COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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Denver, CO 80203

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Jared Polis, Governor
Dan Gibbs, DNR Executive Director
Lauren Ris, CWCB Director

To: Colorado Water Conservation Board Members

From: Lisa Bright-Unger, Water Resources Specialist
Stream and Lake Protection Section

Date: November 19-20, 2025

Agenda Item: 6a. Proposed One-Time Water Use Agreement with the Basalt Water Conservancy District to Lease Ruedi Reservoir Water During the Winter to Deter Anchor Ice on the Fryingpan River, Water Division 5. (2nd Meeting)

I. Staff Recommendation

Formal action is required at this meeting.

Staff recommends the Board to:

1) Direct Staff to execute the proposed One-Time Water Use Agreement with the Basalt Water Conservancy District; and

2) Accept the donation of 500 AF of the Basalt Water Conservancy District's stored water in Ruedi Reservoir.

II. Background

This proposal is for the Colorado Water Conservation Board ("CWCB") to enter into a One-Time Water Use Agreement ("Agreement") with the Basalt Water Conservancy District ("BWCD") . The Agreement permits one lease that would allow releases of stored water in Ruedi Reservoir ("Leased Water") to supplement the instream flow ("ISF") on the Fryingpan River ("FP River") to help maintain flows to deter the formation of anchor ice during the winter.

The objective of the proposed Agreement is to help maintain FP River flows at 65 cfs to prevent the formation of anchor ice at times when temperatures and low flows could otherwise combine to create anchor ice during the winter.

III. The CWCB's Water Acquisition Procedures

Pursuant to 37-92-102(3) C.R.S. and ISF Rule 6b, this meeting is the second of a two-Board meeting process to review, consider any public comment, and approve or reject the proposal for the One-Time Water Use Agreement. Details on the proposed Agreement and use of the Leased Water were presented at the September 2025 Board meeting and no request for a hearing was received following the initial presentation. The September 2025 Board Memo, including a Location Map, is attached as **Exhibit A**.

IV. Existing Water Rights

CWCB would use the BWCD's Leased Water to supplement its existing decreed ISF water right to preserve and improve the natural environment to a reasonable degree on the FP River.

Case No.	Stream	Segment	Length (Miles)	Amount (Dates)	Appropriation Date
W-1945 (1973)	**Fryingpan River**	**Confluence Rocky Fork Creek to confluence Roaring Fork River**	**~14**	**39 cfs (11/1-4/30) 110 cfs (5/1-1031)**	**07/12/1973**

V. Annual Lease & Operations

In 2018, the Roaring Fork Conservancy ("RFC") began working with the Colorado River Water Conservation District ("District") to evaluate supplementing instream flows in the FP River below Ruedi Reservoir in the winter to deter anchor ice.

This year the RFC determined the total amount of water needed to help curtail anchor ice in the FP River as **2,423 AF** and created the schedule for the Ruedi releases. See Table 1 below.

Table 1

Dates	Amount of Ruedi Releases (AF)
Dec 15 – Dec 31, 2025	825
Jan 1 – Jan 31, 2026	1598
Total	2,423

RFC also partnered with the BWCD to bring more locally contracted Leased Water to be used by CWCB to supplement its ISF on the FP River during the winter to help reduce the costs from leasing all the Leased Water from the District. The BWCD can donate 500 AF of Leased Water in December 2025.

All of the 500 AF shall be released by the end of December 31, 2025.

It is also noted in the Agreement that the Leased Water allowed in the ISF Lease Acquisition Program can first be used in the generation of hydropower at the facility located at the Ruedi Reservoir dam.

The revised November 7, 2025 draft Agreement is included as **Exhibit B**.

VI. Cost of Transaction

The BWCD is donating all 500 AF in 2025 to the CWCB's Lease Program.

VII. Conclusion

Staff recommends the Board to:

1) Direct Staff to execute the proposed One-Time Water Use Agreement with the Basalt

Water Conservancy District; and

2) Accept the donation of 500 AF of the Basalt Water Conservancy District's stored water in Ruedi Reservoir.

VIII. Exhibits

Exhibit A – September 2025 Board Memo, including all exhibits

Exhibit B – Revised November 2025 Water Use Agreement - Draft

Exhibit A

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Jared Polis, Governor

Dan Gibbs, DNR Executive Director

Lauren Ris, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Lisa Bright-Unger, Water Resources Specialist
Stream and Lake Protection Section

DATE: September 16-18, 2025

AGENDA ITEM: 13.b. Proposed 1-Year Water Use Agreement with the Basalt Water Conservancy District to Lease Ruedi Reservoir Water During the Winter for Instream Flow Use on the Fryingpan River, Water Division 5. (1st meeting)

I. Staff Recommendation

No formal action is required at this meeting.

The Instream Flow ("ISF") Rules set forth the procedures to be followed by the CWCB ("Board") and Staff when implementing and administering the ISF Program. Pursuant to ISF Rule 6b. and §37-92-102 (3) C.R.S., the Board will use a two-Board meeting process to review, consider public comment, and approve or reject the proposed one-year Water Use Agreement ("WUA") that would allow for releases of water from Ruedi Reservoir for ISF use during the winter on the Fryingpan River ("FP River"). The Board's consideration of this proposal at the September 2025 meeting will initiate the 120-day Board review period and begin a twenty-day period in which any person may request the Board to hold a hearing on the proposal. The initial presentation of this proposal provides an opportunity for the Board and the public to identify questions or concerns that Staff will address at this or a subsequent meeting. Final action on this proposal could occur at the November 2025 Board meeting.

As required by statute, Staff requested recommendations from the Colorado Parks and Wildlife ("CPW"), the U.S. Department of Agriculture, and the U.S. Department of Interior. Pursuant to ISF Rule 6m.(1), Staff provided notice of the proposed acquisition to all persons on the appropriate ISF Subscription Mailing Lists and the State Engineer's Substitute Supply Plan Notification List for Water Division 5.

See Location Map attached as **Exhibit A**.

II. Background

During the winter on the FP River, anchor ice forms below the surface of the water and attaches to the bottom of the river. While anchor ice formation is a natural winter occurrence in northern hemisphere streams, it can have significant impacts on stream hydrology and ecology. Anchor ice formation occurs during cold temperatures when ice particles suspended in the water column grow and attach to the channel substrate. In addition to obstructing water flow, the ice occupies and disrupts fish communities and macroinvertebrate habitat. During break up, ice can scour the channel bottom and transport macroinvertebrates down river, which can impact the forage base for trout and other fish species.

Over the years many studies have been conducted along the FP River to analyze the formation of anchor ice and to assess the influence of releases from Ruedi Reservoir. Flows greater than 70 cfs seem to result in less anchor ice (Miller Ecological Consultants Inc., 2006, Summary Report – A Study of Macroinvertebrate Community Responses to Winter Flows on the Fryingpan River). To alleviate anchor ice, which adds stress to the macroinvertebrate community, an effort should be made to avoid low wintertime releases out of Ruedi Reservoir. (Miller, Summary Report, 2006) See Miller's Report attached as **Exhibit B**.

In 2018, the Roaring Fork Conservancy ("RFC") began working with the Colorado River Water Conservancy District to evaluate supplementing ISFs in the FP River

below Ruedi Reservoir in winter. One-year, short-term lease acquisitions were implemented for winter releases in 2019, 2021, 2022 and 2023.

III. Proposal and Benefits

1. Proposal

This year the RFC has partnered with the Basalt Water Conservancy District ("BWCD") to assist them in offering to the Board an opportunity to enter into a one-year WUA. The WUA allows for one annual lease that would allow for releases of water from Ruedi Reservoir to supplement ISF use during the winter on the FP River pursuant to BWCD's contracts with the Bureau of Reclamation ("BoR"). See the draft WUA, including the BoR contracts, and RFC's Letter of Recommendation attached as **Exhibit C** and **Exhibit D**, respectively.

The objective of the proposed acquisition is to help maintain FP River flows from 60 cfs to 70 cfs (as stated in RFC's Letter) to prevent the formation of anchor ice at times when temperatures and low flows could otherwise combine to create anchor ice during the winter. The Board would use the leased water to supplement its existing decreed ISF water right to preserve and improve the natural environment to a reasonable degree on the FP River ("Leased Water"). The water rights being proposed in the WUA as an annual lease to the Board would be for up to 500 acre-feet of Leased Water available to BWCD in Ruedi Reservoir pursuant to its Ruedi Reservoir Round I Water Sales Contract No. 2-07-70-W0546 and Ruedi Reservoir Round II Water Sales Contract Nos. 009D6C0014 and 039F6C0012 that could be delivered to the FP River.

The contracts under which water will be provided in 2025 define "Municipal and industrial uses" as "use of water by municipalities, industrial users, commercial recreation entities, and other water user entities not engaged in commercial agricultural production." C.R.S 37-92-103(9) defines "Plan for augmentation" and states "... to increase the supply of water available for

beneficial use..." Collectively, releases of water under these contracts would increase the supply of available water for municipal benefit and for use by commercial recreation entities (i.e. fishing outfitters) on the Fryingpan River and the Roaring Fork River downstream of its confluence with the Fryingpan River through the Town of Basalt.

The lease is being offered for releases of 500 acre-feet during the month of December in 2025.

See the Offer Letter from BWCD attached as **Exhibit E.**

2. Benefits

During the duration of this annual lease when Leased Water is available for ISF use, such water will be protected through the subject reach of the FP River down to the confluence with the Roaring Fork River. The proposed annual lease would increase flows in the FP River and provide benefits to the fish species and aquatic community that live in this reach. In addition to mitigating the effects of anchor ice formation, CPW has observed in the past that increased flows on the FP River during the winter months improve fish habitat, increase spawning success and fry emergence for brown trout and promote a more robust macroinvertebrate food base for fish.

From December 2020 through March 2021, researchers from the RFC conducted a pilot study on the FP River to better understand the parameters affecting anchor ice formation in the river. This study determined the correlation between anchor ice and water temperature, air temperature and streamflow. Observations during the study, and from previous years, suggest that additional streamflow releases from Ruedi Reservoir were effective in decreasing ice formation. See the Austin and Anderson Report attached as **Exhibit F**

The RFC has conducted additional observational studies to gather additional data on factors that control ice formation and the effect on river health. See the Annual Observations attached as **Exhibit G**.

Additionally, releases will also increase the efficiency of hydropower production at Ruedi Reservoir's hydropower plant located at the base of Ruedi Reservoir.

IV. Existing ISFs

The Board currently holds ISF water rights on the following reach of the FP River:

Case No.	Stream	Segment	Length (miles)	Rates -cfs (Dates)	Appropriation Date
W-1945 (1973)	Fryingpan River	confluence Rocky Fork Creek to confluence Roaring Fork River	Approx. 14 miles	39 cfs (11/1 - 4/30) 110 cfs (5/1 - 10/31)	07/12/1973

IV. Discussion

ISF Rule 6e requires the Board to evaluate the appropriateness of the acquisition and to determine how best to utilize the acquired water to preserve or improve the natural environment. ISF Rules 6e and 6f describe the Board's evaluation process, including specific factors that the Board must consider in determining the appropriateness of an acquisition. Such an evaluation shall include, but need not be limited to consideration of the following factors:

1. **The Reach of Stream**

   The 13-mile reach of stream on the FP River for the proposed Leased Water starts at its confluence with Rocky Fork Creek, adjacent to the outlet of Ruedi Reservoir, and continues down to its confluence with the Roaring Fork River. The reach is shown on the Location Map (**Exhibit A**).

2. **Natural Flow Regimes**

    a. **The Fryingpan River** originates in the central Rocky Mountains of Colorado northeast of Aspen in Pitkin County. The headwaters of the Fryingpan River are at the Continental Divide in the Hunter Fryingpan Wilderness at an elevation of about 12,000 feet. Streamflow in the Fryingpan River is primarily from snowmelt and local precipitation and influenced by reservoir operations and transmountain diversions. The largest storage facility in the basin is the Bureau of Reclamation's Ruedi Reservoir, located in the lower portion of the watershed approximately 13 miles above the point at which the FP River flows into the Roaring Fork River near the Town of Basalt. Peak flows typically occur in May, June, and early July and diminish down to base flows in July through September; streamflow is characteristically low and steady from November through March of most years. The FP River below Ruedi Reservoir flows in a westerly direction through a confined canyon fed by only a few small tributary streams. The streamflow of the FP River in this canyon is almost entirely made up of Ruedi Reservoir releases, especially during the winter months. The thermal effects of the reservoir releases create open water conditions virtually year-round, making the river a very popular fishery for both local residents and visitors to the area.

3. **Material Injury to Existing Water Rights**

    There will be no injury to existing rights. Under this lease, water previously stored in priority under the Ruedi Reservoir water rights would be released during times when temperature and flow conditions are conducive to the formation of anchor ice in the winter months.

4. **Historical Use and Historical Return Flows**

Because this is a release of stored water and does not involve a change of water right, or other mechanism through which return flows would be owed, the Board does not need to consider this factor.

5. **Natural Environment**
    a. **The Fryingpan River** is a renowned Gold Medal trout fishery. The anglers drawn to this fishing opportunity provide a significant economic driver for local communities and the quality fishery is pivotal to the high quality of life for residents and visitors. Winter flow conditions below the reservoir and the thermal effects of the reservoir have, over time, created fairly predictable conditions for anchor ice formation when streamflow is below 70 cfs and when air temperatures are in the single digits. Extensive anchor ice deposits can have dramatic impacts on aquatic macroinvertebrate numbers and can disrupt their life cycles. Impacts on trout fry in the interstitial spaces in the substrate can also occur with the formation and accumulation of anchor ice deposits.
6. **Location of Other Water Rights**

    There are other water rights located on the FP River; however, they will not be affected by this release of stored water for ISF use on the FP River.
7. **Effect of Proposed Acquisition on Any Relevant Interstate Compact**

    The proposed lease does not negatively affect any interstate compact.
8. **Effect of Proposed Acquisition on the Maximum Utilization of the Waters of the State**

    The proposed lease will promote maximum utilization of waters of the State by generating hydropower at the Ruedi power plant and by making water available to downstream users.

9. **Availability for Subsequent Use or Reuse Downstream**

   The Leased Water would be available for use below the confluence with the Roaring Fork River.

10. **Cost to Complete Transaction**

    BWCD is donating their Leased Water to the CWCB at no cost.

11. **Administrability**

    Staff will contact the Division 5 Engineer to have them determine if the winter releases from Ruedi Reservoir through the FP River pursuant to BWCD's BoR contracts are administrable. A determination will be made prior to the next Board meeting.

VI. Other Factors to Consider

1. **Stacking Evaluation**

   When the Leased Water is available under this lease for ISF use on the FP River, it can be used to supplement the Board's decreed ISF water rights and may be combined, or "stacked," with the existing ISF water rights to achieve a greater level of protection for the natural environment.

2. **CPW's Letter of Recommendation**

   CPW's Letter of recommendation will be provided prior to the next Board meeting.

VII. Conclusion

The proposed annual lease would increase flows in the FP River and provide benefits to the fish species and aquatic community that live in this reach.

No formal action is required at this meeting.

Attachments:

Exhibit A – Location Map

Exhibit B – Miller Report (2006)

Exhibit C – Draft WUA with BoR Contracts

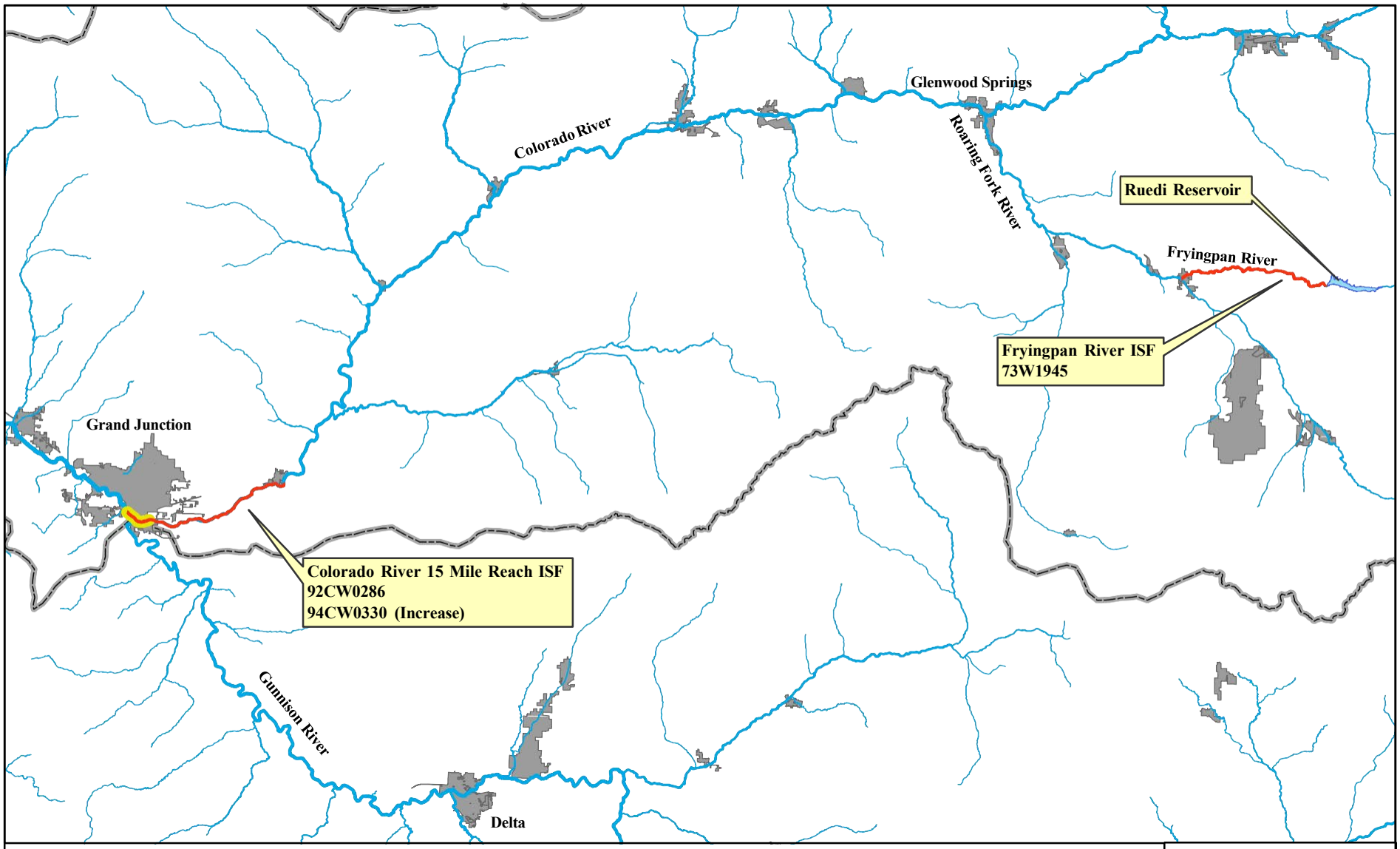
Exhibit D – Letter of Recommendation - RFC

Exhibit E - Offer Letter

Exhibit F – Austin and Anderson Report, 2020-2021

Exhibit G – Annual Observations

Exhibit A



COLORADO
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September 16-18, 2025, CWCB Board Meeting

Agenda Item 13.b. Proposed 1-Year Water Use Agreement with Basalt Water Conservancy District to Lease Ruedi Reservoir Water during the Winter for Instream Flow Use on the Fryingpan River, Water Division 5

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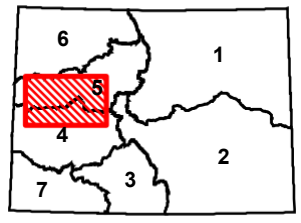
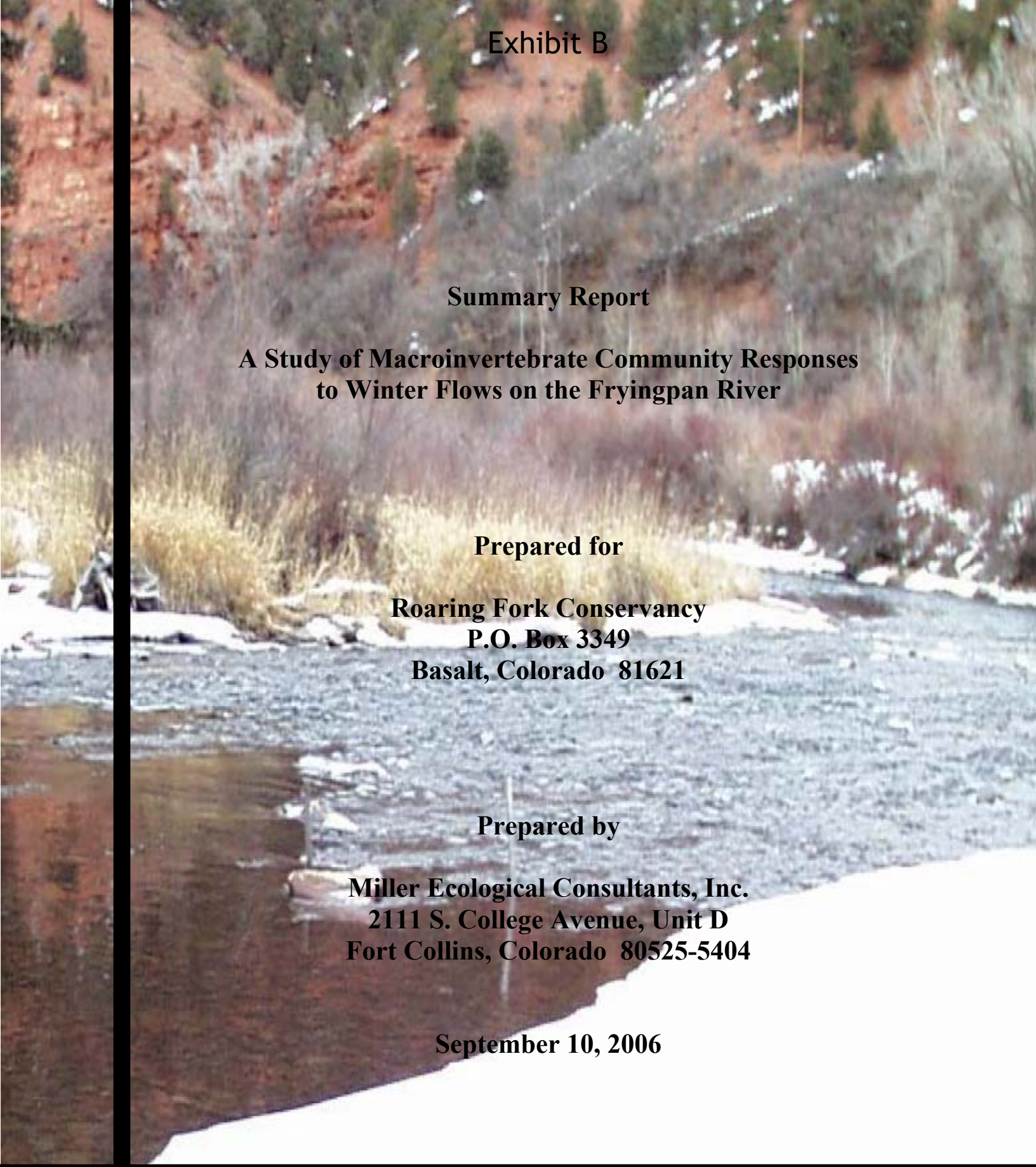


Exhibit B



Summary Report

A Study of Macroinvertebrate Community Responses to Winter Flows on the Fryingpan River

Prepared for

Roaring Fork Conservancy
P.O. Box 3349
Basalt, Colorado 81621

Prepared by

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September 10, 2006

MILLER ECOLOGICAL CONSULTANTS, INC.

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INTRODUCTION

The biological and physical processes that govern the structure and function of benthic macroinvertebrate communities in the Fryingpan River are not entirely understood. However, there is evidence to suggest that the flow regime may be an important physical influence on benthic communities (Rees et al. 2003). For this reason, macroinvertebrate sampling and thermal modeling continued during the fall 2004 and spring 2005 in the Fryingpan River as part of a study to assess the influence of releases from Ruedi Reservoir. Water releases from the impounded reservoir can influence benthic macroinvertebrates and fish communities through regulation of flow and alteration of the thermal regime. It has been hypothesized that erratic changes in discharge have a negative impact on benthic macroinvertebrates (Ptacek et al. 2003); however, it is not clear how the level of discharge during the winter months and the potential formation of anchor ice may influence these communities.

In many ways, the impoundment and physical variables associated with discharge are responsible for the development of an exceptional trout fishery in the Fryingpan River. The purpose of this extended sampling was to evaluate potential impacts associated with low winter flows. This information could be useful when determining management practices that will benefit the trout fishery.

METHODS

MACROINVERTEBRATE SAMPLING

Benthic macroinvertebrate sampling was conducted during fall (28 October) of 2004, and spring (29 April) of 2005. Three sites on the Fryingpan River (FPR-RES, FPR-TC, and FPR-BAS) were sampled on each occasion. These site locations are downstream from the reservoir (FPR-RES), near Taylor Creek (FPR-TDC), and in Basalt (FPR-BAS). At each location, three samples were taken in riffle habitat using a Hess Sampler with 500 μm mesh to provide quantitative macroinvertebrate data. All samples were taken in areas of similar size substrate and similar depth to avoid bias that may be directly related to

habitat. Depth at each sample location ranged between 24.4 cm and 33.5 cm. Substrate within the Hess Sampler was thoroughly disturbed and individual rocks were scrubbed by hand to dislodge all benthic organisms. Benthic macroinvertebrates were preserved in ethanol and transported to the lab where they were sorted, enumerated and identified to the lowest practical taxonomic level (Merritt and Cummins 1996; Ward et al. 2002).

Identification to the "lowest practical taxonomic level" means that all specimens were identified down to the level that is permitted by the available morphological characteristics. Early life stages of many species lack certain anatomical characteristics that allow the specimen to be identified to the genus or species level. In these cases the "lowest practical taxonomic level" may mean only the family level; however, if the available characteristics are consistent with a species that has been previously confirmed during this study then the individual may be included as a member of that taxa. In these cases the species name is provided in parentheses.

As a means of QA/QC, qualified personnel inspected each sample after sorting and a minimum of 20% of all identified taxa were reviewed. Dr. Boris Kondratieff (Professor of Entomology at Colorado State University) confirmed identifications in all cases where the identification of a specimen was difficult or questionable.

In instances where proper identification was possible, the Orders Ephemeroptera, Plecoptera, and Trichoptera were identified to genus (and many down to the species level). Most specimens of other Orders, including Diptera, were identified to the genus level; however, members of the family Chironomidae were only identified to subfamily or tribe. Further identification would require mounting of head capsules – an expensive and time-consuming process. Data collected were used in various indices recommended by the Rapid Bioassessment Protocols (Plafkin et al. 1989) to provide information regarding macroinvertebrate community structure, function, and general aquatic conditions.

Indices used included Shannon-Weaver diversity (diversity) and evenness (evenness), EPT index, taxa richness (richness), and description of functional feeding groups. Diversity

and evenness values were used to detect changes in macroinvertebrate community structure. In unpolluted waters diversity values typically range from near 3.0 to 4.0. In polluted waters this value is generally less than 1.0. The evenness value ranges between 0.0 and 1.0. Values lower than 0.3 are generally considered indicative of organic pollution (Ward et al. 2002).

The Ephemeroptera, Plecoptera, Trichoptera (EPT) index will be employed to assist in the analysis of the data. It is a direct measure of taxa richness among species that are typically considered more sensitive to pollution or other perturbations. This measurement is simply given as the total number of identified taxa in the orders Ephemeroptera, Plecoptera and Trichoptera found at each station.

Taxa richness was also reported for each sampling event during the study. This measurement is reported as the total number of different taxa collected on each date from each sampling location. It is similar to the EPT index, except that it includes all different identifiable benthic macroinvertebrate species. It is useful for describing differences in habitat complexity or aquatic conditions between rivers or site locations.

Benthic macroinvertebrate production at each site was estimated by measuring macroinvertebrate density and biomass. Density was reported as the mean number of macroinvertebrates/m^2 found at each location. Densities were compared among sites for each sampling occasion. Biomass values were obtained by drying the benthic macroinvertebrates from each sample in an oven at 100° C for 24-hours or until all water content had evaporated. Biomass was reported as the mean dry weight of macroinvertebrates per square meter at each site location. Biomass values provide information in terms of weight of macroinvertebrates produced by habitat at each site. Density and biomass provide a means of measuring and comparing productivity at each sampling location.

Separating invertebrate taxa into functional guilds based on food acquisition provided a measurement of macroinvertebrate community function. Aquatic macroinvertebrates were

categorized according to feeding strategy to determine the relative proportion of various groups. The proportion of certain functional feeding groups in the macroinvertebrate community can provide insight to various types of stress in river systems (Ward et al. 2002)

THERMAL REGIME

To describe the winter thermal regime in the Fryingpan River we used Stowaway® Tidbit® temperature loggers (accuracy ±0.2^{o}C) encased in a small (10 cm) section of pvc pipe for protection. We surveyed water temperatures at the following four locations in the Fryingpan River: downstream of Ruedi Dam at the USGS gaging station (Gaging Station), Pruessing Property (Pruessing Site), Roy Palm Property (Palm Site), and upstream of the confluence with the Roaring Fork River behind Taylor Creek Fly Shop (Fly Shop Site). At each site, capsules were placed in the river and attached to a permanent object by aircraft cable. Holes were drilled in each capsule to ensure adequate circulation of stream water. Each thermograph was set to record hourly water temperatures and was downloaded using a Stowaway® Optic Shuttle. Capsules were placed in inconspicuous mid-channel locations near the stream bottom at a depth where anchor ice is likely to form.

Thermal data was downloaded and input into a computer spreadsheet. We limited the thermal analysis to the months of December, January, and February, which are the months where anchor ice would typically occur. For analysis purposes, we defined an anchor ice event/occurrence as any hourly observation with a water temperature less than 32.3^{o}F (0.2^{o}C).

RESULTS

FALL 2004

Macroinvertebrate sampling and analyses was conducted at sites on the Fryingpan River in the fall of 2004 and spring 2005. In general, results of fall 2004 were similar to results from previous years; however, some slight differences were observed (Table 1). Diversity and evenness values indicated that conditions were similar to the fall of 2003. There was higher density at FPR-RES (Figure 1), but higher biomass at FPR-TC and FPR-BAS (Figure 2). The reason for the inconsistency between these metrics was due to changes in the abundance of specific taxa in each community. The number of small invertebrates at FPR-RES increased during the fall of 2004, while the density of some of the larger macroinvertebrates declined. This resulted in a slight increase in densities and a slight decrease in biomass at FPR-RES in the fall of 2003. The opposite effect of this process occurred at site FPR-TC. A slight variation in community structure was also reflected in the function analysis (Figure 3). Functional groups exhibited similar composition during all fall sampling events at all sites, with slight variation occurring mostly in the scraper and collector-filterer groups at FPR-TC.

The differences in metrics observed during three years of fall sampling may be well within the range of natural variation that occurs at these sites. Changes in metric values would not be considered substantial, or suggest that a major community altering event had recently occurred (Table 1). It is important to note the yearly similarities among fall samples because it suggests that changes in macroinvertebrate communities in spring samples are the result of events that occur during winter months.

Table 1. Metrics and comparative values for macroinvertebrate samples collected during the fall season from riffle habitat in the Fryingpan River, Colorado.

Fall 2001	Diversity	Evenness	EPT	Taxa Richness	Density (#/m^2)	Biomass (g/m^2)
FPR-RES	2.29	0.453	19	33	16,509	1.3820
FPR-TC	3.76	0.701	23	41	10,318	2.4338
Fall 2002						
FPR-RES	2.34	0.478	14	30	28,220	2.0104
FPR-TC	3.35	0.639	19	38	17,530	2.4856
Fall 2003						
FPR-RES	2.49	0.508	14	30	31,665	1.8435
FPR-TC	3.39	0.656	18	36	15,792	3.2179
Fall 2004						
FPR-RES	2.33	0.515	12	23	20,161	1.4948
FPR-TC	3.44	0.656	20	38	15,332	3.0058
FPR-BAS	4.00	0.756	23	39	11,321	2.6318

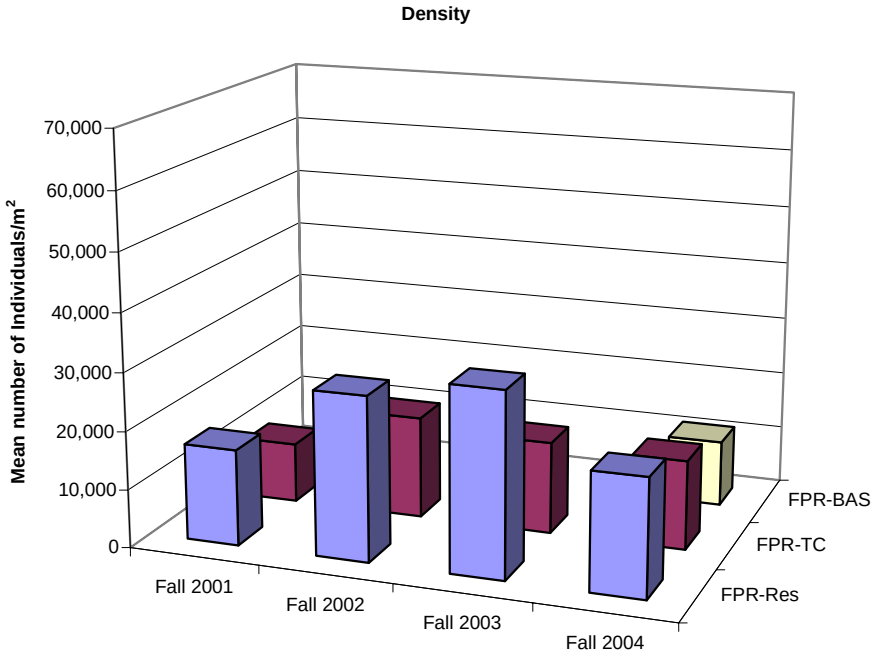

Figure 1. Density values obtained from fall sampling at sites on the Fryingpan River, Colorado.

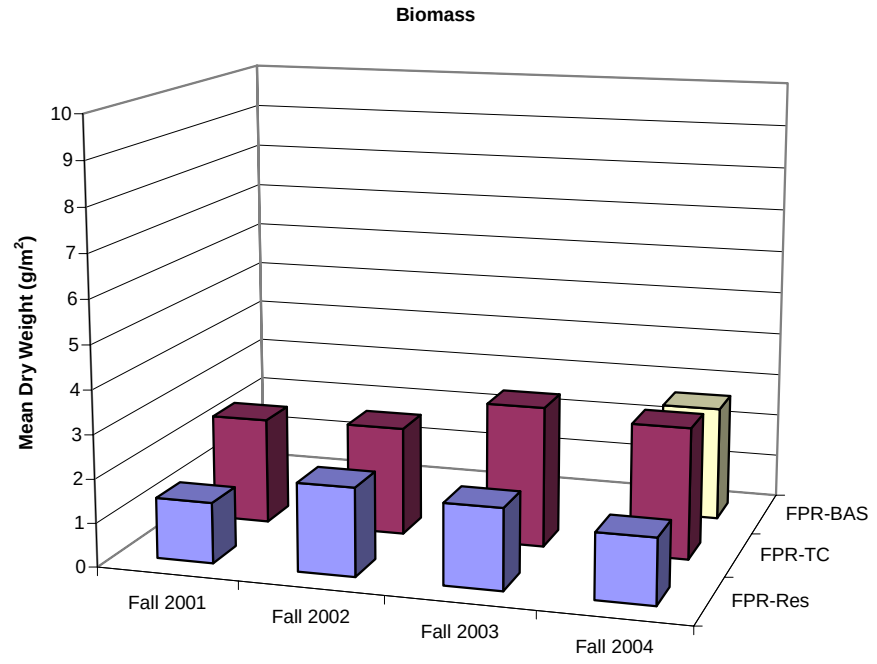

Figure 2. Biomass estimates obtained from fall sampling at sites on the Fryingpan River, Colorado.

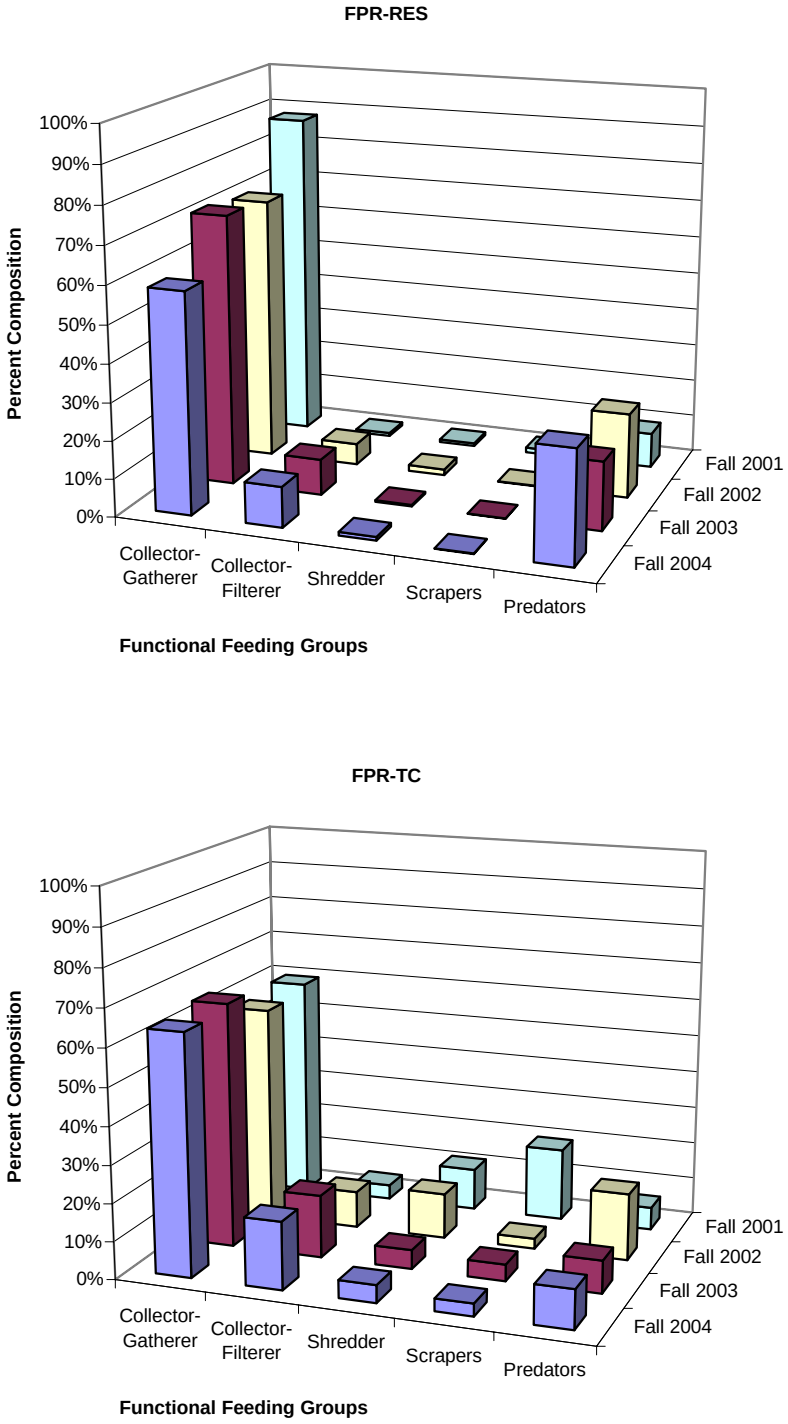

Figure 3. Functional feeding groups at site FPR-RES (top) and FPR-TC (bottom) during fall sampling on the Fryingpan River, Colorado.

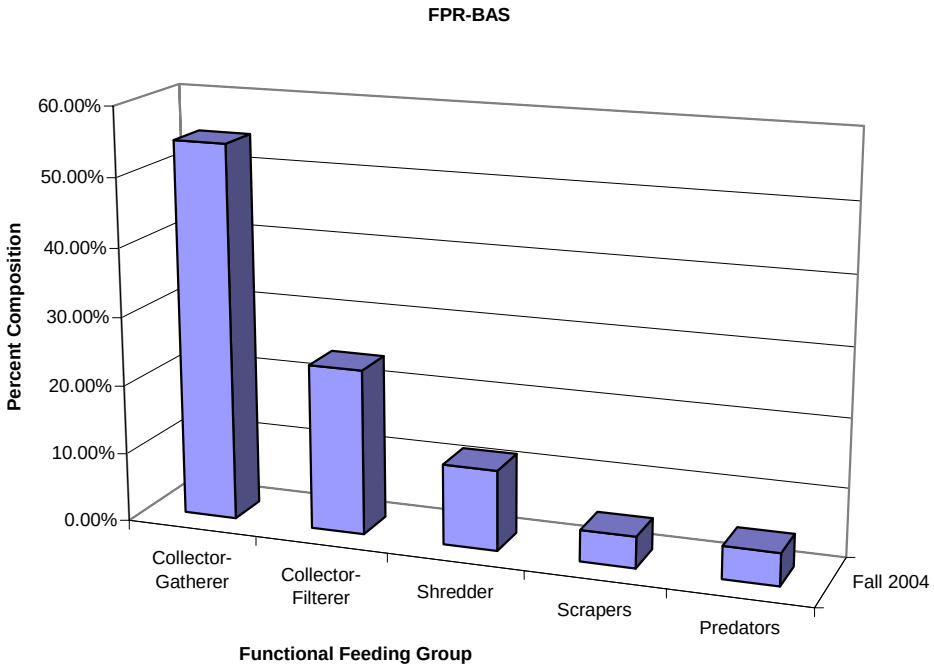

Figure 3 (concluded). Functional feeding groups at site FPR-BAS during fall sampling on the Fryingpan River, Colorado.

SPRING 2005

Evaluation of data collected during spring 2005 indicated that benthic macroinvertebrate communities improved from conditions existing in 2003 (Table 2). Macroinvertebrate communities exhibited an increase in density and biomass at FPR-RES and decreased at FPR-TC (Figures 4 and 5). The changes to community composition were mostly site dependant.

The greatest influence on metric values at FPR- RES during the spring of 2005 resulted from a large increase in the density of mayflies, and the continued presence of additional EPT taxa (mostly caddisflies) that were not accounted for in the spring of 2003. Results of applied metrics indicated that there was an increase in density and biomass at FPR-RES, while EPT and taxa richness values achieved values that were similar to those

reported during 2003 (Table 2). Other metrics and the composition of benthic macroinvertebrates based on function have remained relatively consistent at this site (Figure 6). The metrics that remained relatively unaffected (diversity, evenness, and functional feeding groups) are often more sensitive to pollution-related disturbance. These metrics have always indicated some disturbance at FPR-RES that was thought to be an influence of Ruedi Dam.

The applied metrics for site FPR-TC were also influenced by lower densities of macroinvertebrates, but community composition remained similar to that observed in 2004. In the spring of 2005 a decrease in density and biomass were observed at FPR-TC. This resulted from a general decrease in abundance of several species, and was not restricted to a specific taxonomic group. The number of EPT taxa remained constant but individuals in these groups decreased at FPR-TC during 2005. The number of chironomids exhibited a similar trend. EPT and taxa richness values were at levels that would be expected based on the first two years of this study.Diversity and evenness values were similar to those reported in 2001 and 2002 (Table 2). The distribution of functional feeding groups reaffirms these results by depicting an allocation of species (based on function) that was similar to what was reported in 2003 (Figure 6).

Several of the species that increased in abundance at FPR-TC in the spring 2005 were caddisflies. This is noteworthy because caddisflies are large-bodied insects that may be sensitive to anchor ice formation, but are known to be sensitive to rapid changes in discharge. The increase of caddisflies may signify a reduction in rapid flow changes.

Table 2. Metrics and comparative values for macroinvertebrate samples collected during the spring season from riffle habitat in the Fryingpan River, Colorado.

Spring 2001	Diversity	Evenness	EPT	Taxa Richness	Density (#/m^2)	Biomass (g/m^2)
FPR-RES	2.03	0.406	17	32	36,770	7.4108
FPR-TC	3.71	0.707	21	38	18,366	8.7948
Spring 2002						
FPR-RES	2.37	0.471	20	33	62,996	9.2919
FPR-TC	3.66	0.683	22	41	21,458	4.3774
Spring 2003						
FPR-RES	2.03	0.470	9	20	25,198	4.3867
FPR-TC	1.93	0.386	18	32	20,970	2.0629
Spring 2004						
FPR-RES	2.11	0.430	16	30	33,191	5.8627
FPR-TC	2.11	0.398	20	39	40,909	7.3951
Spring 2005						
FPR-RES	1.75	0.356	15	30	54,522	7.6601
FPR-TC	3.47	0.661	19	38	15,501	3.0725
FPR-BAS	3.68	0.675	26	44	8,323	1.8174

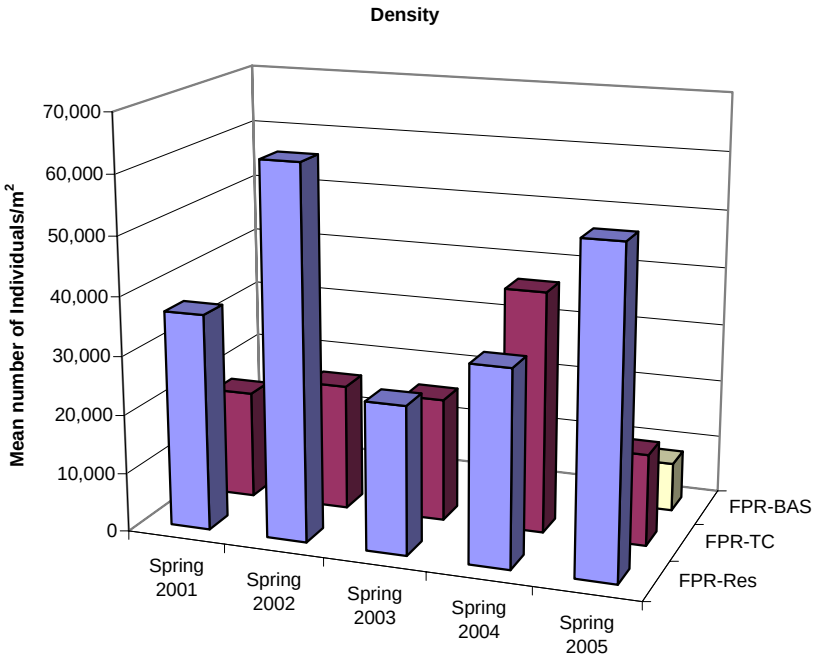

Figure 4. Density values obtained from spring sampling at sites on the Fryingpan River, Colorado.

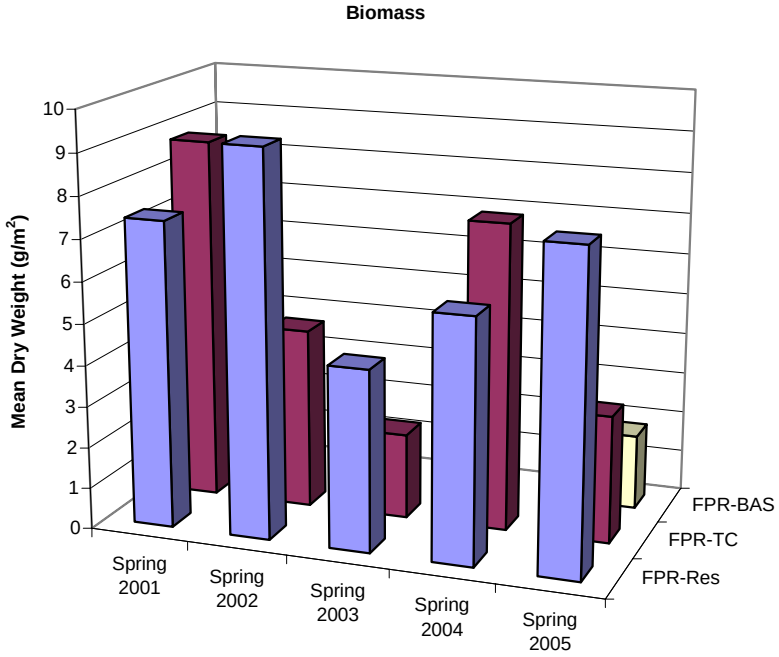

Figure 5. Biomass estimates obtained from spring sampling at sites on the Fryingpan River, Colorado.

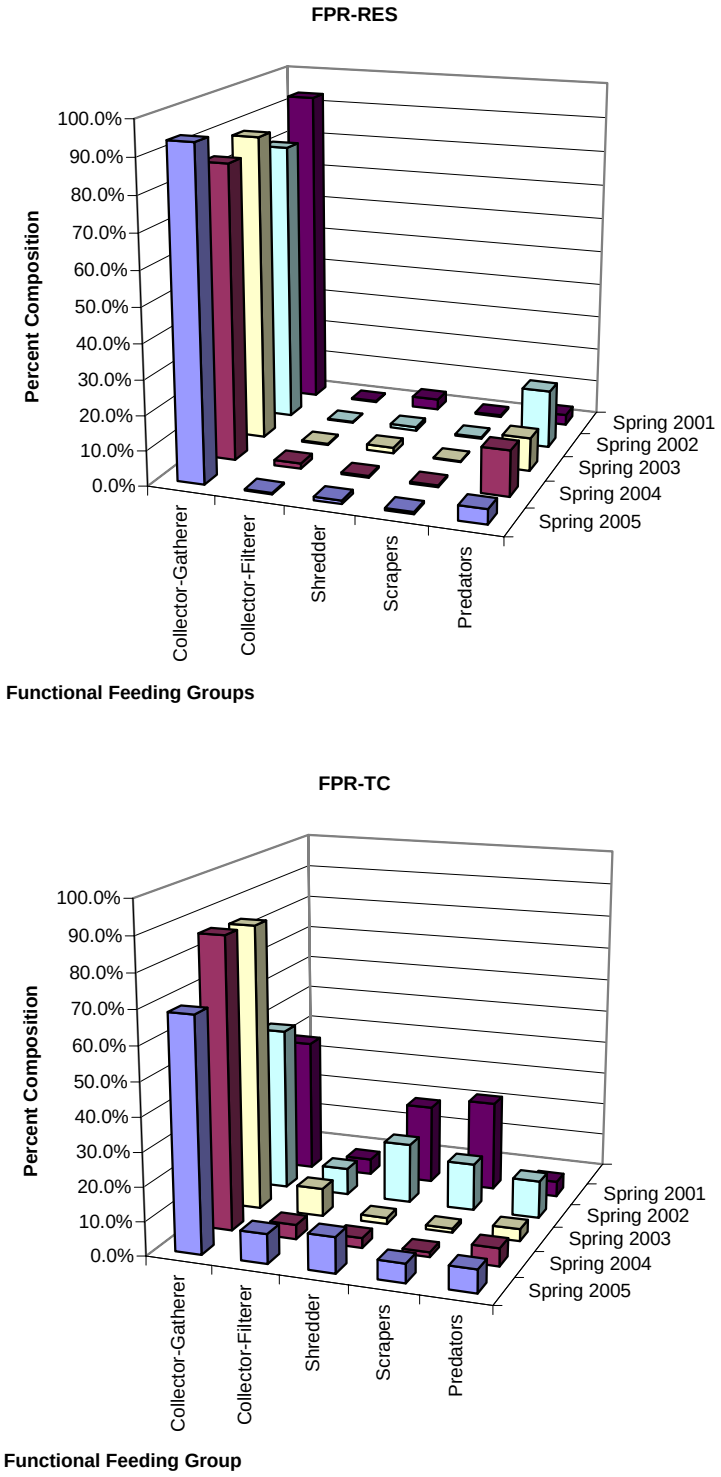

Figure 6. Functional feeding groups at site FPR-RES (top) and FPR-TC (bottom) during spring sampling on the Fryingpan River, Colorado.

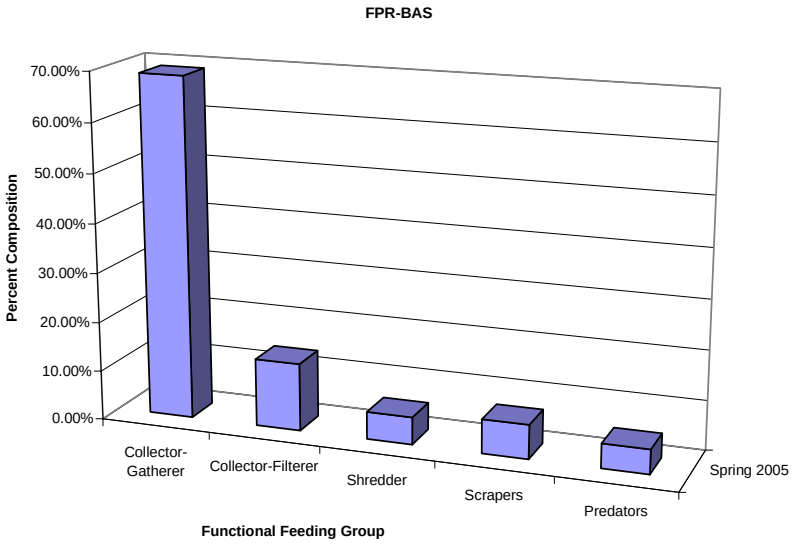

Figure 6 (concluded). Functional feeding groups at site FPR-BAS during spring sampling on the Fryingpan River, Colorado.

DISCUSSION

Aquatic macroinvertebrate communities were evaluated as a means to examine the relationships between winter base flows, anchor ice and macroinvertebrates community structure. The results provide a description of the composition of existing macroinvertebrate communities at the time and location of sampling. The mechanisms that influence the community assemblages are numerous and include variables not directly related to flow manipulations (biological interactions, air temperature, etc.). However, the direct and indirect effects of the flow regime resulting from the regulated discharge in the Fryingpan River appear to influence benthic macroinvertebrate communities.

The magnitude of discharge may be the most important factor that influences macroinvertebrates during the winter months. In the winter of 2002-2003 base flows were recorded at an average 40.8 cfs below Ruedi Dam from December through February (Figure 9). Metrics used to describe benthic macroinvertebrate communities in the spring

indicated that conditions had declined at both sites in spring 2003. It was hypothesized that benthic communities in the spring of 2003 were responding to physical processes associated with lower discharge (Rees et al. 2003). During the winter of 2003-2004 the mean discharge was approximately 85.2 cfs and some apparent recovery of macroinvertebrate communities was observed at both sites on the Fryingpan River. During the winter of 2004-2005 mean discharge was approximately 74.2 cfs (Figure 7). Metric values for 2005 were very similar to spring 2004, however biomass decreased.

Results of metric values from site FPR-RES are likely influenced primarily by discharge because water temperature does not allow anchor ice formation. The mean daily water temperature below the dam was slightly lower during the early portion of the 2002-2003 winter, but water temperature during the coldest months has been similar during each winter season of this study including 2004-2005 (Figure 8).

Although macroinvertebrate impact and recovery seem to be associated with the magnitude of discharge at both sites on the Fryingpan River, the data suggests that the community at FPR-TC is also influenced by some indirect effects of discharge. The data for FPR-BAS suggests more influence of ambient conditions at this site than release from the dam. The formation and frequency of occurrence of anchor ice at FPR-TC appears to be a contributing influence on macroinvertebrate community structure and function.

The results of sampling in 2004 after higher winter flows indicated that densities of many EPT taxa had recovered but chironomid numbers had increased as well. This recent data suggests that two or more concurrent winters with higher flows may be necessary to achieve an optimum balance in the macroinvertebrate community at FPR-TC.

Results of sampling in 2005 after winter flows showed that the densities of many EPT taxa were similar to 2004 indicating the continued higher winter flows were beneficial to the system. This result was hypothesized after the 2004 sampling that winter flows higher than 40 cfs would be beneficial for the invertebrates in the Fryingpan River.

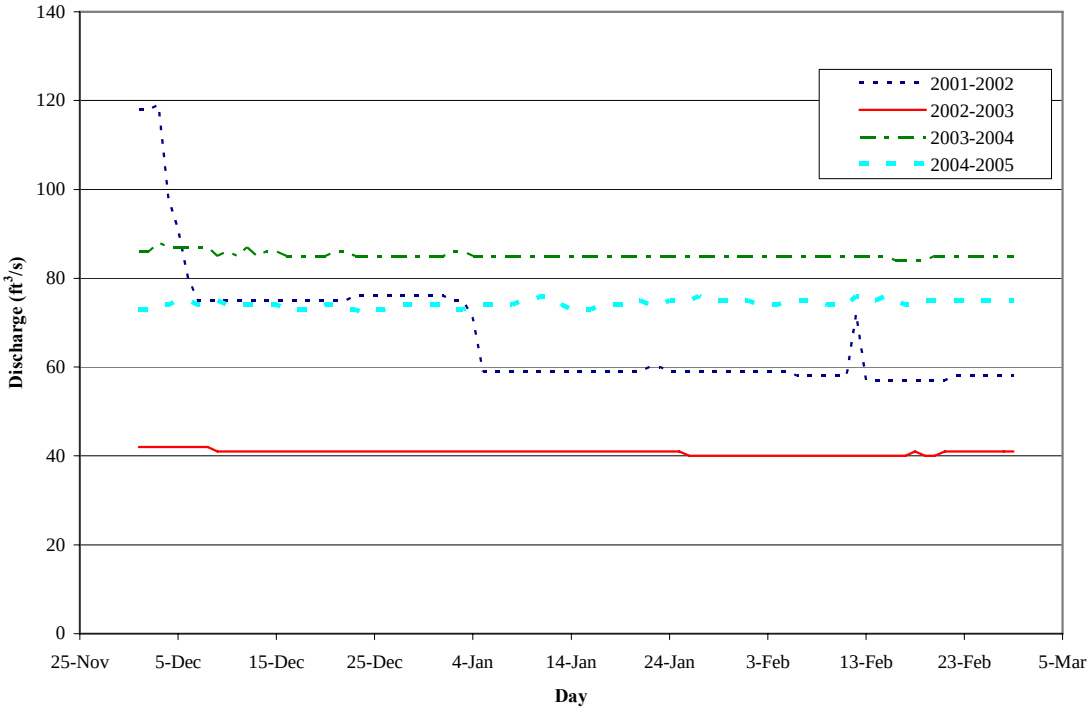

Figure 7. Winter discharge (December-February) for the Fryingpan River below Ruedi Reservoir, Colorado.

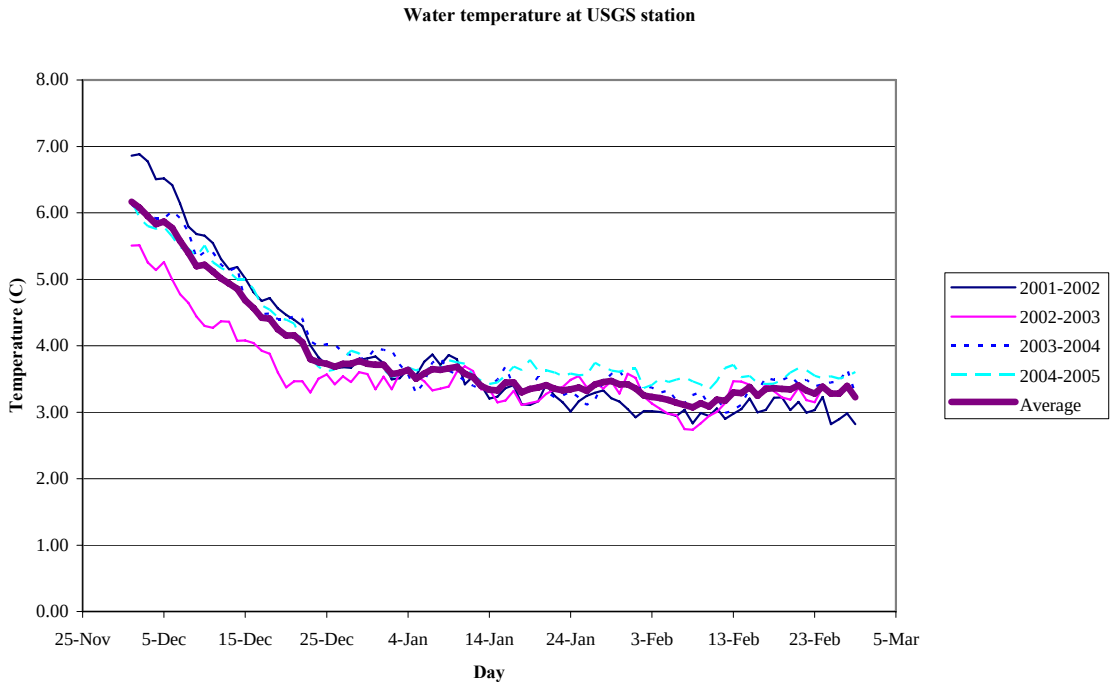

Figure 8. Winter water temperatures for Fryingpan River below Ruedi Reservoir, Colorado.

Because anchor ice is known to have a negative impact on aquatic biota it is important to identify causes and areas of potential formation. Thermograph data for 2004-2005 show that December was the coldest month during the monitoring period which is reflected in both the minimum daily and average daily temperatures (Tables 3 and 4). December of 2004 had the highest number of occurrences of hourly water temperatures less than 0.2 ^{o}C for the entire 2004-2005 winter season. 2004-2005 was also warmer than any of the previous winter time periods. Even with this warmer temperature, there were periods of time when anchor ice could form in the system. Thermograph data from December 2004, January 2005, and February 2005 identified periods of anchor ice formation immediately upstream of the FPR-TC site (Figures 9-11). Thermograph data from the Fryingpan River in Basalt indicated an increased frequency and duration of anchor ice formation (Figures 12-14). The frequency of occurrence and duration of anchor ice formation seems to increase with distance downstream.

Results of this study suggest that magnitude of discharge and air temperature work together to influence anchor ice formation. Thermograph data from two consecutive winter seasons at the Palm site (immediately upstream of FPR-TC) indicated that anchor ice formation at this location was less frequent during the winter of 2004-2005 compared to the previous winter (Table 3). The average length of an anchor ice occurrence was also much less in 2004-2005. It is possible that the magnitude of the effect of anchor ice formation on the macroinvertebrate community may be amplified as the length of the event increases. December 2004 had extended periods of anchor ice at the Palm site (Figure 9) and Basalt (Figure 11).

The available data suggests that discharge was similar in the study area during 2003-2004 and 2004-2005 (Figure 7), but air temperature was different (Table 4). The discharge at site FPR-TC in 2004-2005 was less conducive to the formation of anchor ice than the lower flows during the 2002-2003 winter.

Table 3. Number of anchor ice occurrences (hourly water temperature less than 0.2°C) during winters (December-February) of 2002-2003, 2003-2004 and 2004-2005 at Palm Site.

Month	Year		
	2002-2003	2003-2004	2004-2005
December	229	6	113
January	214	164	50
February	200	86	66

Table 4. Average monthly air temperature (°F) recorded at Aspen, Colorado (Station: Aspen 1 SW, Coop ID: 050372).

Month/Year	Average Max Temperature (°F)	Average Min Temperature (°F)	Count of days with Min Temperature ≤ 5°F
December 01	35.2	8.2	13
January 02	35	8.6	10
February 02	37	5.2	12
December 02	36.5	12.6	6
January 03	40.8	16.3	0
February 03	36.8	12.3	5
December 03	36.6	12.3	7
January 04	36.5	8.8	8
February 04	37.4	10.2	8
December 04	35.97	11.26	9
January 05	39.90	16.55	3
February 05	39.61	14.25	5

The available data suggest that anchor ice was at least partially responsible for the degraded condition of the macroinvertebrate community at FPR-TC during the spring of 2005. To alleviate anchor ice related stress to the macroinvertebrate community, an effort should be made to avoid low wintertime releases out of Ruedi Reservoir.

The water temperature at Basalt appears to be the result of ambient conditions more than at the Palm site. During December 2004, there were extended periods of anchor ice formation. December 2004 was the coldest month of the 2004-2005 winter. This extended period of anchor ice likely had an impact on the macroinvertebrate community, even with discharges over 70 cfs.

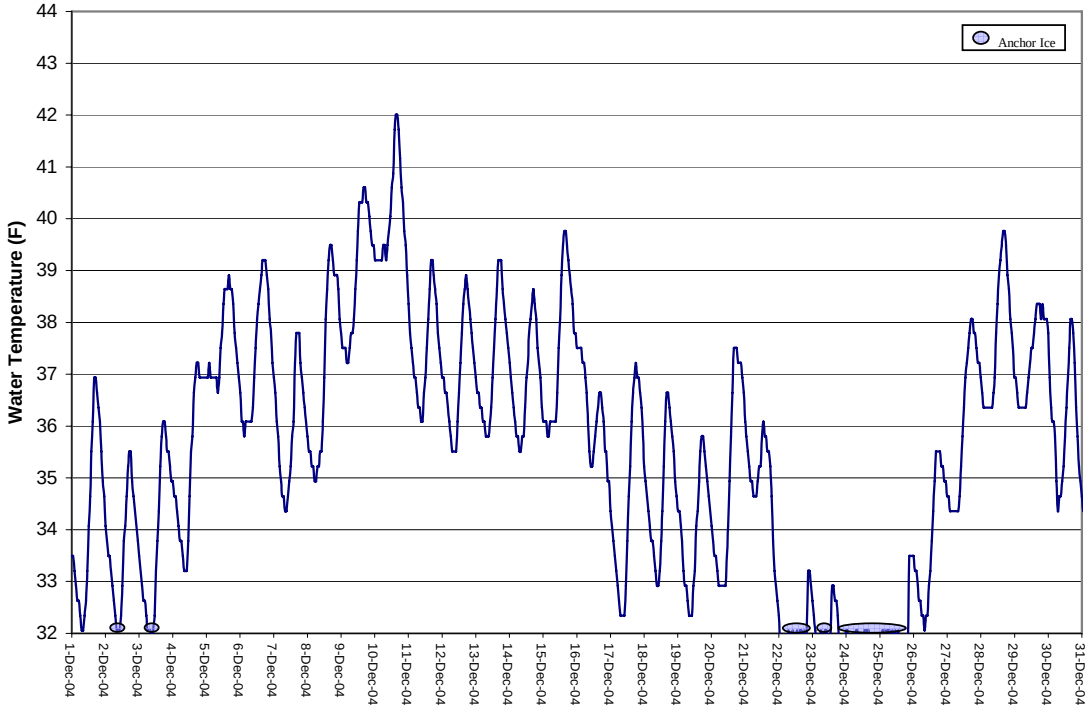

Figure 9. Hourly water temperatures during December 2004 at Palm Site.

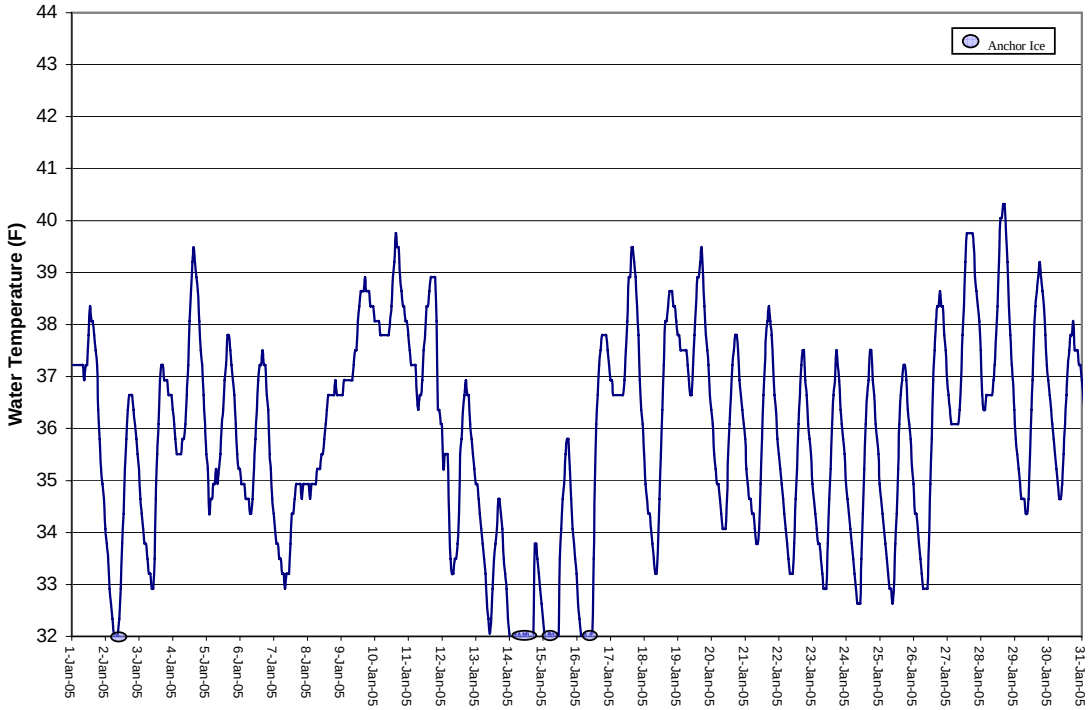

Figure 10. Hourly water temperatures during January 2005 at Palm Site.

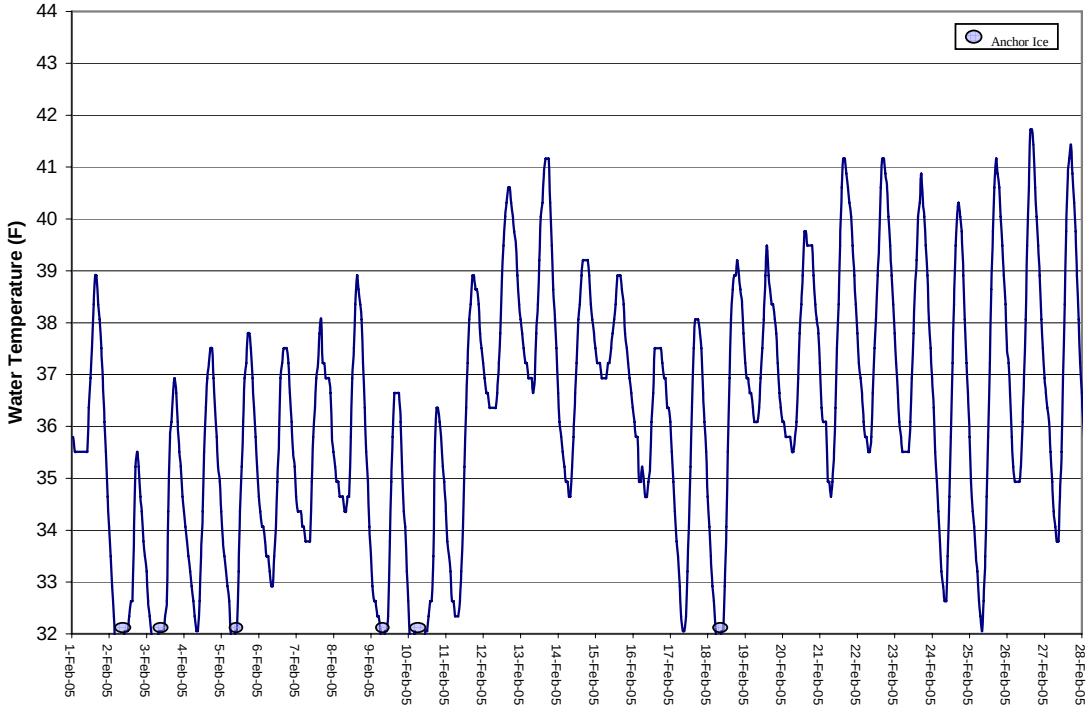

Figure 11. Hourly water temperatures during February 2005 at Palm Site.

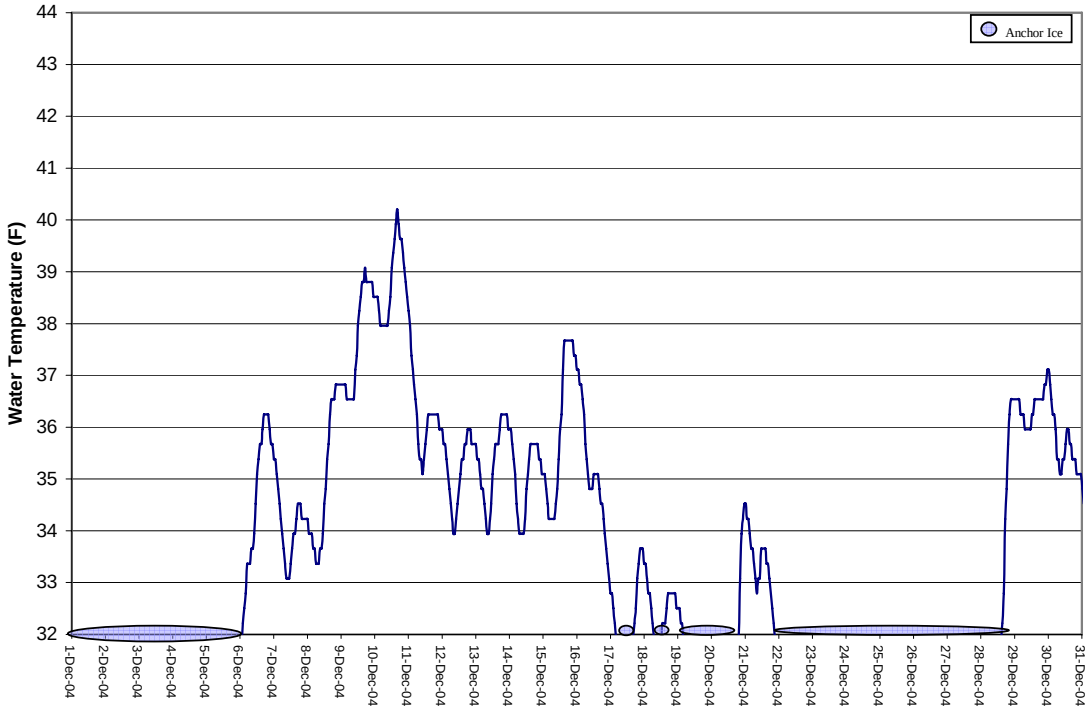

Figure 12. Hourly water temperatures during December 2004 on the Fryingpan River, at Basalt.

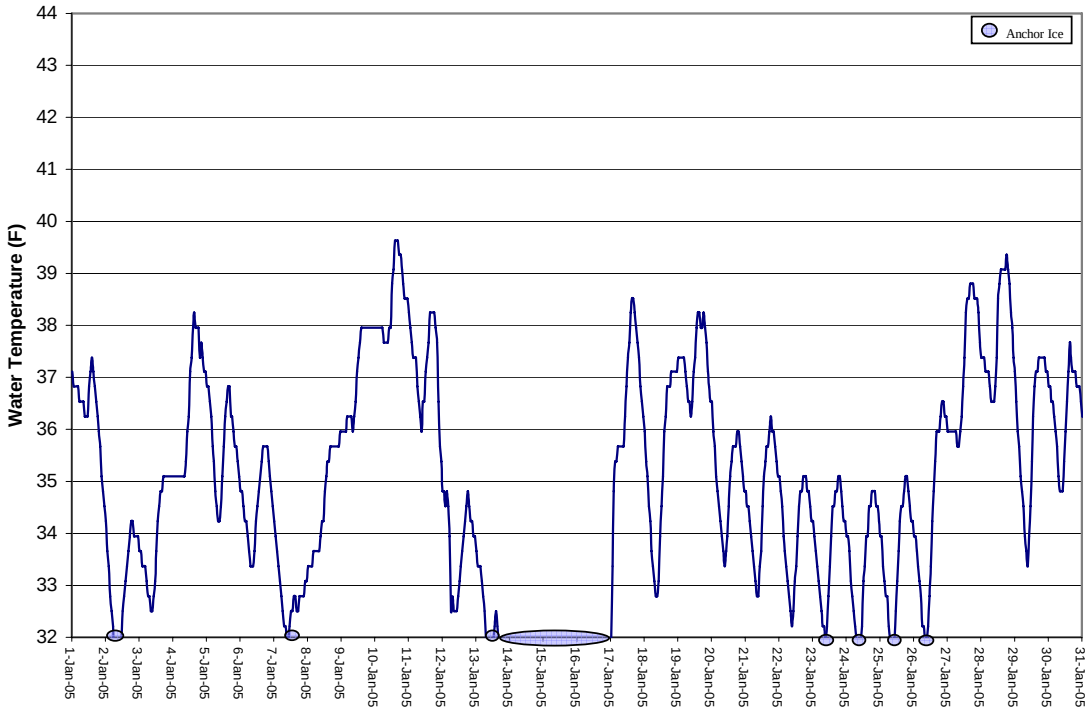

Figure 13. Hourly water temperatures during January 2005 on the Fryingpan River, at Basalt.

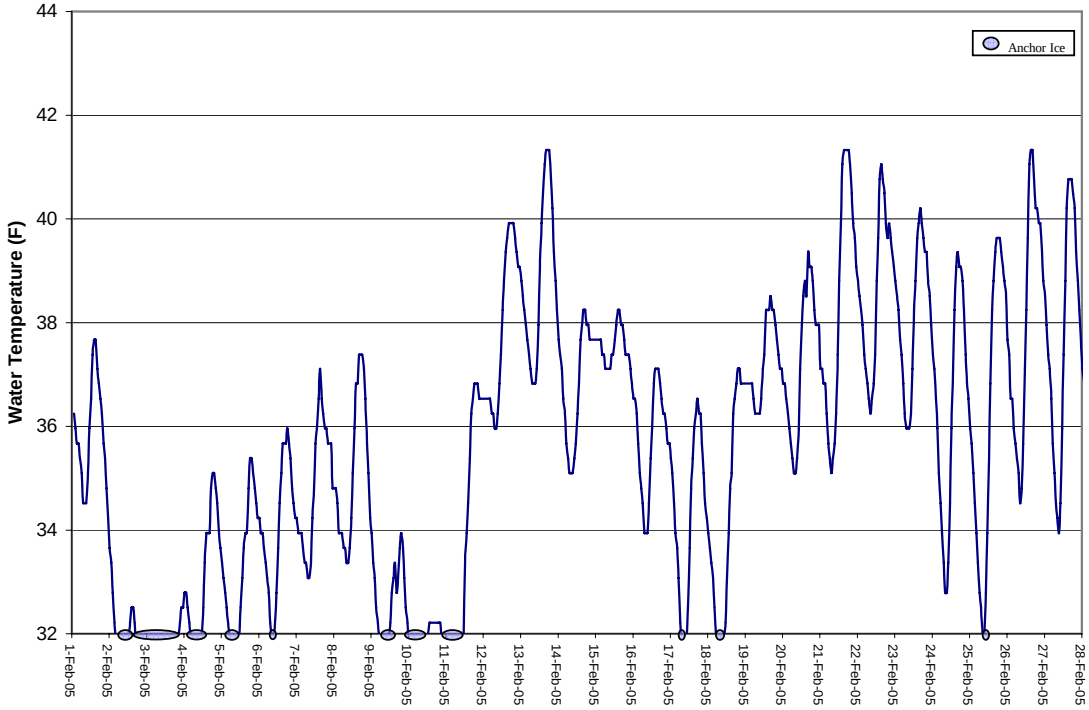

Figure 14. Hourly water temperatures during February 2005 on the Fryingpan River, at Basalt.

CONCLUSIONS

- The impact to the macroinvertebrate community at Basalt from anchor ice appears to be more influenced by ambient conditions than reservoir release.

- The warmer January and February air temperatures in combination with the higher winter discharges appeared to result in fewer occurrences of anchor ice at site FPR-TC.

- It appears that macroinvertebrate diversity and evenness recover in one to two years after severe anchor ice formation if winter flows remain greater than 70 cfs.

- Flows greater than 70 cfs seem to result in less anchor ice in the upper half of the river than flows of approximately 40 cfs.

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APPENDIX A

Table 1. Macroinvertebrate data collected from the Fryingpan River at site FPR-RES on 28 October 2004.

Fryingpan River				
FPR-RES		Sample		
28 Oct. 04	1	2	3	
	rep1	rep2	rep3	total
Acentrella insignificans	2	5	5	12
Baetis (flavistriga)				
Baetis (tricaudatus)	410	573	950	1933
Drunella grandis		3	2	5
Drunella coloradensis				
Drunella doddsi	5	2	3	10
Ephemerella sp.	10	18	24	52
Cinygmula sp.	1			
Epeorus longimanus				
Rhithrogena sp.				
Paraleptophlebia sp.	2	5	1	8
Tricorythodes minutus				
Caenis sp.				
Pteronarcella badia				
Capnia sp.				
Zapada sp.			2	2
Paraperla frontalis				
Sweltsa sp.				
Triznaka signata				
Claassenia sabulosa				
Hesperoperla pacifica				
Skwala americana				
Isoperla fulva				
Isoperla sp. 2				
Brachycentrus americanus			1	1
Brachycentrus occidentalis				
Agapetus boulderensis				
Culoptila sp.				
Glossosoma sp.			1	1
Arctopsyche grandis				
Hydropsyche cockerelli				
Hydropsyche occidentalis				
Hydropsyche sp. (oslari)				
Hydroptila sp.			2	2
Ochrotrichia sp.				
Lepidostoma sp.				
Ceraclea sp.				
Oecetis sp.				
Dolophilodes aequalis				
Rhyacophila brunnea			1	1
Rhyacophila coloradensis	1			1
Neothremma alicia				
Oligophlebodes minuta				
Orthocladiinae	130 (5P)	326 (4P)	338 (3P)	794
Tanypodinae				
Tanytarsini	5	3	15	23
Chironomini				
Diamesinae	6 (1P)	11	19 (1P)	36
Simulium sp.	370(15P)	71 (1P)	80 (3P)	521
Protanyderus margarita				
Chelifera sp.				
Clinocera sp.				
Hemerodromia sp.				
Antocha sp.	2	3	1	6
Dicranota sp.				
Hexatoma sp.				
Tipula sp.				
Atherix pachypus				
Pericoma sp.				
Optioservus sp.				
Heterlimnius corpulentus	0	12	8	20
Zaitzevia parvula				
Microcylloepus sp.				
Narpus concolor				
Acari		1	1	2
Hydracarina sp.				
Gammarus sp.				
Physa sp.				
Pisidium sp.	3	14	2	19
Dugesia sp.				
Polycelis coronata	355	518	666	1539
Oligochaeta	33	49	175	257
Nematoda	3	5	3	11
Totals	832.0	1222.0	1863.0	3306

Table 2. Macroinvertebrate data collected from the Fryingpan River at site FPR-TC on 28 October 2004.

Fryingpan River				
FPR-Taylor Creek		Sample		
28 Oct. 04	1	2	3	
	rep1	rep2	rep3	total
Acentrella insignificans	1	1	2	4
Baetis bicaudatus	362	307	365	1034
Baetis (flavistriga)				
Baetis (tricaudatus)				
B. quilleri			2	2
Drunella grandis	12	22	8	42
Drunella coloradensis				
Drunella doddsi				
Ephemerella sp.	20	18	26	64
Cinygmula sp.	7	7	20	34
Epeorus sp.		1	1	2
Rhithrogena sp.				
Paraleptophlebia sp.	27	39	76	142
Tricorythodes minutus				
Caenis sp.				
Pteronarcella badia				
Capnia sp.				
Zapada sp.		2		2
Paraperla frontalis				
Sweltsa sp.				
Triznaka signata				
Claassenia sabulosa				
Hesperoperla pacifica	1		4	5
Skwala americana				
Isoperla fulva	3	4	6	13
Isoperla sp. 2				
Brachycentrus americanus	33	85	68	186
Brachycentrus occidentalis				
Agapetus boulderensis				
Culoptila sp.				
Glossosoma sp.	4 (3P)	3	2	9
Arctopsyche grandis	5	15	7	27
Hydropsyche cockerelli	1		2	3
Hydropsyche occidentalis				
Hydropsyche sp. (oslari)	4			4
Hydroptila sp.				
Ochrotrichia sp.				
Lepidostoma sp.	28	46	47	121
Ceraclea sp.				
Oecetis sp.				
Dolophilodes aequalis				
Rhyacophila brunnea		3	12	15
Rhyacophila coloradensis	2		2	4
Neothremma alicia				
Oligophlebodes minuta	6	16	12	34
Orthocladiinae	90 (1P)	258 (3P)	654 (5P)	1002
Tanypodinae	1		2	3
Tanytarsini		1	37	38
Chironomini				
Diamesinae	3	2	6	11
Simulium sp.	204	51	22	277
Protanyderus margarita				
Chelifera sp.		2	1	3
Clinocera sp.				
Hemerodromia sp.			2	2
Antocha sp.	7	22	46	75
Dicranota sp.		1		1
Hexatoma sp.				
Tipula sp.				
Atherix pachypus				
Pericoma sp.				
Optioservus sp.			13	13
Heterlimnius corpulentus	15 (2A)	41	43	99
Zaitzevia parvula				
Microcylloepus sp.				
Narpus concolor				
Hydracarina sp.	4	10	14	28
Gammarus sp.				
Physa sp.		1		1
Pisidium sp.	21	60	102	183
Dugesia sp.				
Polycelis coronata	41	55	216	312
Oligochaeta	66	55	56	177
Nematoda	8	9	8	25
Totals	867.0	879.0	1230.0	2959

Table 3. Macroinvertebrate data collected from the Fryingpan River at site FPR-BAS on 28 October 2004.

Fryingpan River				
FPR-BAS		Sample		
28 Oct. 04	1	2	3	
	rep1	rep2	rep3	total
Acentrella insignificans				
B. quilleri	1	2		3
Baetis (tricaudatus)	99	113	144	356
Drunella grandis	3	6	4	13
Drunella coloradensis				
Drunella doddsi				
Ephemerella sp.	21	29	58	108
Cinygmula sp.	8	11	8	27
Epeorus sp.	1			
Rhithrogena sp.		1		1
Paraleptophlebia sp.	24	19	22	65
Tricorythodes minutus				
Caenis sp.			1	1
Pteronarcella badia				
Capnia sp.				
Zapada sp.				
Paraperla frontalis				
Sweltsa sp.	1	1		2
Triznaka signata				
Claassenia sabulosa				
Hesperoperla pacifica	5	3	1	9
Skwala americana				
Isoperla fulva	3	2	9	14
Isoperla sp. 2				
Brachycentrus americanus	18	21	70	109
Brachycentrus occidentalis				
Agapetus boulderensis				
Culoptila sp.			1	1
Glossosoma sp.	46 (4P)	39 (4P)	56 (1P)	
Arctopsyche grandis	9	9	32	50
Hydropsyche cockerelli	26	17	66	109
Hydropsyche occidentalis	4	2	20	26
Hydropsyche sp. (oslari)	12	8	66	86
Hydroptila sp.				
Ochrotrichia sp.				
Lepidostoma sp.	29	31	32	92
Ceraclea sp.				
Oecetis sp.				
Dolophilodes aequalis				
Rhyacophila brunnea		2	3	5
Rhyacophila coloradensis	1	2	4	7
Neothremma alicia				
Oligophlebodes minuta		1		1
Orthocladiinae	36	36	55 (3P)	127.00
Tanypodinae	2			2
Tanytarsini				
Chironomini				
Diamesinae		4		4
Simulium sp.	7	4	1	12
Protanyderus margarita				
Chelifera sp.		1	1	2
Clinocera sp.				
Hemerodromia sp.	2	2	9	13
Antocha sp.	38	49	52	139
Dicranota sp.	1			1
Hexatoma sp.				
Tipula sp.				
Atherix pachypus	1	2		3
Pericoma sp.				
Optioservus sp.	12 (2A)	18 (3A)	6 (1A)	36
Heterlimnius corpulentus				
Zaitzevia parvula				
Microcylloepus sp.				
Narpus concolor				
Acari	3	4	1	8
Gammarus sp.				
Physa sp.				
Pisidium sp.	5	10	5	20
Dugesia sp.				
Polycelis coronata	7	5	6	18
Oligochaeta	47	86	108	241
Nematoda	2	3		5
Totals	416.0	486.0	724.0	1716

Table 4. Macroinvertebrate data collected from the Fryingpan River at site FPR-RES on 29 April 2005.

Fryingpan River			
FPR-RES		Sample	
29 Apr. 2005	1	2	3
	Rep1	Rep2	Rep3
Acentrella insignificans			
Baetis (flavistriga)			
Baetis (tricaudatus)	2331	981	790
Drunella grandis	6	6	5
Drunella coloradensis	5	1	3
Drunella doddsi	4	5	3
Ephemerella sp.	66	22	49
Serratella tibialis			
Cinygmula sp.	17	18	36
Epeorus longimanus			
Epeorus sp.		1	1
Rhithrogena sp.			
Paraleptophlebia sp.			
Tricorythodes minutus			
Leptophlebiidae	1	2	3
Pteronarcella badia			
Prostoia besametsa			
Zapada sp.			
Triznaka signata			
Sweltsa sp.			
Claassenia sabulosa			
Hesperoperla pacifica			
Isoperla fulva			
Isoperla sp. 2			
Skwala americana			
Chloroperlidae			1
Podmosta sp.	1		
Brachycentrus americanus	2		
Brachycentrus occidentalis			
Micrasema bactro			
Culoptila sp.			
Glossosoma sp.			
Arctopsyche grandis	1		
Hydropsyche cockerelli			
Hydropsyche occidentalis			
Hydropsyche sp. *(oslari)*			
Hydroptila sp.	3		
Lepidostoma sp.		2	
Ceraclea sp.			
Oecetis sp.			
Rhyacophila brunnea	4		1
Rhyacophila coloradensis	5	1	1
Neothremma alicia			
Oligophlebodes minuta			
Orthocladiinae	4957	1470	1460
Tanypodinae	1		
Tanytarsini		1	1
Chironomini		1	
Diamesinae	540	412	233
Simulium sp.	21	18	10
Chelifera sp.			
Clinocera sp.			
Hemerodromia sp.			
Oreogeton sp.			
Tipula sp.			
Antocha sp.	5	1	1
Dicranota sp.			
Hexatoma sp.			
Atherix pachypus			
Pericoma sp.			
Neoplasta sp.	1		
Optioservus sp.			
Heterlimnius corpulentus	13		4
Zaitzevia parvula			
Narpus concolor			
Hydracarina sp.			
Gammarus sp.			
Physa sp.			
Planorbidae			
Pisidium sp.			
Dugesia sp.			
Polycelis coronata	91	103	363
Sperchon sp.	19	5	
Sphaeriidae	1	1	
Oligochaeta	39	38	23
Nematoda		3	
Totals	8134.0	3092.0	2988.0

Table 5. Macroinvertebrate data collected from the Fryingpan River at site FPR-TC on 29 April 2005.

Fryingpan River			
FPR-TC		Sample	
29 Apr. 05	1	2	3
	Rep1	Rep2	Rep3
Acentrella insignificans			1
Baetis (flavistriga)	1	26	18
Baetis (tricaudatus)	38	261	285
Drunella grandis		15	19
Drunella coloradensis			
Drunella doddsi			
Ephemerella sp.		22	40
Serratella tibialis	1	1	7
Cinygmula sp.	5	24	62
Epeorus longimanus	1	28	19
Rhithrogena sp.			
Paraleptophlebia sp.	9	112	312
Tricorythodes minutus			
Pteronarcella badia			
Prostoia besametsa			
Zapada sp.			
Triznaka signata			
Sweltsa sp.			
Claassenia sabulosa			
Hesperoperla pacifica	3	4	3
Isoperla fulva	2	4	2
Isoperla sp. 2			
Skwala americana			
Brachycentrus americanus	84	63	93
Brachycentrus occidentalis			
Micrasema bactro			
Culoptila sp.			
Glossosoma sp.	6	13	10
Arctopsyche grandis	10	25	14
Hydropsyche cockerelli			
Hydropsyche occidentalis			
Hydropsyche sp. *(oslari)*			1
Hydroptila sp.			
Lepidostoma sp.	86	43	230
Ceraclea sp.			
Oecetis sp.			
Rhyacophila brunnea	1	5	4
Rhyacophila coloradensis			
Neothremma alicia			
Oligophlebodes minuta	10	12	19
Hesperophylae		2	
Orthocladiinae	236 (25P)	791 (63P)	269 (24P)
Tanypodinae	10	10	16
Tanytarsini		7	11
Chironomini			
Diamesinae	9		1
Simulium sp.	2		
Chelifera sp.		1	1
Clinocera sp.	1	1	
Hemerodromia sp.			
Oreogeton sp.			3
Tipula sp.	1		
Antocha sp.	24	23	15
Dicranota sp.		2	
Hexatoma sp.			
Atherix pachypus			
Pericoma sp.	1		
Optioservus sp.	9 (3A)	5 (2A)	15 (12A)
Heterlimnius corpulentus	54	43 (11A)	50 (3A)
Zaitzevia parvula			
Narpus concolor			
Hydracarina sp.	1	7	3
Gammarus sp.			
Physa sp.			3
Planorbidae			
Pisidium sp.		41	
Dugesia sp.			
Polycelis coronata	149	35	14
Oligochaeta	86	19	16
Nematoda			
Totals	595.0	806.0	1222.0

Table 6. Macroinvertebrate data collected from the Fryingpan River at site FPR-BAS on 29 April 2005.

Fryingpan River			
FPR-BAS		Sample	
29 Apr. 05	1	2	3
	Rep1	Rep2	Rep3
Acentrella insignificans			
Baetis (flavistriga)	4		
Baetis (tricaudatus)	197	89	61
Drunella grandis	4	3	3
Diphetor hageni		4	
Drunella coloradensis			
Drunella doddsi			
Ephemerella sp.	43	21	18
Serratella tibialis			
Cinygmula sp.	20	13	5
Epeorus longimanus	8	15	1
Epeorus sp.			3
Rhithrogena sp.	1		
Paraleptophlebia sp.	33	13	
Tricorythodes minutus			
Leptophlebiidae			3
Pteronarcella badia			
Prostoia besametsa			
Zapada sp.			
Triznaka signata			
Sweltsa sp.			
Claassenia sabulosa	3	2	
Hesperoperla pacifica	2	1	1
Isoperla fulva	11		
Isoperla sp. 2	10	4	1
Skwala americana			
Perlidae		1	
Perlodidae		2	
Brachycentrus americanus	121	6	6
Brachycentrus occidentalis			
Micrasema bactro			
Culoptila sp.			
Glossosoma sp.	6	17	15
Arctopsyche grandis	29		1
Hydropsyche cockerelli	32		
Hydropsyche occidentalis			
Hydropsyche sp. *(oslari)*	46	39	11
Hydroptila sp.			
Lepidostoma sp.	12	7	6
Ceraclea sp.			
Oecetis sp.			
Rhyacophila brunnea	25	5	
Rhyacophila coloradensis	1		
Neothremma alicia			
Oligophlebodes minuta		1	
Orthocladiinae	412 (13P)	44	26
Tanypodinae	6	3	1
Tanytarsini	2	2	0
Chironomini			
Diamesinae	2	33	5
Simulium sp.	1		1
Chelifera sp.	2		
Clinocera sp.			
Hemerodromia sp.			
Oreogeton sp.	7		
Tipula sp.			
Antocha sp.	69	39	28
Dicranota sp.	6		1
Hexatoma sp.			
Atherix pachypus		1	
Pericoma sp.			
Wiedemannia sp.		2	3
Optioservus sp.	37 (6A)	18	7
Heterlimnius corpulentus	1		
Zaitzevia parvula	1		
Narpus concolor			
Hydracarina sp.			
Gammarus sp.			
Physa sp.			
Planorbidae			
Pisidium sp.			
Dugesia sp.	8		
Polycelis coronata		5	1
Oligochaeta	218	140	51
Nematoda			1
Totals	931.0	530.0	260.0

Miller Ecological Consultants, Inc.
2111 S. College Avenue, Unit D
Fort Collins, Colorado 80525
970-224-4505

Exhibit C

DRAFT 8.6.25

WATER USE AGREEMENT

This Water Use Agreement ("Agreement") is entered into by and between the Basalt Water Conservancy District (referred to as "District"), and the Colorado Water Conservation Board, an agency of the State of Colorado ("CWCB"), Individually, "Party"; together, "Parties."

RECITALS

A. The CWCB is an agency of the State of Colorado whose mission is to conserve, develop, protect, and manage Colorado's water for present and future generations.
B. Pursuant to C.R.S. § 37-92-102(3), the CWCB may acquire water by contractual agreement for the purpose of preserving or improving the natural environment to a reasonable degree ("ISF Lease Program").
C. District Colorado Water Conservancy District created under the authority of the Colorado Water Conservancy District Act, Colo. Rev. Stat. § 37-45-101 et seq. The BWCD was created by decree of the Garfield County District Court in C.A. 5593 on April 24, 1964. The District's purpose is to conserve, develop, and stabilize supplies of water for domestic, irrigation, manufacturing, and other beneficial uses within those parts of Eagle, Garfield, and Pitkin counties included within its boundaries.
D. District has entered _____ repayment contracts with the United States of America, Department of the Interior, through the Bureau of Reclamation ("USBR Contracts," attached hereto as Exhibit A). Contract No. _____ (Round 1) provides the District with 500 acre-feet of water per year stored in Ruedi Reservoir , and [add other contract info for Round II] (collectively "Ruedi Water"). The USBR Contracts allow water uses for municipal and domestic purposes, including residential, irrigation, commercial and other municipal water uses. The water delivered to the District can be used either directly, or by exchange for augmentation.
E. The CWCB holds an appropriated instream flow water right in the Fryingpan River decreed in Case No. W-1945 ("Fryingpan ISF Decree," attached hereto as Exhibit B) to preserve the natural environment to a reasonable degree by protecting flow rates up to 39 cfs from November 1 to April 30 and 110 cfs from May 1 to October 31 on the reach of Fryingpan River extending from the confluence with Rocky Fork Creek to the confluence with the Roaring Fork River ("Fryingpan ISF Reach"). To the extent its Ruedi Water is not needed in December of 2025 or in subsequent December months by the District for any reason including for its municipal and domestic purposes, including residential, irrigation, commercial and other municipal water uses and exchange or augmentation purposes, District may elect to lease a portion of its excess Ruedi Water to the CWCB to prevent and mitigate the effects of anchor ice formation in the Frying Pan River within District boundaries.
F. Wintertime formation of anchor ice in the Fryingpan River below Ruedi Reservoir has been documented to adversely impact aquatic habitat in the Fryingpan River. This habitat is within District's service area and supports District's municipal constituents in fishing and related businesses. Flows up to 70 cfs during the winter season have been recommended to help prevent and mitigate the effects of anchor ice formation.
G. District desires to lease/donate an excess portion of its Ruedi Water to the CWCB for use in the Fryingpan ISF Reach in December each year, when available and not needed by District for any of its own water uses, including its including for its municipal and domestic purposes, including residential, irrigation, commercial and other municipal water uses and exchange or augmentation purposes. Such lease of District's excess Ruedi Water is intended to allow CWCB to release the water for instream flow uses in the Fryingpan River as it flows through District boundaries and through its confluence with the Roaring Fork River on a short-term

annual basis ("Annual ISF Lease"). The CWCB desires to accept Annual ISF Lease for use in the State's Fryingpan ISF Reach subject to the terms of this Agreement.

H. The District's lease of water requires District Board approval. The District will continue to work with the CWCB, the local non-profit, the Roaring Fork Conservancy, and the Bureau of Reclamation to manage water releases of any available Ruedi Water.

NOW THEREFORE, in consideration of the mutual agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the CWCB and District agree as follows:

AGREEMENT

1. **Incorporation**. The Parties hereby incorporate by this reference the recitals set forth above.

2. **Term**.
   2.1 Effective Date. This Agreement shall become effective on the date in which the Agreement is signed by the CWCB and District.
   2.2 Expiration Date. Unless otherwise terminated pursuant to the terms set forth herein, this Agreement shall automatically expire five (5) years after the Effective Date.
   2.3 Renewability. The Parties may renew this Agreement to implement an additional five (5) Annual ISF Leases upon written agreement of the parties and subject to the CWCB's and District's approval.

3. **Source and Use of Water**
   3.1 Source. The source of water to be used in an Annual ISF Lease shall be Ruedi Water stored and released from Ruedi Reservoir pursuant to District's USBR Contracts ("Leased Water").
   3.2 Use. The Leased Water shall be used by the CWCB for instream flow purposes exclusively within the Fryingpan ISF Reach from December 1-December 31 each year in the term of this Agreement. Any releases made prior to December 1 must be made with permission from District and the Bureau of Reclamation and consistent with the terms of District's USBR Contracts. Any Leased Water remaining after December 31 shall not roll over to the next year absent written agreement. Use of Leased Water in the ISF Lease Program may be made following generation of hydropower at the facility located at the Ruedi Reservoir dam.
   3.3 Rates of Flow for ISF Use. Releases of Ruedi Water for use in the Fryingpan ISF Reach between December 1 and December 31 shall be used to preserve and improve the natural environment up to a rate of 70 cfs. Releases of Ruedi Water shall not cause the overall release from Ruedi Reservoir to exceed 300 cfs or cause the flow rate in the Fryingpan River below Ruedi Reservoir to exceed 350 cfs.
   3.4 Volume. The Leased Water available subject to this Agreement shall only be the amount available as determined solely by the District unless provided for by a written amendment to this Agreement. For December 2025, the volume subject to this donation and lease shall be ____ acre feet, and for following years, the volume will be solely determined by the District and coordinated with the Roaring Fork Conservancy, the Bureau of Reclamation and CWCB pursuant to the terms in Section 4 below.

4. **Operation of Annual ISF Lease**

4.1 Decision to implement ISF Lease. No later than October 1 of each year, the CWCB, the Roaring Fork Conservancy and District shall meet and determine whether Leased Water will be available and in what amount. Each year it shall be within District's sole discretion as to the determination of whether Leased Water will be available that particular year and in what amount. No minimum amount of Leased Water is guaranteed in a given year. The decision to execute an Annual ISF Lease in a given year shall be made mutually between CWCB and District. District may approve an Annual ISF Lease at its regularly scheduled District meeting. The CWCB may approve an Annual ISF Lease at its regularly scheduled Board Meeting.

4.2 Delivery. CWCB shall submit a release schedule to District, the Roaring Fork Conservancy, and the Bureau of Reclamation prior to the operation of an Annual ISF lease. District shall be responsible for arranging the delivery of Ruedi Water at the outlet works of Ruedi Reservoir into the Fryingpan River consistent with the CWCB release schedule, provided that the releases can be made within the operational limitations of Ruedi Reservoir as determined by the Bureau of Reclamation.

4.3 Release Schedule. Notwithstanding the term of any individual Annual ISF Lease entered pursuant to this Agreement, the CWCB's right to use the Leased Water shall be limited from the effective date of each Annual ISF Lease until December 31 of said year. The CWCB may not carry or book over Leased Water under any Annual ISF Lease that is not released in said year into another Annual ISF Lease year.

4.4 Operations and Coordination. District and CWCB shall coordinate with the Roaring Fork Conservancy, Colorado Parks and Wildlife, the Bureau of Reclamation, and the U.S. Fish and Wildlife Service on the timing and rate of releases of Ruedi Water.

4.5 Exclusivity. The CWCB shall have the exclusive right to use the Leased Water for instream flow use to preserve and improve the natural environment to a reasonable degree, provided that the Leased Water will be used consistent with District's USBR Contracts and in accordance with the Fryingpan-Arkansas Act and Operating Principles.

4.6 District's Reservation of Use. District reserves the right to use any of its USBR Contract Water for its own purposes that is not made available to or used by CWCB under this Agreement or any Annual ISF Lease.

5. **Approvals and Accounting**

5.1 Bureau of Reclamation Approval. Any Annual ISF Lease executed under this Agreement is subject to the Bureau of Reclamation's written approval. The parties shall coordinate to obtain any necessary approvals required to implement an Annual ISF Lease under this Agreement, including approval by the Bureau of Reclamation.

5.2 Division Engineer Confirmation. The CWCB must obtain approval from the Water Division 5 Engineer that the lease set forth in this Agreement is administrable. CWCB shall notify the Water Division 5 Engineer for water rights administration purposes when the Leased Water is being released pursuant to any Annual ISF Lease.

5.3 Accounting. The Parties agree to communicate, coordinate and cooperate, if needed, on any reasonably required accounting as set forth by the Colorado Division of Water Resources or Bureau of Reclamation.

6. **Price and Payment Procedure**

6.1 District has agreed to donate its USBR Contract water as described herein by Annual ISF Lease to the CWCB.

6.2 Once District and the CWCB mutually agree to implement an Annual ISF Lease in a given

year, and the CWCB has approved the ISF Lease at a regularly scheduled Board meeting, and District has approved the lease amount at a regularly scheduled District meeting, the CWCB will issue appropriate documentation to accept the donation.

7. **Termination**
   7.1 This Agreement may be terminated upon mutual agreement of the Parties or as described herein.
   7.2 Material Breach. Either Party may terminate this Agreement for a material breach of the terms of this Agreement by the other Party; provided that the terminating Party has first given at least sixty (60) days prior written notice specifying in detail such alleged material breach and giving the other Party the right within such sixty (60) day period to cure and remedy such alleged material breach. Breach of any annual lease under this Agreement is not a breach of this Agreement. District shall not be deemed to have materially breached this Agreement if pursuant to paragraph 4.1 it decides that a lesser amount of water or no water will be made available for an Annual ISF Lease in any given year.
   7.3 Ability to Perform Impaired. Either Party may terminate this Agreement if its legal ability to deliver Ruedi Water is materially impaired or is eliminated because of the termination or adverse modification of the USBR Contracts, permits, decrees, or other authorizations or legal or administrative findings that are necessary to deliver Ruedi Water; provided that the terminating Party has first given at least sixty (60) days prior written notice to the other Party specifying the issue and steps taken to resolve the issue.
   7.4 Notice of Breach. Prior to commencing any action for enforcement of this Agreement, the Party seeking enforcement shall give the other Party no less than sixty (60) days prior written notice specifying in detail the basis for the enforcement action and the desired outcome that would resolve the perceived need for enforcement.

8. **Remedies**.
   8.1 Available Remedies. Remedies under this Agreement are limited to remedies available under Colorado law.
   8.2 Costs and Fees. In the event of a dispute under this Agreement, each Party shall bear its own costs and fees, including attorney's fees.

9. **Force Majeure**. In the event either Party is unable to perform its obligations under the terms of this Agreement because of acts of God; natural disasters; epidemics; actions or omissions by governmental authorities; unavailability of supplies or equipment critical to perform; major equipment or facility breakdown; changes in Colorado or federal law, including, without limitation, changes in any permit; or other causes reasonably beyond that Party's control, such Party shall not be liable to the other Party for any damages resulting from such failure to perform or otherwise from such causes.

10. **Notices.** Any notice required or permitted to be given by a Party under or in connection with this Agreement shall be in writing and shall be deemed duly given when personally delivered or sent by: (a) registered or certified mail, return receipt requested, postage prepaid, (b) expedited courier service, or (c) email with confirmation of receipt, to the following:

If to CWCB: Colorado Water Conservation Board
Attention: Chief, Stream and Lake Protection Section
1313 Sherman Street, Room 718

Denver, CO 80203
Email: dnr_cwcbisf@state.co.us

With a copy to: CWCB ISF Program
Attention: Rob Veihl
1313 Sherman St.,
Rm.718 Denver, CO 80203
Email: rob.viehl@state.co.us

If to District: Basalt Water Conservancy District
Attention: _____

With a copy to: _____

11. **Miscellaneous.**

11.1 No Agency. Nothing in this Agreement will be construed as creating any agency, partnership, joint venture or other form of joint enterprise between the Parties. Notwithstanding the foregoing, the CWCB or District may elect to designate an agent to undertake specific responsibilities under this Agreement. Should the CWCB or District elect to do so, it shall provide written notice to the other party of such designation including the identity of such agent; contact information for such agent, including a principal point of contact; and clearly defined description(s) of the responsibilities such agent shall undertake on behalf of the CWCB or District.

11.2 Heirs and Assigns. This Agreement shall inure to and be binding on the heirs, executors, administrators, successors, and permitted assigns of the Parties.

11.3 Choice of Law. This Agreement shall be construed in accordance with the laws of the State of Colorado, as amended, without reference to conflicts of laws.

11.4 No Waiver of Immunities. No term or condition of this Agreement shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, of the Colorado Governmental Immunity Act, C.R.S. § 24-10-101 et seq.

11.5 No Waiver. No waiver of any of the provisions of this Agreement shall be deemed to constitute a waiver of any other of the provisions of this Agreement, nor shall such waiver constitute a continuing waiver unless otherwise expressly provided herein, nor shall the waiver of any default or breach hereunder be deemed a waiver of any subsequent default or breach hereunder.

11.6 Assignment. This Agreement may be assigned by either Party upon the prior written consent of the other Party.

11.7 Amendment. No amendment, modification, or novation of this Agreement or its provisions and implementation shall be effective unless subsequently documented in writing that is approved and executed by both Parties with the same formality as they have approved and executed the original Agreement.

11.8 Severability. If any provision of this Agreement is held illegal or unenforceable in a judicial proceeding, such provision shall be severed and shall be inoperative, and the remainder of this Agreement shall remain operative and binding on the Parties.

11.9 Merger. This Agreement constitutes the entire Agreement between the Parties and sets

forth the rights, duties, and obligations of each to the other as of the Effective Date. Any prior Agreements, promises, negotiations, or representations not expressly set forth in this Agreement are of no force and effect.

11.10 No Third-Party Beneficiaries. This Agreement does not and is not intended to confer any rights or remedies upon any person or entity other than the Parties. It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement and all rights of action relating to such enforcement shall be strictly reserved to the Parties.

11.11 Headings. The headings contained in this Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Agreement.

11.12 Non-Discrimination. The Parties will fulfill their obligations under this Agreement without discriminating, harassing, or retaliating on the basis of race, color, national origin, ancestry, sex, age, pregnancy status, religion, creed, disability sexual orientation, genetic information, spousal or civil union status, veteran status, or any other status projected by applicable law.

11.13 Authority. Each Party represents that it has obtained all necessary approvals, consents, and authorizations to enter into this Agreement and to perform its duties under this Agreement; the person executing this Agreement on its behalf has the authority to do so; upon execution and delivery of this Agreement by the Parties, it is a valid and binding Agreement, enforceable in accordance with its terms; and the execution, delivery, and performance of this Agreement does not violate any bylaw, charter, regulation, law, or any other governing authority of that Party.

IN WITNESS WHEREOF, CWCB and District hereby execute this Agreement on the dates set forth below.

COLORADO WATER CONSERVATION BOARD,
an agency of the State of Colorado:

_____ Date:

Name:
Title:

BASALT WATER CONSERVANCY DISTRICT

_____ Date:

Name:
Title:

_____ Date:

Attest:

LIST OF EXHIBITS

A. USBR Contracts

B. Fryingpan ISF Decree, Case No. W-1945

CONTRACT NO. 2-07-70-W0546

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Reclamation
Fryingpan-Arkansas Project, Colorado

CONTRACT BETWEEN THE UNITED STATES AND BASALT WATER CONSERVANCY DISTRICT FOR FURNISHING WATER FOR MUNICIPAL, DOMESTIC AND OTHER RELATED PURPOSES FROM RUEDI RESERVOIR

THIS CONTRACT, made this 13th day of May, 1982, pursuant to the Act of June 17, 1902 (32 Stat. 388), and acts amendatory thereof and supplementary thereto, particularly Section 301(b) of the Act of July 3, 1958 (72 Stat. 319), and the Act of August 16, 1962 (76 Stat. 389), collectively known as the Federal Reclamation Laws, is between the UNITED STATES OF AMERICA, hereinafter referred to as the United States, represented by the Contracting Officer executing this contract, and BASALT WATER CONSERVANCY DISTRICT, a corporation of the State of Colorado, with its principal place of business in Carbondale, Colorado, hereinafter referred to as the District.

EXPLANATORY RECITALS

WHEREAS, the following statements are made in explanation:

a. The United States, acting through the Secretary of the Interior, has constructed the Ruedi Reservoir as a feature of the Fryingpan-Arkansas Project as authorized by the Act of August 16, 1962 (76 Stat. 389), as amended by the Act of October 27, 1974 (88 Stat. 1486), and the Act of November 3, 1978 (92 Stat. 2493), in substantial accordance with House Document No. 187, 83rd Congress, 1st Session, as modified by House Document No. 353, 86th Congress, 2nd Session, subject to operating principles for the Fryingpan-Arkansas Project as set forth in House Document No. 130, 87th Congress, 1st Session. Ruedi Reservoir was authorized for two primary

purposes: to provide storage capacity for replacement water for senior downstream diversion rights in western Colorado simultaneous to times of Fryingpan-Arkansas Project diversions to the Arkansas Basin in eastern Colorado; and to furnish regulatory storage capacity and water to users in western Colorado for irrigation, municipal, domestic and industrial uses. Incidental purposes include recreation and conservation of fish and wildlife resources;

b. The capital costs for the construction of Ruedi Reservoir are allocated among the various authorized purposes. The regulatory purpose has been allocated $9,222,000 representing that portion of the capital costs consisting of the initial construction cost plus interest during construction. Pursuant to the provisions of Section 2 of the Act of August 16, 1962, as amended, this amount is reimbursable in not more than 50 years from August 1969 when Ruedi Reservoir was placed in service. In authorizing the construction, operation and maintenance of Ruedi Reservoir as a feature of the Fryingpan-Arkansas Project, it was the intent of Congress that future users of the regulatory capacity repay the capital costs and appropriate share of the operation, maintenance and replacement costs related thereto. Interest charges on the $9,222,000 did not accrue for the 10-year period ending in August 1979 under the provisions of the Water Supply Act of 1958. Interest has accrued since that date. As of September 30, 1981, unpaid capital costs of Ruedi Reservoir allocated to the regulatory purpose were $9,792,000;

c. The District requires 500 acre-feet of water annually for municipal and domestic purposes, including residential, commercial and other municipal related water uses.

d. The District desires to contract, pursuant to the Federal Reclamation Laws and the laws of the State of Colorado, for the supply of up to 500 acre-feet of water annually from the regulatory capacity of Ruedi Reservoir for which the District will make payment to the United States upon the basis, at the rates, and pursuant to the conditions hereinafter set forth; and,

e. The United States desires to provide and is capable of providing the required 500 acre-feet of water annually from the regulatory capacity of Ruedi Reservoir.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, the parties hereto agree as follows:

DEFINITIONS

1. Where used herein, unless specifically expressed otherwise or obviously inconsistent with the intent hereof, the term:

a. "United States" shall mean the United States of America, acting through the Secretary of the Interior (hereinafter the "Secretary") or his duly authorized representative.

b. "Contracting Officer" shall mean the Regional Director, Lower Missouri Region, Bureau of Reclamation. Unless deemed otherwise, the Contracting Officer shall be the Secretary's authorized representative.

c. "Project" shall mean the Fryingpan-Arkansas Project, Colorado.

d. "District" shall mean the Basalt Water Conservancy District, a conservancy district of the State of Colorado, with its principal place of business in Carbondale, Colorado.

e. "Delivery" shall mean the delivery of water into the Fryingpan River at the outlet works of the Ruedi Reservoir pursuant to request made by the District in accordance with the provisions of Article 5.

f. "Standby charge" shall be that annual charge to reserve the right for delivery of up to 500 acre-feet of water per year.

g. "Delivery charge" shall be that annual charge for the amount of water requested for delivery by the District and delivered by the United States into the Fryingpan River at the outlet works of Ruedi Reservoir. For purposes of this contract, the minimum quantities set forth in the attached Schedule A shall be deemed to have been requested for delivery by the District.

h. "Year" shall mean the period beginning on January 1 and ending the following December 31.

i. "Replacement capacity" shall mean that portion of the total capacity of Ruedi Reservoir required to permit project diversions at times when such diversions could not otherwise be made because of simultaneous demands of senior diversions in western Colorado existing on April 30, 1959, and as further defined in Section 6(a) of the Operating Principles, Fryingpan-Arkansas Project.

j. "Regulatory capacity" shall mean that portion of the total capacity of Ruedi Reservoir not needed for replacement purposes and as further defined in Section 6(b) of the Operating Principles, Fryingpan-Arkansas Project.

k. "Ruedi Reservoir" shall mean the dam, reservoir and related facilities constructed on the Fryingpan River above the town of Basalt as a feature of the Fryingpan-Arkansas Project.

l. "Municipal, domestic and related uses" (hereinafter "municipal") shall mean use of water furnished to municipalities or other entities pursuant to this contract for municipal, domestic and miscellaneous related purposes, as those terms are traditionally and commonly construed, excluding use for industrial and commercial-agricultural purposes.

m. "Industrial uses" shall mean water used for producing or processing a nonagricultural product for sale. For purposes of this definition, the use of less than 100 acre-feet annually by any one user shall be conclusively presumed to be nonindustrial.

n. "Commercial-agricultural uses" shall mean water used primarily in the commercial production of crops and livestock which are the principal sources of income for the user of such water.

o. "Capital costs" shall mean the capitalized investment for Ruedi Reservoir including the construction costs of the reservoir plus interest during construction and accrued interest computed at the rate of 3.046 percent and other appropriate costs allocable to the regulatory capacity, including the cost of additions as defined in Article 1r below, as determined in accordance with the regular accounting procedures of the Contracting Officer as of the date of this contract.

p. "Operation and maintenance costs" shall mean and shall be limited solely to those ordinary and necessary expenditures directly incurred to operate and maintain Ruedi Reservoir to the extent and for the purpose for which it was originally authorized and constructed. Operation and maintenance shall not include expenditures required to remedy deficiencies in the original construction.

q. "Replacement costs" shall mean and shall be limited solely to the expenditures required to remedy conditions brought about by the ordinary use of Ruedi Reservoir or to restore or replace components of the existing reservoir. For purposes of this contract, replacement costs shall be those costs allocable to the regulatory capacity but shall not include expenditures to increase the capacity of Ruedi Reservoir or to extend the purpose for which it was originally authorized and constructed.

r. "Additions" shall mean any new facilities necessary to fulfill the intent and purpose for which Ruedi Reservoir was originally authorized and constructed.

TERM OF THE CONTRACT

2. a. The contract becomes effective on the date of execution and shall remain in effect until September 30, 2019, unless terminated sooner in accordance with the provisions of Article 8.

b. The District shall have the option to renew this contract for an additional term of 40 years upon written request to the Secretary on or before 2 years prior to the expiration of this contract. Renewal of this contract shall be upon the same terms and conditions set forth in Articles 3 and 7 herein with priority to be based on the date that this contract was initially executed; Provided, however, That all other terms and conditions, including the water service charges set forth in Article 4, may be renegotiated by the parties based on Federal Reclamation Laws in effect at that time.

CONTRACTED SERVICE

3. The District hereby contracts for 500 acre-feet of water service annually from Ruedi Reservoir and the United States agrees to provide such water service, subject to the terms and conditions of this contract.

WATER SERVICE CHARGES

4. a. The minimum standby charge will be an annual charge of $6 per acre-foot for the amount of water contracted for herein and which the United States is capable of delivering to the District. The standby charge will become due upon execution of this contract and thereafter payable on or before January 1 of each subsequent year of this contract. The standby charge for the first year, if less than a full contract year, will be prorated on a monthly basis beginning with the first calendar month following the date of this contract. Such prorated standby charge will be due and payable on or before 45 days after the date of this contract. The standby charge represents interest on the reimbursable capital costs plus annual operation, maintenance and replacement charges allocable to the 500 acre-feet of the regulatory capacity contracted for herein.

b. The minimum charge for delivery of water requested by the District shall be $9 per acre-foot. The delivery charge represents the amount required for repayment of the unpaid reimbursable capital costs of Ruedi Reservoir and shall be in addition to the standby charge.

c. Whether or not the District requests delivery pursuant to Article 5, the District is required to take or, failing to take, to pay annually the delivery charge for a minimum quantity of water as set forth in the attached Schedule A, Provided the United States is capable of delivering said water. The charge for the minimum service set forth in Schedule A shall be payable on or before January 1 of each year.

d. The per acre-foot charges set forth in Article 4a and b above may be reviewed and adjusted by the Contracting Officer, after consultation with the District, at 5-year intervals beginning January 1, 1986, based on

Federal fiscal year accounting, except that no adjustment shall be made in the delivery charge or the interest component of the standby charge until January 1, 1991, subject to the following conditions and limitations:

(1) The standby charge may be increased only to reflect increases in the portion of accrued interest on the reimbursable capital costs plus annual operation, maintenance and replacement (OM&R) charges allocable to the 500 acre-feet of the regulatory capacity contracted for herein. Adjustments in the OM&R component shall be based on a projection of expenses for those components in the succeeding 5 Federal fiscal years taking into account the actual expenditures for OM&R during the preceeding 5 Federal fiscal years.

(2) The delivery charge may be increased only to reflect variances in expected amortization of the reimbursable capital costs due to changes in historical or projected water deliveries, capital costs and cost allocations. For the purposes of this article, the amortization period for the regulatory capacity of Ruedi Reservoir will end in the year 2019.

(3) The increase in the per acre-foot standby charge plus the increase in the per acre-foot delivery charge at any 5-year interval may not result in total charges which exceed the maximum amounts set forth as follows:

Year	Maximum Total: Standby + Delivery Charges
1991-1995	$19.50 per acre-foot
1996-2000	$25.35 per acre-foot
2001-2005	$33.00 per acre-foot
2006-2010	$42.80 per acre-foot
2011-2019	$55.00 per acre-foot

(4) The maximum water service charge per acre-foot of water contracted for herein, including both standby and delivery charges, shall not exceed $55 per acre-foot during the term of this contract.

(5) The Contracting Officer will notify the District in writing of any adjustment in the water service charges pursuant to Article 4d at least 60 days prior to the effective date of such adjustment.

e. Payment shall be made quarterly in advance of delivery for quantities in excess of the minimum service payments required by Article 4c. Such payment shall be based on the delivery schedule submitted by the District pursuant to Article 5a. The Contracting Officer will provide the District with a quarterly statement of water delivered and any additional delivery charges due based on said projected schedule, whereupon payment of such additional delivery charges shall be made by the District within 30 days of receipt of such statements. Adjustments in payment for any differences between actual and scheduled deliveries of water will be made during the succeeding quarter. Water service and deliveries under this contract will not be terminated because of the Contracting Officer's failure to bill the District for delivery charges.

f. Until such time as all capital costs are repaid, the United States will apply all revenues for providing water service from the regulatory capacity of Ruedi Reservoir to the payment of operation, maintenance and replacement costs, interest on the unpaid balance of the capital costs, and the capital costs including interest during construction which are allocated to the regulatory capacity.

DELIVERY OF WATER

5. a. Before October 1 of each year, the District will submit a written schedule to the Contracting Officer of its anticipated monthly demand for the delivery of water during the following year. The District shall revise said schedule as necessary to reflect its expected demand schedule based on current water conditions. Notwithstanding the above, the District shall be entitled to take delivery of water under this contract at any time upon 24 hours notice to the Contracting Officer or a designated representative. All notices requesting delivery or a change in the delivery schedule shall be in writing. However, orders which cannot be transmitted in writing due to urgent or emergency situations may be telephoned to the Contracting Officer or a designated representative, whereupon such orders shall be confirmed in writing by the District.

b. The Contracting Officer will timely notify the District and Division No. 5 Engineer, Colorado Division of Water Resources, in Glenwood Springs, Colorado, of the date, time and amount of all water released from Ruedi Reservoir and delivered pursuant to this contract.

c. In the event the District fails or is unable to use the quantities of water delivered by the United States pursuant to a request by the District, said inability, failure or refusal shall not relieve the District of the obligation to pay for delivery of such water pursuant to the terms of this contract.

d. The delivery of water under this contract will be made into the Fryingpan River at the outlet works of Ruedi Reservoir in accordance with the provisions of Article 5a. All delivery of water will be limited by the outlet capacity of Ruedi Reservoir. All water delivered to the

District from Ruedi Reservoir will be measured by the Contracting Officer with equipment furnished, operated and maintained by the United States. The United States will not be responsible for the control, carriage, use, handling or distribution of water delivered to the District beyond the delivery point and the District shall hold the United States harmless from and against all claims, demands and causes of action on account of property damage, personal injury or death resulting from the control, carriage, use, handling or distribution of water delivered to the District, provided such water is delivered in a safe and reasonable manner.

e. The District will not be responsible for the storage of water in or the operation and maintenance of Ruedi Reservoir and the United States shall protect, indemnify and hold the District harmless from and against all claims, demands and causes of action of any nature whatsoever resulting from or in any manner connected with the storage of water in or the operation and maintenance of Ruedi Reservoir within the limits of the Federal Tort Claims Act (28 U.S.C. Secs. 2671-2680).

DISTRICT'S USE OF WATER

6. a. Water delivered to the District under this contract will be used either directly, by exchange or through augmentation for municipal purposes within the District.

b. The District may charge its users such rates for municipal services as permitted by Colorado law for water furnished pursuant to this contract.

c. The District shall develop and implement an effective water conservation program for all water delivered under this contract. The District's water conservation program shall contain definite goals,

appropriate water conservation measures and time schedules for meeting water conservation objectives. Said water conservation program shall be in existence prior to the delivery of water under this contract and shall be subject to approval by the Contracting Officer; Provided, however, such approval shall not be unreasonably withheld.

WATER SHORTAGE AND APPORTIONMENT

7. In the operation of Ruedi Reservoir, the Contracting Officer will use all reasonable means to guard against a condition of shortage in the quantity of water available to the District pursuant to this contract. To this end, the amount of water which the United States will contract to provide for a supply for municipal and industrial water service shall be based on hydrologic conditions that existed in the Colorado River Basin for the 1977 water year as determined by the Contracting Officer. However, should shortages occur, delivery to all contractors for municipal service will first be reduced proportionately as required by the shortage up to 30 percent of their respective contracted amounts. Should further shortages occur, priority will be established based on contract execution dates for all municipal and industrial users with the earliest date having the highest priority. In no event shall any liability accrue against the United States or any of its officers, agents or employees for any damage direct or indirect arising out of such shortage.

TERMINATION OF THE CONTRACT

8. a. This contract may be terminated and water service hereunder cease at the option of the United States upon failure of the District to make payments as required by this contract or to abide by any lawful

notice, order or final administrative or judicial determination that the District has violated a rule or regulation of the United States or the State of Colorado directly relating to and affecting water service hereunder which is not inconsistent with any expressed provision herein; Except, That this contract shall not be terminated unless such failure continues 45 days after the United States gives the District written notice of such failure.

b. The District may terminate the contract in whole or in part by either of the following methods:

(1) The District may terminate the contract on December 31 of any year by giving written notice to the Contracting Officer at least 1 year prior to that date.

(2) The District may terminate the contract as of the effective date of any increase in water service charges made pursuant to Article 4d by giving written notice to the Contracting Officer prior to the effective date of any such increase. If the District elects to terminate the contract on the effective date of any such increase in water service charges, the District shall have the option (the "Option") to continue receiving water service pursuant to the terms and conditions of the present contract for a period of 5 years (the "5-year option term") at the water service rates in effect prior to the effective date of the increase in question. The District may exercise the Option by giving written notice to the Contracting Officer prior to the effective date of any proposed increase in the water service charges. In the event the District exercises the Option, the District shall have the further option to renew the present contract at the end of the 5-year option term or on any contract anniversary date during the 5-year option term at the water service rates which would

have been in effect had the District not terminated the contract pursuant to this Article 8b(2); Provided, however, That the District may only exercise such further option (a) by giving 1 year prior notice in writing to the Contracting Officer, and (b) by paying the Contracting Officer within 30 days prior to the renewal date the difference between the total water service charges paid by the District during the 5-year option term or portion thereof and the total water service charges which would have been due from the District during that same period had the District not terminated the contract pursuant to this Article 8b(2), plus interest at the rate stated in Article 12.

c. Any sale of the right to receive water pursuant to this contract other than service charges permitted by Article 6(b) is prohibited. It is the intent of the parties hereto to prohibit such sales; however, should such sales occur, the right to delivery of the quantity of water involved in such sales shall be terminated by the District at the request of the Contracting Officer.

ASSIGNMENT OF THE CONTRACT

9. a. The United States may assign all or part of its interest in this contract provided the assignee has the capability to furnish water service to the District as herein provided and assumes all rights, duties and obligations under this contract.

b. The District may assign all or part of its interests in this contract provided the assignee is capable of fulfilling all of the obligations of the District pursuant to the contract and subject to the Contracting Officer's approval. Agreements between the District and its water users are not considered assignments under this article.

BOOKS, RECORDS AND REPORTS

10. The District shall establish and maintain accounts and other books and records pertaining to its water supply and water use as either relates to this contract. Reports thereon shall be furnished to the Contracting Officer in such form and on such date or dates as he may require; provided, however, in no event shall the District be obligated to furnish such reports more than once every 3 months. In accordance with applicable Federal laws and regulations, each party shall have the right during office hours to examine and make copies of each other's books and records relating to matters covered by this contract.

NOTICES

11. Any notice, demand or request authorized or required by this contract shall be deemed to have been given, on behalf of the District, when mailed postage prepaid, or delivered to the Director, Lower Missouri Region, Bureau of Reclamation, P.O. Box 25247, Denver, Colorado 80225, and on behalf of the United States, when mailed postage prepaid, or delivered to the President, Basalt Water Conservancy District, Village Plaza, Suite 100, Glenwood Springs, Colorado 81601. The designation of the addressee or the address may be changed by notice given in the same manner as provided in this article for other notices.

CHARGE FOR LATE PAYMENTS

12. The District shall pay a late payment charge on installments or charges which are received after the due date. The late payment charge percentage rate calculated by the Department of the Treasury and published quarterly in the Federal Register shall be used; Provided, That the late payment charge percentage rate will not be less than 0.5 percent per month. The late payment charge percentage rate applied on an overdue payment will remain in effect until payment is received or a different rate is published. The late payment rate for a 30-day period will be determined on

the day immediately following the due date and will be applied to the overdue payment for any portion of the 30-day period of delinquency. In the case of partial late payments, the amount received will first be applied to the late charge on the principal and then to payment of the principal.

TITLE VI, CIVIL RIGHTS ACT OF 1964

13. a. The District agrees that it will comply with Title VI of the Civil Rights Act of July 2, 1964, (78 Stat. 241) and all requirements imposed by or pursuant to the Department of the Interior Regulation (43 CFR 17) issued pursuant to that title, to the end that, in accordance with Title VI of that Act and the Regulation, no person in the United States shall, on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the District receives financial assistance from the United States and hereby gives assurance that it will immediately take any measures to effectuate this agreement.

b. If any real property or structure thereon is provided or improved with the aid of Federal financial assistance extended to the District by the United States, this assurance obligates the District, or in the case of any transfer of such property, any transferee for the period during which the real property or structure is used for a purpose involving the provision of similar services or benefits. If any personal property is so provided, this assurance obligates the District for the period during which it retains ownership or possession of the property. In all other cases, this assurance obligates the District for the period during which the Federal financial assistance is extended to it by the United States.

c. This assurance is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property, discounts, or other Federal financial assistance extended after the date hereof to the District by the United States, including installment payments after such date on account of arrangements for Federal financial assistance which were approved before such date. The District recognizes and agrees that such Federal financial assistance will be extended in reliance on the representations and agreements made in this assurance, and that the United States shall reserve the right to seek judicial enforcement of this assurance. This assurance is binding on the District, its successors, transferees, and assignees.

QUALITY OF WATER

14. The operation and maintenance of Project facilities shall be performed in such manner as is practicable to maintain the quality of raw water made available through such facilities at the highest level reasonably attainable as determined by the Contracting Officer. The United States does not warrant the quality of water and is under no obligation

to construct or furnish water treatment facilities to maintain or better the quality of water.

WATER AND AIR POLLUTION CONTROL

15. The District, in carrying out this contract, shall comply with all applicable water and air pollution laws and regulations of the United States and the State of Colorado and shall obtain all required permits or licenses from the appropriate Federal, State, or local authorities.

BENEFITS CONDITIONED UPON PAYMENT

16. The payment of charges becoming due hereunder is a condition precedent to receiving benefits under this contract. No water will be made available to the District through project facilities during any period in which the District may be in arrears in the payment of any water service charges due the United States pursuant to Article 4.

EQUAL OPPORTUNITY

17. During the performance of this contract, the District agrees as follows:

a. The District will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The District will take affirmative action to ensure that applicants are employeed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The District agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.

b. The District will, in all solicitations or advertisements for employees placed by or on behalf of the District, state that all qualified applicants will receive consideration for employment without discrimination because of race, color, religion, sex, or national origin.

c. The District will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Contracting Officer, advising the said labor union or workers' representative of the District's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The District will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.

e. The District will furnish all information and reports required by said amended Executive Order and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the Contracting Officer and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

f. In the event of the District's noncompliance with the nondiscrimination clauses of this contract or with any of the such rules, regulations, or orders, this contract may be canceled, terminated, or suspended, in whole or in part, and the District may be declared ineligible for further Government contracts in accordance with procedures authorized in said amended Executive Order, and such other sanctions may be imposed and remedies invoked as provided in said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

g. The District will include the provisions of paragraphs a through g in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of said amended Executive Order, so that such provisions will be binding upon each subcontractor or vendor. The District will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event the District becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the District may request the United States to enter into such litigation to protect the interests of the United States.

CERTIFICATION OF NONSEGREGATED FACILITIES

18. The District hereby certifies that it does not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. It certifies further that it will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it will not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The District agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit

directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. The District further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause; that it will retain such certifications in its files; and that it will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES

A Certification of Nonsegregated Facilities must be submitted prior to the award of a subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually). Note: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

OFFICIALS NOT TO BENEFIT

19. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise herefrom. This restriction shall not be construed to extend to this contract if made with a corporation or company for its general benefits.

CONTINGENT ON APPROPRIATION OR ALLOTMENT OF FUNDS

20. The expenditure or advance of any money or the performance of any obligation by the United States hereunder which may require appropriation of money by the Congress or the allotment of funds shall be contingent upon such appropriation or allotment being made. The failure of the Congress to appropriate funds or the absence of any allotment of funds shall not relieve the District from any obligations under this contract. No liability shall accrue to the United States in case such funds are not appropriated or allotted.

IN WITNESS WHEREOF, the parties hereto have executed this contract the day and year first above written.

BASALT WATER CONSERVANCY DISTRICT

Barbara Mack
Secretary

By Lloyd Crawford
President

THE UNITED STATES OF AMERICA

By B. E. Martini
Regional Director
Lower Missouri Region
Bureau of Reclamation

(SEAL)

ACKNOWLEDGEMENT

STATE OF COLORADO)
)SS.
COUNTY OF GARFIELD)

I do hereby certify that Floyd Crawford, President of Basalt Water Conservancy District, and Barbara Mick, Secretary of Basalt Water Conservancy District, whose names are subscribed in the foregoing instrument as such officers, appeared before me this day in person and acknowledged that they signed, sealed and delivered said instrument as their free and voluntary act and deed of said Basalt Water Conservancy District for the uses and purposes therein set forth.

Given under my hand and official seal this 13th day of May, 19 82.

(SEAL)

Kay Ellen Darrow
Notary Public
Suite 100, Village Plaza
Glenwood Springs, CO 81601

My commission expires: June 8, 1985

ACKNOWLEDGEMENT

STATE OF COLORADO)
)SS.
COUNTY OF GARFIELD)

The foregoing instrument was acknowledged before me this 13th day of May, 19 82, by B. E. Martin, as Regional Director for the Lower Missouri Region, Bureau of Reclamation, United States of America, on behalf of the United States of America.

Witness my hand and official seal.

(SEAL)

Kay Ellen Darrow
Notary Public
Suite 100, Village Plaza
Glenwood Springs, CO 81601

My commission expires: June 8, 1985

SCHEDULE A

WATER SERVICE CONTRACT BETWEEN THE UNITED STATES AND BASALT WATER CONSERVANCY DISTRICT

Minimum Service for
Which Delivery Charge Must be Paid Annually

Year	Minimum Acre-Feet
1983	5
1984	15
1985	30
1986	50
1987	75
1988	105
1989	140
1990	180
1991	225
1992	275
1993 and thereafter	300

United States Department of the Interior

BUREAU OF RECLAMATION
Eastern Colorado Area Office
11056 West County RD 18E
Loveland, Colorado 80537-9711

IN REPLY
REFER TO:

EC-1340
WTR-4.00

OCT - 6 2002

Mr. Christopher L. Geiger
Balcomb & Green, P.C.
P.O. Drawer 790
818 Colorado Avenue
Glenwood Springs, CO 81602

Subject: Long Term Ruedi Reservoir Round II Water Repayment Contract No. 039F6C0012 – Basalt Water Conservancy District - Fryingpan-Arkansas Project, Colorado

Dear Mr. Geiger:

Enclosed is the fully executed duplicate original Ruedi Reservoir Round II water repayment contract. The contract is for 500 acre-feet with the provision for annual payments.

The check in the amount of $34,968.08 has been received and applied to the first annual payment and the estimated O&M for 2003.

If you have any questions on the above, please call Terry Gomoll at 970-962-4352.

Sincerely,

ACTING FOR

Brian Person
Area Manager

Enclosure

cc: Mr. Alan Martellaro
Division V Engineer
P.O. Box 396
Glenwood Springs, CO 81602
(w/copy of encl)

DUPLICATE
ORIGINAL

CONTRACT NO. 039F6C0012

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

RUEDI RESERVOIR
FRYINGPAN-ARKANSAS PROJECT, COLORADO
Ruedi Reservoir Round II Water Sales

REPAYMENT CONTRACT BETWEEN THE UNITED STATES
AND THE BASALT WATER CONSERVANCY DISTRICT

THIS CONTRACT, Made this 3RD day of OCTOBER, 2003, pursuant to the Act of June 17, 1902 (32 Stat. 388), and acts amendatory thereof and supplementary thereto, particularly Section 9(c)(1) of the Reclamation Project Act of 1939 (53 Stat. 1187), Title III of the Act of July 3, 1958 (72 Stat. 320), and the Act of August 16, 1962 (76 Stat. 389), as amended, collectively referred to as the Federal Reclamation Laws, is between the UNITED STATES OF AMERICA, hereinafter referred to as the "United States," represented by the Contracting Officer executing this contract, and the BASALT WATER CONSERVANCY DISTRICT, hereinafter referred to as the "Contractor."

W I T N E S S E T H T H A T

EXPLANATORY RECITALS:

a. WHEREAS, the United States has constructed Ruedi Reservoir and related facilities as a feature of the Fryingpan-Arkansas Project as authorized by the Act of August 16, 1962 (76 Stat. 389), as amended by the Act of October 27, 1974 (88 Stat. 1486), and the Act of November 3, 1978 (92 Stat. 2493), in substantial conformance with House Document No. 187, 83rd Congress, 1st Session, as modified by House Document No. 353, 86th Congress, 2nd Session, subject to the Operating Principles for the Fryingpan-Arkansas Project as set forth in House Document No. 130, 87th Congress, 1st Session.

b. WHEREAS, Ruedi Reservoir was authorized to provide storage capacity for replacement water for senior downstream diversion rights in western Colorado at times of Fryingpan-Arkansas Project diversions to the Arkansas River Basin in eastern Colorado, and to furnish regulatory storage capacity and water to users in western Colorado for any purpose recognized by the laws of the United States.

c. WHEREAS, the capital costs for the construction of Ruedi Reservoir are allocated among the authorized purposes, including $9,312,000 allocated to the regulatory purpose consisting of the initial construction cost plus interest during construction. Pursuant to Section 2 of the Act of August 16, 1962, as amended, this amount is reimbursable with interest in not more than 50 years from September 30, 1969, when Ruedi Reservoir was placed in service. Under the provisions of the Water Supply Act of 1958 (72 Stat. 297), interest charges on the $9,312,000 did not accrue for the 10-year period ending September 30, 1979. The $9,312,000 of costs allocated to the regulatory purpose are further allocated to Ruedi Reservoir Round I and Ruedi Reservoir Round II water sales and are $1,419,402 and $7,892,598 respectively. As of September 30, 1999, the uncontracted capital costs, including accrued interest, operation, maintenance, and replacement costs for Ruedi Reservoir allocated to Ruedi Reservoir Round II water sales, hereinafter referred to as Round II were $28,021,544.99.

d. WHEREAS, the Contractor desires to enter into a contract, pursuant to the Federal Reclamation Laws and the laws of the State of Colorado, for a quantity of water from the regulatory capacity of Ruedi Reservoir and to repay the reimbursable costs associated therewith as more specifically provided herein.

e. WHEREAS, the United States desires to provide the quantity of water requested by the Contractor pursuant to the terms and conditions set forth herein.

NOW THEREFORE, in consideration of the mutual covenants herein contained, the parties hereto agree as follows:

DEFINITIONS

1. Where used herein, unless specifically expressed otherwise or obviously inconsistent with the intent hereof, the term:

a. "United States" shall mean the United States of America, acting through the Secretary of the Interior hereinafter the "Secretary" or his duly authorized representative.

b. "Contracting Officer" shall mean the Secretary of the Interior or his duly authorized representative.

c. "Project" shall mean the Fryingpan-Arkansas Project, Colorado.

d. "Year" shall mean the period beginning January 1 and ending on the following December 31.

e. "Ruedi Reservoir" shall mean the dam, reservoir, and related facilities as presently constructed on the Fryingpan River above the Town of Basalt, Colorado, as a feature of the Fryingpan-Arkansas Project.

f. "Replacement capacity" shall mean that portion of the total capacity of Ruedi Reservoir required to permit Project diversions at times when such diversions could not otherwise have been made because of simultaneous demands of senior diversions in western Colorado that existed on April 30, 1959, and as further defined in Section 6(a) of the Operating Principles, Fryingpan-Arkansas Project.

g. "Regulatory capacity" shall mean that portion of the total capacity of Ruedi Reservoir not needed for replacement purposes as further defined in Section 6(b) of the Operating Principles, Fryingpan-Arkansas Project.

h. "Municipal and industrial uses" shall mean use of water by municipalities, industrial users, commercial recreation entities, and other water user entities not engaged in commercial agricultural production.

i. "Commercial agricultural uses" shall mean water used primarily for the commercial production of crops and livestock, which are the principle sources of income for the user of such water.

j. "Capital costs" shall mean the capitalized investment for Ruedi Reservoir including construction costs, interest during construction, accrued interest, and accrued unpaid annual operation, maintenance, and replacement costs, and interest thereon, and other appropriate costs allocable to the regulatory capacity.

k. "Operation and maintenance costs" shall mean those costs incurred to operate and maintain Ruedi Reservoir, including any administrative, overhead, or general expenses incurred by the United States, either directly or indirectly, in the operation and maintenance of Ruedi Reservoir and in the administration of this contract.

l. "Replacement costs" shall mean the costs incurred to remedy conditions brought about by the ordinary use of Ruedi Reservoir or to restore or replace components of the existing reservoir. For the purposes of this contract, replacement costs shall be those costs allocable to the regulatory capacity, but shall not include costs to increase the capacity of Ruedi Reservoir or to expand the purposes for which it was originally authorized and constructed.

m. "Marketable yield" shall mean the 46,500 acre-feet of water estimated to be available from the regulatory capacity of Ruedi Reservoir, including the 7,850 acre-feet previously sold under Round I, and the remaining 38,650 acre-feet designated for the Round II water sales.

TERM OF THE CONTRACT

2. This contract shall become effective on the date of execution and shall remain in effect until terminated in accordance with the provisions of Article 8 hereof; Provided, However, That at the end of the initial 25-years of the term of this contract (year 2028), all terms and conditions, including the quantity of water contracted for herein, are subject to renegotiation at the determination of the Contracting Officer, based on Federal laws and policies in effect at that time; Provided, Further, That the Contractor shall, subject to fulfillment of all obligations hereunder, have a first right for the purposes stated herein to the quantity of water contracted for herein from the marketable yield of Ruedi Reservoir.

CONTRACTED WATER SUPPLY

3. a. The Contractor hereby contracts for 500 acre-feet of water annually from the marketable yield of Ruedi Reservoir for municipal and industrial use subject to the terms and conditions of this contract.

b. The United States shall not enter into any contract that will result in the total amount of water marketed from the reservoir exceeding the marketable yield, Provided, That the United States reserves the right to make short-term (5 years or less) sales or leases of water from the regulatory capacity of Ruedi Reservoir for purposes recognized under the laws of the United States and the State of Colorado, as long as such sales or leases do not impinge upon the Contractor's entitlement to take delivery of water contracted for herein or adversely affect the determination of the marketable yield.

c. The Contractor shall have no right to carryover storage of undelivered water from year to year under this contract.

CONTRACTOR'S REPAYMENT OBLIGATION AND OTHER COSTS

4. a. For the water supply contracted for herein, the Contractor shall repay a proportionate share of the capital costs allocable to Round II. As of September 30, 1999, the unpaid uncontracted capital costs allocable to Round II were $28,021,544.99. The Contractor's capital cost repayment obligation of $458,865.00 represents the Contractor's proportionate (500/[38,650 less previously marketed Round II water]) share of the unpaid capital costs allocable to Round II. The Contractor's capital cost repayment obligation shall be repaid in annual installments as shown in the following table:

YEAR	ANNUAL PAYMENT	PRINCIPAL	INTEREST	BALANCE
2003	$33,948.00	$33,948.00	$0.00	$424,917.00
2004	$33,948.00	$21,005.03	$12,942.97	$403,911.97
2005	$33,948.00	$21,644.84	$12,303.16	$382,267.13
2006	$33,948.00	$22,304.14	$11,643.86	$359,962.99
2007	$33,948.00	$22,983.53	$10,964.47	$336,979.46
2008	$33,948.00	$23,683.61	$10,264.39	$313,295.85
2009	$33,948.00	$24,405.01	$9,542.99	$288,890.85
2010	$33,948.00	$25,148.38	$8,799.62	$263,742.46
2011	$33,948.00	$25,914.40	$8,033.60	$237,828.06
2012	$33,948.00	$26,703.76	$7,244.24	$211,124.30
2013	$33,948.00	$27,517.15	$6,430.85	$183,607.15
2014	$33,948.00	$28,355.33	$5,592.67	$155,251.82
2015	$33,948.00	$29,219.03	$4,728.97	$126,032.79
2016	$33,948.00	$30,109.04	$3,838.96	$95,923.75
2017	$33,948.00	$31,026.16	$2,921.84	$64,897.59
2018	$33,948.00	$31,971.22	$1,976.78	$32,926.37
2019	$33,929.31	$32,926.37	$1,002.94	$0.00

b. The Contractor's first annual capital cost payment shall be due and payable upon execution of this contract, and thereafter, shall be due and payable on January 1 of each subsequent year until payment of the capital cost obligation is complete.

c. If, subsequent to the execution of this contract, additional capital costs are incurred for the regulatory capacity of Ruedi Reservoir, the Contractor shall pay a proportionate share of such additional costs allocable to Round II, as determined by the Contracting Officer, which share shall be in direct proportion to the contracted water supply specified in Article 3.a. above. Payment of such additional costs shall be upon such terms and conditions as determined by the parties hereto, based on Reclamation policies and laws in effect at the time. Prior to incurring such costs, the Contracting Officer shall notify the Contractor in writing of any necessary additional capital costs, including the basis for such costs and the Contractor's estimated proportionate share thereof.

d. The Contractor's capital cost obligation is a fixed obligation of the Contractor and is payable as provided for herein whether or not the quantity of water contracted for in Article 3.a. above is available for delivery to the Contractor.

e. In addition to the capital cost repayment obligation, the Contractor shall also pay a proportionate share of the actual annual reimbursable operation, maintenance, and replacement (OM&R) costs allocable to the marketable yield. The Contractor's share of the actual annual reimbursable OM&R costs shall be in direct proportion to the contracted water supply specified in Article 3.a. above to the 46,500 acre-foot marketable yield.

f. The annual OM&R charges shall be based on the Federal Fiscal Year (October 1 through the following September 30) accounting. Payment for the current fiscal year, as adjusted for actual OM&R charges for the previous fiscal year, shall become due and payable on or before January 1 of each year.

g. The annual OM&R charge will be due and payable upon execution of this contract and thereafter shall be due and payable on or before January 1 of each subsequent year of the term of this contract. The first Fiscal Year's charges, if less than a full Fiscal Year, shall be prorated on a monthly basis beginning with the first calendar month following execution of this contract. The annual OM&R charge will be based on estimates prepared by the Contracting Officer. In the event the estimated OM&R costs fall short of the actual OM&R costs, or whenever it is determined by the Contracting Officer that a deficit will occur after January 1 of the Fiscal Year, supplemental notices may be issued by the Contracting Officer requesting additional funds to cover such shortfall or deficiency. Funds not expended during the Fiscal Year will be carried over and applied as a credit against the Contractor's charges for the following Fiscal Year.

h. No water will be delivered at any time the Contractor is in default of any payment required pursuant to this contract. The Contractor shall make all payments required pursuant to this contract whether or not the quantity of water specified in Article 3.a. above is available for delivery and whether or not the Contractor is capable of using the water delivered or scheduled for delivery.

i. Payments shall be made to a certain bank by a medium specified by the Contracting Officer, by check to a certain lock box, or by wire transfer to the United States Treasury, or to such other locations and by such other methods as the Contracting Officer may specify and as are readily available to the Contractor for its use.

DELIVERY OF WATER

5. a. Before June 1 of each year, the Contractor shall submit to the Contracting Officer a written schedule of its anticipated monthly demand for the delivery of water for the following 12 months. The Contractor shall revise said schedule as necessary to reflect its expected demand schedule based on current hydrologic conditions.

Notwithstanding the above, the Contractor shall be entitled to take delivery of water under this contract at any time upon 24 hours notice to the Contracting Officer or a designated representative. All notices requesting delivery of water or a change in the delivery schedule shall be in writing. Orders which cannot be transmitted in writing due to urgency or emergency situations may be telephoned to the Contracting Officer's designated representative, Provided, That such orders shall be confirmed in writing by the Contractor.

b. The Contracting Officer will notify the Contractor and the Division No. 5 Engineer, Colorado Division of Water Resources, of the date, time, and amount of all water released from Ruedi Reservoir and delivered pursuant to this contract.

c. The delivery of water pursuant to this contract will be made into the Fryingpan River at the outlet works of Ruedi Reservoir. All delivery of water shall be limited by the outlet capacity of Ruedi Reservoir. All water delivered to the Contractor from Ruedi Reservoir will be measured at the outlet works of Ruedi Reservoir by the Contracting Officer with equipment owned, operated, and maintained by the United States. The United States will not be responsible for control, carriage, use, handling, or distribution of water delivered to the Contractor beyond the delivery point, and the Contractor shall hold the United States harmless from and against all claims, demands, and causes of action on account of property damage, personal injury, or death resulting from the control, carriage, use, handling, or distribution of water delivered to the Contractor.

d. The Contractor will not be responsible for the storage of water in or operation and maintenance of Ruedi Reservoir and the United States shall protect, indemnify, and hold the Contractor harmless from and against all claims, demands, and causes of action of any nature whatsoever resulting from or in any manner connected with the storage of water in or the operation and maintenance of Ruedi Reservoir within the limits of the Federal Tort Claims Act (28 U.S.C. 2671-2680).

e. The United States reserves the right to release the water contracted for herein from an alternate reservoir or reservoirs, Provided, That such releases from an alternate reservoir or reservoirs shall neither diminish the water supply contracted for herein nor affect the Contractor's ability to use the water for the purposes, at the location and at the time(s) as contemplated herein.

CONTRACTOR'S USE OF WATER

6. a. Water delivered to the Contractor under this contract will be used for municipal and industrial purposes directly, or by augmentation and exchange to replace out of priority water depletions to senior water rights in the Colorado River Basin. Place of use will occur within the Contractor's existing service area and potential service area, which generally lie within portions of the Fryingpan and Roaring Fork River basins,

including Pitkin, Eagle and Garfield Counties in the State of Colorado. (See attached map).

b. Lease, sale, donation, or other such disposal of any of the water contracted for herein shall require prior written approval of the Contracting Officer, Provided, That a municipal contractor may distribute the water contracted for herein to its customers and charge its customers such rates as permitted under Colorado law.

WATER SHORTAGE AND APPORTIONMENT

7. a. The Contracting Officer shall operate the Project in accordance with the Operating Principles for the Fryingpan-Arkansas Project as set forth in House Document No. 130, 87th Congress, 1st Session.

b. Water delivered pursuant to this contract is provided from the regulatory capacity of Ruedi Reservoir. Should shortages occur to the regulatory capacity, as determined by the Contracting Officer, based on schedules furnished pursuant to Article 5.a. above, such shortages will be apportioned among the Ruedi Reservoir contractors in the following manner: first, deliveries to all temporary and short-term contractors will be proportionately reduced up to 100 percent of their respective contracted amounts; second, deliveries to all Round II contractors will be proportionately reduced up to 100 percent of their respective contracted amounts; third, deliveries to all Round I municipal contractors will be proportionately reduced up to 30 percent of their respective contracted amounts; and finally, deliveries to all Round I contractors will be reduced up to 100 percent of their respective contracted amounts based on contract execution dates with the earliest date having highest priority; Provided, That the deliveries to all contracts with the same execution dates shall be proportionately reduced up to 100 percent of their respective remaining contracted amounts.

c. In administering shortage conditions, the Contracting Officer may require the Contractor to submit revised schedules pursuant to Article 5.a. above. The Contracting Officer reserves the right to limit the amount of water available for delivery under this contract to the amount specified in such revised schedules. Should any revised schedule require less than the total amount of water under contract by an individual contractor to meet the Contractor's expected demands, the Contracting Officer reserves the right to use all or any portion of the water not so scheduled by the Contractor for redistribution to other contractors to mitigate the effects of the shortage. In no event shall any liability accrue against the United States or any of its officers, agents, or employees for any damage, either direct or indirect, arising out of such shortage.

d. No adjustment will be made in the payments required pursuant to this contract as a result of the Contracting Officer's inability to deliver water requested for delivery by the Contractor due to shortage conditions.

TERMINATION OF WATER DELIVERIES

8. Delivery of the water contracted for herein shall cease at the option of the United States upon failure of the Contractor to make payments as required by this contract or upon failure of the Contractor to abide by any lawful notice, order, or final administrative or judicial determination that the Contractor has violated a rule or regulation of the United States or the State of Colorado directly relating to and affecting the furnishing of water hereunder; Provided, that water deliveries hereunder shall not cease unless such failure or violation continues 60 days after the United States gives the Contractor written notice to remedy the failure or violation.

TERMINATION OF THE CONTRACT

9. a. This contract may be terminated and the delivery of water contracted for herein shall cease at the option of the United States upon failure of the Contractor to make payments as required by this contract or upon failure of the Contractor to abide by any lawful notice, order, or final administrative or judicial determination that the Contractor has violated a rule or regulation of the United States or the State of Colorado directly relating to and affecting the furnishing of water hereunder; Except, That this contract may not be terminated unless such failure or violation continues 60 days after the United States gives the Contractor written notice of such failure or violation.

b. The contractor may terminate this contract at the end of any year by providing written notice of such termination to the United States pursuant to Article 11 below not less than 90 days prior to the effective date of termination, Provided, That such termination must be necessitated by the Contractor's inability to meet the payments required hereunder due to the applicability of Amendment No. 1 (Tabor). Upon any such termination, the United States may make the water supply contracted for herein available to other contractors, or reallocate the contracted water supply to other purposes, and the contractor has no prior claim or right to enter into a contract for such water supply or any portion thereof in the future.

ENVIRONMENTAL COMPLIANCE

10. a. Compliance with the provisions of the National Environmental Policy Act (NEPA), as amended, and the Endangered Species Act (ESA), as amended, are a prerequisite to execution of this contract.

The general environmental impacts associated with the Ruedi Reservoir Round II water marketing program under the preferred alternative with conservation measures are described in the Final Supplemental Environmental Statement (FSES) dated August 1, 1989. Additional compliance may also be required on a site-specific basis and shall be the responsibility of the United States using data and other information provided by the Contractor. The Contractor shall provide the necessary data and information and a site-specific mitigation plan, if required, to the Contracting Officer for approval. The data, information, and mitigation cover those environmental impacts associated with the Contractor's diversions and on-site use of Ruedi Reservoir water. All costs associated with the preparation, approval, and implementation of NEPA and ESA compliance and mitigation plans, including costs incurred by the United States, shall be the responsibility of the Contractor.

b. The Contractor shall give notice to the United States concerning any changes in location of diversions, return flows, places or type of use, or diversion rates. The Contractor shall be responsible for any additional NEPA and ESA compliance or mitigation measures which may be required by the United States as the result of such changes and all associated costs, including costs incurred by the United States, shall be the responsibility of the Contractor.

c. The Contractor shall make advance payment for costs to be incurred by the United States, which are the Contractor's responsibility under this Article 10.

NOTICES

11. Any notice, demand, or request authorized or required by this contract shall be deemed to have been given, on behalf of the Contractor, when mailed postage prepaid, or delivered to the Regional Director, Great Plains Region, Bureau of Reclamation, P.O. Box 36900, Billings, Montana 59107-6900, and on behalf of the United States, when mailed postage prepaid or delivered to the Contractor, Basalt Water Conservancy District, c/o Scott Balcomb and Chris Geiger, Balcomb & Green, P.C., P.O. Drawer 790, Glenwood Springs, CO 81602. The designation of the addressee or the address may be changed by notice given in the same manner as provided in this article for other notices.

ASSIGNMENT OF CONTRACT

12. a. No assignment or transfer of this contract or any rights or interests herein shall be valid until approved in writing by the Contracting Officer.

b. The United States reserves the right to enter into agreements with third party agents for the administration of this contract, Provided, That such agreements shall not adversely affect the rights of the Contractor to receive the water contracted for under this contract.

STANDARD CONTRACT ARTICLES

13. The standard contract articles applicable to this contract are listed below. The full text of these standard articles is attached as Exhibit A and is hereby made a part of this contract by this reference.

A. Charges for Delinquent Payments

B. General Obligation--Benefits Conditioned Upon Payment

C. Contingent on Appropriation or Allotment of Funds

D. Officials Not to Benefit

E. Books, Records, and Reports

F. Rules, Regulations, and Determinations

G. Quality of Water

H. Water and Air Pollution Control

I. Water Conservation

J. Equal Opportunity

K. Compliance With Civil Rights Laws and Regulations

L. Uncontrollable Forces

M. Medium for Transferring Payments

IN WITNESS WHEREOF, the parties hereto have executed this contract as of the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Area Manager
ACTING FOR Eastern Colorado Area Office

BASALT WATER CONSERVANCY DISTRICT,

By _____

President
Title

ACKNOWLEDGMENT

STATE OF)
COLORADO) ss.
COUNTY OF)
GARFIELD

On August 12, 2003, before me, Barbara Mick

_____ appeared Arthur Bowles, President,

the person(s) whose name(s) (is)(are) subscribed to the within instrument

and known to me to have executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the

day and year in this acknowledgment first above written.

BARBARA MICK NOTARY PUBLIC STATE OF COLORADO (SEAL)

Barbara Mick
Notary Public

My commission expires: 1/27/06

EXHIBIT A

CONTRACT NO. 039F6C0012

STANDARD ARTICLES

A. CHARGES FOR DELINQUENT PAYMENTS

1. The Contractor shall be subject to interest, administrative and penalty charges on delinquent installments or payments. When a payment is not received by the due date, the Contractor shall pay an interest charge for each day the payment is delinquent beyond the due date. When a payment becomes 60 days delinquent, the Contractor shall pay an administrative charge to cover additional costs of billing and processing the delinquent payment. When a payment is delinquent 90 days or more, the Contractor shall pay an additional penalty charge of 6 percent per year for each day the payment is delinquent beyond the due date. Further, the Contractor shall pay any fees incurred for debt collection services associated with a delinquent payment.

2. The interest charge rate shall be the greater of the rate prescribed quarterly in the Federal Register by the Department of the Treasury for application to overdue payments, or the interest rate of 0.5 percent per month prescribed by section 6 of the Reclamation Project Act of 1939 (Public Law 76-260). The interest charge rate shall be determined as of the due date and remain fixed for the duration of the delinquent period.

3. When a partial payment on a delinquent account is received, the amount received shall be applied, first to the penalty, second to the administrative charges, third to the accrued interest, and finally to the overdue payment.

B. GENERAL OBLIGATION--BENEFITS CONDITIONED UPON PAYMENT

1. The obligation of the Contractor to pay the United States as provided in this contract is a general obligation of the Contractor notwithstanding the manner in which the obligation may be distributed among the Contractor's water users and notwithstanding the default of the individual water users in their obligations to the Contractor.

2. The payment of charges becoming due hereunder is a condition precedent to receiving benefits under this contract. No water will be made available to the Contractor from project facilities during any period in which the Contractor may be in arrears in the advance payment of any operation and maintenance charges due the United States or in arrears for more than 12 months in the payment of any construction charges due the United States. The Contractor shall not furnish water made available pursuant to this contract for lands or parties which are in arrears in the advance payment of operation and maintenance or toll charges or in arrears more than 12 months in the payment of construction charges as levied or established by the Contractor.

C. CONTINGENT ON APPROPRIATION OR ALLOTMENT OF FUNDS

The expenditure or advance of any money or the performance of any obligation of the United States under this contract shall be contingent upon appropriation or allotment of funds. Absence of appropriation or allotment of funds shall not relieve the Contractor from any obligations under this contract. No liability shall accrue to the United States in case funds are not appropriated or allotted.

D. OFFICIALS NOT TO BENEFIT

No Member of or Delegate to Congress, Resident Commissioner, or official of the Contractor shall benefit from this contract other than as a water user or landowner in same manner as other water users or landowners.

E. BOOKS, RECORDS, AND REPORTS

The Contractor shall establish and maintain accounts and other books and records pertaining to administration of the terms and conditions of this contract, including: the Contractor's financial transactions, water supply data, water-use data; and other matters that the Contracting Officer may require. Reports thereon shall be furnished to the Contracting Officer in such form and on such date or dates as the Contracting Officer may require. Subject to applicable Federal laws and regulations, each party to this contract shall have the right during office hours to examine and make copies of each other party's books and records relating to matters covered by the contract.

F. RULES, REGULATIONS, AND DETERMINATIONS

1. The parties agree that the delivery of water or the use of Federal facilities pursuant to this contract is subject to Reclamation law, as amended and supplemented, and the rules and regulations promulgated by the Secretary of the Interior under Reclamation law.

2. The Contracting Officer shall have the right to make determinations necessary to administer this contract that are consistent with the expressed and implied provisions of this contract, the laws of the United States and the State, and the rules and regulations promulgated by the Secretary of the Interior. Such determinations shall be made in consultation with the Contractor.

G. QUALITY OF WATER

The operation and maintenance of project facilities shall be performed in such manner as is practicable to maintain the quality of raw water made available through such facilities at the highest level reasonably attainable, as determined by the Contracting Officer. The

United States does not warrant the quality of water and is under no obligation to construct or furnish water treatment facilities to maintain or better the quality of water.

H. WATER AND AIR POLLUTION CONTROL

The Contractor, in carrying out this contract, shall comply with all applicable water and air pollution laws and regulations of the United States and the State, and shall obtain all required permits or licenses from the appropriate Federal, State, or local authorities.

I. WATER CONSERVATION

1. The Contractor shall develop and implement an effective water conservation program based on the Contractor's water conservation plan that has been reviewed by the Contracting Officer and determined to meet the conservation and efficiency criteria established under Federal law. The water conservation program shall contain definite water conservation objectives, appropriate economically feasible water conservation measures, and time schedules for meeting those objectives.

2. The Contractor shall submit to the Contracting Officer by December 31, of each calendar year a report on the status of the Contractor's implementation of its water conservation program.

3. At 5-year intervals, subsequent to the Contracting Officer's determination that the Contractor's water conservation program meets the conservation and efficiency criteria established under Federal law, the Contractor shall submit to the Contracting Officer for review and evaluation updated water conservation programs. The Contracting Officer shall review and evaluate the updated water conservation program and determine if they meet the conservation and efficiency criteria established under Federal law.

J. EQUAL OPPORTUNITY

During the performance of this contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.

2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without discrimination because of race, color, religion, sex, or national origin.

3. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Contracting Officer, advising the said labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The Contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.

5. The Contractor will furnish all information and reports required by said amended Executive Order and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the Contracting Officer and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the such rules, regulations, or orders, this contract may be canceled, terminated, or suspended, in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in said amended Executive Order, and such other sanctions may be imposed and remedies invoked as provided in said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

7. The Contractor will include the provisions of paragraphs 1. through 7. in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of said amended Executive Order, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

K. COMPLIANCE WITH CIVIL RIGHTS LAWS AND REGULATIONS

1. The Contractor shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), Section 504 of the Rehabilitation Act of 1975 (Public Law 93-112, as amended), the Age Discrimination Act of 1975 (42 U.S.C. 6101, et seq.), and any other

applicable civil rights laws, as well as with their respective implementing regulations and guidelines imposed by the United States Department of the Interior and/or the Bureau of Reclamation.

2. These statutes require that no person in the United States shall, on the grounds of race, color, national origin, handicap, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving financial assistance from the Bureau of Reclamation. By executing this contract, the Contractor agrees to immediately take any measures necessary to implement this obligation, including permitting officials of the United States to inspect premises, programs, and documents.

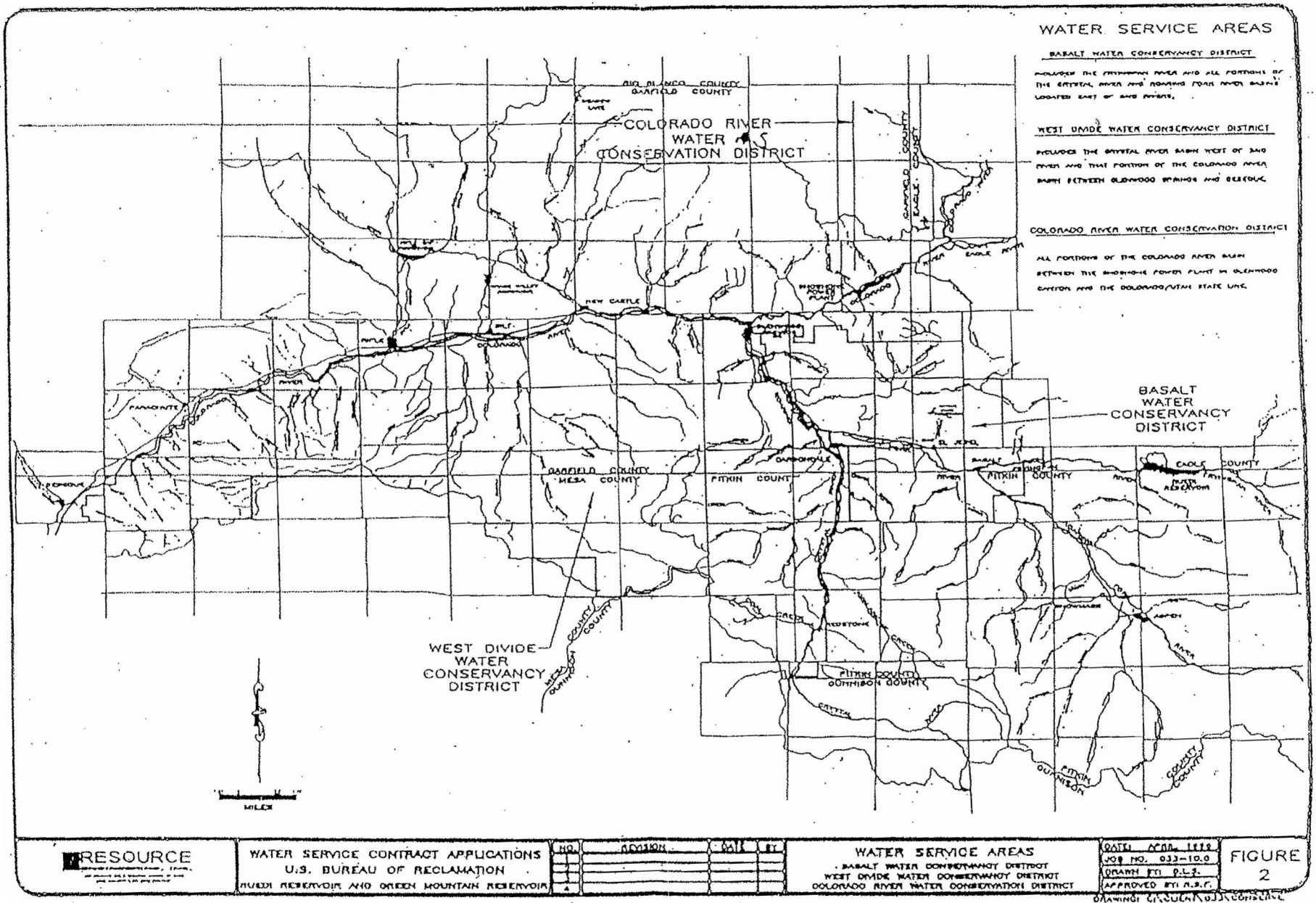
3. The Contractor makes this agreement in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property discounts, or other Federal financial assistance extended after the date hereof to the Contractor by the United States, including installment payments after such date on account of arrangements for Federal financial assistance which were approved before such date. The Contractor recognizes and agrees that such Federal assistance will be extended in reliance on the representations and agreements made in this article, and that the United States reserves the right to seek judicial enforcement thereof.

L. UNCONTROLLABLE FORCES

Neither party shall be considered to be in default in respect to any obligation hereunder, if prevented from fulfilling such obligation by reason of uncontrollable forces, the term "uncontrollable forces" being deemed, for the purpose of this contract, to mean any cause beyond the control of the party affected, including, but not limited to, drought, failure of facilities, flood, earthquake, storm, lightning, fire, epidemic, war, riot, civil disturbance, labor disturbance, sabotage, and restraint by court or public authority, which by exercise of due diligence and foresight, such party could not reasonably have been expected to avoid. Either party rendered unable to fulfill any obligation by reason of uncontrollable forces shall exercise due diligence to remove such inability with all reasonable dispatch.

M. MEDIUM FOR TRANSFERRING PAYMENTS

All payments from the Contractor to the United States under this contract shall be made by the medium requested by the United States on or before the date payment is due. The required method of payment may include checks and/or wire transfers.



RESOURCE

WATER SERVICE CONTRACT APPLICATIONS
U.S. BUREAU OF RECLAMATION
RUEDI RESERVOIR AND GREEN MOUNTAIN RESERVOIR

NO.	REVISION	DATE	BY
1			
2			
3			
4			

WATER SERVICE AREAS
BASALT WATER CONSERVANCY DISTRICT
WEST DIVIDE WATER CONSERVANCY DISTRICT
COLORADO RIVER WATER CONSERVATION DISTRICT

DATE: APRIL 1992
JOB NO. 033-10.0
DRAWN BY: P.L.J.
APPROVED BY: R.S.F.
DRAWING: C:\CLEAR\033\CONSERVE

FIGURE 2

United States Department of the Interior

BUREAU OF RECLAMATION
Eastern Colorado Area Office
11056 West County RD 18E
Loveland, Colorado 80537-9711

IN REPLY
REFER TO:

EC-1330

SEP 21 2000

Ms. Lori J. M. Satterfield
Balcomb and Green, P.C.
P.O. Drawer 790
Glenwood Springs, CO 81602

Subject: Long Term Ruedi Reservoir Round II Water Repayment Contract No. 009D6C0014 - Basalt Water Conservancy District - Fryingpan-Arkansas Project, Colorado

Dear Ms. Satterfield:

Enclosed is the fully executed duplicate original of the subject Ruedi Reservoir Round II water repayment contract dated September 21, 2000. The contract is for 490 acre-feet with the provision for annual payments.

A bill for collection will be forwarded to the District within the next couple of weeks requesting the 2000 annual construction payment in the amount of $24,050.00 plus an annual advanced O&M payment in the amount of $1,715.00, for a total payment of $25,765.00.

If you have any questions on the above, please call Alice Johns at (970) 962-4338.

Sincerely,

Brian Person
Area Manager

Enclosure (1)

cc: Mr. Orlyn J. Bell, Division V Engineer, P.O. Box 396, Glenwood Springs CO 81601 (w/copy contract)

CONTRACT NO. 009D6C0014

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

RUEDI RESERVOIR
FRYINGPAN-ARKANSAS PROJECT, COLORADO
Ruedi Reservoir Round II Water Sales

REPAYMENT CONTRACT BETWEEN THE UNITED STATES
AND THE BASALT WATER CONSERVANCY DISTRICT

THIS CONTRACT, Made this 21 day of Sept, 2000, pursuant to the Act of June 17, 1902 (32 Stat. 388), and acts amendatory thereof and supplementary thereto, particularly Section 9(c)(1) of the Reclamation Project Act of 1939 (53 Stat. 1187), Title III of the Act of July 3, 1958 (72 Stat. 320), and the Act of August 16, 1962 (76 Stat. 389), as amended, collectively referred to as the Federal Reclamation Laws, is between the UNITED STATES OF AMERICA, hereinafter referred to as the "United States," represented by the Contracting Officer executing this contract, and the BASALT WATER CONSERVANCY DISTRICT, hereinafter referred to as the "Contractor."

WITNESSETH THAT

EXPLANATORY RECITALS:

a. WHEREAS, the United States has constructed Ruedi Reservoir and related facilities as a feature of the Fryingpan-Arkansas Project as authorized by the Act of August 16, 1962 (76 Stat. 389), as amended by the Act of October 27, 1974 (88 Stat. 1486), and the Act of November 3, 1978 (92 Stat. 2493), in substantial conformance with House Document No. 187, 83rd Congress, 1st Session, as modified by House Document No. 353, 86th Congress, 2nd Session, subject to the Operating Principles for the Fryingpan-Arkansas Project as set forth in House Document No. 130, 87th Congress, 1st Session.

b. WHEREAS, Ruedi Reservoir was authorized to provide storage capacity for replacement water for senior downstream diversion rights in western Colorado at times of Fryingpan-Arkansas Project diversions to the Arkansas River Basin in eastern Colorado, and to furnish regulatory storage capacity and water to users in western Colorado for any purpose recognized by the laws of the United States.

c. WHEREAS, the capital costs for the construction of Ruedi Reservoir are allocated among the authorized purposes, including $9,312,000 allocated to the regulatory purpose consisting of the initial construction cost plus interest during construction. Pursuant to Section 2

of the Act of August 16, 1962, as amended, this amount is reimbursable with interest in not more than 50 years from September 30, 1969, when Ruedi Reservoir was placed in service. Under the provisions of the Water Supply Act of 1958 (72 Stat. 297), interest charges on the $9,312,000 did not accrue for the 10-year period ending September 30, 1979. The $9,312,000 of costs allocated to the regulatory purpose are further allocated to Ruedi Reservoir Round I and Ruedi Reservoir Round II water sales and are $1,419,402 and $7,892,598 respectively. As of September 30, 1999, the uncontracted capital costs, including accrued interest, operation, maintenance, and replacement costs for Ruedi Reservoir allocated to Ruedi Reservoir Round II water sales, hereinafter referred to as Round II were $28,024,544.99.

d. WHEREAS, the Contractor desires to enter into a contract, pursuant to the Federal Reclamation Laws and the laws of the State of Colorado, for a quantity of water from the regulatory capacity of Ruedi Reservoir and to repay the reimbursable costs associated therewith as more specifically provided herein.

e. WHEREAS, the United States desires to provide the quantity of water requested by the Contractor pursuant to the terms and conditions set forth herein.

NOW THEREFORE, in consideration of the mutual covenants herein contained, the parties hereto agree as follows:

DEFINITIONS

1. Where used herein, unless specifically expressed otherwise or obviously inconsistent with the intent hereof, the term:

a. "United States" shall mean the United States of America, acting through the Secretary of the Interior hereinafter the "Secretary" or his duly authorized representative.

b. "Contracting Officer" shall mean the Secretary of the Interior or his duly authorized representative.

c. "Project" shall mean the Fryingpan-Arkansas Project, Colorado.

d. "Year" shall mean the period beginning January 1 and ending on the following December 31.

e. "Ruedi Reservoir" shall mean the dam, reservoir, and related facilities as presently constructed on the Fryingpan River above the Town of Basalt, Colorado, as a feature of the Fryingpan-Arkansas Project.

f. "Replacement capacity" shall mean that portion of the total capacity of Ruedi Reservoir required to permit Project diversions at times when such diversions could not otherwise have been made because of simultaneous demands of senior diversions in western Colorado that existed on April 30, 1959, and as further defined in Section 6(a) of the Operating Principles, Fryingpan-Arkansas Project.

g. "Regulatory capacity" shall mean that portion of the total capacity of Ruedi Reservoir not needed for replacement purposes as further defined in Section 6(b) of the Operating Principles, Fryingpan-Arkansas Project.

h. "Municipal and industrial uses" shall mean use of water by municipalities, industrial users, commercial recreation entities, and other water user entities not engaged in commercial agricultural production.

I. "Commercial agricultural uses" shall mean water used primarily for the commercial production of crops and livestock, which are the principle sources of income for the user of such water.

j. "Capital costs" shall mean the capitalized investment for Ruedi Reservoir including construction costs, interest during construction, accrued interest, and accrued unpaid annual operation, maintenance, and replacement costs, and interest thereon, and other appropriate costs allocable to the regulatory capacity.

k. "Operation and maintenance costs" shall mean those costs incurred to operate and maintain Ruedi Reservoir, including any administrative, overhead, or general expenses incurred by the United States, either directly or indirectly, in the operation and maintenance of Ruedi Reservoir and in the administration of this contract.

l. "Replacement costs" shall mean the costs incurred to remedy conditions brought about by the ordinary use of Ruedi Reservoir or to restore or replace components of the existing reservoir. For the purposes of this contract, replacement costs shall be those costs allocable to the regulatory capacity, but shall not include costs to increase the capacity of Ruedi Reservoir or to expand the purposes for which it was originally authorized and constructed.

m. "Marketable yield" shall mean the 46,500 acre-feet of water estimated to be available from the regulatory capacity of Ruedi Reservoir, including the 7,850 acre-feet previously sold under Round I, and the remaining 38,650 acre-feet designated for the Round II water sales.

TERM OF THE CONTRACT

2. This contract shall become effective on the date of execution and shall remain in effect until terminated in accordance with the provisions of Article 8 hereof; Provided, However, That at the end of the initial 25-years of the term of this contract (year 2025), all terms and conditions, including the quantity of water contracted for herein, are subject to renegotiation at the determination of the Contracting Officer, based on Federal laws and policies in effect at that time; Provided, Further, That the Contractor shall, subject to fulfillment of all obligations hereunder, have a first right for the purposes stated herein to the quantity of water contracted for herein from the marketable yield of Ruedi Reservoir.

CONTRACTED WATER SUPPLY

3. a. The Contractor hereby contracts for 490 acre-feet of water annually from the marketable yield of Ruedi Reservoir for municipal and industrial use subject to the terms and conditions of this contract.

b. The United States shall not enter into any contract that will result in the total amount of water marketed from the reservoir exceeding the marketable yield, Provided, That the United States reserves the right to make short-term (5 years or less) sales or leases of water from the regulatory capacity of Ruedi Reservoir for purposes recognized under the laws of the United States and the State of Colorado, as long as such sales or leases do not impinge upon the Contractor's entitlement to take delivery of water contracted for herein or adversely affect the determination of the marketable yield.

c. The Contractor shall have no right to carryover storage of undelivered water from year to year under this contract.

CONTRACTOR'S REPAYMENT OBLIGATION AND OTHER COSTS

4. a. For the water supply contracted for herein, the Contractor shall repay a proportionate share of the capital costs allocable to Round II. As of September 30, 1999, the unpaid uncontracted capital costs allocable to Round II were $28,021,544.99. The Contractor's capital cost repayment obligation of $367,137.40 represents the Contractor's proportionate (490/[38,650 less previously marketed Round II water]) share of the unpaid capital costs allocable to Round II. The Contractor's capital cost repayment obligation shall be repaid in annual installments as shown in the following table:

YEAR	ANNUAL PAYMENT	PRINCIPAL	INTEREST	BALANCE
2000	24,050.00	24,050.00	0.00	343,087.40
2001	24,050.00	13,599.56	10,450.44	329,487.84
2002	24,050.00	14,013.80	10,036.20	315,474.04
2003	24,050.00	14,440.66	9,609.34	301,033.38
2004	24,050.00	14,880.52	9,169.48	286,152.86
2005	24,050.00	15,333.78	8,716.22	270,819.07
2006	24,050.00	15,800.85	8,249.15	255,018.22
2007	24,050.00	16,282.14	7,767.86	238,736.08
2008	24,050.00	16,778.10	7,271.90	221,957.98
2009	24,050.00	17,289.16	6,760.84	204,668.82
2010	24,050.00	17,815.79	6,234.21	186,853.03
2011	24,050.00	18,358.46	5,691.54	168,494.57
2012	24,050.00	18,917.66	5,132.34	149,576.92
2013	24,050.00	19,493.89	4,556.11	130,083.03
2014	24,050.00	20,087.67	3,962.33	109,995.36
2015	24,050.00	20,699.54	3,350.46	89,295.82
2016	24,050.00	21,330.05	2,719.95	67,965.77
2017	24,050.00	21,979.76	2,070.24	45,986.01
2018	24,050.00	22,649.27	1,400.73	23,336.74
2019	24,047.58	23,336.74	710.84	0.00

b. The Contractor's first annual capital cost payment shall be due and payable upon execution of this contract, and thereafter, shall be due and payable on January 1 of each subsequent year until payment of the capital cost obligation is complete.

c. If, subsequent to the execution of this contract, additional capital costs are incurred for the regulatory capacity of Ruedi Reservoir, the Contractor shall pay a proportionate share of such additional costs allocable to Round II, as determined by the Contracting Officer, which share shall be in direct proportion to the contracted water supply specified in Article 3.a. above. Payment of such additional costs shall be upon such terms and conditions as determined by the parties hereto, based on Reclamation policies and laws in effect at the time. Prior to incurring such costs, the Contracting Officer shall notify the Contractor in writing of any necessary additional capital costs, including the basis for such costs and the Contractor's estimated proportionate share thereof.

d. The Contractor's capital cost obligation is a fixed obligation of the Contractor and is payable as provided for herein whether or not the quantity of water contracted for in Article 3.a. above is available for delivery to the Contractor.

e. In addition to the capital cost repayment obligation, the Contractor shall also pay a proportionate share of the actual annual reimbursable operation, maintenance, and replacement (OM&R) costs allocable to the marketable yield. The Contractor's share of the actual annual reimbursable OM&R costs shall be in direct proportion to the contracted water supply specified in Article 3.a. above to the 46,500 acre-foot marketable yield.

f. The annual OM&R charges shall be based on the Federal Fiscal Year (October 1 through the following September 30) accounting. Payment for the current fiscal year, as adjusted for actual OM&R charges for the previous fiscal year, shall become due and payable on or before January 1 of each year.

g. The annual OM&R charge will be due and payable upon execution of this contract and thereafter shall be due and payable on or before January 1 of each subsequent year of the term of this contract. The first Fiscal Year's charges, if less than a full Fiscal Year, shall be prorated on a monthly basis beginning with the first calendar month following execution of this contract. The annual OM&R charge will be based on estimates prepared by the Contracting Officer. In the event the estimated OM&R costs fall short of the actual OM&R costs, or whenever it is determined by the Contracting Officer that a deficit will occur after January 1 of the Fiscal Year, supplemental notices may be issued by the Contracting Officer requesting additional funds to cover such shortfall or deficiency. Funds not expended during the Fiscal Year will be carried over and applied as a credit against the Contractor's charges for the following Fiscal Year.

h. No water will be delivered at any time the Contractor is in default of any payment required pursuant to this contract. The Contractor shall make all payments required pursuant to this contract whether or not the quantity of water specified in Article 3.a. above is available for delivery and whether or not the Contractor is capable of using the water delivered or scheduled for delivery.

I. Payments shall be made to a certain bank by a medium specified by the Contracting Officer, by check to a certain lock box, or by wire transfer to the United States Treasury, or to such other locations and by such other methods as the Contracting Officer may specify and as are readily available to the Contractor for its use.

DELIVERY OF WATER

5. a. Before June 1 of each year, the Contractor shall submit to the Contracting Officer a written schedule of its anticipated monthly demand for the delivery of water for the following 12 months. The Contractor shall revise said schedule as necessary to reflect its expected demand schedule based on current hydrologic conditions. Notwithstanding the above, the Contractor shall be entitled to take delivery of water under this contract at any time upon 24 hours notice to the Contracting Officer or a designated representative. All notices requesting delivery of water or a change in the delivery schedule shall be in writing. Orders which cannot be transmitted in writing due to urgency or emergency situations may be telephoned to the Contracting Officer's designated representative, Provided, That such orders shall be confirmed in writing by the Contractor.

b. The Contracting Officer will notify the Contractor and the Division No. 5 Engineer, Colorado Division of Water Resources, of the date, time, and amount of all water released from Ruedi Reservoir and delivered pursuant to this contract.

c. The delivery of water pursuant to this contract will be made into the Fryingpan River at the outlet works of Ruedi Reservoir. All delivery of water shall be limited by the outlet capacity of Ruedi Reservoir. All water delivered to the Contractor from Ruedi Reservoir will be measured at the outlet works of Ruedi Reservoir by the Contracting Officer with equipment owned, operated, and maintained by the United States. The United States will not be responsible for control, carriage, use, handling, or distribution of water delivered to the Contractor beyond the delivery point, and the Contractor shall hold the United States harmless from and against all claims, demands, and causes of action on account of property damage, personal injury, or death resulting from the control, carriage, use, handling, or distribution of water delivered to the Contractor.

d. The Contractor will not be responsible for the storage of water in or operation and maintenance of Ruedi Reservoir and the United States shall protect, indemnify, and hold the Contractor harmless from and against all claims, demands, and causes of action of any nature whatsoever resulting from or in any manner connected with the storage of water in or the operation and maintenance of Ruedi Reservoir within the limits of the Federal Tort Claims Act (28 U.S.C. 2671-2680).

e. The United States reserves the right to release the water contracted for herein from an alternate reservoir or reservoirs, Provided, That such releases from an alternate reservoir or reservoirs shall neither diminish the water supply contracted for herein nor affect the Contractor's ability to use the water for the purposes, at the location and at the time(s) as contemplated herein.

CONTRACTOR'S USE OF WATER

6. a. Water delivered to the Contractor pursuant to this contract will be used for municipal and industrial purposes directly, or by augmentation and exchange to replace out of priority water depletions to senior water rights on the Fryingpan and Roaring Fork Rivers, and on the Colorado River downstream of the confluence of the Roaring Fork and Colorado Rivers. Place of use will occur within the existing and future service area of the Basalt Water Conservancy District, located in Pitkin, Eagle, and Garfield Counties, within the Colorado River basin in the State of Colorado. (see attached map)

b. Lease, sale, donation, or other such disposal of any of the water contracted for herein shall require prior written approval of the Contracting Officer, Provided, That a municipal contractor may distribute the water contracted for herein to it's customers and charge it's customers such rates as permitted under Colorado law.

WATER SHORTAGE AND APPORTIONMENT

7. a. The Contracting Officer shall operate the Project in accordance with the Operating Principles for the Fryingpan-Arkansas Project as set forth in House Document No. 130, 87th Congress, 1st Session.

b. Water delivered pursuant to this contract is provided from the regulatory capacity of Ruedi Reservoir. Should shortages occur to the regulatory capacity, as determined by the Contracting Officer, based on schedules furnished pursuant to Article 5.a. above, such shortages will be apportioned among the Ruedi Reservoir contractors in the following manner: first, deliveries to all temporary and short-term contractors will be proportionately reduced up to 100 percent of their respective contracted amounts; second, deliveries to all Round II contractors will be proportionately reduced up to 100 percent of their respective contracted amounts; third, deliveries to all Round I municipal contractors will be proportionately reduced up to 30 percent of their respective contracted amounts; and finally, deliveries to all Round I contractors will be reduced up to 100 percent of their respective contracted amounts based on contract execution dates with the earliest date having highest priority; Provided, That the deliveries to all contracts with the same execution dates shall be proportionately reduced up to 100 percent of their respective remaining contracted amounts.

c. In administering shortage conditions, the Contracting Officer may require the Contractor to submit revised schedules pursuant to Article 5.a. above. The Contracting Officer reserves the right to limit the amount of water available for delivery under this contract to the amount specified in such revised schedules. Should any revised schedule require less than the total amount of water under contract by an individual contractor to meet the Contractor's expected demands, the Contracting Officer reserves the right to use all or any portion of the

water not so scheduled by the Contractor for redistribution to other contractors to mitigate the effects of the shortage. In no event shall any liability accrue against the United States or any of its officers, agents, or employees for any damage, direct or indirect, arising out of such shortage.

d. No adjustment will be made in the payments required pursuant to this contract as a result of the Contracting Officer's inability to deliver water requested for delivery by the Contractor due to shortage conditions.

TERMINATION OF WATER DELIVERIES

8. Delivery of the water contracted for herein shall cease at the option of the United States upon failure of the Contractor to make payments as required by this contract or upon failure of the Contractor to abide by any lawful notice, order, or final administrative or judicial determination that the Contractor has violated a rule or regulation of the United States or the State of Colorado directly relating to and affecting the furnishing of water hereunder; Provided, that water deliveries hereunder shall not cease unless such failure or violation continues 60 days after the United States gives the Contractor written notice to remedy the failure or violation.

TERMINATION OF THE CONTRACT

9. a. This contract may be terminated and the delivery of water contracted for herein shall cease at the option of the United States upon failure of the Contractor to make payments as required by this contract or upon failure of the Contractor to abide by any lawful notice, order, or final administrative or judicial determination that the Contractor has violated a rule or regulation of the United States or the State of Colorado directly relating to and affecting the furnishing of water hereunder; Except, That this contract may not be terminated unless such failure or violation continues 60 days after the United States gives the Contractor written notice of such failure or violation.

b. The contractor may terminate this contract at the end of any year by providing written notice of such termination to the United States pursuant to Article 11 below not less than 90 days prior to the effective date of termination, Provided, That such termination must be necessitated by the Contractor's inability to meet the payments required hereunder due to the applicability of Amendment No. 1 (Tabor). Upon any such termination, the United States may make the water supply contracted for herein available to other contractors, or reallocate the contracted water supply to other purposes, and the contractor has no prior claim or right to enter into a contract for such water supply or any portion thereof in the future.

ENVIRONMENTAL COMPLIANCE

10. a. Compliance with the provisions of the National Environmental Policy Act (NEPA), as amended, and the Endangered Species Act (ESA), as amended, are a prerequisite to execution of this contract. The general environmental impacts associated with the Ruedi Reservoir Round II water marketing program under the preferred alternative with conservation measures are described in the Final Supplemental Environmental Statement (FSES) dated August 1, 1989. Additional compliance may also be required on a site-specific basis and shall be the responsibility of the United States using data and other information provided by the Contractor. The Contractor shall provide the necessary data and information and a site-specific mitigation plan, if required, to the Contracting Officer for approval. The data, information, and mitigation cover those environmental impacts associated with the Contractor's diversions and on-site use of Ruedi Reservoir water. All costs associated with the preparation, approval, and implementation of NEPA and ESA compliance and mitigation plans, including costs incurred by the United States, shall be the responsibility of the Contractor.

b. The Contractor shall give notice to the United States concerning any changes in location of diversions, return flows, places or type of use, or diversion rates. The Contractor shall be responsible for any additional NEPA and ESA compliance or mitigation measures which may be required by the United States as the result of such changes and all associated costs, including costs incurred by the United States, shall be the responsibility of the Contractor.

c. The Contractor shall make advance payment for costs to be incurred by the United States which are the Contractor's responsibility under this Article 10.

NOTICES

11. Any notice, demand, or request authorized or required by this contract shall be deemed to have been given, on behalf of the Contractor, when mailed postage prepaid, or delivered to the Regional Director, Great Plains Region, Bureau of Reclamation, P.O. Box 36900, Billings, Montana 59107-6900, and on behalf of the United States, when mailed postage prepaid or delivered to the Contractor, Basalt Water Conservancy District, c/o Ms. Lori J. M. Satterfield, Balcomb and Green, P.C., P.O. Drawer 790, Glenwood Springs, CO 81602. The designation of the addressee or the address may be changed by notice given in the same manner as provided in this article for other notices.

ASSIGNMENT OF CONTRACT

12. a. No assignment or transfer of this contract or any rights or interests herein shall be valid until approved in writing by the Contracting Officer.

b. The United States reserves the right to enter into agreements with third party agents for the administration of this contract, Provided, That such agreements shall not adversely affect the rights of the Contractor to receive the water contracted for under this contract.

STANDARD CONTRACT ARTICLES

13. The standard contract articles applicable to this contract are listed below. The full text of these standard articles is attached as Exhibit A and is hereby made a part of this contract by this reference.

A. Charges for Delinquent Payments

B. General Obligation--Benefits Conditioned Upon Payment

C. Contingent on Appropriation or Allotment of Funds

D. Officials Not to Benefit

E. Books, Records, and Reports

F. Rules, Regulations, and Determinations

G. Quality of Water

H. Water and Air Pollution Control

I. Water Conservation

J. Equal Opportunity

K. Compliance With Civil Rights Laws and Regulations

L. Uncontrollable Forces

M. Medium for Transferring Payments

IN WITNESS WHEREOF, the parties hereto have executed this contract supplement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By Allie E. Yatz
~~Acting~~ Area Manager
Eastern Colorado Area Office

BASALT WATER CONSERVANCY DISTRICT

By Arthur Bauder

Title President

ACKNOWLEDGMENT

STATE OF Colorado
) ss.
COUNTY OF Garfield

On September 21, 2000, before me, Arthur Bowles

_____ appeared personally,

the person(s) whose name(s) (is)(are) subscribed to the within instrument

and known to me to have executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the

day and year in this acknowledgment first above written.

(SEAL)

Nicole King
Notary Public

NOTARY PUBLIC
NICOLE M. KING
STATE OF COLORADO

My commission expires: MY COMMISSION EXPIRES 01/10/04

EXHIBIT A

STANDARD ARTICLES

A. CHARGES FOR DELINQUENT PAYMENTS

1. The Contractor shall be subject to interest, administrative and penalty charges on delinquent installments or payments. When a payment is not received by the due date, the Contractor shall pay an interest charge for each day the payment is delinquent beyond the due date. When a payment becomes 60 days delinquent, the Contractor shall pay an administrative charge to cover additional costs of billing and processing the delinquent payment. When a payment is delinquent 90 days or more, the Contractor shall pay an additional penalty charge of 6 percent per year for each day the payment is delinquent beyond the due date. Further, the Contractor shall pay any fees incurred for debt collection services associated with a delinquent payment.

2. The interest charge rate shall be the greater of the rate prescribed quarterly in the Federal Register by the Department of the Treasury for application to overdue payments, or the interest rate of 0.5 percent per month prescribed by section 6 of the Reclamation Project Act of 1939 (Public Law 76-260). The interest charge rate shall be determined as of the due date and remain fixed for the duration of the delinquent period.

3. When a partial payment on a delinquent account is received, the amount received shall be applied, first to the penalty, second to the administrative charges, third to the accrued interest, and finally to the overdue payment.

B. GENERAL OBLIGATION--BENEFITS CONDITIONED UPON PAYMENT

1. The obligation of the Contractor to pay the United States as provided in this contract is a general obligation of the Contractor notwithstanding the manner in which the obligation may be distributed among the Contractor's water users and notwithstanding the default of the individual water users in their obligations to the Contractor.

2. The payment of charges becoming due hereunder is a condition precedent to receiving benefits under this contract. No water will be made available to the Contractor from project facilities during any period in which the Contractor may be in arrears in the advance payment of any operation and maintenance charges due the United States or in arrears for more than 12 months in the payment of any construction charges due the United States. The Contractor shall not furnish water made available pursuant to this contract for lands or parties which are in arrears in the advance payment of operation and maintenance or toll charges or in arrears more than 12 months in the payment of construction charges as levied or established by the Contractor.

C. CONTINGENT ON APPROPRIATION OR ALLOTMENT OF FUNDS

The expenditure or advance of any money or the performance of any obligation of the United States under this contract shall be contingent upon appropriation or allotment of funds. Absence of appropriation or allotment of funds shall not relieve the Contractor from any obligations under this contract. No liability shall accrue to the United States in case funds are not appropriated or allotted.

D. OFFICIALS NOT TO BENEFIT

No Member of or Delegate to Congress, Resident Commissioner, or official of the Contractor shall benefit from this contract other than as a water user or landowner in same manner as other water users or landowners.

E. BOOKS, RECORDS, AND REPORTS

The Contractor shall establish and maintain accounts and other books and records pertaining to administration of the terms and conditions of this contract, including: the Contractor's financial transactions, water supply data, water-use data; and other matters that the Contracting Officer may require. Reports thereon shall be furnished to the Contracting Officer in such form and on such date or dates as the Contracting Officer may require. Subject to applicable Federal laws and regulations, each party to this contract shall have the right during office hours to examine and make copies of each other party's books and records relating to matters covered by the contract.

F. RULES, REGULATIONS, AND DETERMINATIONS

1. The parties agree that the delivery of water or the use of Federal facilities pursuant to this contract is subject to Reclamation law, as amended and supplemented, and the rules and regulations promulgated by the Secretary of the Interior under Reclamation law.

2. The Contracting Officer shall have the right to make determinations necessary to administer this contract that are consistent with the expressed and implied provisions of this contract, the laws of the United States and the State, and the rules and regulations promulgated by the Secretary of the Interior. Such determinations shall be made in consultation with the Contractor.

G. QUALITY OF WATER

The operation and maintenance of project facilities shall be performed in such manner as is practicable to maintain the quality of raw water made available through such facilities at the highest level reasonably attainable, as determined by the Contracting Officer. The United States does not warrant the quality of water and is under no obligation to construct or furnish water treatment facilities to maintain or better the quality of water.

H. WATER AND AIR POLLUTION CONTROL

The Contractor, in carrying out this contract, shall comply with all applicable water and air pollution laws and regulations of the United States and the State, and shall obtain all required permits or licenses from the appropriate Federal, State, or local authorities.

I. WATER CONSERVATION

1. The Contractor shall develop and implement an effective water conservation program based on the Contractor's water conservation plan that has been reviewed by the Contracting Officer and determined to meet the conservation and efficiency criteria established under Federal law. The water conservation program shall contain definite water conservation objectives, appropriate economically feasible water conservation measures, and time schedules for meeting those objectives.

2. The Contractor shall submit to the Contracting Officer by December 31, of each calendar year a report on the status of the Contractor's implementation of its water conservation program.

3. At 5-year intervals, subsequent to the Contracting Officer's determination that the Contractor's water conservation program meets the conservation and efficiency criteria established under Federal law, the District shall submit to the Contracting Officer for review and evaluation updated water conservation programs. The Contracting Officer shall review and evaluate the updated water conservation program and determine if they meet the conservation and efficiency criteria established under Federal law.

J. EQUAL OPPORTUNITY

During the performance of this contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin.

Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.

2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without discrimination because of race, color, religion, sex, or national origin.

3. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Contracting Officer, advising the said labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The Contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.

5. The Contractor will furnish all information and reports required by said amended Executive Order and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the Contracting Officer and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the such rules, regulations, or orders, this contract may be canceled, terminated, or suspended, in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in said amended Executive Order, and such other sanctions may be imposed and remedies invoked as provided in said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

7. The Contractor will include the provisions of paragraphs 1. through 7. in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of said amended Executive Order, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

K. COMPLIANCE WITH CIVIL RIGHTS LAWS AND REGULATIONS

1. The Contractor shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), Section 504 of the Rehabilitation Act of 1975 (Public Law 93-112, as amended), the Age Discrimination Act of 1975 (42 U.S.C. 6101, et seq.), and any other applicable civil rights laws, as well as with their respective implementing regulations and guidelines imposed by the United States Department of the Interior and/or the Bureau of Reclamation.

2. These statutes require that no person in the United States shall, on the grounds of race, color, national origin, handicap, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving financial assistance from the Bureau of Reclamation. By executing this contract, the Contractor agrees to immediately take any measures necessary to implement this obligation, including permitting officials of the United States to inspect premises, programs, and documents.

3. The Contractor makes this agreement in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property discounts, or other Federal financial assistance extended after the date hereof to the Contractor by the United States, including installment payments after such date on account of arrangements for Federal financial assistance which were approved before such date. The Contractor recognizes and agrees that such Federal assistance will be extended in reliance on the representations and agreements made in this article, and that the United States reserves the right to seek judicial enforcement thereof.

L. UNCONTROLLABLE FORCES

Neither party shall be considered to be in default in respect to any obligation hereunder, if prevented from fulfilling such obligation by reason of uncontrollable forces, the term "uncontrollable forces" being deemed, for the purpose of this contract, to mean any cause beyond the control of the party affected, including, but not limited to, drought, failure of facilities, flood, earthquake, storm, lightning, fire, epidemic, war, riot, civil disturbance, labor disturbance, sabotage, and restraint by court or public authority, which by exercise of due diligence and foresight, such party could not reasonably have been expected to avoid. Either party rendered unable to fulfill any obligation by reason of uncontrollable forces shall exercise due diligence to remove such inability with all reasonable dispatch.

M. MEDIUM FOR TRANSFERRING PAYMENTS

All payments from the Enterprise to the United States under this contract shall be made by the medium requested by the United States on or before the date payment is due.
The required method of payment may include checks and/or wire transfers.

RESOLUTION 2000-2

WHEREAS, Basalt Water Conservancy District has applied for a Round II water service contract with the United States Bureau of Reclamation for water releases from Ruedi Reservoir; and

WHEREAS, it is in the best interest of the District and its constituents for the District to enter into said contract for 490 acre feet of water.

NOW THEREFORE, the Board of Directors of the Basalt Water Conservancy District, having duly considered this matter, it is:

RESOLVED, that the District:

1. Approves the Ruedi Reservoir Round II water repayment contract no. 009D6C0014;

2. Authorizes the District's President, Arthur Bowles, to execute the contract on behalf of the District; and

3. Authorizes the District's counsel to correspond with the Bureau and confirm the District's commitment to comply with the environmental commitments outlined in paragraph 21 of the categorical exclusion checklist (CEC) relating to the subject contract.

PRESENTED, READ AND ADOPTED by the unanimous vote of the Board of Directors present at the regular meeting of the Board of Directors of the Basalt Water Conservancy District on the 5th day of September, 2000

BASALT WATER CONSERVANCY DISTRICT

By: Arthur Bowles
Arthur Bowles, President

Attested by:

Barbara Mick
Barbara Mick, Secretary

IN THE DISTRICT COURT IN AND

FOR WATER DIVISION NO. 5

STATE OF COLORADO

Application No. W-1945

IN THE MATTER OF THE APPLICATION)
FOR WATER RIGHTS OF THE COLORADO)
WATER CONSERVATION BOARD, ON)
BEHALF OF THE PEOPLE OF THE STATE)
OF COLORADO IN THE FRYING PAN)
RIVER IN PITKIN AND EAGLE COUNTIES)

RULING OF REFEREE

The above entitled matter having been referred to the undersigned as Water Referee for Water Division No. 5, State of Colorado, by the Water Judge of said Court on the 17th day of July, 1973, in accordance with Article 21 of Chapter 148, Colorado Revised Statutes 1963, as amended (Chapter 373 S.L. Colo. 1969), known as The Water Rights Determination and Administration Act of 1969.

And the undersigned Referee having made such investigations as are necessary to determine whether or not the statements in the application, and statement of opposition, are true and having become fully advised with respect to the subject matter of the application, and statement of opposition, does hereby make the following determination and ruling as the Referee in this matter, to-wit:

1. The statements in the application and in the Statement of Opposition are true.

2. There is no ditch or structure involved; however, for the purpose of identification, the water right will be called Lower Frying Pan River.

3. The name of claimant and address is: The Colorado Water Conservation Board, 1845 Sherman Street, Danver, Colorado.

4. The source of the water is the Frying Pan River immediately below its confluence with the Rocky Fork to its confluence with the Roaring Fork River.

5. There is no diversion. The application is for instream use on the Frying Pan River from a point immediately below its confluence with the Rocky Fork to the point of confluence with the Roaring Fork River.

6. The proposed use of the water is to maintain such minimum flows in the stream bed as are required to preserve the natural environment to a reasonable degree.

7. The date of initiation of the appropriation is July 12, 1973.

8. The water was first applied to the above beneficial use on July 12, 1973, by action of the Colorado Water Conservation Board under the provisions of Sec. 148-21-3(6), (7), and (10), as amended.

9. The amount of water claimed is 39 cubic feet of water per second of time during the period from November 1 to April 30; and 110 cubic feet of water per second of time during the period from May 1 to October 31.

10. This appropriation to maintain minimum stream flow is made under the provisions of Section 148-21-3(6), (7), and (10) as amended by Senate Bill 97, signed into law April 23, 1973.

11. On September 28, 1973, the Colorado River Water Conservation District filed, in Water Court for Water Division No. 5, a Statement of Opposition to this application in which it is stated: The Colorado River Conservation District has no objection to the granting of the application for water rights on the condition, however, that as a part of the Ruling of the Referee and the Decree of the Water Court a Finding is made and an Order entered that the Congress of the United States of America in authorizing the construction of the Frying Pan-Arkansas Project (76 Stat. 389) specifically directed the operation of the project in accordance with certain Operating Principles appearing as House Document No. 130, 87th Cong. 1st Sess., and that the Ruling and Decree are not intended to be, nor shall it be construed as, an amendment, variation, abrogation or construction of such Operating Principles.

The Referee does therefore conclude that the above entitled application should be granted and that 39 cubic feet of water per second of time during the period from November 1 to April 30, and 110 cubic feet of water per second of time during the period from May 1 to October 31, is hereby awarded to the Lower Frying Pan River, from a point immediately below its confluence with the Rocky Fork to the point of confluence with the Roaring Fork River, for the purpose of maintaining such minimum flows in the stream bed as are required to preserve the natural environment to a reasonable degree, with appropriation date of the 12th day of July, 1973, absolutely and unconditionally; subject, however, to all earlier priority rights of others in accordance with law, and also subject to the Operating Principles of the Frying Pan-Arkansas Project.

It is accordingly ORDERED that this ruling shall be filed with the Water Clerk and shall become effective upon such filing, subject to judicial review pursuant to Section 148-21-20 CRS 1963 as amended (1971).

It is further ORDERED that a copy of this ruling shall be filed with the appropriate Division Engineer and the State Engineer.

Done at the City of Glenwood Springs, Colorado, this 19th day of NOVEMBER, 1973.

BY THE REFEREE:

Jean Cole
Water Referee
Water Division No. 5
State of Colorado

No protest was filed in this matter.
The foregoing ruling is confirmed
and approved, and is made the
Judgment and Decree of this court.

Dated: April 25, ~~1973~~ 1974 CF

Water Judge

Exhibit D

ROARING FORK CONSERVANCY
Bringing People Together to Protect Our Rivers

MEMORANDUM

TO: CWCB Board and Staff
FROM: Heather Lewin, Roaring Fork Conservancy
RE: Lease of Water in Ruedi Reservoir for Winter Release
Date: August 5, 2025

Increased pressure on streams due to growing population, recreation, and climate change has led to the need for strategic management, where possible, to ensure the long-term health and viability of Colorado's rivers and fisheries. The Lower Fryingpan River runs 13 miles from the outflow of Ruedi Reservoir to its confluence with the Roaring Fork River in Basalt. World renowned for its gold medal fishery, the Fryingpan valley draws thousands of visitors annually, significantly contributing to Colorado's tourism economy. The continued ecological and economic benefits of a vibrant stream system are dependent on Ruedi Reservoir management that benefits local and downstream West Slope needs. In recent years, the Lower Fryingpan River has seen increased angling pressure as the Roaring Fork, Colorado, Crystal, and Eagle Rivers have all experienced temperature related closures in summer, pushing anglers further upstream to the Fryingpan. Additionally, lower snowpack and higher temperatures in the winter bring increased angling as a winter recreation alternative, enhancing year-round pressures on the resource. Maintaining minimum winter flows at 60-70cfs increases both recreational opportunities, ecological resiliency, and economic benefit. In addition, water flowing downstream could be used to help ensure winter flow targets on the 15-mile reach are met. In short, using contract water held by the Town of Basalt and the Basalt Water Conservancy District in Ruedi Reservoir will have long and short term ecological and economic benefits to the local and regional communities, as well as Colorado's environment, recreation, and tourism.

The Town of Basalt ("Town") and Basalt Water Conservancy District ("District") have been in discussions with Roaring Fork Conservancy ("RFC") regarding the possibility of leasing water currently held under contract for release from Ruedi Reservoir with an area of beneficial use that is impacted by anchor ice. We would like to propose that both leases be held by the CWCB.

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The parameters of the lease would be as follows:

1. The District currently holds four contracts with the US Bureau of Reclamation for a total of 1,790 af of water in Ruedi Reservoir. This lease requests 500 af.
2. The Town currently holds two contracts with the US Bureau of Reclamation for a total of 500 af. This lease requests 300 af.
3. RFC has provided information showing the potential environmental impacts of low winter flows on the Fryingpan River and the benefits of augmenting those flows as detailed below. The objective of the lease would be to maintain Fryingpan River flows at between 60 and 70 cfs or up to 31 cfs above the current minimum flow of 39 cfs, where temperatures and low flows are more likely to combine to create anchor ice.
4. A combination of flow levels and temperature influence icing conditions, so it is difficult to predict with certainty when, or in what amount releases would be necessary. For instance, extremely low temperatures could create anchor ice even when flows are already above the minimum of 39 cfs, while high temperatures could lead to ice-free conditions even when flows are at 39 cfs or below.
5. Releases would be limited to the amount necessary to bring Fryingpan flows at Ruedi Dam between 60 and 70 cfs. Releases would continue until anchor ice conditions abated, at which time RFC will notify the Bureau of Reclamation to halt additional releases. RFC will keep the District informed of the timing and amount of all releases with total releases between December 15 and January 30.
6. The CWCB will contract with both the District and the Town independently.
7. Releases may be suspended by Bureau of Reclamation when those releases preclude the Bureau from managing Ruedi Reservoir consistent with the Bureau's legal and regulatory obligations. Any such suspension will be accompanied by written communications to RFC, the CWCB, the District, and the Town detailing the reason(s) for that suspension.
8. An extension or renewal of the lease may be negotiated between the parties at their discretion.
9. The following summarizes the findings of previous studies of anchor ice and its impact on the Fryingpan River fishery:

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From **Summary Report: A Study of Macroinvertebrate Community Response to Winter Flows on the Fryingpan River - August 11, 2004 (Bill Miller):**

- *Aquatic macroinvertebrate communities were evaluated as a means to elucidate the relationships between winter base flows, anchor ice and macroinvertebrates community structure. The magnitude of discharge may be the most important factor that influences macroinvertebrates during the winter months. (p16)*

- *The formation and frequency of occurrence of anchor ice at FPR-TC appears to be a contributing influence on macroinvertebrate community structure and function. Recent data suggests that two or more concurrent winters with higher flows may be necessary to achieve an optimum balance in the macroinvertebrate community.(p18)*

- *Results of this study suggest that magnitude of discharge and air temperature work together to influence anchor ice formation. The lower discharge at site FPR-TC in 2002-2003 was much more conducive to the formation of anchor ice than the higher flows during the following winter.(p.22)*

- *The available data suggest that anchor ice was at least partially responsible for the degraded condition of the macroinvertebrate community at FPR-TC during the spring of 2003. To alleviate anchor ice related stress to the macroinvertebrate community, an effort should be made to avoid low wintertime releases out of Ruedi Reservoir.(p.23)*

From **Summary Report: A Study of Macroinvertebrate Community Response to Winter Flows on the Fryingpan River - September 10, 2006 (Bill Miller):**

- *Results of this study suggest that magnitude of discharge and air temperature work together to influence anchor ice formation.(p.17)*

- *It appears that macroinvertebrate diversity and evenness recover in one to two years after severe anchor ice formation if winter flows remain greater than 70 cfs.*

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- *Flows greater than 70 cfs seem to result in less anchor ice in the upper half of the river than flows of approximately 40 cfs. (p. 22)*

From **Lower Fryingpan River and Ruedi Reservoir Economic Impact Study 2015 (Martin Shields, John Loomis, Rebecca Hill):**

- *This (per day expenditures associated with angling) translates to total expenditures for the year of $3.3 million. This spending translates to almost $3.8 million in output, 38 jobs, and $2.4 million in value added to the three-county region.*
- *First, we looked at the management of winter stream flows to reduce the occurrence of anchor ice…. In the case of winter flows, this translated to a potential increase in economic activity in the region of $1.5 million in output, 15 jobs and $944,401 in value added. The added economic output from increased trips due to increased winter river flow management translated to a 40% increase in the regional economic impacts from angler recreation on the Lower Fryingpan River.*

10. Agreement from the U.S. Bureau of Reclamation that these releases will not interfere with or compromise their ability to manage the reservoir under most circumstances.
11. Agreement from Colorado Parks and Wildlife that these releases will not degrade or compromise habitat, biomass or other environmental conditions in and adjacent to the Fryingpan River.

Exhibit E

BASALT
WATER CONSERVANCY
DISTRICT

August 21, 2025

Rob Viehl
Chief, Stream and Lake Protection Section
Colorado Water Conservation Board
1313 Sherman St., Rm. 721
Denver, CO 80203

Dear Rob:

The Basalt Water Conservancy District (BWCD) will lease up to 500 acre-feet (AF) of Ruedi Reservoir water to the Colorado Water Conservation Board (CWCB) for winter instream flow enhancement to mitigate anchor ice formation in the Fryingpan River during the 2025 calendar year at no charge.

Background

The BWCD was created in 1964 to conserve, enhance, develop, and stabilize water supplies for constituents in Garfield, Eagle, and Pitkin counties. To fulfill this mission, the BWCD provides water supplies to support domestic, irrigation, commercial and other beneficial uses in the Roaring Fork Valley. Many of the District's constituents rely on the Fryingpan River. Ensuring sufficient winter flows to mitigate anchor ice will assist in enhancing, developing, and stabilizing water supplies and flows in the river. The District's supplies available for this purpose include contracts with the Bureau of Reclamation for water stored in Ruedi Reservoir.

The Roaring Fork Conservancy has partnered with the CWCB since 2019 to mitigate anchor ice formation and impacts by increasing instream flow in the Fryingpan below Ruedi Reservoir with leased Ruedi Reservoir water by approximately 25 cubic feet per second (cfs) above the 39 cfs decreed instream flow between December 15 and March 31.

The BWCD also has a long collaborative relationship with the CWCB. When the Roaring Fork Conservancy approached the BWCD regarding the lease of additional water in 2025 to support the above-described increased flows, the BWCD decided to support this effort. The need for this enhanced winter flow is outlined in more detail in the companion letter provided by the Roaring Fork Conservancy.

Basalt Water Conservancy District Applicable Ruedi Contracts

The BWCD maintains four perpetual Ruedi contracts with the Bureau of Reclamation. The requested 500 AF lease volume to supplement winter instream flows from December 1-December 31, 2025, will be supplied and delivered pursuant to three BWCD contracts. These contracts are identified below with their approved uses in paragraph 6(a) of each contract:

- RUEDI RESERVOIR ROUND I, CONTRACT NO. 2-07-70-W0546; 500 AF, which provides that contract water can be used directly for municipal and domestic purposes, including residential, commercial and other municipal related water uses, or by exchange and augmentation.

- RUEDI RESERVOIR ROUND II, CONTRACT NO. 009D6C0014; 490 AF, which provides that contract water can be used for municipal and industrial purposes directly, or by augmentation or exchange.

- RUEDI RESERVOIR ROUND II, CONTRACT NO. 039F6C0012; 500 AF, which provides that contract water can be used for municipal and industrial purposes directly, or by augmentation or exchange.

- RUEDI RESERVOIR ROUND II, CONTRACT NO. 139D6C0099; 300 AF, which provides that contract water can be used for municipal and industrial purposes directly, or by augmentation or exchange. (No water will be used from this contract in 2025).

The contracts under which water will be provided in 2025 define "Municipal and industrial uses" as "use of water by municipalities, industrial users, commercial recreation entities, and other water user entities not engaged in commercial agricultural production." C.R.S 37-92-103(9) defines "Plan for augmentation" and states "... to increase the supply of water available for beneficial use..." Collectively, releases of water under these contracts would increase the supply of available water for municipal benefit and for use by commercial recreation entities (i.e. fishing outfitters) on the Fryingpan River and the Roaring Fork River downstream of its confluence with the Fryingpan River through the Town of Basalt.

Contract Term and Pricing

The BWCD proposes to enter into a one-year lease with the CWCB. Key terms include:

1. The contract will be for the 2025 calendar year, and the District understands that delivery will be requested in the month of December.

2. There will be no cost associated with this contract. This water will be a donation from BWCD.

The BWCD is pleased to have this opportunity to work with the CWCB on a lease that will benefit winter stream flows in Fryingpan River below Ruedi Reservoir. We look forward to working with you to complete this transaction. Please let us know if we can provide any additional information to assist in CWCB's consideration of this proposal.

Respectfully,

_____

Gary Knaus, President

Basalt Water Conservancy District

Cc: Heather Tattersall Lewin, Roaring Fork Conservancy
Chris Geiger
Eric Mangeot
Ramsey Kropf

Exhibit F

Fryingpan River Anchor Ice Report 2020-2021

Shaylyn Austin
Matthew P Anderson

ROARING FORK CONSERVANCY
Celebrating 25 years
Bringing People Together to Protect Our Rivers

Executive Summary

Stationary ice formation, a natural occurrence in northern hemisphere streams during winter, has significant impacts on the hydrology and ecology of a stream. From December 2020 through March 2021, Roaring Fork Conservancy researchers conducted a pilot study on the Lower Fryingpan River to better understand the parameters affecting anchor ice formation in the river. Anchor ice presence was observed 13 out of the 32 survey days. A decrease in anchor ice presence started in the second half of January 2021 and continued through the end of the study period. This decrease in anchor ice aligned with observed increases in water temperature, air temperature, and stream flow rate. Logistic regression modeling substantiated these observations with statistically significant results showing a negative correlation between those three independent variables and anchor ice presence. While the results from this initial period of anchor ice monitoring provides a strong basis for future studies, improvements can be made to protocol and methodology to strengthen the integrity of the data moving forward. Additionally, continuing the study for at least five more years will provide more evidence necessary to make definitive conclusions about the influence of water temperature, air temperature, and stream flow rate on anchor ice formation in the Lower Fryingpan River.

Introduction

Ice formation in rivers occurs when water becomes supercooled, meaning it cools to below 0°C. Conditions for supercooling are sub-zero air temperatures, little to no surface ice, and turbulent water flow (Brown et al. 2011). Under these conditions tiny ice particles on the surface of the water can become suspended in the water column, forming frazil ice. From there, frazil ice grows and is transported to the streambed in turbulent water. Frazil ice attached to the channel bottom is called anchor ice, a form of stationary ice attached to the streambed (Brown et al. 2011).

Left: Anchor ice at Site 1 (in Basalt). Right: Anchor ice on boulders at Site 2 (near Mile Marker 1). Cover Page Photo: Anchor ice and border ice at Site 5 (near confluence of Fryingpan and Seven Castles Creek).

Anchor ice formation, a natural occurrence in northern hemisphere streams in the winter, has significant impacts on the hydrology and ecology of a stream. Anchor ice dams can obstruct water flow, as well as increase and decrease water levels, upstream and downstream, respectively. Additionally, anchor ice can occupy fish and macroinvertebrate habitat, forcing them to make energetically costly movements, and anchor ice release events or ice jam releases can carry sediments and invertebrates down river (Brown et al. 2011).

Ice jam releases also have implications for human safety and the integrity of infrastructure nearby the stream. Large ice jams can cause flooding upriver. Moreover, release of these large ice jams at high stream velocity can damage bridges or similar structures as well as severely harm anyone recreating in the river (Huokuna et al. 2017).

In winter, discharges from Reudi Dam have a noticeable effect on the thermal regime of the river, water level, and temporal and spatial characteristics of the stream flow. All of these are factors in anchor ice formation. In a study of North American rivers, Huokuna et al. (2017) found that greater discharges of warm water from reservoirs in the winter increased open water areas, therefore creating more area for frazil ice formation and subsequently more anchor ice formation in downstream river reaches (Huokuna et al. 2017). Ultimately, local river conditions, year-to-year weather conditions, and dam structure and operation determine the impact that reservoirs have on stream flow and ice formation.

It is important to understand the processes underlying anchor ice formation to better predict how the management of rivers will impact anchor ice formation and, subsequently, the hydrology and ecology of the river. These factors are especially pertinent to the Lower Fryingpan River as a Gold Medal Fishery. This report addresses how stream flow regulation by Ruedi Dam may be affecting ice formation within the Lower Fryingpan River in Basalt, CO. Findings from this study could help inform management decisions regarding future winter flow discharge out of Ruedi Dam.

Research Goals

The goal of the Fryingpan River Anchor Ice Study 2020-2021 was firstly to establish and execute an objective-driven protocol for assessing anchor ice formation within the Lower Fryingpan River. Secondly, we hoped to better understand the factors that affect anchor ice formation within the river, as well as establish a temperature gradient for the study area.

Predictions

It was hypothesized that anchor ice abundance would increase with distance from Reudi Dam, and be negatively correlated with water temperature, air temperature, and stream flow rate.

Methods

Study Area

Surveys were conducted at six sites along the Lower Fryingpan River in Basalt, CO. The Lower Fryingpan River is the approximately 14 mile stretch of river downstream of Ruedi Dam that flows into the Roaring Fork River. Site 1 was chosen at a location directly above the Roaring Fork River confluence. The other five sites were chosen at approximately one-mile intervals leading upstream with Site 6 at the Taylor Creek confluence. Convenience of access was prioritized.

Site	Latitude (N)	Longitude (W)	Elevation (ft.)
Site 1	39.36827 °	107.03179°	6657
Site 2	39.37517 °	107.01622°	6730
Site 3	39.37444°	107.00636°	6772

Site 4	39.37507°	106.98652°	6875
Site 5	39.37949°	106.96993°	6930
Site 6	39.37617°	106.94305°	7040

Table 1 Fryingpan River Anchor Ice Study survey sites. Sites are numbered from downstream to upstream.

Surveying took place over the course of four months, December 3, 2020 through March 31, 2021. Surveyors assessed ice characteristics at each site at least once per week on days following at least two consecutive nights of below 20°F air temperature. In order to ensure frequent surveying, seven survey events were conducted on days without two prior consecutive nights of sub 20°F, predominately later in the study period. A total of 32 surveys were conducted: nine in December, eight in January, eight in February, and seven in March.

Physical Parameters

The latitude, longitude, and elevation were recorded for each survey site. Additionally, water temperature and air temperature were recorded at each site for every survey event using a digital thermometer. Stream flow rate data for each survey event was collected from the USGS Gauge below Ruedi Reservoir. Previous weather history was collected from the NCDC weather history database using the Aspen Pitkin County Airport Sardy Field weather station.

Observational Parameters

Notes were taken on specific stream characteristics at each site that could affect ice formation, including relative stream velocity, water depth, exposure to sun, and any drastic changes in ice presence between surveys, among other observed characteristics

Ice Surveying

The percent coverage and thickness of anchor ice was visually estimated for each site. The type of anchor ice formation was recorded, including the relative size of the clumps and the density of distribution among them. When opportune, an anchor ice sample was taken from the riverbed by pulling off an intact piece the size of at least one fist, while wearing rubber gloves. The sample was then photographed, individual crystal length was measured using a ruler, and any sediment lodged within the sample was recorded. Additional ice formation types were also recorded. Border ice width, the distance of border ice from the river bank to the outer edge of the ice, was estimated at each site, as well as whether or not the border ice had been flooded. Presence of slush ice, or ice floating down the stream of the river, was also recorded. The

Anchor ice sample from Site 1 (in Basalt).

presence of anchor ice dams and anchor ice weirs were recorded at each site. If present, heights of anchor ice dams were estimated. Photographs and videos were taken at each site. Lastly, the time and location of any witnessed anchor ice release event was recorded using photographs, videos and written descriptions of the event.

Results

Overall Anchor Ice Presence and Coverage

Anchor ice surveying took place 32 times from December 3, 2020 to March 31, 2021, resulting in 192 unique site visits. Out of the 32 survey days, anchor ice was observed 13 out of the 32 days, and out of the 192 unique site visits, anchor ice was observed 54 times. Site-specific observations by month are depicted in **Table 2**. There was a decrease in anchor ice presence in January, and anchor ice remained largely absent for the rest of the survey period. Throughout the season, anchor ice presence was observed most frequently at Site 2 (11 times) and least frequently at Site 1 (7 times).

	Site						
Month	**Site 1**	**Site 2**	**Site 3**	**Site 4**	**Site 5**	**Site 6**	*Total*
December	4	5	5	6	5	4	*29*
January	0	4	2	2	4	4	*16*
February	1	0	0	0	0	0	*1*
March	2	2	1	1	1	1	*8*
Total	*7*	*11*	*8*	*9*	*10*	*9*	*54*

Table 2. Number of times anchor ice presence was recorded at each site and for each month throughout the survey period (December 3, 2020 through March 21, 2021).

Anchor ice was absent the majority of the survey days. Anchor ice was not observed at 138 out of the 198 unique site visits. When excluding recordings of 0% coverage, the average estimated anchor ice coverage for each month was as follows: 61% in December, 42% in January, 10% in February, and 39% in March. Specific estimated coverages for each site visit are shown in **Table 3**.

	Site 1	**Site 2**	**Site 3**	**Site 4**	**Site 5**	**Site 6**
December						
12/3/20	50	75	75	75	90	50
12/4/20	25	75	90	75	50	75
12/8/20	10	80	25	95		
12/11/20						
12/15/20				75	90	
12/16/20						
12/21/20						
12/24/20	40	70	90	40	50	75
12/30/20		10	50	25	70	75
January						
1/1/21		90	5		60	30

1/5/21						
1/7/21		70	20	40	50	75
1/11/21		75		5	35	40
1/15/21		10			45	45
1/18/21						
1/21/21						
1/28/21						
February						
2/1/21	10					
2/5/21						
2/8/21						
2/12/21						
2/17/21						
2/19/21						
2/22/21						
2/26/21						
March						
3/1/21	75	60	45	30	45	45
3/3/21	5	5				
3/12/21						
3/15/21						
3/24/21						
3/25/21						
3/31/21						

Table 3. Estimated anchor ice coverage recordings for every anchor ice presence observed throughout the 4-month survey period. Blanks correspond with 0% estimated coverage of anchor ice.

Physical Parameters

Air and water temperature data were not collected prior to December 12, 2021 because a digital thermometer was not yet attained. Absences in water temperature data after that date were due to unsafe river access conditions.

Average recorded air temperatures for December, January, February, and March were -12.3°C, -2.9°C, 1.5°C, and 4.4°C, respectively (**Figure 1**). There was a noticeable shift in air temperatures starting after January 15th. Prior to January 15th, air temperatures were all below freezing. Following that date, temperatures remained consistently above freezing, falling to an average of below freezing across the six sites only on February 5th, February 19th, and March 1st.

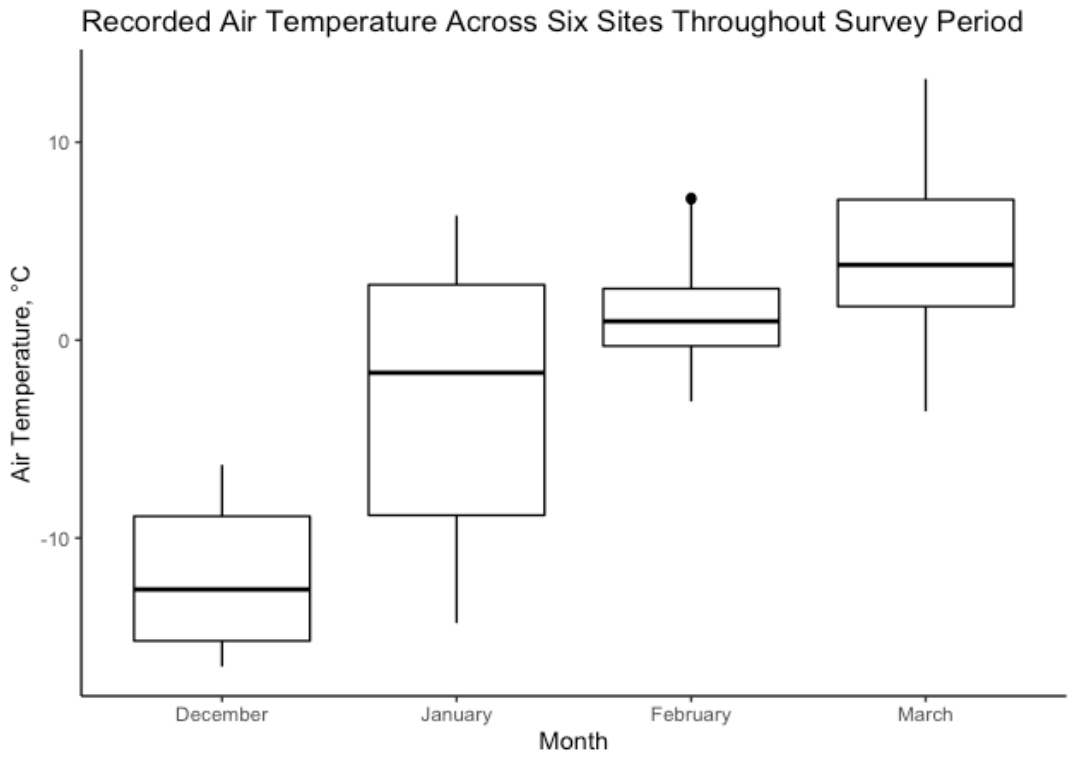
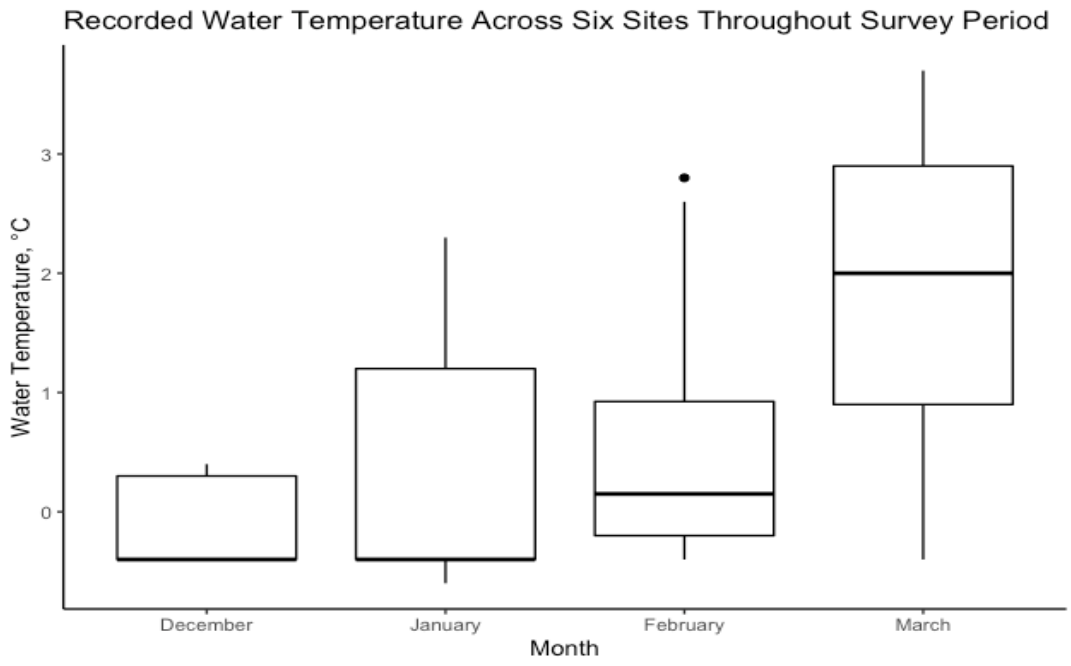


Figure 1 (above). Recorded air temperatures at each site by month throughout the survey period (December 3, 2020 through March 31, 2021). A general increasing trend is observed. **Figure 2 (below)**. Recorded water temperatures at each site by month throughout the survey period (December 3, 2020 through March 31, 2021). A general increasing trend is observed.



Average water temperatures for December, January, February, and March were -0.17°C, 0.25°C, 0.54°C, and 2.8°C, respectively (**Figure 2**). After Water temperatures began to be consistently above freezing starting January 18th. There was a notable increase in water temperature starting February 12th, when temperatures above 2°C were recorded for the first time in the season. One of the survey goals was to establish a temperature gradient of anchor ice formation leading up the stream. We were unable to detect significant differences in recorded water temperatures amongst the sites.

Three noticeable changes in stream flow rate occurred within the survey period at the beginning of January, the end of February, and mid-March (**Figure 3**). Throughout December, the stream flow remained between 46 and 48 cubic square feet (cfs). The stream flow rate then increased in January, consistently staying between 58.9 and 61.7csf for all of January. Stream flow remained about 60csf in February, between 61.3 and 63.9csf. Then on February 27th it decreased to around 4csf, and in the evening of February 28th it decreased again to 35csf. For the next few weeks, stream flow remained at an average of 35csf and, then increased slightly the last week of March to about 45csf.

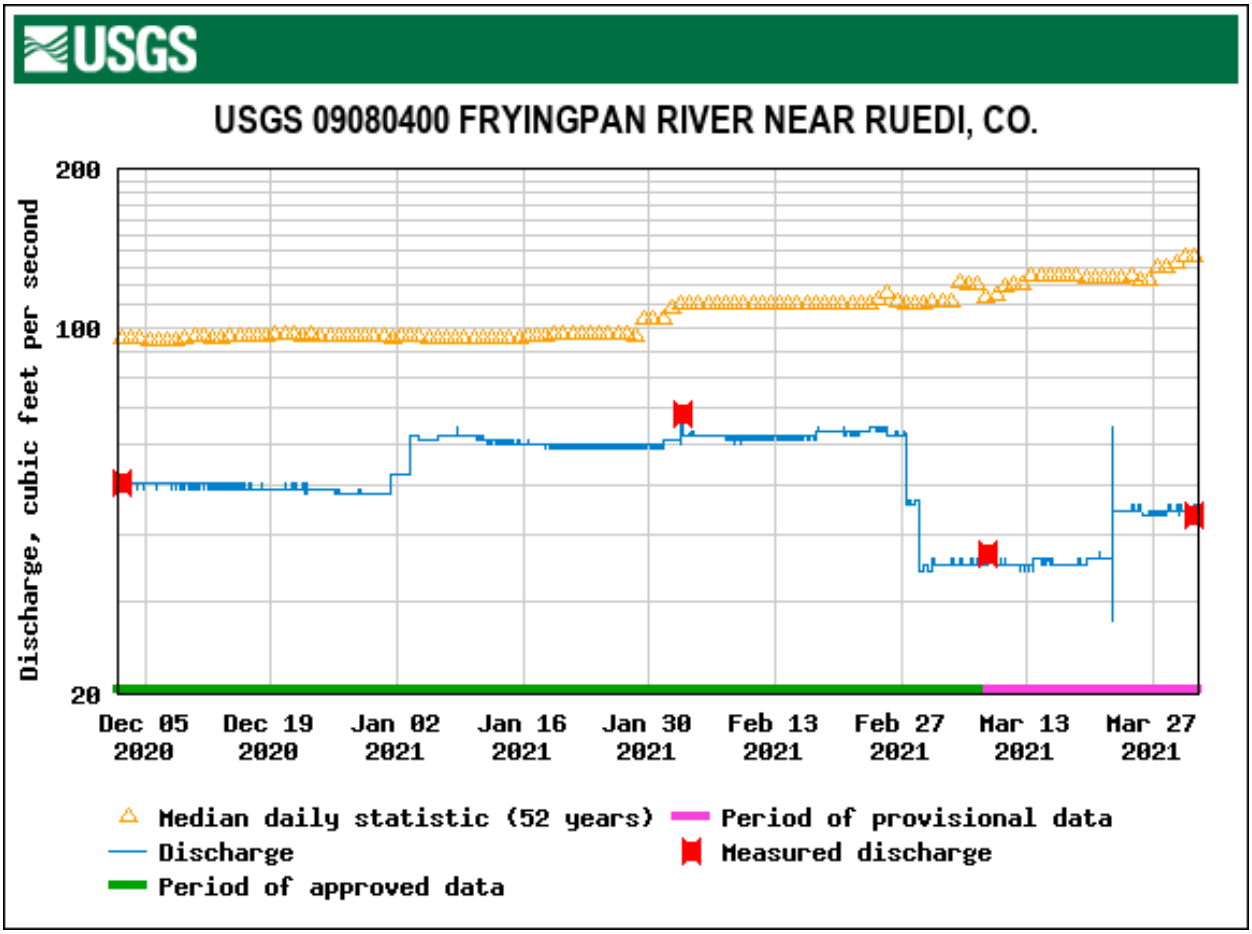


Figure 3: Discharge recorded by USGS gauge below Ruedi Dam within the period of ice surveying, December 3, 2020 through March 31, 2021. Noticeable changes occurred at the beginning of January (increase), the end of February (decrease), and mid-March (increase). Source: USGS

Modeling

While regression modeling was attempted for estimated coverage of anchor ice, results were unhelpful because the overwhelming majority of 0% coverage recordings caused unequal variance and non-normal residuals. Instead, logistic regression was conducted to determine the probability of anchor ice presence in relation to stream flow rate, air temperature, and water temperature. The logistic regression found that all three variables are negatively correlated with the odds of anchor ice being present. Specifically, for a one-unit increase in water temperature, the odds of anchor ice presence decrease by 99.19% (p=0.002). For a one-unit increase in stream flow, the odds of anchor ice presence decrease by 10.75% (p=0.002). Lastly, for a one-unit increase in air temperature, the odds of anchor ice presence decrease by 12.92% (p=0.01).

Discussion of Results

A clear pattern of anchor ice presence is evident throughout the survey period. Anchor ice was consistently present and abundant throughout December and early January, then was largely absent throughout the second half of January and throughout February and March, except for one day in March when it was present at all six sites. Logistic regression modeling for anchor ice presence found that the odds of anchor ice presence are negatively correlated with air temperature, water temperature, and stream flow rate. These findings make sense when looking at the trends of these variables throughout the duration of the survey period. Stream flow rate, water temperature, and stream flow rate all increased in January, while anchor ice presence decreased at that same time.

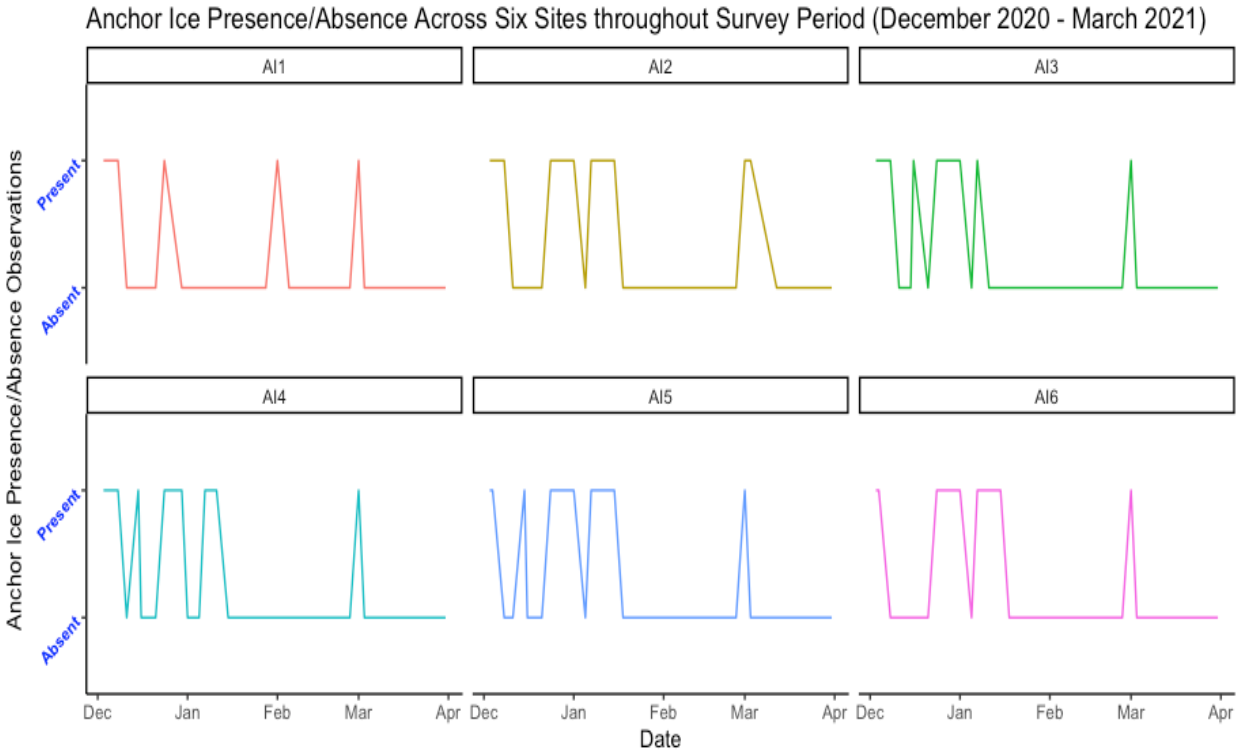


Figure 4. Anchor ice presence/absence at each site throughout the survey period (December 3, 2020 through March 31st, 2021) for all 32 survey days. Anchor ice was largely absent throughout late January, February, and March. Anchor ice was observed across all six sites on March 1st.

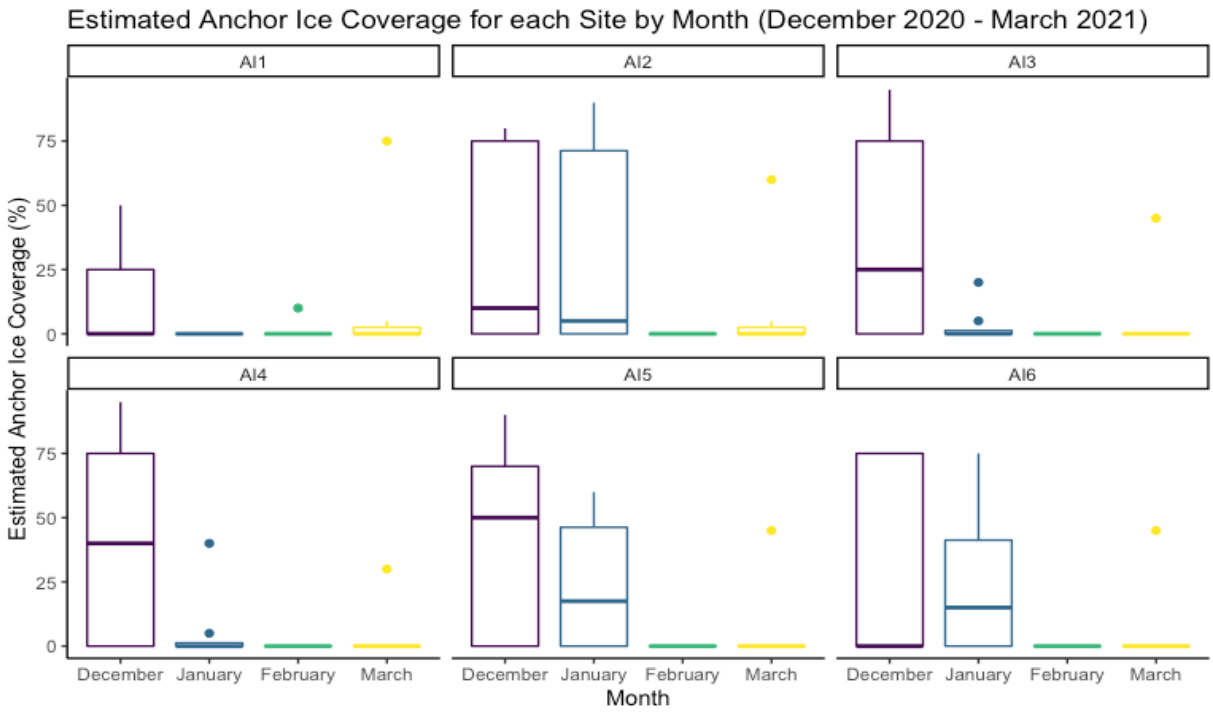


Figure 5: Estimated anchor ice coverage for each site by month throughout the survey period.

The one-day spike in anchor ice presence on March 1st then subsequent reduction two days later is the only time this occurred this season. Stream flow discharge rate decreased two days prior to March 1st, and to the lowest levels of the season the night before March 1st. It is possible that this sudden drop in discharge rate contributed to this ice formation. However, anchor ice presence did not persist in the river despite consistently low stream flow rates in the following weeks (**Figure 5**).

Although the logistic regression shows significant results that align with our hypotheses, it is not clear how well the choice of variables for this study directly align with anchor ice formation. Kempema (2008) identifies the rates of mixing in flowing water, heat transfer from water to air, and latent heat of fusion released as anchor ice grows as important parameters controlling anchor ice formation. While stream flow rate, water temperature, and air temperature can be used as proxies for these more specific parameters, they may not provide the degree of preciseness necessary to correlate these values directly with anchor ice formation.

Site Differences

Prior to surveying it was hypothesized that anchor ice presence and abundance would decrease with proximity to Ruedi Dam, due to relatively warm water discharged by Ruedi Dam. The data do not show evidence consistent with this hypothesis. The fewest number of anchor ice sighting across sites occurred at Site 1, the site furthest from Reudi Dam. However, it is important to note that for most of the season Site 1 was covered entirely by border ice, preventing observations of potential anchor ice.

Each of the sites were unique in grade, width, shade coverage, stream depth, and flow speed (rapid vs. runs). It is likely that while anchor ice formation within a stream requires certain environmental conditions, such as low air and water temperatures, the precise location that the anchor ice forms as well as the abundance of ice is highly subjective to local stream conditions. In order to better understand the effects of discharge from Reudi Dam on the formation of anchor ice in the Lower Fryingpan, it may be beneficial to incorporate more sites further upstream into this study. Similar anchor ice presence and coverage was observed at Sites 3 and 4 and Sites 5 and 6, respectively (**Table 3**). Therefore, researchers could consider eliminating Sites 3 and 5 from the study and adding at least two more sites further upstream.

Anchor ice dam at Site 2 (near Mile Marker 1).

Recommendations

Perhaps one of the most significant outcomes of this pilot study is determining areas where methodology can be improved moving forward. In order to maintain consistency of reporting throughout the season and integrity of data, inter-observer reliability must be prioritized. Anchor ice can be difficult to spot and estimations of its coverage are highly subjective. Fluctuating stream depth levels further complicate observations; it is more difficult to see anchor ice in deeper waters. All potential observers should spend one at least one full day of sampling together at the beginning of the season. This will allow them to establish focal areas for surveying at each of the sites, as well as provide the opportunity to calibrate their individual estimations to ultimately achieve observations of at least 80% sameness. Continuity from season to season, whether it be the same observer or comprehensive training conducted by the previous observer is ideal. Additionally, adding more sites further upstream will increase variability in water temperature and air temperature amongst the study sites, potentially illuminating more

significant results on the scale that the level of data collection warrants. Increasing the survey period, particularly in the early season could also help to understand formation influences. Adding additional observational factors such as border ice depth and water depth could also prove useful.

Conclusion

This anchor ice monitoring pilot season on the Lower Fryingpan River provides a strong basis for continuing this study long-term. There were noticeable correlations between anchor ice presence and the primary independent variables of interest: air temperature, water temperature, and stream flow rate. However, it is difficult to attribute changes in anchor ice to any single variable since all of them changed substantially in January alongside changes in anchor ice presence. Continuing this study for at least five more years is necessary to gain a stronger understanding of these trends. Additionally, taking measures to ensure inter-observer reliability and expanding the overall stretch of river to include more sites further upstream will result in a more robust data set moving forward.

Works Cited

Brown, R.S., W.A. Hubert & S.F. Daly. 2011. *A Primer on Winter, Ice, and Fish: What Fisheries Biologists Should Know about Winter Ice Processes and Stream-dwelling Fish.* Fisheries. 36:8-26.

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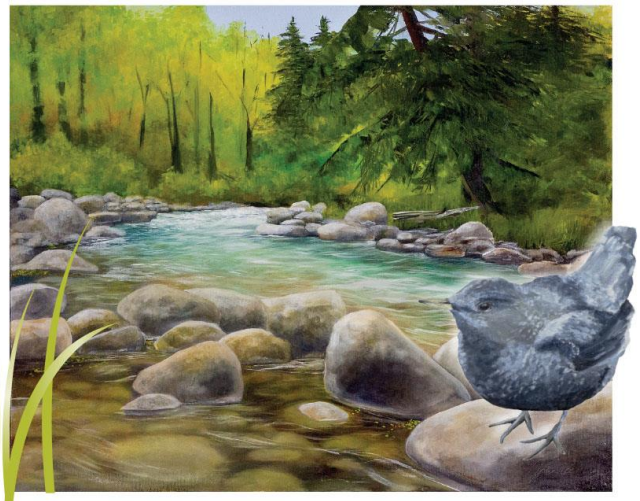
ROARING FORK



CONSERVANCY

Celebrating 25 years

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Exhibit G

Lower Fryingpan River Anchor Ice Observations

Winter 2021-2022

Roaring Fork Conservancy (RFC) water quality staff conducted the second year of anchor ice monitoring on the lower Fryingpan River during the winter of 2021-2022. The following is a brief narrative of general observations and conditions corresponding with the quantitative data gathered during this time period.

Background

On average RFC water quality staff conducted anchor ice monitoring twice weekly during the 2021-2022 winter, documenting both quantitative measurements and qualitative observations.

Definitions

- Anchor Ice – submerged ice attached or anchored to the streambed, regardless of the nature of its formation. This ice typically has a soft, "slushy" consistency.

Anchor Ice at Site 5

- Surface Ice – ice layer(s) found at or above the surface of the river, typically anchored to stream banks or objects which protrude out of the water. This ice typically has a hard, solid consistency. Under certain conditions surface ice can extend down into the water column of the river. This ice can be either slushy or solid in consistency.

Surface Ice at Site 1

Staff observed two major factors which seemed to influence the type and prevalence of ice levels: weather conditions and water levels in the lower Fryingpan River.

Weather

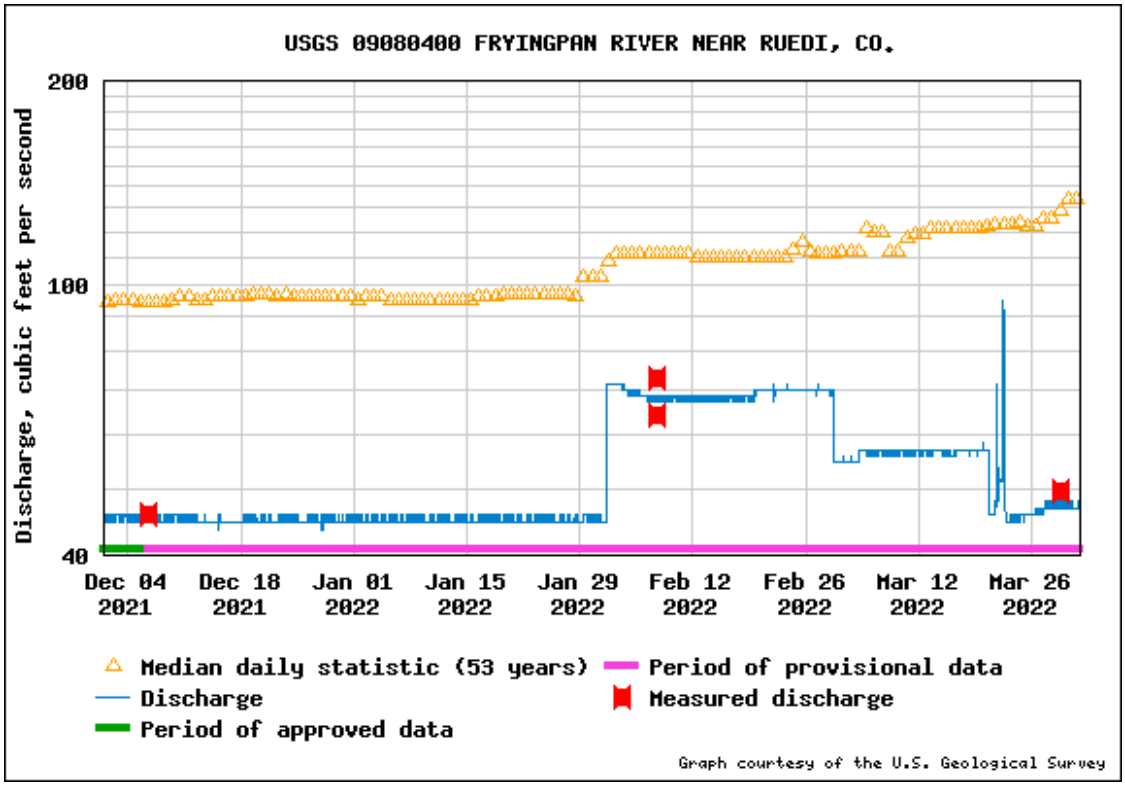
The 2021-2022 winter began with above average air temperatures and below average precipitation that lasted from November through mid-December. This triggered a later start to anchor ice monitoring than the previous winter. More typical, colder winter air temperatures returned in mid-December followed by significant snowfall in late December. Much of January and February were denoted by below average precipitation and cold temperatures, ideal conditions for ice formation. February saw a pattern of slightly above-average daytime temperatures with cold nighttime low temperatures. In late February precipitation returned with a large multi-day storm system. Mid-February into early March saw gradual warming trends in in both day and night temps broken by occasional “cold-snaps”.

Staff observed that, in general, storm systems accompanied by cloudy weather and snow did not necessarily translate to immediate cold air temperatures. Instead, consecutive nights of cold temperatures (single digits to teens) were most likely to occur shortly after a storm system passed through.

Ruedi Reservoir releases (flow)

Flow in the lower Fryingpan River is predominantly determined by releases from Ruedi Reservoir, managed by the Bureau of Reclamation (BOR). Due to persistent drought conditions and associated low reservoir levels, releases from Ruedi Reservoir were maintained just above

minimum required levels throughout early winter 2021-2022. The BOR is obligated to release the instream flow of 39cfs, or inflow, whichever is less. From early November through the end of January, flows were maintained at approximately 45cfs. RFC worked with multiple organizations (Colorado Water Conservation Board, Colorado River District, Ruedi Water and Power Authority, and Bureau of Reclamation) to supplement winter flows to approximately 70 cfs beginning on February 1st with the goal of reducing anchor ice and improving stream health. See graph below.



Narrative

Noteworthy stream conditions, observations, and ice prevalence are discussed below:

- Following a large multi-day storm system in late December, early January was relatively dry and maintained cold temperatures. This combination of cold air temperatures and low flows resulted in consistently low water temperatures and frequent anchor ice observations along the lower Fryingpan River. Surface ice was also common but not extensive.
- From late January through much of February daytime air temperatures were above average but nighttime lows remained cold. Water temperatures also remained cold,

however staff observed an increase in surface ice coverage and decrease in anchor ice, suggesting a potential correlation.

- On Feb 1st, flows from Ruedi Reservoir increased by approximately 25 cfs. RFC staff conducted anchor ice monitoring the day before, day of, and two days after the flow increase.
    - Jan 31st, the day prior to the flow increase, staff observed anchor ice at 5 of 7 monitoring sites with stream temperatures low enough to support anchor ice formation at all sites based on previous data. One of the sites without anchor ice had nearly complete surface ice coverage, potentially inhibiting the formation of anchor ice. Surface ice presence was above average and, in many locations, extended below the river surface and into the water column.
    - Feb 1st, the day of the flow increase, RFC staff monitored all sites, ensuring enough time for the increase flow to reach the confluence. Anchor ice was observed at 3 of 7 sites with stream temperatures low enough to support anchor ice at all sites. Deeper water and swifter flows were noted at 4 of 7 sites. At 2 of the sites that lacked anchor ice, staff noted that particularly swift flows may have scoured anchor ice away. Surface ice was flooded in many locations however it still extended below the river surface into the water column at most sites.
    - Feb 3rd, two days after the flow increase, overnight low temperatures were significantly lower than the previous two sample events and stream temperatures were low enough to support anchor ice at all sites. Anchor ice was observed at 5 of 7 sites however anchor ice coverage, thickness, and/or surface ice was reduced at nearly all sites. Surface ice was no longer flooding at 6 of 7 sites and surface ice that extended into the water column was reduced at 4 of 7 sites. These two factors seemed to indicate that the increased flows scoured the surface ice in the water column, making "room" for the increased flows and eliminating the need to flood above the surface ice. **The key takeaway- some form of ice was reduced at all sites despite cold water temperatures and much colder air temperatures.**
- **After the Feb 1st flow increase, observed anchor ice levels remained below the pre-increase levels.** Surface ice levels also diminished at many sites. These decreases in ice were observed despite both water and air temperatures which were conducive to ice formation.
- Around mid-February a few factors changed. Temperatures were generally warmer, with increasing sunshine at many of the sample sites (which are typically in shade most of the winter). These gradual changes, in addition to the 25cfs flow increase, led to a decrease in observed anchor ice coupled with a slow increase in stream temperatures. These conditions persisted despite occasional "cold-snaps" which brought colder nighttime temps.
- In late February, staff did not observe anchor ice throughout the study area.

- Flows from Ruedi Dam decreased 15 cfs on 3/1/22 and 10 cfs on 3/20/22; staff observed anchor ice once in March on 3/11/22 due to a cold snap. The anchor ice that was observed on 3/11/22 was small, thin, and in small portions.

Summary

The timing of flow increases from Ruedi Reservoir (2/1/22) combined with consistent weather patterns and air temperatures around that time, allowed for the unique opportunity to observe how increased flows affected ice levels with minimal additional variables. In general, anchor and surface ice were common prior to the increased flows. Although anchor ice was still present after the flow increase, all ice levels saw some reduction after the flow increase. This was despite a continued trend of cold air and water temperatures which had shown to be conducive to anchor ice formation in the past. This would suggest that the increased volume of water played a role in reducing the conditions favorable for anchor and surface ice formation.

Abbreviated Narrative

The following is an abbreviated version of stream conditions and ice prevalence observed.

- Early January: Cold air and water temperatures plus low flows resulted in frequent anchor and surface ice observations.
- Late January-February: Cold nighttime air and water temps but increased daytime temps resulted in continued ice observations, however surface ice increased, and anchor ice decreased slightly.
- On Feb 1st, flows from Ruedi Reservoir increased by approximately 25 cfs. Three sample events were conducted during this time:
    - Jan 31st (prior to flow increase): Anchor and surface ice prevalent along with cold stream temps.
    - Feb 1st (day of flow increase): Anchor ice slightly reduced although stream temperatures remained cold. Deeper water and swifter flows noted along with flooding of surface ice.
    - Feb 3rd (two days after flow increase): Significantly colder nighttime temps and water temperatures remained cold. Both anchor and surface ice were common, however, **some form of ice reduction was observed at all sites despite colder conditions**.
- Early February: Air temps and water temps remained conducive to ice formation however anchor and surface ice levels remained **below** those prior to the flow increase.
- Mid-February: Warming air temps and increased solar radiation resulted in fewer anchor ice observations and a gradual increase in stream temperatures.
- Late February: anchor ice was not observed, regardless of weather or stream temperature.

Fryingpan Anchor Ice Survey
Winter 2022-2023 Summary

Background:

Anchor ice formation, a natural occurrence in northern hemisphere streams during winter, has significant impacts on the hydrology and ecology of a stream. Anchor ice can occupy fish and macroinvertebrate habitat, form dams which can alter water flows, and when these "ice jams" release, can send significant flows downstream, disrupting aquatic habitat and potentially threatening human safety and infrastructure.

Anchor ice formed on streambed near confluence with Seven Castles Creek (Site 5).

Ice formation in rivers occurs when water becomes supercooled, temperatures below 0°C. Conditions for supercooling are sub-zero air temperatures, little to no surface ice, and turbulent water flow (Brown et al. 2011). Under these conditions tiny ice particles on the surface of the water can become suspended in the water column, forming frazil ice. From there, frazil ice grows and is transported to the streambed in turbulent water. Frazil ice, when stationary and attached to the channel bottom is called anchor ice (Brown et al. 2011).

Numerous factors affect anchor ice formation including year-to-year weather, stream temperatures, winter flows, hydrology, and shading. In winter, discharges from Ruedi Dam have a notable effect on the thermal regime of the river, water levels, and stream flow characteristics. All of these are factors in anchor ice formation, making flows from Ruedi Reservoir one of the most significant human-controlled influences on winter stream health of the Fryingpan River.

Anchor Ice Surveys:

Roaring Fork Conservancy (RFC) has conducted anchor ice surveys on the lower Fryingpan River throughout each winter season since 2020. Study goals are to implement an objective-driven protocol for assessing anchor ice, increase understanding of the factors that affect anchor ice formation, and investigate correlations between Ruedi Reservoir winter releases and occurrences of anchor ice.

Study Area:

Surveys are conducted at seven sites along the lower Fryingpan River. Sites begin near the Roaring Fork River confluence in Basalt and extend upstream to mile marker 7.

Brown, R.S., W.A. Hubert & S.F. Daly. 2011. *A Primer on Winter, Ice, and Fish: What Fisheries Biologists Should Know about Winter Ice Processes and Stream-dwelling Fish.* Fisheries. 36:8-26.

Seven anchor ice survey sites from Site 1 in Basalt upstream to Site 7 near mile marker 7. This image was generated using Google Earth Pro.

Methods:

Surveys are typically conducted throughout the winter from December through March. Surveyors assess ice characteristics at each site twice per week using overnight air temperatures to determine the most likely anchor ice events.

Physical survey parameters include water and air temperature, previous days' temperatures, and stream flow at the USGS Gauge below Ruedi Reservoir. Observational information includes site and stream characteristics which affect ice formation, sun exposure, and significant changes in both anchor and surface ice between surveys. Photographs are taken during each sample event.

RFC staff member conducting anchor ice survey at Site 5 (near confluence with Seven Castles Creek).

During surveys, anchor ice presence is determined along with visual estimates of percent coverage on the streambed. When present, anchor ice thickness, cluster size, density, and distribution are also recorded. Observations of other types of ice are also noted, including width, depth, and coverage of border (surface) ice, and the presence of frazil ice (ice floating in the stream), ice dams, and ice weirs.

Ruedi Reservoir Supplemental Winter Releases:

Studies commissioned by RFC and conducted by Bill Miller in 2004 and 2006 show that flows between 60-70 cfs are beneficial to aquatic life by minimizing anchor ice and helping macroinvertebrate communities recover following severe anchor ice formation. In four of the past five years, RFC worked with the Colorado Water Conservation Board (CWCB) and the Colorado River Water Conservation District (CRWCD) to lease water from Ruedi Reservoir to supplement minimum instream flows to meet this ecological need.

RFC's anchor ice study was envisioned to help clarify how increased winter flows affect ice formation. Based on observations from the previous two winters, staff identified the need for leases to begin in mid-December and were able to work with CRWCD to find additional available contract water. This boosted winter flows from January 1st through March 21st, 2023, a significant increase over previous winters.

Partnership with the Colorado Water Trust provided technical assistance and fundraising support. Additional funding partners include Pitkin County Healthy Rivers, Colorado Water Trust, CRWCD's Community Funding Partnership, Town of Basalt, City of Aspen, RFC, and Roaring Fork Fly Fishing Guide Alliance.

Results:

2022-2023 Anchor Ice Narrative:

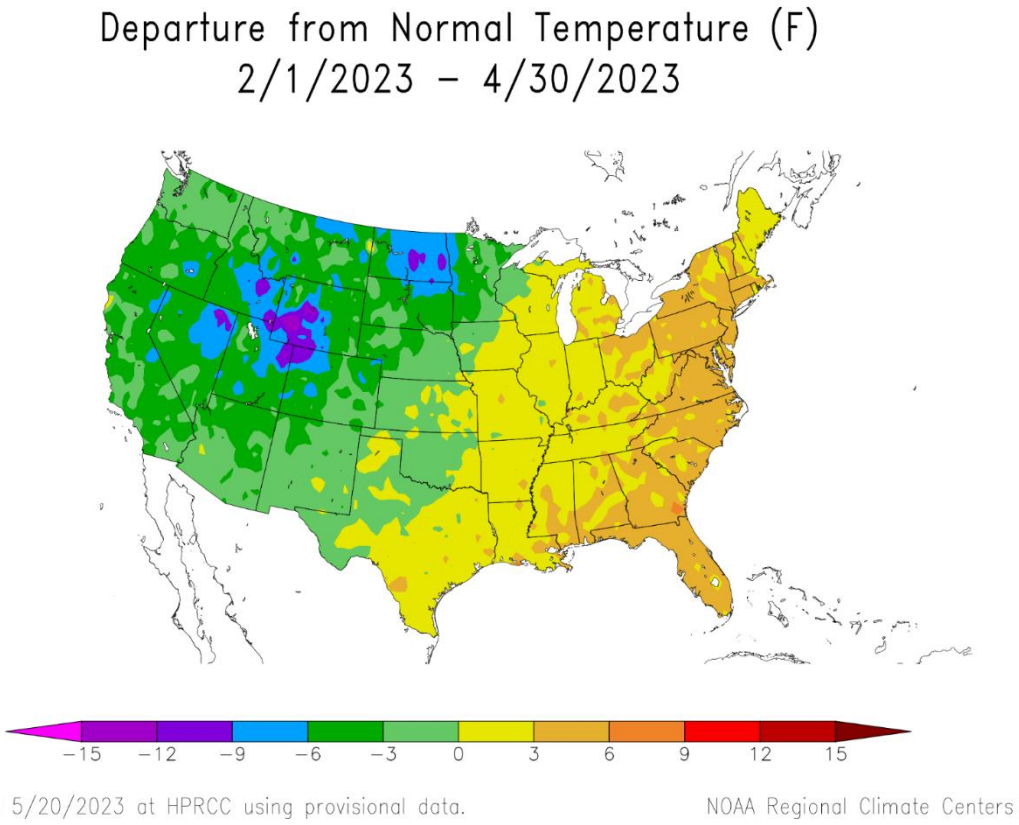
- November 30: First anchor ice observation of the winter season.
- Early December: Anchor ice present in small amounts following a few cold nights. Surface ice very minimal.
- Mid/Late December: Cold days and nights result in extensive anchor ice presence. Ruedi Dam releases increase 18 cfs on December 16. Two ice jam release events occur on December 17 and 21 after a string of very cold nights.
- Early January: All forms of ice decrease as nighttime temperatures warm up slightly.
- Late January-February: Anchor ice is present during nearly every survey day as both daytime and nighttime temperatures drop considerably. Surface ice prevalence increases slightly, and water temperatures are consistently low enough for anchor ice formation. Below average air temperatures are recorded throughout the U.S. West in February according to NOAA data.
- March: Air and water temperatures increase leading to few days with anchor ice. Anchor ice is present only at the end of March due to a cold snap.

Quantitative Data:

	2020-21 Winter	2021-22 Winter	2022-23 Winter
First Anchor Ice Observation	12/3/20	12/13/21	11/30/22
# of Days Anchor Ice Observed	14 of 32 days (44%)	17 of 29 days (59%)	20 of 32 days (63%)
# of Survey Events Anchor Ice Observed	61 of 198 survey events (31%)	73 of 199 survey events (37%)	104 of 224 survey events (46%)
Average Overall Anchor Ice Coverage	52% coverage	49% coverage	40% coverage
Average Previous Day Air Temp High	32˚F	33˚F	29˚F

Average Previous Day Air Temp Low	15˚F	13˚F	11˚F

Average Overall Anchor Ice Coverage is calculated by averaging all non-zero anchor ice estimates at each site for each year (i.e., an average of all the anchor ice coverages for each winter season). 0% coverage estimates are not included in the averages.



Key Findings:

Current data and observations would indicate:

- The supplemental winter releases from Ruedi Reservoir reduce percent coverages of anchor and surface ice despite conducive conditions.
- The Intermountain West region, including the Roaring Fork Watershed, experienced below average air temperatures for the months of January, February, March, and April, according to NOAA data.
- Anchor ice presence was observed more frequently in 2022-23 than the two previous winters. This is likely due to consistently colder air and water temperatures experienced this winter.
- The coldest conditions typically occurred on the clear nights following a storm.
- Anchor ice was only observed at stream temperatures between -0.2° and -0.4° Celsius. No water temperatures below -0.4° Celsius were recorded this winter season.
- This winter season saw significantly less surface ice relative to the previous two winters. Additionally, fewer ice structures were observed (border ice, ice dams, and ice weirs). These ice structures impact stream hydrology. Observations

from the past three winters suggest surface ice and anchor ice coverage may be inversely related.

For more information, visit www.roaringfork.org
Contact: Chad Rudow, Water Quality Program Manager, chad@roaringfork.org
Heather Lewin, Director of Science and Policy, heather@roaringfork.org
(970) 927-1290

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2024-25 FP Anchor Ice Mid-Winter Updates

As of 1/22/2025, Roaring Fork Conservancy has conducted 16 anchor ice surveys across seven sites on the Lower Fryingpan River during the 2024-25 winter season. Anchor ice was observed on 9 of the 16 survey days. The first detection of anchor ice this season was on 11/20/24. Releases from Ruedi Reservoir were consistently 62 cfs until January 15 when they were increased to 85 cfs. Below average temperatures in November lead to the earliest anchor ice observation of the study, but then warmer temperatures caused very little anchor ice formation in December. A cold snap starting in the second week of January caused significant anchor and surface ice formation, including anchor ice formation further upstream than previously observed.

Data Comparison:

	2023-24 Winter (thru 1/22/2024)	2024-25 Winter (thru 1/22/2025)
First Anchor Ice Observation	**12/27/23**	**11/20/24**
# of Days Anchor Ice Observed	**7 of 13 days (54%)**	**9 of 16 days (56%)**
# of Survey Events Anchor Ice Observed	**39 of 91 survey events (43%)**	**49 of 112 survey events (44%)**
Average Overall Anchor Ice Coverage	**16% coverage**	**23% coverage**

To this point in the winter, the 2024-25 season has tracked very closely to the 2023-24 season. While the 2023-24 winter as a whole was relatively warmer than this winter, the stretch from late December 2023 through mid-January 2024 was cold enough for increased anchor ice formation. This January's temperatures are even colder, perhaps explaining the slightly greater average overall anchor ice coverage (i.e. when there is anchor ice this winter it covers more of the streambed). One big difference between this winter and last winter is that surface ice coverage is much greater so far this winter.

2024-25 Narrative (thru 1/22/2025):

- **Mid to Late November:** cold nighttime temperatures; anchor ice first observed on 11/20/24 (10 days earlier in season than next earliest – 11/30/2022)
- **Early to Mid-December:** warmer days and nights; all forms of ice decreasing, little to no anchor ice observed during December
- **Early January:** multiple winter storm systems move through between Christmas and New Years, cold temperatures follow; anchor ice increases substantially and is observed at all 7 sites
- **January 15:** Ruedi flows increase 20 cfs; surface/border ice is flooding both before and after this flow increase (many sites have a new border ice shelf above water while the old shelf is inundated); overall amount of ice seems mostly unchanged
- **Mid-January:** frigid cold snap begins in second week of January and lasts 7+ days; anchor ice in flux due to substantial surface ice increases at all 7 sites

Exhibit B

20251107 DRAFT

WATER USE AGREEMENT

This Water Use Agreement ("Agreement") is entered into by and between the Basalt Water Conservancy District (referred to as "District"), and the Colorado Water Conservation Board, an agency of the State of Colorado ("CWCB"), Individually, "Party"; together, "Parties."

RECITALS

A. The CWCB is an agency of the State of Colorado whose mission is to conserve, develop, protect, and manage Colorado's water for present and future generations.
B. Pursuant to C.R.S. § 37-92-102(3), the CWCB may acquire water by contractual agreement for the purpose of preserving or improving the natural environment to a reasonable degree ("ISF Lease Program").
C. District Colorado Water Conservancy District created under the authority of the Colorado Water Conservancy District Act, Colo. Rev. Stat. § 37-45-101 et seq. The BWCD was created by decree of the Garfield County District Court in C.A. 5593 on April 24, 1964. The District's purpose is to conserve, develop, and stabilize supplies of water for domestic, irrigation, manufacturing, and other beneficial uses within those parts of Eagle, Garfield, and Pitkin counties included within its boundaries.
D. District has entered four repayment contracts with the United States of America, Department of the Interior, through the Bureau of Reclamation ("USBR Contracts," attached hereto as Exhibit A). Contract No. 2-07-70-W0546 (Round 1) provides the District with 500 acre-feet of water per year stored in Ruedi Reservoir, Contract No. 009D6C0014 (Round 2) provides the District with 490 acre-feet of water per year stored in Ruedi Reservoir, Contract No. 039F6C0012 (Round 2) provides the District with 500 acre-feet of water per year stored in Ruedi Reservoir, and Contract No. 139D6C0099 (Round 2) provides the District with 300 acre-feet of water per year stored in Ruedi Reservoir (collectively "Ruedi Water"). The USBR Contracts allow water uses for municipal and industrial purposes directly, or by exchange for augmentation and exchange. Contract No. 139D6C0099 specifically allows use of this water by municipalities, industrial users, commercial recreation entities, piscatorial users including delivery of water to supplement streamflow, and other water user entities not engaged in commercial agricultural production.
E. The CWCB holds an appropriated instream flow water right in the Fryingpan River decreed in Case No. W-1945 ("Fryingpan ISF Decree," attached hereto as Exhibit B) to preserve the natural environment to a reasonable degree by protecting flow rates up to 39 cfs from November 1 to April 30 and 110 cfs from May 1 to October 31 on the reach of Fryingpan River extending from the confluence with Rocky Fork Creek to the confluence with the Roaring Fork River ("Fryingpan ISF Reach"). To the extent its Ruedi Water is not needed in December of 2025 or in subsequent December months by the District for any reason including for its municipal and domestic purposes, including residential, irrigation, commercial and other municipal water uses and exchange or augmentation purposes, District may elect to lease a portion of its excess Ruedi Water to the CWCB to prevent and mitigate the effects of anchor ice formation in the Frying Pan River within District boundaries.
F. Wintertime formation of anchor ice in the Fryingpan River below Ruedi Reservoir may adversely impact aquatic habitat in the Fryingpan River. This habitat is within District's service area and supports District's municipal constituents in fishing and related businesses. Flows up to 70 cfs during the winter season have been recommended to help prevent and mitigate the effects of anchor ice formation.
G. District desires to lease/donate an excess portion of its Ruedi Water to the CWCB for use in

the Fryingpan ISF Reach in December each year, when available and not needed by District for any of its own water uses, including its including for its municipal and domestic purposes, including residential, irrigation, commercial and other municipal water uses and exchange or augmentation purposes. Such lease of District's excess Ruedi Water is intended to allow CWCB to release the water for instream flow uses in the Fryingpan River as it flows through District boundaries and through its confluence with the Roaring Fork River on a short-term basis ("2025 ISF Lease"). The CWCB desires to accept 2025 ISF Lease for use in the State's Fryingpan ISF Reach subject to the terms of this Agreement.

H. The District's lease of water requires District Board approval. The District will continue to work with the CWCB, the local non-profit, the Roaring Fork Conservancy, and the Bureau of Reclamation to manage water releases of any available Ruedi Water.

NOW THEREFORE, in consideration of the mutual agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the CWCB and District agree as follows:

AGREEMENT

1. **Incorporation**. The Parties hereby incorporate by this reference the recitals set forth above.

2. **Term**.
   2.1 Effective Date. This Agreement shall become effective on the date in which the Agreement is signed by the CWCB and District.
   2.2 Expiration Date. Unless otherwise terminated pursuant to the terms set forth herein, this Agreement shall automatically expire at 11:59 p.m. on December 31, 2025.

3. **Source and Use of Water**
   3.1 Source. The source of water to be used shall be Ruedi Water stored and released from Ruedi Reservoir pursuant to District's USBR Contracts ("Leased Water").
   3.2 Use. The Leased Water shall be used by the CWCB for instream flow purposes exclusively within the Fryingpan ISF Reach between December 1 and December 31, 2025. Any releases made prior to December 1 must be made with permission from District and the Bureau of Reclamation and consistent with the terms of District's USBR Contracts. Use of Leased Water in the ISF Lease Program may be made following generation of hydropower at the facility located at the Ruedi Reservoir dam.
   3.3 Rates of Flow for ISF Use. Releases of Ruedi Water for use in the Fryingpan ISF Reach between December 1 and December 31, 2025, shall be used to preserve and improve the natural environment up to a rate of 70 cfs. Releases of Ruedi Water shall not cause the overall release from Ruedi Reservoir to exceed 300 cfs or cause the flow rate in the Fryingpan River below Ruedi Reservoir to exceed 350 cfs.
   3.4 Volume. The Leased Water available subject to this Agreement shall only be the amount available as determined solely by the District unless provided for by a written amendment to this Agreement. For December 2025, the volume subject to this donation and lease shall be a maximum of 500 acre feet.

4. **Operation of 2025 ISF Lease**
   4.1 Decision to implement ISF Lease. No later than December 1, 2025, the CWCB, the Roaring

Fork Conservancy and District shall meet and determine whether Leased Water will be available and in what amount. It shall be within District's sole discretion as to the determination of whether Leased Water will be available and in what amount. No minimum amount of Leased Water is guaranteed.

4.2 Delivery. CWCB shall submit a release schedule to District, the Roaring Fork Conservancy, and the Bureau of Reclamation prior to the operation under this Agreement. District shall be responsible for arranging the delivery of Ruedi Water at the outlet works of Ruedi Reservoir into the Fryingpan River consistent with the CWCB release schedule, provided that the releases can be made within the operational limitations of Ruedi Reservoir as determined by the Bureau of Reclamation.

4.3 Release Schedule. The CWCB's right to use the Leased Water shall be limited from December 1 until December 31, 2025. The CWCB may not carry or book over Leased Water that is not released in said year.

4.4 Operations and Coordination. District and CWCB shall coordinate with the Roaring Fork Conservancy, Colorado Parks and Wildlife, the Bureau of Reclamation, and the U.S. Fish and Wildlife Service on the timing and rate of releases of Ruedi Water.

4.5 Exclusivity. The CWCB shall have the exclusive right to use the Leased Water for instream flow use to preserve and improve the natural environment to a reasonable degree, provided that the Leased Water will be used consistent with District's USBR Contracts and in accordance with the Fryingpan-Arkansas Act and Operating Principles.

4.6 District's Reservation of Use. District reserves the right to use any of its USBR Contract Water for its own purposes that is not made available to or used by CWCB under this Agreement.

5. **Approvals and Accounting**

5.1 Bureau of Reclamation Approval. This Agreement is subject to the Bureau of Reclamation's written approval. The parties shall coordinate to obtain any necessary approvals required to implement this Agreement, including approval by the Bureau of Reclamation.

5.2 Division Engineer Confirmation. The CWCB must obtain approval from the Water Division 5 Engineer that the lease set forth in this Agreement is administrable. CWCB shall notify the Water Division 5 Engineer for water rights administration purposes when the Leased Water is being released pursuant to this Agreement.

5.3 Accounting. The Parties agree to communicate, coordinate and cooperate, if needed, on any reasonably required accounting as set forth by the Colorado Division of Water Resources or Bureau of Reclamation.

6. **Price and Payment Procedure**

6.1 District has agreed to donate its USBR Contract water as described herein.

7. **Termination**

7.1 This Agreement may be terminated upon mutual agreement of the Parties or as described herein.

7.2 Material Breach. Either Party may terminate this Agreement for a material breach of the terms of this Agreement by the other Party; provided that the terminating Party has first given at least sixty (60) days prior written notice specifying in detail such alleged material breach and giving the other Party the right within such sixty (60) day period to cure and remedy such alleged material breach. District shall not be deemed to have materially

breached this Agreement if pursuant to paragraph 4.1 it decides that a lesser amount of water or no water will be made available.

7.3 Ability to Perform Impaired. Either Party may terminate this Agreement if its legal ability to deliver Ruedi Water is materially impaired or is eliminated because of the termination or adverse modification of the USBR Contracts, permits, decrees, or other authorizations or legal or administrative findings that are necessary to deliver Ruedi Water; provided that the terminating Party has first given at least sixty (60) days prior written notice to the other Party specifying the issue and steps taken to resolve the issue.

7.4 Notice of Breach. Prior to commencing any action for enforcement of this Agreement, the Party seeking enforcement shall give the other Party no less than sixty (60) days prior written notice specifying in detail the basis for the enforcement action and the desired outcome that would resolve the perceived need for enforcement.

8. **Remedies**.

8.1 Available Remedies. Remedies under this Agreement are limited to remedies available under Colorado law.

8.2 Costs and Fees. In the event of a dispute under this Agreement, each Party shall bear its own costs and fees, including attorney's fees.

9. **Force Majeure**. In the event either Party is unable to perform its obligations under the terms of this Agreement because of acts of God; natural disasters; epidemics; actions or omissions by governmental authorities; unavailability of supplies or equipment critical to perform; major equipment or facility breakdown; changes in Colorado or federal law, including, without limitation, changes in any permit; or other causes reasonably beyond that Party's control, such Party shall not be liable to the other Party for any damages resulting from such failure to perform or otherwise from such causes.

10. **Notices.** Any notice required or permitted to be given by a Party under or in connection with this Agreement shall be in writing and shall be deemed duly given when personally delivered or sent by: (a) registered or certified mail, return receipt requested, postage prepaid, (b) expedited courier service, or (c) email with confirmation of receipt, to the following:

If to CWCB:
Colorado Water Conservation Board
Attention: Chief, Stream and Lake Protection Section
1313 Sherman Street, Room 718
Denver, CO 80203
Email: dnr_cwcbisf@state.co.us

With a copy to:
CWCB ISF Program
Attention: Rob Veihl
1313 Sherman St.,
Rm.718 Denver, CO 80203
Email: rob.viehl@state.co.us

If to District:
Basalt Water Conservancy District
P.O. Box 790
Glenwood Springs, CO 81602
Email: Melody.morris@lrewater.com

With a copy to: Balcomb & Green, P.C.
PO Drawer 790
Glenwood Springs, CO 81602
Email: chrisg@balcombgreen.com

11. **Miscellaneous.**

11.1 No Agency. Nothing in this Agreement will be construed as creating any agency, partnership, joint venture or other form of joint enterprise between the Parties. Notwithstanding the foregoing, the CWCB or District may elect to designate an agent to undertake specific responsibilities under this Agreement. Should the CWCB or District elect to do so, it shall provide written notice to the other party of such designation including the identity of such agent; contact information for such agent, including a principal point of contact; and clearly defined description(s) of the responsibilities such agent shall undertake on behalf of the CWCB or District.

11.2 Heirs and Assigns. This Agreement shall inure to and be binding on the heirs, executors, administrators, successors, and permitted assigns of the Parties.

11.3 Choice of Law. This Agreement shall be construed in accordance with the laws of the State of Colorado, as amended, without reference to conflicts of laws.

11.4 No Waiver of Immunities. No term or condition of this Agreement shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, of the Colorado Governmental Immunity Act, C.R.S. § 24-10-101 et seq.

11.5 No Waiver. No waiver of any of the provisions of this Agreement shall be deemed to constitute a waiver of any other of the provisions of this Agreement, nor shall such waiver constitute a continuing waiver unless otherwise expressly provided herein, nor shall the waiver of any default or breach hereunder be deemed a waiver of any subsequent default or breach hereunder.

11.6 Amendment. No amendment, modification, or novation of this Agreement or its provisions and implementation shall be effective unless subsequently documented in writing that is approved and executed by both Parties with the same formality as they have approved and executed the original Agreement.

11.7 Severability. If any provision of this Agreement is held illegal or unenforceable in a judicial proceeding, such provision shall be severed and shall be inoperative, and the remainder of this Agreement shall remain operative and binding on the Parties.

11.8 Merger. This Agreement constitutes the entire Agreement between the Parties and sets forth the rights, duties, and obligations of each to the other as of the Effective Date. Any prior Agreements, promises, negotiations, or representations not expressly set forth in this Agreement are of no force and effect.

11.9 No Third-Party Beneficiaries. This Agreement does not and is not intended to confer any rights or remedies upon any person or entity other than the Parties. It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement and all rights of action relating to such enforcement shall be strictly reserved to the Parties.

11.10 Headings. The headings contained in this Agreement are for reference purposes only and shall not affect the meaning or interpretation of this Agreement.

11.11 Non-Discrimination. The Parties will fulfill their obligations under this Agreement without

discriminating, harassing, or retaliating on the basis of race, color, national origin, ancestry, sex, age, pregnancy status, religion, creed, disability sexual orientation, genetic information, spousal or civil union status, veteran status, or any other status projected by applicable law.

11.12 Authority. Each Party represents that it has obtained all necessary approvals, consents, and authorizations to enter into this Agreement and to perform its duties under this Agreement; the person executing this Agreement on its behalf has the authority to do so; upon execution and delivery of this Agreement by the Parties, it is a valid and binding Agreement, enforceable in accordance with its terms; and the execution, delivery, and performance of this Agreement does not violate any bylaw, charter, regulation, law, or any other governing authority of that Party.

IN WITNESS WHEREOF, CWCB and District hereby execute this Agreement on the dates set forth below.

COLORADO WATER CONSERVATION BOARD,
an agency of the State of Colorado:

_____ Date:
Name:
Title:

BASALT WATER CONSERVANCY DISTRICT

_____ Date:
Name:
Title:

_____ Date:
Attest:

LIST OF EXHIBITS

A. USBR Contracts

B. Fryingpan ISF Decree, Case No. W-1945