In the Matter of the Proposed Acquisition of an Interest in the Shoshone Power Plant Water Rights

CWCB Staff Presentation





TODAY'S PRESENTERS, STAFF, & COUNSEL

Acquisition Process, Proposal, Board Factors

CWCB Staff: Rob Viehl, Kaylea White, Colin

Watson, Kara Scheel

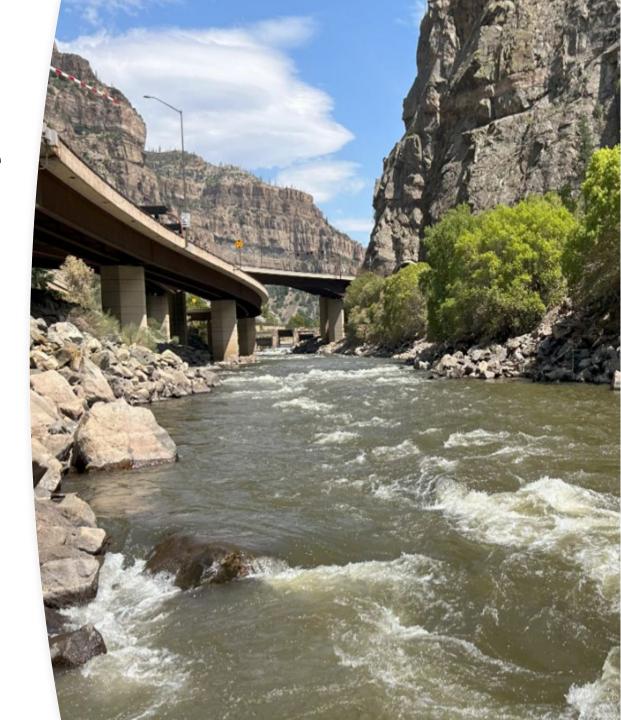
AGO: Jen Mele

CPW Recommendation

CPW Staff: Katie Birch, Kendall Bakich

THE PROPOSAL

- River District will purchase the Shoshone Water Rights, maintain ownership, and dedicate to CWCB for ISF Use.
- PSCo will hold a lease for hydropower use.
- 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.



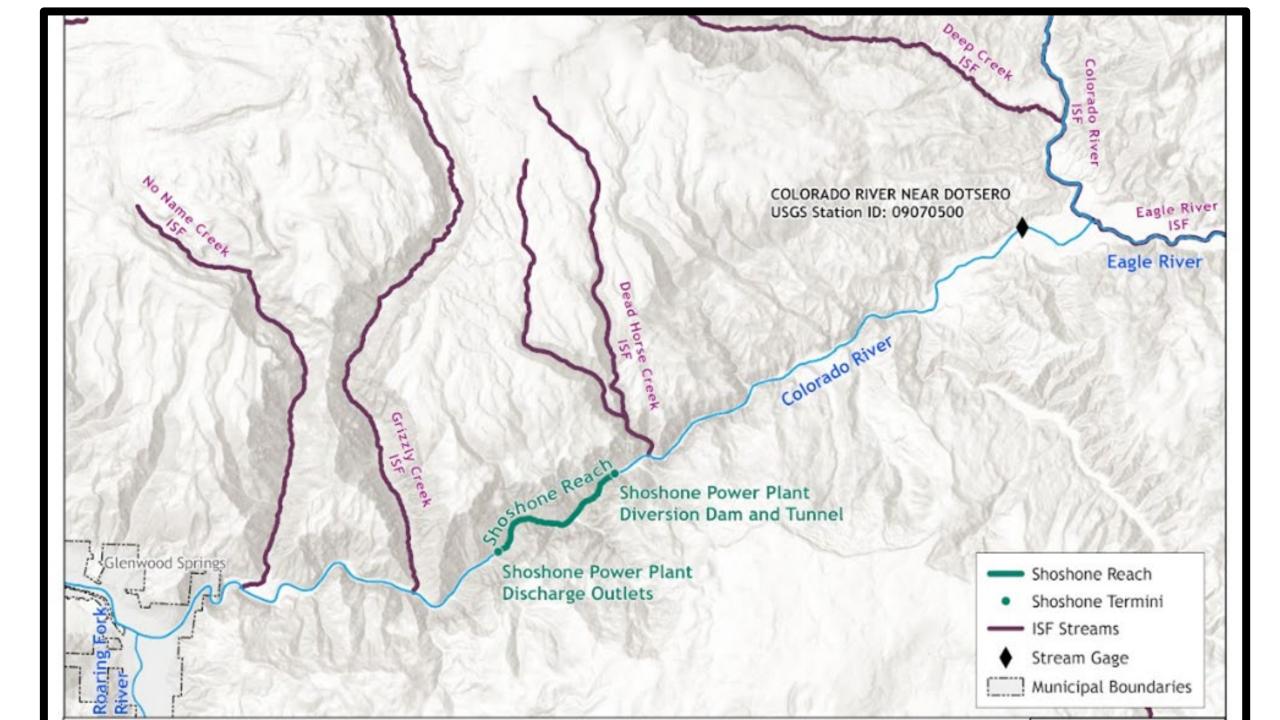
SHOSHONE WATER RIGHTS

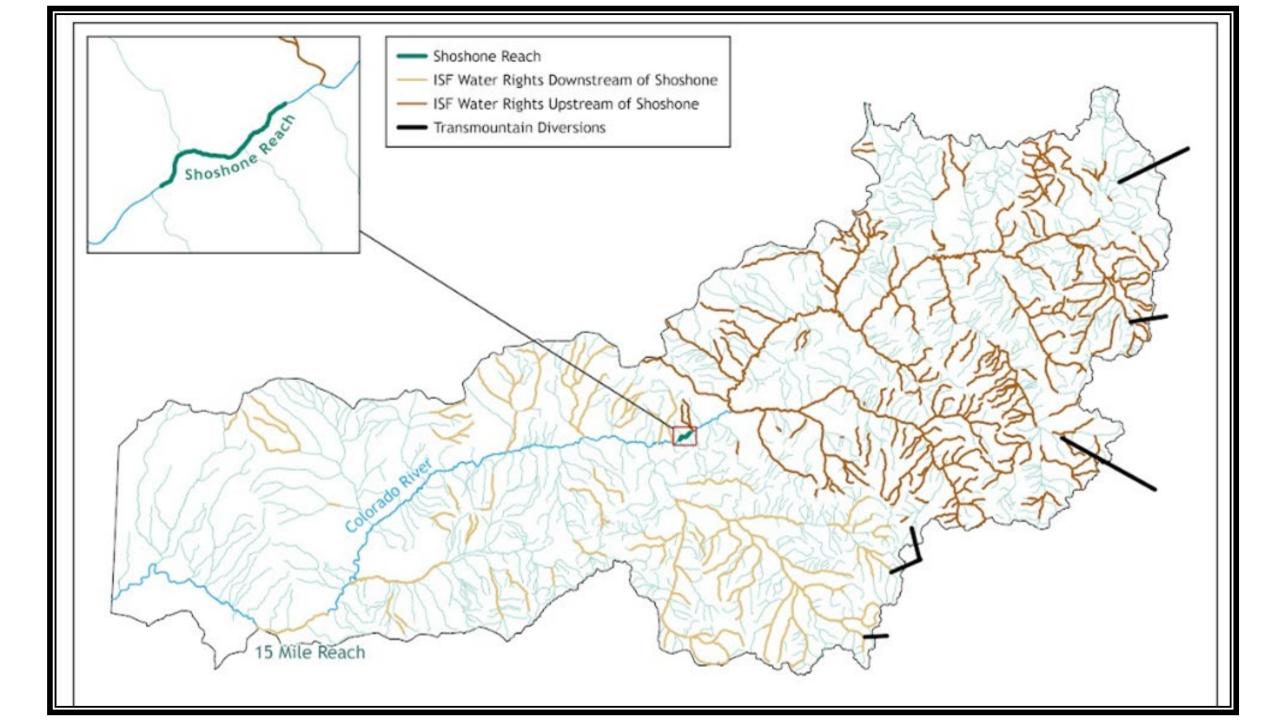
| Priority Date* | Appropriation Date | Adjudication Date/ Water Court Decree | Decreed Rate of Diversion & Diversion Rate Intended to Change |
|-------------------|--------------------|--|---|
| December 5, 1905 | January 7, 1902 | December 9, 1907 Civil Action Nos. 466 and 553 | 1,250 cfs |
| May 31,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

TOTAL



1,408 cfs



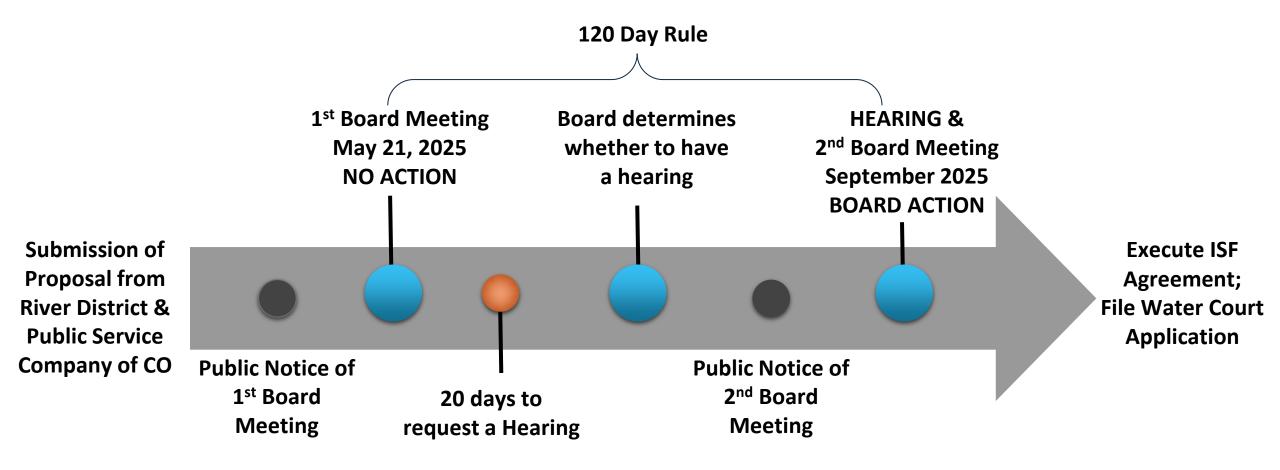


ISF ACQUISITIONS

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 acquisition 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



BOARD INVOLVEMENT TO DATE

- September 2023 CRWCD applied for a non-reimbursable project towards purchase of the Shoshone Water Rights
- November 2023 AGO agreements overview & DWR administration overview
- January 2024 CWCB Shoshone Permanency Workshop
- January 2024 CWCB Unanimously approved funding \$20 million
- May 2024 Projects Bill HB 24-1435 approved
- November 2024 CRWCD project update
- May 2025 Acquisition presented to the Board
- June 2025 Hearing requested
- July 2025 Special Board Meeting granting request & July Board meeting update
- September 2025 Hearing



STAFF RECOMMENDATION

- 1. <u>Accept a perpetual interest</u> in the junior and senior Shoshone Water Rights for ISF use up to the full decreed amounts and determine that this use will preserve and improve the natural environment to a reasonable degree;
- 2. Direct the CWCB Director to **sign the ISF Agreement** after the hearing.
- 3. Determine that protecting the Shoshone Water Rights in the Shoshone Reach, subject to the terms and conditions in the final water court decree, in amounts up to the stream flow rates recommended by CPW to preserve and improve the natural environment, is the <u>best utilization of the acquired water</u> to preserve and improve the natural environment to a reasonable degree; and
- 4. Direct Staff to work with the Attorney General's Office and the River District and PSCo as Co-Applicants to <u>file a water court application</u> requesting to add an instream flow use to the Shoshone Water Rights in accordance with section 37-92-102(3), C.R.S.

ISF AGREEMENT

- CWCB, RD, PSCo
- Dedicates interest in the water rights to CWCB for ISF Use
- Parties to obtain a decreed right for ISF use up to the ISF Rate, confirming administrability
- Coordinate on any needed Infrastructure, cost covered by RD
- 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





RELATED AGREEMENTS

ShOP, 2016

• DW, RD, WEST SLOPE, BOR, DWR

CRCA, 2012

• DW, RD, WEST SLOPE

RELAXATION, 2007

• DW & PSCo

CHECK CASE, 1996

 RD, WEST SLOPE, DWR, CWCB, CPW, CSU & PBWW

BOARD'S ROLE

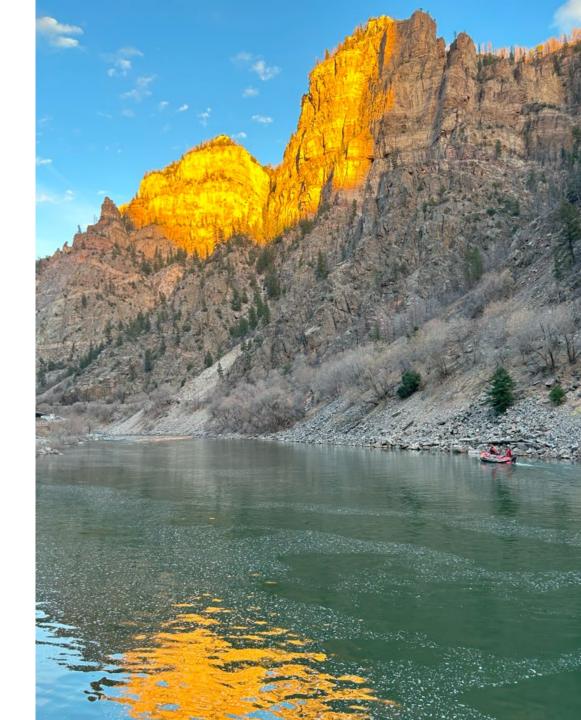
• The Board may acquire in such amounts as the Board determines are appropriate for stream flows to preserve or improve the natural environment to a reasonable degree. (6a)

The Board Shall:

- Determine, in a timely manner (120 days), what terms and conditions the Board will accept in an agreement (6b)
- Evaluate the appropriateness of the acquisition (6e)
 - Consider the factors listed and may consider other factors
- Determine how best to utilize the acquired water to preserve or improve the natural environment (6e)
- File a change of water right application (6i)
- Request the Water Court to verify quantification of historical use and return flows and include T&Cs necessary to prevent injury (6i)

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.



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 Reach Natural Environment & CPW Recommendation



Colorado River: Shoshone Reach

Confined, canyon-bound river

- Constrained channel
- Large substrate (boulders)
- High gradient
- Deep pools and holding habitat

Diverse and dynamic aquatic habitat





Aquatic, Riparian, and Terrestrial Communities

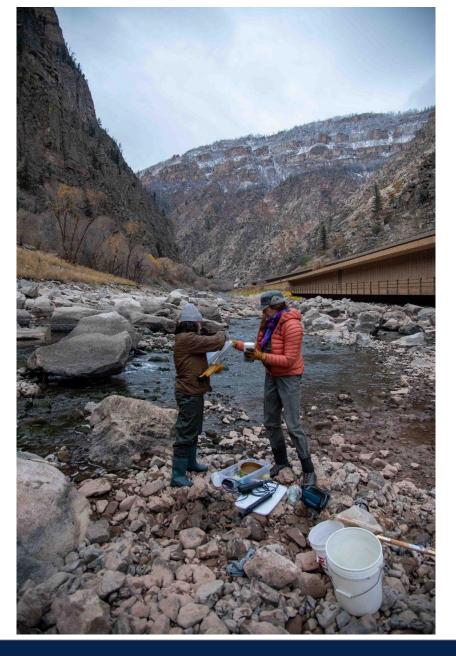
- Native and sportfish communities
- Abundant and diverse macroinvertebrate community
- Terrestrial wildlife
 - Bighorn sheep
 - River otters and beaver
 - Mule deer and elk
 - Peregrine falcons and eagles
- Healthy riparian community



CPW Data Collection Efforts

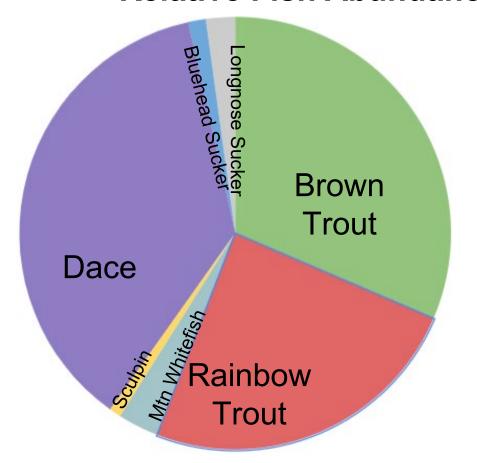
- Macroinvertebrate sampling
- Fishery surveys
 - December 2023 bank electroshocking
 - o October 2024 detailed population estimate





Fishery Data - 2024 Population Estimate

Relative Fish Abundance





Significant Findings

"Quality" trout

- > 14"
- Signal to high-quality angling opportunity



Significant Findings

Bluehead Sucker

- Federal "sensitive" species
- Listed in the State Wildlife Action Plan
 - Tier 1 Species of Greatest Conservation Need
- Three Species Rangewide Conservation Strategy & Agreement



Habitat Suitability Instream Flow Quantification Studies

April 2025

Two studies using the Instream Flow Incremental **M**ethodology

> IFIM is standard methodology used nationally and in Colorado on large, complex instream flow determinations

GEI Literature review



Final Shoshone Reach, Colorado River Instream Flow Report



Benefits of Instream Flows

- Studies show instream flows will:
 - Connect Habitat
 - Increase wetted area = increase suitable fish habitat
 - Provide Thermal Refugia
 - Support sediment transport

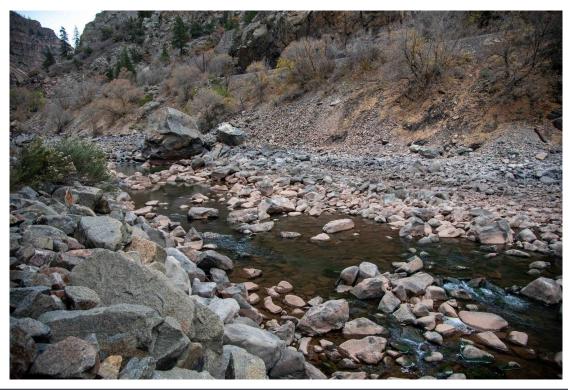
= Improved Fish Habitat Supporting





Benefits of Instream Flows

- Current state is dewatered much of the year
- Restored flows to an additional of 2.4 miles of the Colorado River





CPW Conclusions

- A flow-dependent natural environment exists in the Shoshone Reach
 - Including an abundant and diverse macroinvertebrate community, recreationallyimportant fish, and and <u>native fish which are</u> species of greatest conservation need.
- Acquisition of the senior and junior Shoshone rights will preserve and improve the natural environment
 - Leading to increases in habitat availability and connectivity.



CPW Recommendation

Best use of the Shoshone
 water rights is to preserve and
 improve the natural
 environment in the amount
 offered
 up to 1408 cfs

 Fish habitat improves in the Shoshone Reach <u>up to at</u> <u>least 3000 cfs</u>



***Additionally, high flows in excess of 3000 cfs provide:

- Geomorphic benefits: Flushing fines, habitat maintenance, nutrient cycling, and allochthonous inputs
- o Connectivity, Thermal refugia, and increased wetted area for macros and fish

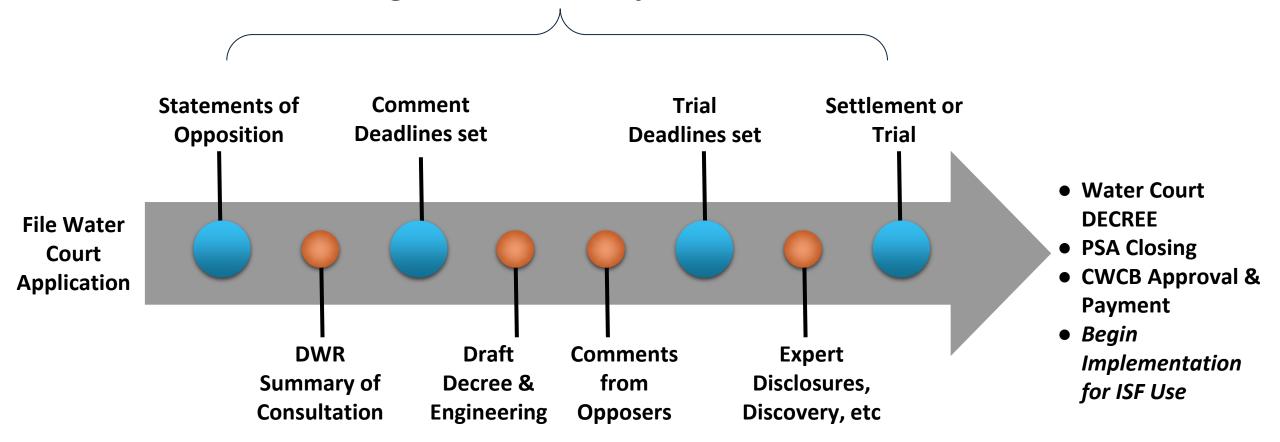
ISF Rule 6, Factors 3, 4, & 6 – Location of Other Water Rights, Non-injury, Hist. Use, & Rtn. Flows

- 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 Stipulations & Decree will:
 - Determine or affirm method and quantification
 - Include allowance and limits on ISF use based on historical use
 - Require maintenance of historical return flows
 - Provide restrictions to prevent injury to other water users



WATER COURT PROCESS

Negotiations & Stipulations



RESOLVING TECHNICAL ISSUES IN WATER COURT

 Expert reports of both applicants and opposers lay out positions on technical issues before the court

Expert meetings are held to facilitate the resolution of these issues

 Organization, deadlines and overall timing of process helps to lead to resolution

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
- CWCB will ensure that this acquisition will not have a negative impact on interstate compacts
- ISF, like hydropower, is a non-consumptive use, for which RF's will become part of the natural streamflow downstream of the reach

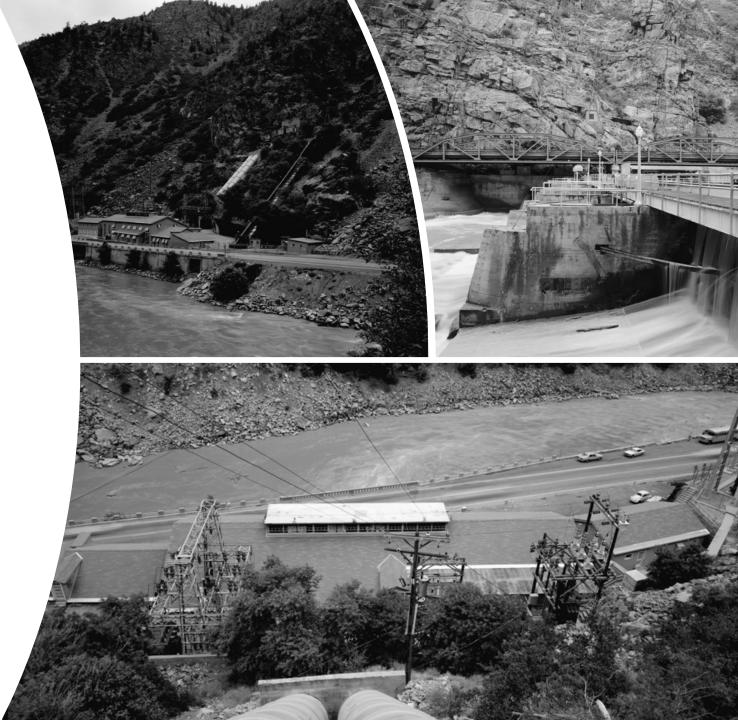
ISF Rule 6, Factor 10 - Costs

- 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 |
| | |

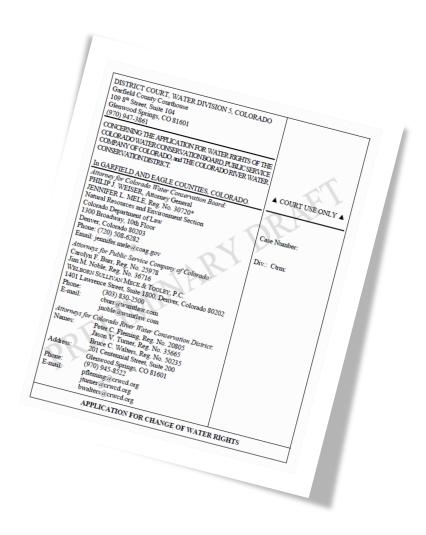
ISF Rule 6, Factor 11 - Administrability

- DWR indicated this acquisition is administrable:
 - Subject to T&C in the decree
 - Subject to measurement and reporting requirements



WATER COURT APPLICATION

- 3 Co-applicants (CWCB, RD, PSCo)
- Application
 - Change entire Shoshone Water Rights
 - Change of use requested to add ISF Use
 - Place of use
 - Type of use to preserve and improve
 - Amount of us is "up to the full decreed rate"



NEXT STEPS

- Action can be taken at this Board meeting.
- Upon acceptance, file a water court application.
- Multi-year water court process.
- A final decree triggers closing of the Purchase and Sale Agreement.
- CWCB votes to confirm if closing conditions are met, then CWCB funds are released.
- After all of these steps, the Shoshone Water Right will be placed to ISF
 Use in the Shoshone Reach pursuant to Terms and Conditions in the
 water court decree.

STAFF RECOMMENDATION

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CWCB STAFF REBUTTAL AND CONCLUSIONS





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Recovery Program Storage Pools in Upper Colorado River System

| Pool | Amount | Туре |
|----------------------------------|------------------------------|--------------------------------|
| East Slope 10,825 water (Granby) | 5,412.5 AF | Firm |
| West Slope 10,825 water (Ruedi) | 5,412.5 AF | Firm |
| Ruedi Firm Pool | 5,000 AF | Firm |
| Ruedi '4 in 5' Pool | 0 or 5,000 AF | Availability based on fill |
| Wolford Fish Pool | Up to 6,000 AF | Prorated based on fill |
| Green Mountain HUP Surplus | 0 to 66,000 AF | Subject to availability |
| Leases/Donations | Up to 12,000 AF historically | Based on need and availability |

