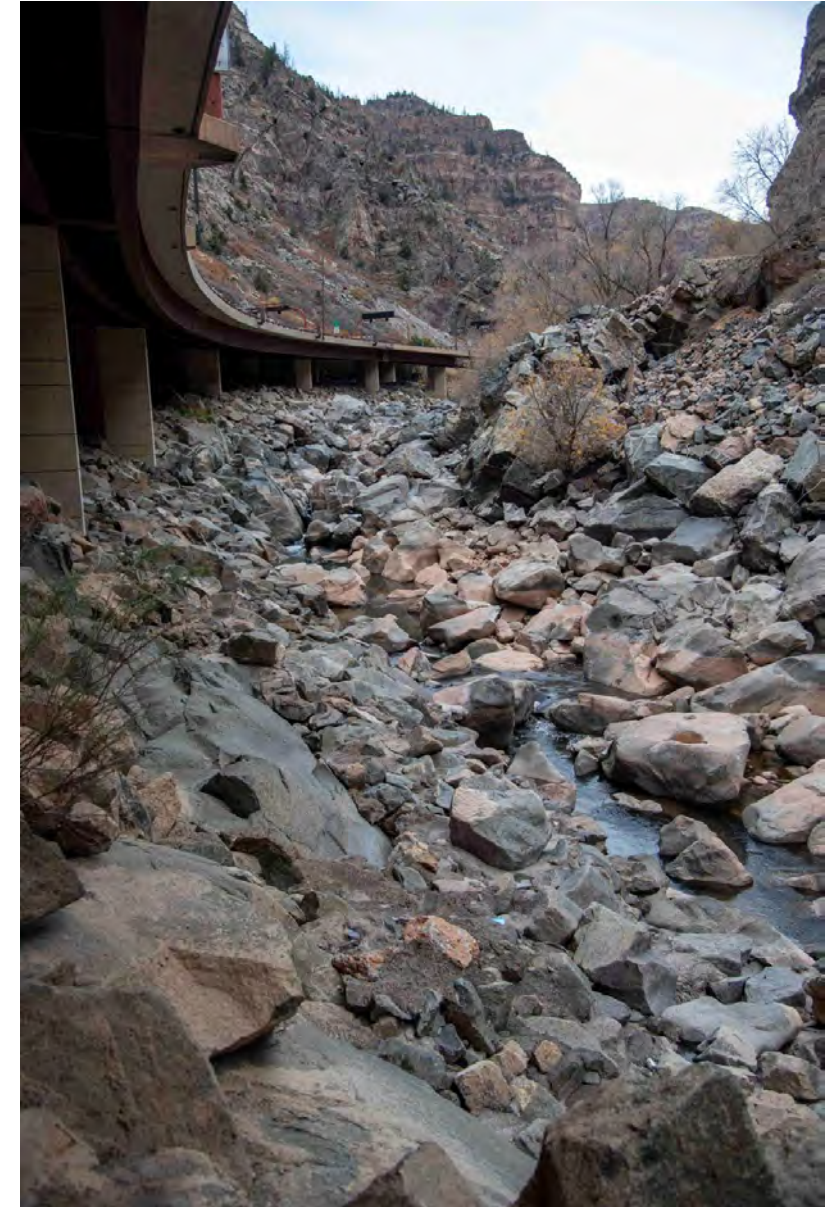
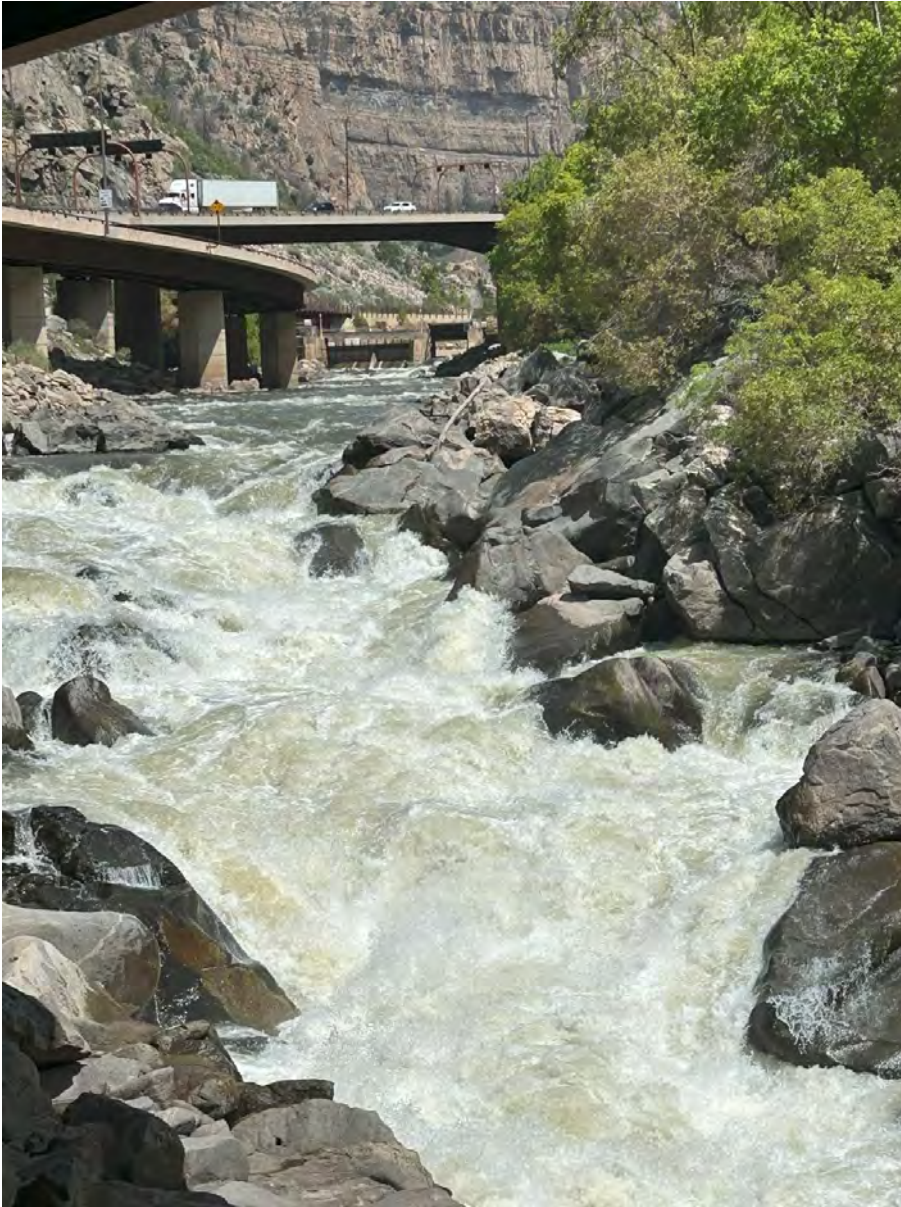
# Benefits of Flow

Instream flow at Shoshone provides:

- Connects Habitat
- Thermal Refugia
- ↑ wetted river = ↑ aquatic habitat
- Increased flow = sediment transport
- ***Improved Population Resiliency***



Will the Shoshone Water Rights preserve and/or improve the natural environment in the Shoshone Reach?



# Relationship between Flow & Fish Habitat

- Instream **F**low **I**ncremental **M**ethodology
- IFIM models “Weighed Useable Area”
  - WUA = **Suitable** fish habitat for specific species/life stages
- IFIM is best tool on large, complex rivers
  - Dolores and San Miguel ISFs
  - Colorado River W&S ISF
  - Poudre River ISF Acquisitions – NISP & Poudre ISF Augmentation



# IFIM – Freshwater Consulting Winter 2023-24

- Hydraulic habitat model
  - SRH-2D (Hydraulic)
  - Excel (Habitat)
- One Study Site
  - Two large pools divided by riffle
- 4 focal fish species
  - Adult life stage



*Flannelmouth  
Sucker*



*Mountain whitefish*



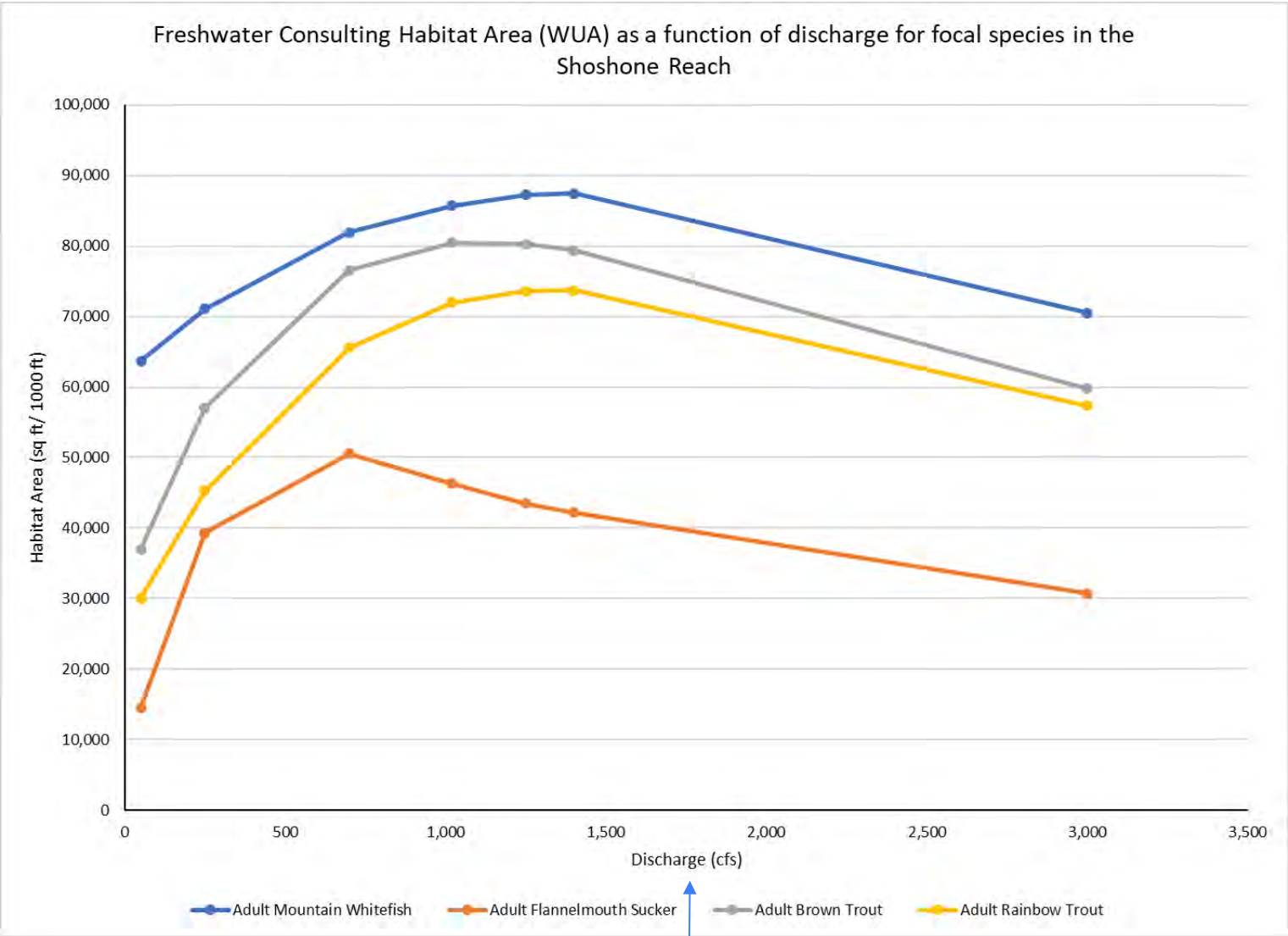
*Rainbow Trout*

*Brown Trout*



# Freshwater Consulting IFIM Results

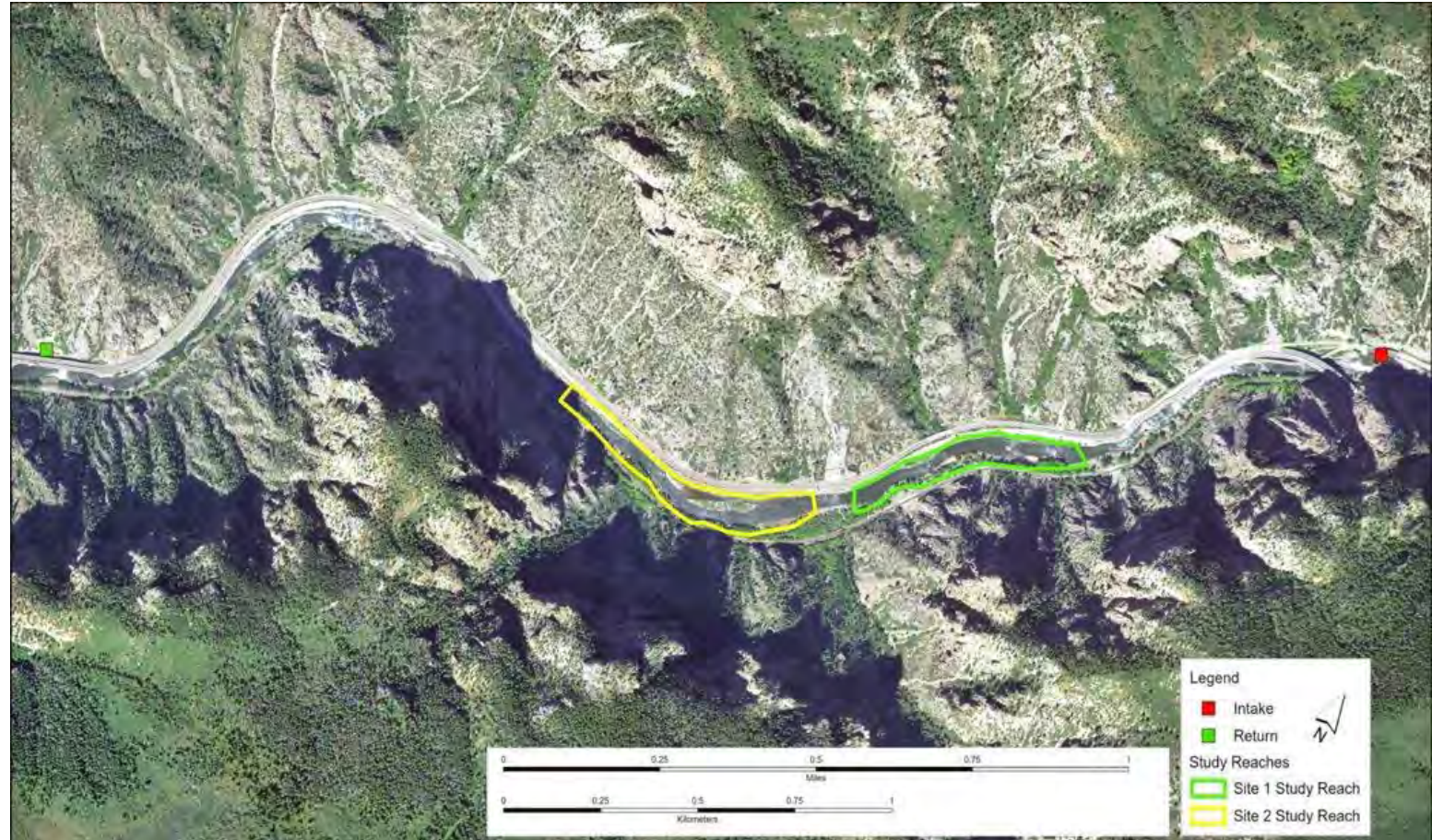
Suitable fish habitat



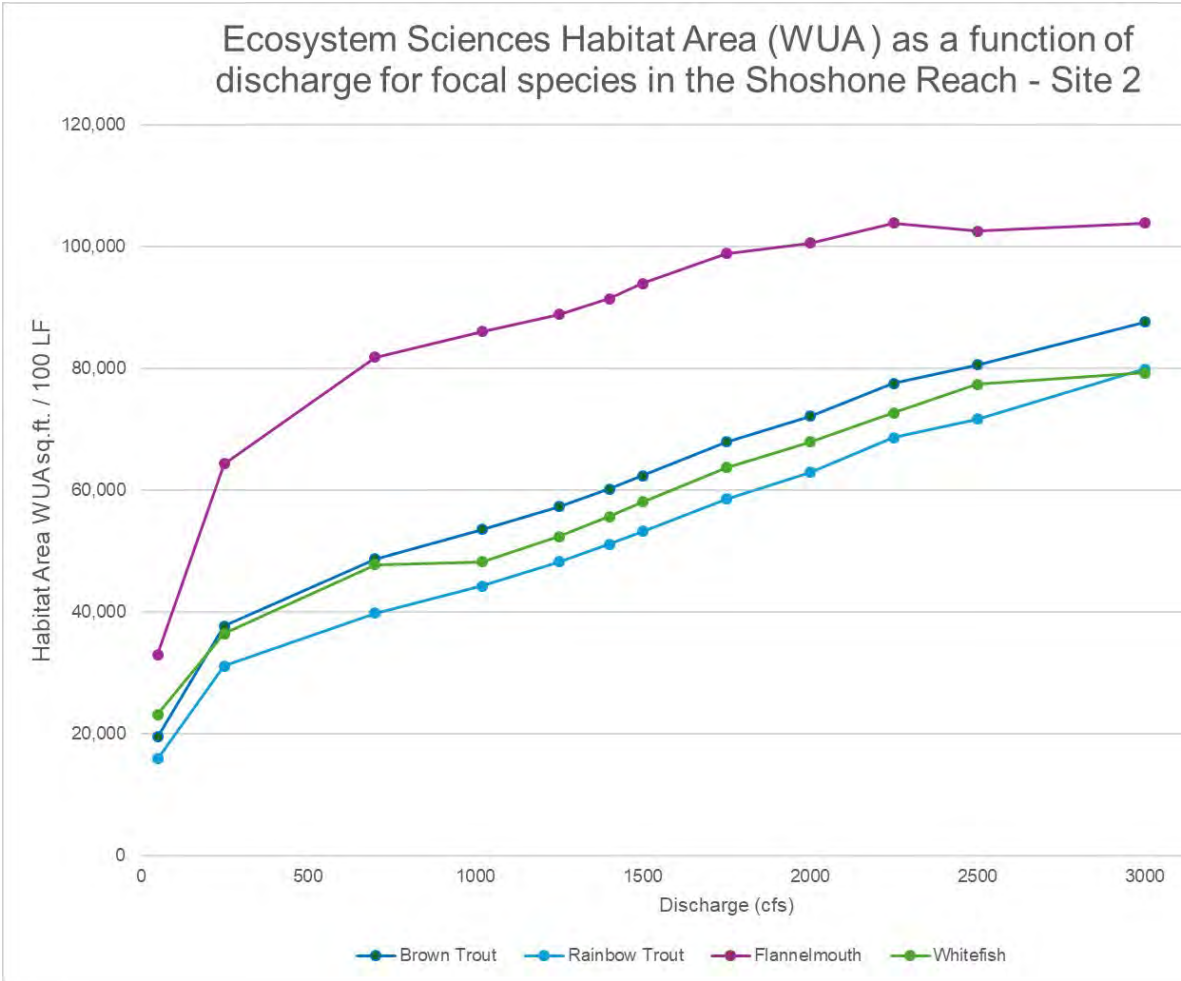
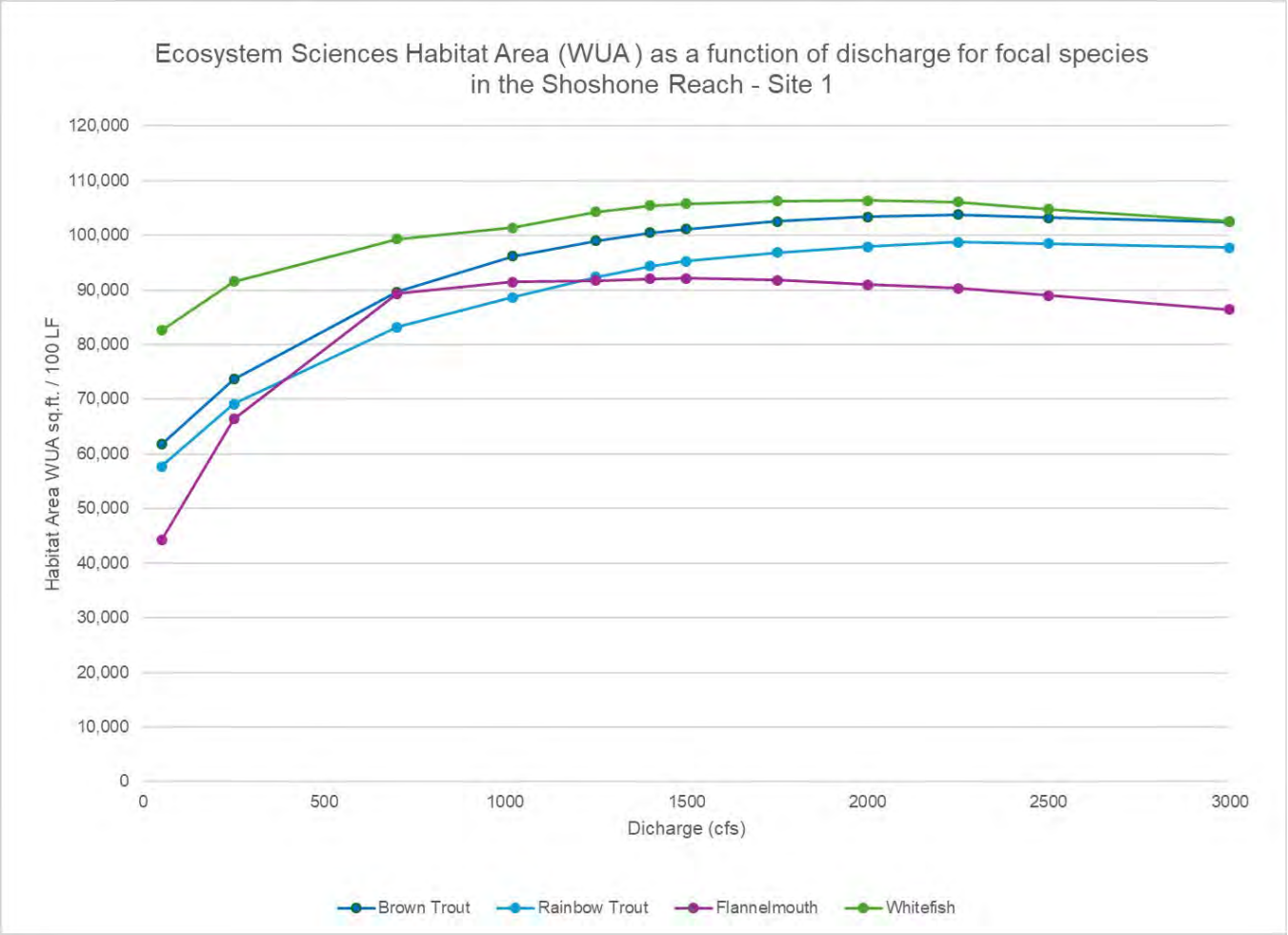
Flow

# Additional IFIM Modeling - Ecosystem Sciences 2024-25

- Study Site 2
  - Increased habitat complexity
- Improved velocity limitations
- Spatial representation
  - GIS-based model
- Flows between 1400-3000 cfs modeled



# Ecosystem Sciences IFIM Results



# Where is suitable habitat?



# Conclusions

- Canyon reaches provide dynamic fish habitat
- Microhabitat & velocity refuges are very important
- Connectivity is critical
- Additional water = additional habitat availability



# CPW Recommendations

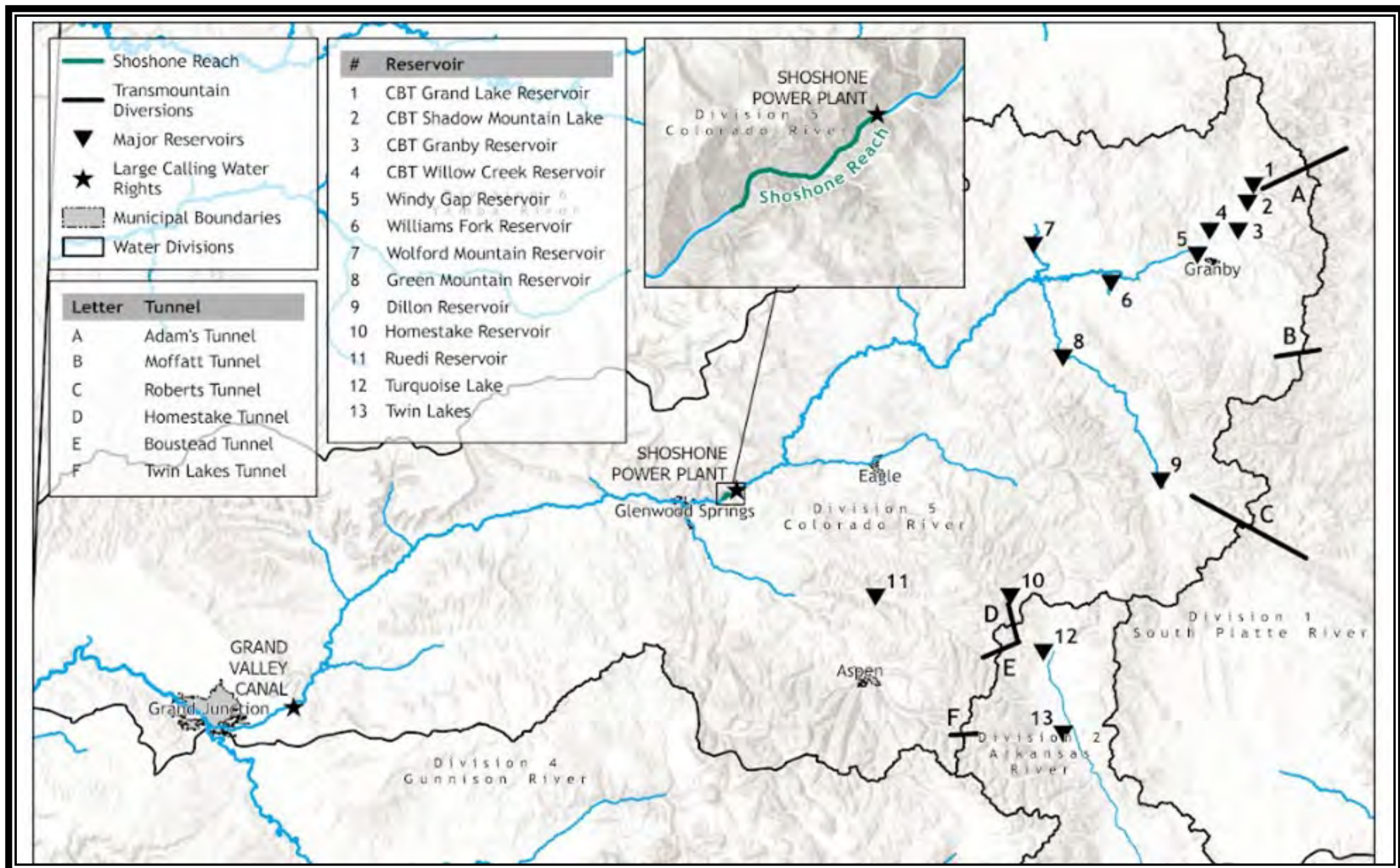
- The Shoshone water rights up to 1408 cfs will preserve & improve the natural environment
- IFIM modeling shows fish habitat  in the Shoshone Reach up to 3000 cfs
- High flows (3000+ cfs) provide:
  - Geomorphic benefits: Flushing fines, habitat maintenance, nutrient cycling, and allochthonous inputs
  - Connectivity
  - Thermal refuge
  - Increased wetted area for macros and fish



# ISF Rule 6, Factors 3, 4, & 6 – Location of Other Water Rights, Non-injury, Hist. Use, & Rtn. Flows

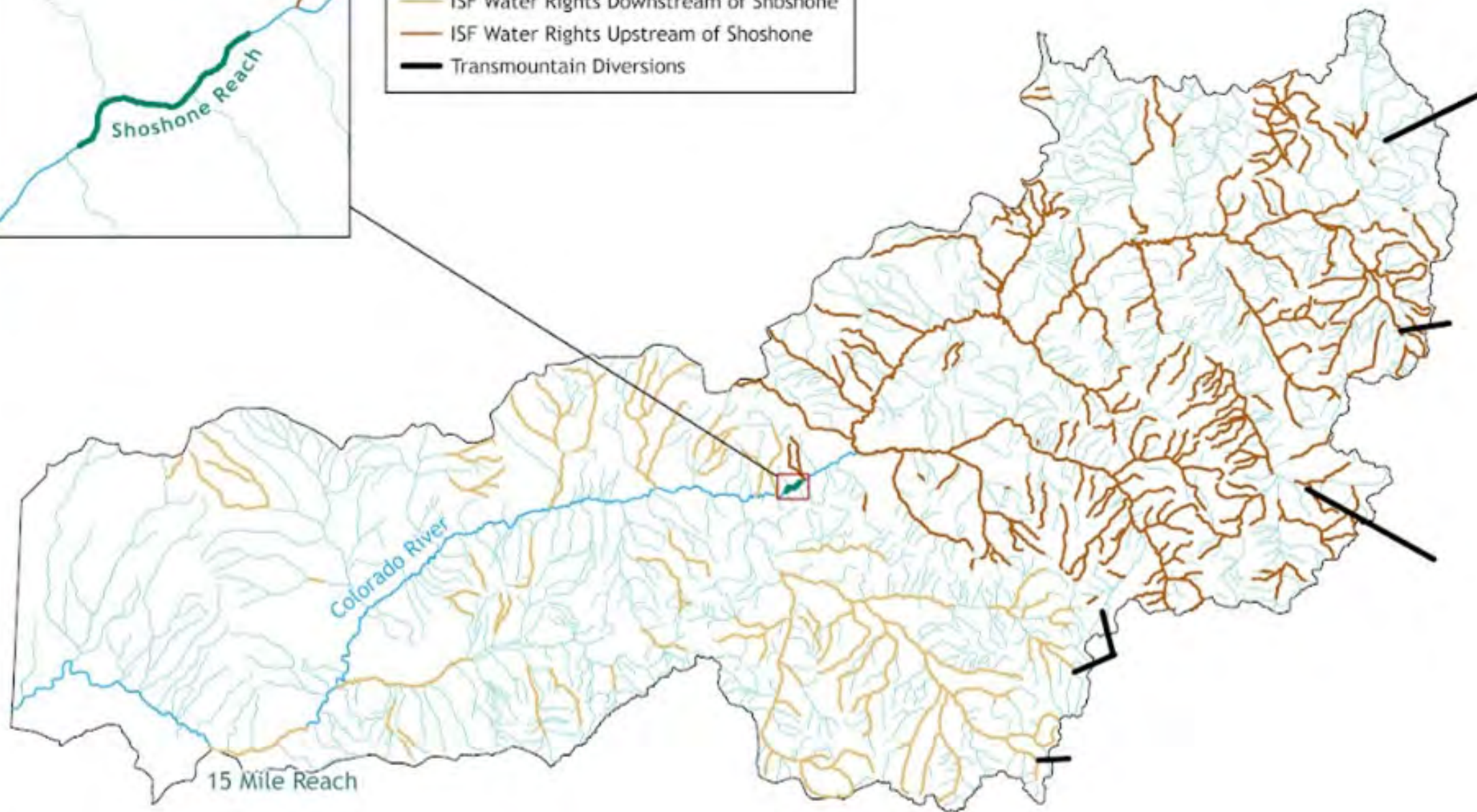
- No other diverting water rights w/in the reach, but augmentation plans, exchanges, and deliveries extend through the Shoshone reach
- Many decreed junior and senior water rights both upstream and downstream of the reach, including diversions for in-basin use, as well as TMD & ISF's
- Water Court will provide restrictions:
  - Historical use and historical return flows will be maintained
  - Method and quantification to be determined in water court
  - To prevent injury to other water users







- Shoshone Reach
- ISF Water Rights Downstream of Shoshone
- ISF Water Rights Upstream of Shoshone
- Transmountain Diversions



# ISF Rule 6, Factors 7, 8, & 9 – Max Utilization, Interstate Compacts, & Downstream Use

- By not expanding use and continuing utilization, this acquisition will promote maximum utilization of the waters of the state.
  - Beneficial use for ISF to P&I the NERD
  - Subsequent use downstream
    - By other water users in the Grand Valley and beyond
    - By CWCB's ISF in the 15-mile reach
- By not expanding the historical use, CWCB will ensure that this acquisition will not have a negative impact on interstate compact
- ISF, like hydropower, is a non-consumptive use, for which RF's will become part of the natural streamflow downstream of the reach



# ISF Rule 6, Factor 10 - Costs

- Total Cost of Purchase is \$99M
  - CWCB Non-reimbursable project \$20M
  - River District's financial commitments \$20M
  - West Slope supporters \$17.1M
  - USBR B2E Funds \$40M
- CWCB Staff & AGO Resources
- Possible Trial Expenses

|                                                                                    |                 |
|------------------------------------------------------------------------------------|-----------------|
| Ute Water Conservancy District                                                     | \$2 million     |
| Eagle River Water and Sanitation District and Upper Eagle Regional Water Authority | \$1 million     |
| Grand County                                                                       | \$1 million     |
| City of Grand Junction                                                             | \$1 million     |
| Mesa County                                                                        | \$1 million     |
| Summit County                                                                      | \$1 million     |
| Pitkin County                                                                      | \$1 million     |
| Colorado Mesa University                                                           | \$500,000       |
| Clifton Water District                                                             | \$250,000       |
| Grand Valley Irrigation Company                                                    | \$250,000       |
| Basalt Water Conservancy District                                                  | \$100,000       |
| Grand Valley Power                                                                 | \$100,000       |
| Grand Valley Water Users Association                                               | \$100,000       |
| Middle Park Water Conservancy District                                             | \$100,000       |
| Town of New Castle                                                                 | \$100,000       |
| Orchard Mesa Irrigation District                                                   | \$100,000       |
| City of Rifle                                                                      | \$100,000       |
| Snowmass Water & Sanitation District                                               | \$100,000       |
| Town of Silverthorne                                                               | \$100,000       |
| Mesa County Irrigation District                                                    | \$50,000        |
| Palisade Irrigation District                                                       | \$50,000        |
| West Divide Water Conservancy District                                             | \$50,000        |
| Kobe Water Authority                                                               | \$25,000        |
| Town of Parachute                                                                  | \$25,000        |
| De Beque Plateau Valley Soil Conservation District                                 | \$5,000         |
| Town of De Beque                                                                   | \$5,000         |
| Total:                                                                             | \$17.11 million |



# ISF Rule 6, Factor 11 - Administrability

- Coordination with DWR is on-going and will continue throughout the process.
- Acquisition is administrable provided that:
  - T&C in the decree to prevent injury,
  - Measurement, recording, reporting,
  - Structure modifications are made if needed, &
  - Communication protocols are established



Agenda 10 d.



# ISF Agreement

---

- To be finalized before water court application is filed
- Will be effective on signature date, but rights & obligations only at closing of PSA, after a court decree is issued
- CWCB agrees to use the Shoshone water rights for ISF subject to decree terms & conditions



# Water Court Application

- 3 Co-applicants (CWCB, River District, PSCo)
- Request to change
  - entire Shoshone Water Rights
  - to add ISF use
- Application
  - Description of water rights to be changed
  - Change of use requested includes
    - Place of use
    - Type of use
    - Amount of use is “up to the full decreed rate”
- Engineering for the historical use analysis and discussion
  - Provided during the court process and includes
    - A representative historical study period including wet, dry, and average years.
    - Historical use period and amounts to be used
    - Historical return flows to be maintained

DISTRICT COURT, WATER DIVISION 3, COLORADO  
Garfield County Courthouse  
109 8<sup>th</sup> Street, Suite 104  
Glenwood Springs, CO 81601  
(970) 947-3861

CONCERNING THE APPLICATION FOR WATER RIGHTS OF THE  
COLORADO WATER CONSERVATION BOARD, PUBLIC SERVICE  
COMPANY OF COLORADO, AND THE COLORADO RIVER WATER  
CONSERVATION DISTRICT.

In GARFIELD AND EAGLE COUNTIES, COLORADO.

Attorney for Colorado Water Conservation Board:  
PHILIP J. WEISER, Attorney General  
JENNIFER L. MELE, Reg. No. 30720\*  
Natural Resources and Environment Section  
Colorado Department of Law  
1300 Broadway, 10th Floor  
Denver, Colorado 80203  
Phone: (720) 508-6282  
Email: jennifer.mele@coag.gov

Attorneys for Public Service Company of Colorado:  
Carolyn F. Burr, Reg. No. 25978  
Jim M. Noble, Reg. No. 36716  
WELBORN SULLIVAN MECK & TOOLEY, P.C.  
1401 Lawrence Street, Suite 1800, Denver, Colorado 80202  
Phone: (303) 830-2500  
E-mail: cburr@wsmtlaw.com  
jnoble@wsmtlaw.com

Attorneys for Colorado River Water Conservation District:  
Peter C. Fleming, Reg. No. 20805  
Jason V. Turner, Reg. No. 35665  
Bruce C. Walters, Reg. No. 50235  
201 Centennial Street, Suite 200  
Glenwood Springs, CO 81601  
Phone: (970) 945-8522  
E-mail: pfleming@crwed.org  
jturner@crwed.org  
bwalters@crwed.org

▲ COURT USE ONLY ▲

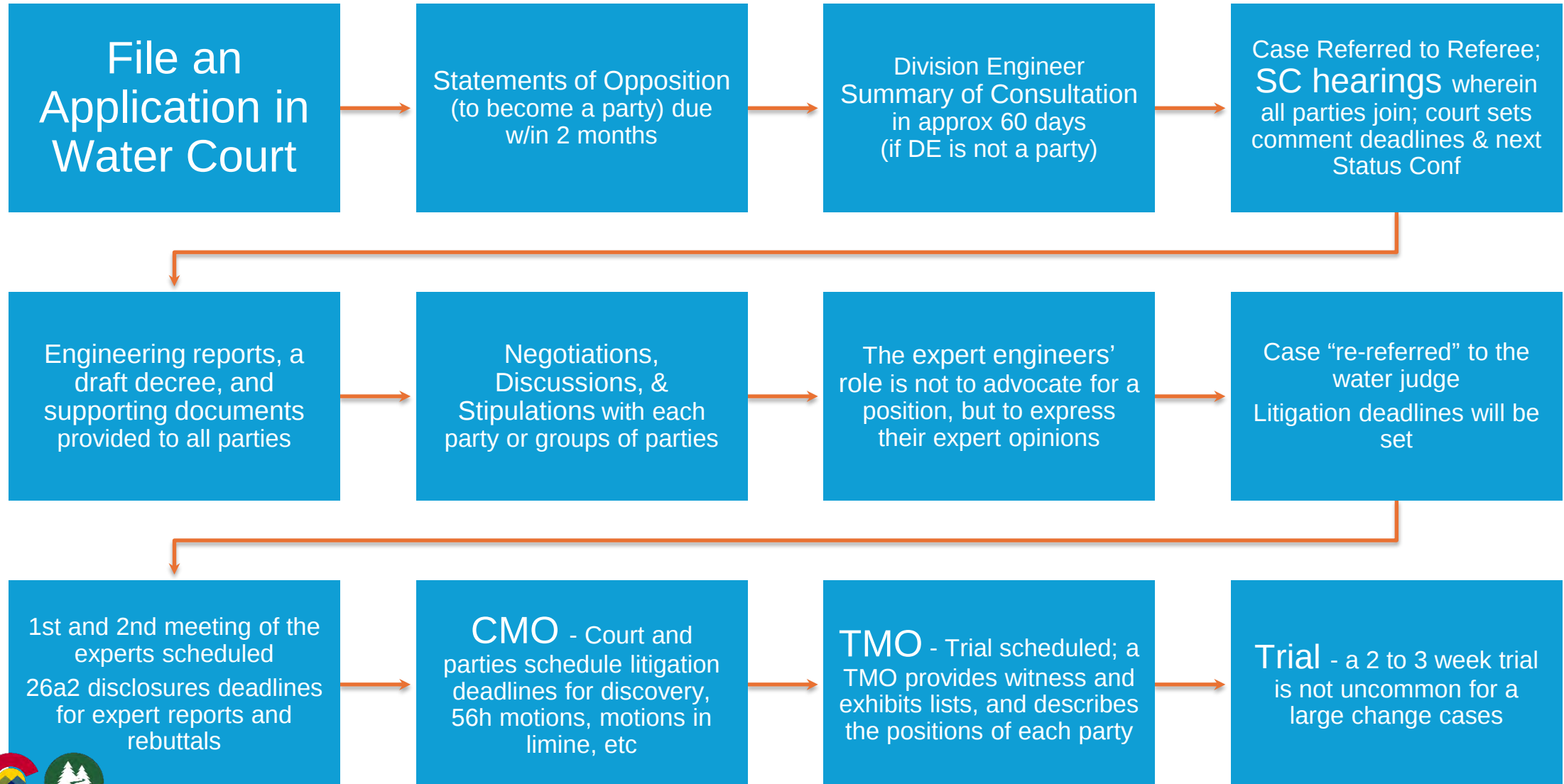
Case Number: \_\_\_\_\_

Div.: Ctrm: \_\_\_\_\_

APPLICATION FOR CHANGE OF WATER RIGHTS



# WATER COURT PROCESS (multistair)



# Future Meeting Anticipated Recommendation:

- Determine that the CWCB accepts a perpetual interest in the Shoshone Water Rights for ISF use at any rates up to the full decreed amounts to Preserve & Improve the Natural Environment to a Reasonable Degree;
- Direct the CWCB Director to sign the ISF Agreement;
- Determine that the best use of the acquired interest in the Shoshone Water Rights is to Preserve and Improve the Natural Environment to a Reasonable Degree within the Shoshone Reach, up to the flow rates recommended by Colorado Parks and Wildlife;
- Direct Staff to work with the Attorney General's Office and Co-Applicants to file a water court application requesting to add an instream flow use to the Shoshone Water Rights in accordance with 37-92-102(3).



# NEXT STEPS

- Action can be taken at the next Board meeting in July 2025 if uncontested.
- However, if a hearing is requested w/in 20 days, the Board at special meeting or at its next regularly scheduled meeting decides whether or not to grant that request.
- Any hearing in this matter would take place at the September 2025 Board meeting.
- If Board accepts acquisition, then water court application would be filed, likely by December 2025.
- Multi-year water court process, typically 3-4 years.
- A final decree will trigger closing of the Purchase and Sale Agreement. The CWCB will then vote to confirm that the closing conditions have been met and funds will be released for the sale.



# QUESTIONS?



# PUBLIC COMMENT

## 10.d Proposed Acquisition of an Interest in the Shoshone Water Rights for Instream Flow Use on the Colorado River



**COLORADO**  
Colorado Water  
Conservation Board

Department of Natural Resources



# Acquisition of Shoshone Water Rights for Instream Use: BLM's Perspective



# The upper Colorado River is a central management focus for BLM Colorado



- BLM manages 45 river miles between Kremmling and Dotsero in a “Special Recreation Management Area.” Management objectives include:
  - Protect fish, wildlife, plants.
  - Protect backcountry setting and scenic views.
  - Generate community stewardship.
  - Maintain tourism revenue and employment for local economy, consisting of 1,100 jobs and \$145.7 million in tourist spending.
- Nine developed recreation sites.
- 2022 Visitation: 238,000 user days, including 96,000 commercial and private boating days.
- 76 Special Recreation Permits for outfitters.

# Upper Colorado River

## BLM Wild & Scenic River (WSR) Determinations

- **2014:** 84 river miles between Kremmling and No Name are “eligible” for WSR designation. “Eligible” status comes with management standards for federal agencies to protect the Outstandingly Remarkable Values (ORVs).
- **2015:** BLM and USFS made a Resource Management Plan decision to rely on the Upper Colorado Wild & Scenic Stakeholder Alternative Management Plan (The “SG Plan.”)
- **2015:** The river will stay in “eligible” status, and BLM will not make a recommendation to Congress that the river is “suitable” for designation.
- **2020:** BLM and USFS approved moving from the “provisional” period to the “operational” period of Stakeholder Plan, based on finalizing procedures for “ORV Indicators” and “Resource Guides.”
- **Since 2020:** BLM and USFS have annually affirmed that the Stakeholder Plan is effective at protecting and enhancing flow-dependent ORVs (recreational boating and recreational fishing).



# Upper Colorado River

## BLM Wild & Scenic River ORVs

| Name of Segment                                        | Outstandingly Remarkable Values                                                                   |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Colorado River – Gore Canyon<br>(Segment 4)            | Scenic, Recreational (Fishing, Floatboating, and Scenic Driving),<br>Geologic, Wildlife, Historic |
| Colorado River – Pumphouse to State Bridge (Segment 5) | Scenic, Recreational (Fishing, Floatboating, and Scenic Driving),<br>Geologic, Wildlife, Historic |
| Colorado River – State Bridge to Dotsero (Segment 6)   | Scenic, Recreational (Floatboating, and Scenic Driving), Botanical,<br>Wildlife                   |
| Colorado River – Glenwood Canyon<br>(Segment 7)        | Recreational (Whitewater Boating, Scenic Viewing, Hiking), Scenic,<br>Geologic                    |

Since 2020, the “ORV Indicators” monitored by the Stakeholder Group have indicated that the ORVs are in stable condition.



# Role of Shoshone Water Right in the Stakeholder Group Plan



- SG Plan establishes “resource guides” for ranges of flows that are supportive of ORVs.
- SG Plan relies on the existence of the Shoshone Power Plant water rights as one of its Tier 1 “Long-Term Protection Measures.”
- SG monitors streamflow through the Wild & Scenic segments. When flows are outside of the “resource guides,” the SG can supplement flows with coordinated, cooperative, and voluntary water deliveries (“Cooperative Measures”), when water is available.
- SG Plan specifically notes the acquisition of water rights by CWCBC as a “cooperative measure.”

# Risks to river and Stakeholder Plan if Shoshone water rights are not reliably exercised



- “Cooperative Measures” have been successful in filling many smaller flow deficits (up to 10,000 acre-feet) that could negatively affect fish populations and recreational opportunities.
- It is extremely challenging for the SG to fill longer-term, larger volume flow deficits. The availability and cost of water limit options for improving flows.
- Chronic temperature standard exceedances are a consistent issue for the SG. If flow rates frequently occur outside of the range of the SG’s “resource guides,” there is a risk that the SG’s “ORV Indicators” will fall outside of thresholds set forth in the SG Plan. This would cause the indicators to be elevated to federal, state, and local governments for review and intervention.

# Shoshone Water Right: BLM Conclusions



- CWCB has invested substantial resources in the success of the SG Plan.
- Continued effectiveness of the SG Plan benefits all stakeholders.
- The Shoshone water rights provide a critical foundation for the plan.
- BLM has reviewed CPW's report and concurs the lease would significantly benefit habitat within, upstream, and downstream from Glenwood Canyon.
- A formal lease of the water rights to ISF use would provide certainty to all stakeholders.
- **The best long-term use of the water rights is to preserve the historical flow regime and for instream flow purposes.**

# Shoshone Water Right: BLM Conclusions



- BLM takes no position on the quantification of the historic use of the Shoshone water rights. That issue must be thoroughly addressed in water court.
- BLM takes no position on the CRD application to Bureau of Reclamation for funds to purchase the Shoshone rights.

# Questions for BLM?

Contact Roy Smith at [r20smith@blm.gov](mailto:r20smith@blm.gov) or 303-239-3940



# PUBLIC COMMENT

## 10.d Proposed Acquisition of an Interest in the Shoshone Water Rights for Instream Flow Use on the Colorado River



**COLORADO**  
Colorado Water  
Conservation Board

Department of Natural Resources

