

COLORADO Colorado Water Conservation Board Department of Natural Resources 1313 Sherman Street, Room 718 Denver, CO 80203 P (303) 866-3441 F (303) 866-4474

то:	Colorado Water Conservation Board Members		
FROM:	Lisa Bright-Unger, Water Resources Specialist Stream and Lake Protection Section		
DATE:	July 16-17, 2025		
AGENDA ITEM:	#20b. Proposed Permanent Acquisition for an Interest in the Mineral Point Ditch Water Right on Burrows Creek for Instream Flow Use as a		
	Perpetual Lease with the U.S. Bureau of Land Management, Water Division 7 (2nd Meeting)		

I. Staff Recommendation

- Accept the U.S. Bureau of Land Management's ("BLM") offer for a contractual interest in the Mineral Point Ditch water right on Burrows Creek, up to the decreed amounts, to be used for instream flow ("ISF") by the CWCB through a perpetual lease agreement to preserve the natural environment to a reasonable degree to benefit the Animas River system and restore flows to Burrows Creek.
- Determine that the best use of the acquired contractual interest in the Mineral Point Ditch rights is to preserve the natural environment to a reasonable degree within the proposed reach up to the CPW recommended flow rates.
- 3) Authorize the CWCB Director to sign a perpetual lease with BLM.
- Request staff to work with the Attorney General's office and the BLM to file a water court application requesting to add ISF use to the Mineral Point Ditch water rights in accordance with 37-92-102(3).

II. The Board's ISF 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 this permanent water right acquisition as a contractual interest in a perpetual lease.

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The Board first considered this acquisition at its May 21, 2025 Board meeting, and after the initial presentation, no request for a hearing was received.

III. Summary of Proposal

The BLM has proposed to the Colorado Water Conservation Board ("Board") a permanent acquisition for an interest in the Mineral Point Ditch water right on Burrows Creek in San Juan County, Colorado, for ISF purposes as a perpetual lease to preserve the environment to a reasonable degree. Mineral Point Ditch historically was a transbasin diversion that exported water from the Animas Basin (Water Division 7) into the Uncompany River Basin (Water Division 4).

Details of the proposed permanent acquisition were included in the May 21, 2025 staff memo (Exhibit A). Prior to the Board's use of the BLM water rights in Mineral Point Ditch for instream flow purposes, Water Court approval of a change of water rights is required to add instream flow as a beneficial use. A Location Map is included as Exhibit B.

This proposed acquisition is intended to work together with a recommended ISF new appropriation on Burrows Creek. The Board formed intent to appropriate the Burrows Creek ISF on March 19,2025, no notices to contest were received, and the Board is asked to take final action on this recommended ISF in Agenda Item 19a. at this Board meeting.

IV. CPW's Recommendation

Staff requested a biological analysis from Colorado Parks and Wildlife (CPW) pursuant to Rule 6f(2). CPW's biological analysis is included in their letter of recommendation (Exhibit C). CPW's letter references the BLM letter of recommendation for the appropriation (Exhibit D).

BLM, CWCB Staff and CPW are comfortable using the average flow rate for administration of the changed water right, given the unique circumstances surrounding the historical diversions.

Month	June	July	August	September
Avg Monthly (cfs)	0.50	1.10	0.40	0.10

Table 1. Proposed Average Monthly Flows

V. Proposed Perpetual Lease Agreement

Key information pertaining to the proposed Lease Agreement (Exhibit E) is summarized below:

- BLM grants the Board the right to use the full amount and yield of Mineral Point Ditch water rights for instream flow purposes:
 - 11.0 cubic feet per second, absolute, decreed to Mineral Point Ditch for irrigation, domestic, stock water and fish culture use in a decree entered by the District Court, County of La Plata, State of Colorado in Civil Action 1751-B dated March 31, 1966
- The Board will use the Mineral Point Ditch water rights to maintain streamflow in the stream reach described below:

Upper Terminus: historic location of the Mineral Point ditch headgate Lower Terminus: confluence with the North Fork Animas River

- The use of the water rights by the Board for ISF purposes will require Water Court approval of a change of the water rights to add instream flow as a beneficial use.
- The Board is not required to make any monetary payments to BLM for the use of the leased water rights. The CWCB will support this acquisition through water court process by providing staff time and funding for the following types of activities:

- Engineering analysis of the historical diversion rates and timing that can be used to support a water rights change application,
- Drafting a water rights change application for review and approval by BLM,
- Filing and prosecuting a water rights change application in Colorado Water Court,
- Administering the changed water rights for instream flow uses,
- Reporting annual use of the changed water rights to the Colorado Division of Water Resources; and
- Protecting the changed water rights from diversion by other parties by placing a call when appropriate.
- The Lease Agreement shall be for a five-year term, upon expiration of the primary term of the lease, the Lease Agreement shall automatically renew for successive five-year periods unless either Party provides written notice of termination.

VI. Conclusion

By committing the Mineral Point water right to instream flow use with a permanent acquisition, the Board would assist with restoring historic stream conditions in a critical Superfund area and help to ensure that flows are available for a proposed, new instream flow appropriation on Burrows Creek.

VII. Attachments:

Exhibit A - May 2025 Board Memo Exhibit B - Location Map Exhibit C - CPW Letter of Recommendation for ISF Acquisition Exhibit D - BLM Letter of Recommendation for ISF Appropriation Exhibit E - Draft Lease Agreement with BLM

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Exhibit A



COLORADO Colorado Water Conservation Board Department of Natural Resources 1313 Sherman Street, Room 718 Denver, CO 80203 P (303) 866-3441 F (303) 866-4474 Jared Polis, Governor Dan Gibbs, DNR Executive Director Lauren Ris, CWCB Director

то:	Colorado Water Conservation Board Members
FROM:	Lisa Bright-Unger, Water Resources Specialist Stream and Lake Protection Section
DATE:	May 21-22, 2025
AGENDA ITEM:	#10.b. Proposed Permanent Acquisition for an Interest in the Mineral Point Ditch Water Right on Burrows Creek for Instream Flow Use as a Perpetual Lease with the U.S. Bureau of Land Management, Water Division 7 (1st Meeting)

I. Staff Recommendation

No formal action is required at this meeting.

Staff recommends this permanent acquisition proposal to add instream flow ("ISF") as a beneficial use to the Mineral Point Ditch water right to preserve the natural environment to a reasonable degree to benefit the Animas River system and restore flows to Burrows Creek.

II. The Proposal

The U.S. Bureau of Land Management ("BLM") has proposed to the Colorado Water Conservation Board ("Board") a permanent acquisition for an interest in the Mineral Point Ditch water right on Burrows Creek in San Juan County, Colorado, for instream flow ("ISF") purposes as a perpetual lease to preserve the environment to a reasonable degree. Mineral Point Ditch historically was a trans-basin diversion that exported water from the Animas Basin (Water Division 7) into the Uncompany River Basin (Water Division 4). The water was historically used for irrigation in Ouray County.

Burrows Creek is located within the Bonita Peak Mining District Superfund Site which received its designation due to heavy metal discharge from historic mining operations in

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a watershed that was already characterized by high levels of naturally occurring heavy metals. Mineral Point Ditch had sufficient capacity to divert the entire baseflow of Burrows Creek. In doing so, the ditch historically depleted flows that would have transported heavy metals out of Burrows Creek, depleted streamside wetlands that are capable of absorbing and storing heavy metals and drastically reduced the amount of stream habitat available to aquatic macroinvertebrate community.

The BLM purchased these water rights to restore flows to Burrows Creek and to better manage acid mine drainage from the Superfund site. In addition, the BLM proposed a new ISF appropriation on Burrows Creek designed to work together with this proposed acquisition to provide year-round flow protection.

The BLM does not have authorization to permanently transfer ownership of federal property to other parties. However, BLM does have the authority to lease property to other parties if the lease will assist with accomplishing BLM's land management objectives.

Today, we are requesting the Board's initial consideration of this permanent water right acquisition as a contractual interest in a perpetual lease. Attached are the following documents: the Location Map (Exhibit A), a draft of the Lease Agreement ("Lease") with the BLM (Exhibit B) and BLM's offer letter (Exhibit C).

III. The Board's ISF Acquisition Procedures

Pursuant to 37-92-102(3) C.R.S. and ISF Rule 6b., the Board will use a two-meeting process to consider the proposed lease. This meeting initiates the 120-day review process and begins a 20-day period at which any person may request the Board 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. At the second meeting, if the Board accepts the proposal, then a water court application will be submitted and subject to any terms and conditions imposed by the water court.

IV. The Board Actions to Date

The Board formed its intent to appropriate the Burrows Creek ISF at the March 2025 meeting, and it is currently working through that 3 Board meeting process. The reach for the appropriation is the full length of Burrows Creek, from the headwaters to the confluence with the North Fork Animas River.

V. The Mineral Point Ditch Water Rights

The Mineral Point Ditch water right is 11.0 cubic feet per second ("cfs"), for irrigation, domestic, stock water and fish culture use which was decreed absolute in Civil Action 1751-B dated March 21, 1966, with an appropriation date of September 27, 1956.

VI. Factors for the Board to Consider

Pursuant to ISF Rule 6e. and 6f., the Board shall evaluate the appropriateness of any acquisition of water, water rights, or interests in water to preserve or improve the natural environment. Such evaluation shall include, but need not be limited to consideration of the following factors:

1. The reach of stream or lake level for which the use of the acquired water is proposed, which may be based upon any one or a combination of the following: the historical location of return flow; the length of the existing instream flow reach, where applicable; whether an existing instream flow water right relies on return flows from the water right proposed for acquisition; the environment to be preserved or improved by the proposed acquisition; or such other factors the Board may identify: Burrows Creek is a tributary to the North Fork Animas River, which is a tributary to the Animas River, which is a tributary to the San Juan River in New Mexico. The creek is located approximately one mile north of the historic mining community of Animas Forks and approximately 13 miles north of Silverton. The creek is 1.3 miles long and located within a very high-altitude, U-shaped glaciated valley above tree

line, with elevations ranging from 12,400 feet at the headwaters,

which is located on the northwest flank of Houghton Mountain, to 11,600 feet at the confluence with the North Fork Animas River.

Burrows Creek is located within the Bonita Peak Mining District Superfund Site. This site consists of 48 historic mines or mining-related sources where ongoing releases of metal-laden water and sediments are occurring within the Upper Animas River and other watersheds. Burrows Creek flows through the Boston Mine site.

The reach of the stream proposed for use of the acquired Mineral Point Ditch water right extends from the historic location of the Mineral Point Ditch point of diversion 0.9 miles down to the confluence of Burrows Creek with the North Fork Animas River.

2. The natural flow regime:

The contributing basin of the proposed ISF on Burrows Creek is 0.7 square miles, with an average elevation of 12,209 feet and average annual precipitation of 41.4 inches. This small high elevation basin receives a significant amount of annual precipitation resulting in snowmelt runoff dominated hydrology.

There are no streamflow gages on Burrows Creek. Staff completed a water availability assessment for the proposed ISF new appropriation using CSUFlow18 (Eurich, et al., 2021). This regression-based model predicted that mean-monthly streamflow is approximately 0.19 cfs during baseflow conditions and up to 5.0 cfs during the snowmelt runoff. Streamflow is likely to be highly variable from year to year and seasonally due to variations in snowpack and timing of snow melt processes.

3. Any potential material injury to existing decreed water rights: The Burrows Creek Diversion is the other water right in use on Burrows Creek.

The diversion was appropriated in 2000 for 0.9 cfs and decreed to irrigate wetlands adjacent to Burrows Creek due to concerns about the historic dewatering of the creek caused by trans-basin diversion by the Mineral Point Ditch.

The only other currently decreed water right that could be used in Burrows Creek was granted to Southwestern Water Conservation District, and La Plata County in case 06CW0127. This conditional water right can be used anywhere in the Animas Service Area which is defined as any point within the Animas River Basin (which includes the Animas River and all of its tributaries) upstream of a point on the Animas River which is located roughly at the City of Durango.

While there is limited historical data and record keeping, the CWCB believes the information available provides a sufficient picture of how this water right was historically used to execute a water court change case without injury.

4. The historical consumptive use and historical return flows of the water right proposed for acquisition that may be available for instream flow use:

As previously mentioned, the water right was originally used as a trans-basin diversion and has historically been considered fully consumed, therefore, there are no historical return flows to be analyzed and no potential return flow obligations in a change case.

The BLM and CWCB staff coordinated extensively with the Southwestern Water Conservation District ("SWCD") to analyze and discuss the historical consumptive use of this water right. A period of record from 1986-2002 was chosen since that period provides the most reliable diversion records. These records appear to be conservative because they show substantially less diversions, in both diversion period and flow rate, than the most modern diversion records from 2019 to 2023. The 1986 to 2002 period incorporates average, wet, and dry years, which is the standard for change cases in water court. This time period also incorporates periods of non-use of the ditch. BLM and CWCB staff are comfortable using the average flow rate for administration of the changed water right, given the unique circumstances surrounding the historical diversions.

Table 1. Proposed Average Monthly Flows

Month	June	July	August	September
Avg Monthly (cfs)	0.50	1.10	0.40	0.10

5. The natural environment that may be preserved or improved by the proposed acquisition, and whether the natural environment will be preserved or improved to a reasonable degree by the water available from the proposed acquisition:

Burrows Creek supports a natural environment consisting of aquatic macroinvertebrates and riparian/wetland vegetation.

Staff have requested a biological analysis from Colorado Parks and Wildlife (CPW) pursuant to Rule 6f(2). CPW's analysis and recommendation regarding this acquisition proposal will be provided for the second Board meeting.

6. The location of other water rights on the subject stream(s):

The Mineral Point Ditch point of diversion is located approximately halfway between the headwaters and the confluence with the North Fork Animas River. The Burrows Creek Diversion plots about 80 ft downstream from the Minter Point Ditch. 7. The effect of the proposed acquisition on any relevant interstate compact issue, including whether the acquisition would assist in meeting or result in the delivery of more water than required under compact obligations:

Division 7 is responsible for Compact compliance under the Animas-La Plata Project, La Plata River, and Upper Colorado River Basin Compacts, and for the interstate deliveries through the San Juan-Chama Project. The proposed lease will not negatively affect any of these interstate compacts.

8. The effect of the proposed acquisition on the maximum utilization of the waters of the state:

The proposed perpetual lease will promote maximum utilization of waters of the State by being beneficially used in the Burrows Creek acquisition reach for ISF use and it will be available for use downstream from Burrows Creek Reach.

9. Whether the water acquired will be available for subsequent use or reuse downstream:

The ISF use is non consumptive, therefore, it will be available for other users downstream.

10. The cost to complete the transaction:

BLM does not require any monetary consideration for this perpetual lease, provided that the CWCB manages the water right for instream purposes, and with a guarantee that use of the water right will revert to BLM if CWCB does not use the water right for instream purposes. However, there would be costs associated with Staff time preparing the change case for water court.

11. The administrability of the acquired water right when used for instream flow purposes:

In consultation with the Division of Water Resources ("DWR"), the Division 7 engineer sees no issues with respect to administration of the proposed lease.

VII. Additional Factors to Consider

• Stacking Evaluation:

Pursuant to ISF Rule 6c., the Board shall evaluate whether to combine or stack the acquired water right with any other ISF appropriation or acquisition. The proposed acquisition would work to preserve the natural environment in conjunction with the proposed new ISF water right that the CWCB declared their intent to appropriate at its meeting on March 19, 2025. Therefore, the Staff does not recommend stacking the two proposed ISF uses.

• Stakeholder Outreach:

Pursuant to ISF Rule 6m.(1), Staff has provided notice of the proposed acquisition to all persons included on the appropriate ISF Subscription Mailing Lists and provided notice to the State Engineer's Substitute Supply Plan Notification List. Pursuant to ISF Rule 11c., Staff have requested recommendations from the Colorado Parks & Wildlife ("CPW"), the U.S. Department of Agriculture and the U.S. Department of Interior.

VIII. Conclusion

At the July 2025 CWCB board meeting (the 2nd meeting of the two-Board meeting process), if no hearing has been requested, Staff may recommend that the Board take action on this proposed lease.

By committing the Mineral Point water right to instream flow use, the CWCB would assist with restoring historic stream conditions in a critical Superfund area and help to ensure that flows are available for a proposed, new instream flow appropriation on Burrows Creek.

Attachments:

- Exhibit A Location Map
- Exhibit B Draft Lease Agreement with BLM
- Exhibit C BLM Offer Letter



Department of Natural Resources

Burrows Creek for Instream Flow Use as a Perpetual Lease with the U.S. Bureau of Land Management, Water Division 7



Exhibit C



COLORADO Parks and Wildlife

Department of Natural Resources

Aquatic Wildlife Section 6060 Broadway Denver, CO 80216

July 3, 2025

Rob Viehl, Section Chief Stream and Lake Protection Section Colorado Water Conservation Board (CWCB) 1313 Sherman Street, 7th Floor Denver, CO 80203

Re: Proposed Permanent Acquisition of the Mineral Point Ditch Water Right on Burrows Creek

Dear Mr. Viehl:

This letter is in response to your request for recommendations from Colorado Parks and Wildlife (CPW) on the proposed permanent acquisition to add instream flow (ISF) as a beneficial use to the Mineral Point Ditch. In 2023, the Bureau of Land Management (BLM) acquired the Mineral Point Ditch located on Burrows Creek, a tributary to the Animas River, in Water Division 7. The BLM has proposed a permanent ISF acquisition and has offered the Colorado Water Conservation Board (CWCB or Board) an interest in the water right. Under the proposal, the water right will be dedicated to the Board through a perpetual ISF lease that will preserve the natural environment to a reasonable degree. This partnership between BLM and CWCB will restore flows to Burrows Creek and benefit the Animas Rivers system. CPW offers the following letter of recommendation and support, pursuant to C.R.S. 37-92-102(3).

Background

The Mineral Point Ditch is a transbasin diversion that diverts flows from Burrows Creek, a tributary of the Animas River, located approximately one mile upstream of the historic mining community of Animas Forks north of Silverton. The high-elevation watershed sits at the top of Engineer Pass, very close to the divide between the Animas and Uncompahgre River Basins. The Mineral Point Ditch historically intercepted Burrows Creek flows and exported water into the Uncompahgre River for irrigation surrounding Ouray. The ditch is decreed for 11 cfs which gives it the legal and physical ability to divert the majority of flows and leaves Burrows Creek significantly dewatered. As a component of large-scale remediation efforts across Mineral Creek, Cement Creek, and the Upper Animas under the Bonita Peak Mining District Superfund Site, the BLM purchased the ditch in 2023.

Historically, diversions from the Mineral Point Ditch concentrated water quality impacts from nearby mining sites and altered the flow regime in Burrows Creek impacting stream-side wetland and fen complexes. Fens are a unique and rare wetland type and are found in the Burrows Creek floodplain. Fens are dependent on consistent and mineral-rich groundwater and have been degraded over time in this area. The BLM and partners are working to restore the fens in Burrow Creek. The BLM's goal in purchasing the Mineral Point Ditch was to



reestablish the natural flow regime in the creek to improve surface water quality and groundwater levels to support wetlands and fens.

Natural Environment & Flow Quantification

Burrows Creek is a high-elevation first order stream with a contributing basin that ranges from 11,600 to 12,400 feet in elevation. The stream channel is extremely high-gradient, with gradient of 5 to 10 percent in sections. Water quality in the creek is affected by both the natural geology and anthropogenic drivers. High levels of naturally occurring heavy metals - aluminum, cadmium, copper, manganese, lead, and zinc - are further increased by contaminated surface and groundwater from mining-related sources. Burrows Creek does not currently appear to support a fishery. The basin elevation is likely a driving factor limiting the overwintering of fish. Burrows Creek does support a water-dependent natural environment, including robust stream-side wetlands which are intermixed with fens and a riparian community of willows, sedges, and rushes. Burrows Creek also supports a macroinvertebrate community. Sampling conducted by Mountain Studies Institute indicate the community is pollutant-tolerant with chironomidea midges dominating and some caddisfly and stonefly taxa. Functioning fen, wetland, and riparian areas improve water quality conditions, and as these features improve with more reliable flows from the Mineral Point Ditch, diversity of the macroinvertebrate community may also improve.

CPW supported the BLM in quantifying the flow rates that would protect the natural environment in Burrows Creek. The recommended ISF rates (see BLM letter of recommendation) were quantified based on habitat maintenance for macroinvertebrates. Maintenance of aquatic macroinvertebrate habitat requires continuously wetted stream channel and adequate stream velocities that allow oxygenation. The R2Cross methodology was used to determine flow rates that meet the requirements for wetted perimeter and velocity in riffles, the habitat type most productive for macroinvertebrates.

Conclusions and Recommendations

CPW is of the opinion that the proposed perpetual lease of Mineral Point Ditch will benefit the ISF reach on Burrows Creek by supporting the water-dependent natural environment. It will also likely result in long-term water quality improvements that support remediation efforts in the Bonita Peak Mining District Superfund Site. CPW recommends that the CWCB proceed with this acquisition. CPW staff will be available at the July 2025 CWCB meeting to answer any questions that the Board might have relating to our role in helping formulate the biological flow rates. We appreciate the opportunity to provide input on this proposal and another creative example of utilizing the State Instream Flow Program to benefit aquatic habitats.

Sincerely,

Digitally signed by Katie Birch Date: 2025.07.02 16:07:18 -06'00'

Katie Birch, Instream Flow Program Specialist





United States Department of the Interior

BUREAU OF LAND MANAGEMENT



Colorado State Office Denver Federal Center, Building 40 Lakewood, Colorado 80225 <u>www.blm.gov/colorado</u>

In Reply Refer To: CO-932 (7250)

Mr. Rob Viehl Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, Colorado 80203

Dear Mr. Viehl:

The Bureau of Land Management (BLM) is writing this letter to formally communicate its instream flow recommendation for Burrows Creek, located in Water Division 7.

Location and Land Status. Burrows Creek is tributary to the Animas River approximately one mile north of the historic mining community of Animas Forks and approximately 12.9 miles north of Silverton. This recommendation covers a reach which extends from the headwaters, which is located on the northwest flank of Houghton Mountain, down to the confluence with the Animas River, a distance 1.4 miles. Of this reach, BLM manages approximately 0.4 miles, while approximately 1.0 miles are in private ownership in the form of patented mining claims.

Burrows Creek is located within the Bonita Peak Mining District Superfund Site. This site consists of 48 historic mines or mining-related sources where ongoing releases of metal-laden water and sediments are occurring within the Mineral Creek, Cement Creek, and Upper Animas River watersheds. BLM's Abandoned Mine Lands Program is working closely with the Environmental Protection Agency to remediate the various sources of mining-related contamination at the site. Current investigations and remediation planning in the Burrows Creek watershed include the Redcloud Mine, Dewitt Mine, London Mine, and Boston Mine. Burrows Creek flows through the Boston Mine site.

Biological Summary. Burrows Creek is located within a very high-altitude, U-shaped glaciated valley above tree line, with elevations ranging from 11,600 feet at the confluence with the Animas River to 12,400 feet at the headwaters. The stream is very high gradient, with slopes typically exceeding five percent and sometimes exceeding 10 percent. At previously surveyed sites in Burrows Creek, substrate is comprised mostly of gravels (14.29%), pebbles (60.95%), and cobbles (24.76%). The stream is often in contact with bedrock, and the stream channel does not appear to migrate significantly.

Water quality in Burrows Creek is significantly affected by both naturally occurring and anthropogenic sources. Naturally occurring movement of groundwater, surface water, and precipitation through pyritic rocks throughout the Burrows Creek watershed results in dissolution INTERIOR REGION 7 • UPPER COLORADO BASIN

of metals that ultimately make their way into Burrows Creek. This process is commonly referred to as "acid rock drainage." Dissolution of metals by water movement through historic mine tailings and mine infrastructure also affects water quality, which is commonly referred to as "mining influenced water." As a result of these two processes, Burrows Creek is affected by elevated concentrations of aluminum, cadmium, copper, manganese, lead, and zinc. (See Roberts, S. 2017. *Bonita Peak Mining District 2016 Benthic Macroinvertebrate Assessment.* Mountain Studies Institute; and also see Herndon Solutions Group, 2021. *Expanded Site Inspection Report, Burrows Gulch, San Juan County, Colorado.*

Despite the presence of heavy metals, Burrows Creek supports a water-dependent natural environment:

- Previous evaluations of habitat quality conclude that Burrows Creek is similar in habitat quality to other creeks in the upper Animas River watershed that have sufficient water quality to support fish, such as Maggie Gulch. Even if heavy metal concentrations were not a water quality issue for Burrows Creek, BLM does not believe that Burrows Creek could support a fishery. BLM's experience in the Silverton area is that fish populations cannot successfully overwinter in streams above 12,000 feet elevation. In addition, the pools on Burrows Creek are not sufficiently deep to keep them ice free during the winter.
- The natural environment consists of stream-side freshwater emergent wetlands mapped by the National Wetlands Inventory. The common wetland species Carex aquatalis dominates most of the vegetation community, accompanied by Arostis idahoensis, Carex hardina and isolated islands of Sphagnum moss. Calamagrostis canadensis and Agrostis scabra appear closer to Burrows Creek. These wetlands are intermixed with fens, which are an extremely rare wetland type that depend on constant, mineral-rich groundwater discharge. During 2024, BLM is implementing a project to restore the full functionality of these fens, which has been impaired by stream diversions and deposition of erosive materials from adjacent slopes. Together the freshwater and fen wetland complexes remove heavy metals from the hydrologic system by plant uptake and by adsorption on the sediments in the wetland complex.
- In addition to the wetland complexes described above, the creek supports a riparian community comprised of willows, sedges, and rushes. The riparian community has been impacted by historic sheep grazing practices during summer, but the riparian community is stable and vigorous.
- The Burrows Creek macroinvertebrate community is dominated by Chironomidea midges. Trichoptera caddisflies and two stonefly taxa (*Capnia and Zapada*) have been documented at various locations and times on Burrows Creek. The Hilsenoff Biotic Index calculated for Burrows Creek is 7.5, which indicates that the macroinvertebrate community is largely comprised of species tolerant of metals. The calculated Multi-Metric Index (Colorado Department of Public Health and Environment, 2010) for Burrows Creek is 15, which indicates that water quality in the creek is impaired. Burrows Creek passes through the historic Boston Mine site, and MMI scores and total taxa richness are lower below the Boston Mine. Remediation efforts to address acid mine

drainage from the Boston Mine site have begun, and BLM will be monitoring the effects of the remediation effort on water quality and macroinvertebrates.

Quantification of Instream Flow Needs. The recommended instream flow rates were quantified based on the needs of aquatic macroinvertebrates. Maintenance of stable aquatic macroinvertebrate populations is supported by continuously wetted stream surfaces, and adequate stream velocities. R2Cross methodology allows for identification of flows that generally meet these requirements. In addition, flows that meet CWCB's hydraulic instream flow criteria in riffles are also assist in providing stream temperatures and dissolved oxygen that meet macroinvertebrate requirements.

R2Cross Analysis. BLM and Colorado Parks and Wildlife (CPW) collected the following R2Cross data from Burrows Creek:

Cross Section Date	Discharge Rate	Top Width	Winter Flow Recommendation (meets 2 of 3 hydraulic criteria)	Summer Flow Recommendation (meets 3 of 3 hydraulic criteria)
08/26/2024 #1	2.65 cfs	15.88 feet	0.97 cfs	5.42 cfs
08/26/2024 #2	2.65 cfs	18.25 feet	2.60 cfs	2.63 cfs
		Averages:	1.785 cfs	4.025 cfs

BLM and CPW analysis indicate that the following flow rates are needed to protect the natural environment to a reasonable degree:

3.75 cfs is recommended from May 1 to June 15 during the peak of the snowmelt runoff period. This flow rate will provide a substantial extent of wetted surfaces, depth, and physical habitat availability for macroinvertebrates as they begin the active warm weather period of their life cycles. Maintaining adequate velocity supports oxygenation of riffles and reduces accumulation of fines in interstitial space, which supports a productive macroinvertebrate community.

1.6 cfs is recommended from June 16 to July 15 during the culmination of the snowmelt runoff period. This period is among the most active periods of the year for macroinvertebrate nymphs, larvae, and pupae, so it is important to provide as much wetted habitat and suitable depth as possible during this brief period.

0.58 cfs is recommended from July 16 to October 31. This recommendation is driven by limited water availability. Protection of flows during this period is important because it typically supports the highest biomass and diversity of aquatic macroinvertebrates during the year.

0.19 cfs is recommended from November 1 to March 31. This recommendation is driven by limited water availability. This flow rate will facilitate overwinter survival of macroinvertebrates that embed themselves in the hyporheic zone of the creek and in wetlands immediately adjacent to the creek.

1.3 cfs is recommended from April 1 to April 30. This flow rate will facilitate macroinvertebrate activity in the active stream channel when macroinvertebrates start to emerge from the hyporheic zone of the creek as ice and snow begins to melt.

Relationship to BLM Management Actions. In October 2023, BLM acquired 10.75 cubic feet per second of the 11.0 cfs water right associated with the Mineral Point Ditch (WDID 3004661). In February 2025, BLM acquired the remaining 0.25 cfs ownership interest from another party. Mineral Point Ditch historically diverted water from Burrows Creek at the Boston Mine site and conveyed the water across a low saddle to the headwaters of the Uncompany River. The water was historically applied to irrigation use near the City of Ouray.

One of BLM's objectives for Burrows Creek is to protect the Mineral Point Ditch flows that have been redirected back to Burrows Creek. BLM is working collaboratively with CWCB staff to develop a lease agreement that would allow the purchased Mineral Point Ditch water rights to be committed to instream use in Burrows Creek. If CWCB leases the water right, it could function to help satisfy this recommended instream flow appropriation.

A second BLM objective for leasing the Mineral Point Ditch water right to the CWCB is protect water quality benefits for Burrows Creek. The portion of the Burrows Creek watershed above the Mineral Point is not significantly affected by mining influenced water. Historically, relatively cleaner water that flowed down Burrows Creek during the snowmelt runoff period was diverted to the Uncompahgre River watershed and could not serve to dilute acid rock drainage and mining influenced water lower in the Burrows Creek watershed. BLM anticipates that the dilution effects of returning the leased water right to Burrows Creek will help protect and improve water-dependent values on Burrows Creek and the Animas River.

Water Availability. The water from Mineral Point Ditch has already been returned to Burrows Creek, so that water right will no longer have any effect on water availability. Other than the Mineral Point Ditch water right, there is only one other water right that diverts from Burrows Creek, which is the Burrows Creek Diversion (WDID 3000857). This water right, which is owned by Houghton Mines LLC, is decreed for 0.9 cfs absolute, and 0.1 cfs conditional with a 2001 priority, and it is used to irrigate wetlands adjacent to Burrows Creek.

The only historic stream gaging activity on Burrows Creek was implemented from 2019-2021 as part of an Expanded Site Inspection Report conducted for BLM's Abandoned Mine Lands Program. As expected, that gaging demonstrated very high snowmelt runoff flows in May and June, and low baseflows in the August-September period. That report is conveyed to CWCB as part of this recommendation. In addition to the data described above, the Colorado Division of Water Resources has maintained a record of diversions made by Mineral Point Ditch. Since 2019, diversions were measured by a recording gage and made available by satellite telemetry, so these data should provide a record of flows that would have been available in Burrows Creek if the Mineral Point Ditch had not been operated.

Data sheets, model output, macroinvertebrate data, wetland data, and photographs of the cross sections have previously been transmitted to the CWCB staff. BLM thanks both Colorado Parks and Wildlife and the CWCB for their cooperation in this effort.

If you have any questions regarding our instream flow recommendation, please contact Roy Smith at 303-239-3940.

Sincerely,

JOEL HUMPHRIES Date: 2025.02.27 0955:48 for

Alan Bittner Deputy State Director Resources

cc:

Stephanie McCormick, Southwest District Jon Kaminsky, Gunnison Field Office Melissa Smeins, Colorado State Office Lisa Merrill, Silverton Field Station

Exhibit E

LEASE AGREEMENT

MINERAL POINT DITCH WATER RIGHTS

This Lease Agreement is entered into this _____ day of _____, 2025 ("Effective Date"), by and between the United States Department of Interior, Bureau of Land Management ("BLM") and the Colorado Water Conservation Board ("Board") (both of who may also be referred to individually as the "Party" or collectively as the "Parties"), and in consideration of the mutual promises contained in this document, agree as follows:

RECITALS

- A. The United States and its assigns, acting through and authorized by Section 206 of the Federal Land Policy and Management Act of 1976, acquired title to the Mineral Point Ditch water rights via special warranty deed dated October 12, 2023, found at Reception Nos. 235977 and _______ in, respectively, Ouray County and San Juan County, Colorado, and General Warranty Deed dated ______, 2025, , found at Reception Nos. ______ and ______ in, respectively, Ouray County and San Juan County, Colorado. The Mineral Point Ditch water rights include 11.0 cubic feet per second, absolute, decreed to Mineral Point Ditch for irrigation, domestic, stock water and fish culture use in a decree entered by the District Court, County of La Plata, State of Colorado in Civil Action 1751-B dated March 31, 1966. The decree awarded an appropriation date of September 27, 1956, and assigns the ditch Priority No. 1965-74 for diversions from Burrows Creek. The decreed point of diversion is at point whence the Northwest Corner of Section 36, Township 43 North, Range 7 West, N.M.P.M., bears north 46°37' West, 3,304 feet.
- B. Under Section 37-92-102(3), Colorado Revised Statutes, no person or entity other than the Board shall be granted a decree adjudicating a right to water or interests in water for instream flows in a stream channel between specific points for any purpose whatsoever.
- C. Pursuant to Section 37-92-102(3), Colorado Revised Statutes, the Board is vested with statutory authority to acquire by lease or other contractual agreement such water, water rights, or interests in water as the Board determines may be required for minimum stream flows to preserve the natural environment to a reasonable degree.
- D. To advance the goals of its management plans for the Bonita Peak Superfund Site and Alpine Loop Management Area, the BLM wants to lease certain water rights to the Board to maintain instream flow in Burrows Creek which is located in Water Division 7.

E. Subject to the terms of this Lease Agreement, the BLM will lease to the Board certain water rights for instream flow purposes. The Board will use those water rights to maintain instream flow in the stream reaches described below:

UT: historic location of the Mineral Point ditch headgate

LT: confluence with the North Fork Animas River

- F. The water rights to be leased to the Board are currently decreed for irrigation, domestic, stock water and fish culture use. The use of the water rights by the Board for instream flow purposes will require Water Court approval of a change of the water rights.
- G. Prior to the Board's use of the BLM water rights in Mineral Point Ditch for instream flow purposes, the Board will determine the amount of water which is required for minimum stream flows to preserve and/or improve the natural environment to a reasonable degree in the segments described above.

AGREEMENT

NOW THEREFORE, in consideration of the foregoing recitals, the mutual promises and agreements contained herein, and the benefits exchanged, the Parties agree as follows:

- 1. <u>Consideration:</u> Subject to the terms and conditions contained in this Lease Agreement, BLM grants the Board the right to use the full amount and yield of Mineral Point Ditch water rights for instream flow purposes. During the primary term of this Lease Agreement and any subsequent renewals thereof, the Board shall not be required to make any monetary payments to the BLM for the use of the leased water rights specified in this Lease Agreement. The BLM and the Board agree that the Board will provide other valuable consideration, in the form of the Board's active management of the leased water rights for instream flow purposes in Burrows Creek including the following: engineering analysis of the historical diversion rates and timing that can be used to support a water rights change application, drafting a water rights change applications in the applicable Colorado water court, administering the changed water rights for instream flow uses (which will be in addition to the uses already allowed under the decree), including reporting annual use of the changed water rights for diversion by other parties by placing a call when appropriate.
- 2. <u>Water Rights:</u> The BLM hereby leases the following water rights to the Board:

11.0 cubic feet per second, absolute, decreed to Mineral Point Ditch for irrigation, domestic, stock water and fish culture use in a decree entered by the District Court, County of La Plata, State of Colorado in Civil Action 1751-B dated March 31, 1966. The decree awarded an appropriation date of September 27, 1956, and assigns the ditch Priority No. 1965-74 for diversions from Burrows Creek. The decreed point of diversion is at point whence the Northwest Corner of Section 36, Township 43 North, Range 7 West, N.M.P.M., bears north 46°37' West, 3,304 feet.

- 3. <u>Sole Purpose for Lease Agreement:</u> The Board will use the leased water rights described in the paragraph above solely to maintain instream flows in Burrows Creek.
- 4. <u>Amount Leased</u>: The amount of water to be leased to the Board by BLM under this Lease Agreement will not exceed the amount of water that the Board finds necessary to preserve or improve the natural environment to a reasonable degree in Burrows Creek.
- 5. **Board Determinations:** The rate or volume of water leased under this agreement shall not limit the Board's determination under Section 37-92-102(3), Colorado Revised Statutes, of the amount of water necessary to preserve or improve the natural environment to a reasonable degree in Burrows Creek.
- 6. <u>Limitation on Use of Leased Water Right:</u> If, for any reason, this Lease Agreement is not in effect, then the use of the leased water rights by BLM shall not include instream flow uses.
- 7. <u>Water Court Application:</u> The Board and BLM may jointly file an application with the Water Court to allow as an additional use of the leased rights exclusively by the Board for instream flows not to exceed the decreed flow rate of the leased water right. The Board shall provide drafts of the proposed change application to BLM for review and comment prior to filing it with the Water Court. The BLM shall use its best efforts to assist the Board in obtaining judicial approval of that application.
- 8. <u>Water Court Application Dismissal:</u> Either Party to this Lease Agreement may, in its sole discretion, cause the water court application to be dismissed at any time before the court issues a final decree. The other Party shall not oppose the effort to dismiss the application. If the application is dismissed for any reason or is denied in whole or in part, or if the decree of the water court is conditioned in such manner as to prevent this Agreement from being completely fulfilled, then this Agreement and the lease shall be terminated within 30 days written notice by either Party to the Lease Agreement.
- 9. <u>Term of Lease Agreement:</u> This lease shall be for a five-year term, commencing on the Effective Date first shown above. Upon expiration of the primary term of this lease, this lease shall automatically renew for successive five-year periods unless either Party provides written notice of termination to the other Party and least 30 days prior to the then existing lease term.
- 10. <u>Enforcement:</u> Pursuant to Section 37-92-102(3), Colorado Revised Statutes, the terms of this Lease Agreement shall be enforceable by each Party as a water matter in a court of competent jurisdiction; provided however, that before commencing any action for enforcement of this Agreement, the Party alleging a violation shall notify the other party in writing of the alleged violation and the Parties shall make a good faith effort to resolve their differences through informal consultation. Specific enforcement of this Lease Agreement shall be the exclusive remedy for the failure of either Party to comply with the provisions of herein.

- 11. <u>Termination:</u> Either Party may terminate this Agreement by providing the other Party with thirty (30) days advance written notice. The BLM may terminate this Lease Agreement if it determines that the leased water rights are being used by the Board for purposes other than those specified herein. The Board may terminate this Lease Agreement for any reason.
- 12. <u>Notices and Representatives:</u> Each individual identified below is a representative of the designating Party. All notices required by this Lease Agreement will be hand-delivered with receipt required, sent by certified or registered mail, or emailed with receipt verified to such Party's representative at the address set forth below. In addition to, but not in lieu of a hard-copy notice, notice may also be sent by e-mail to the e-mail addresses set forth below. Either Party may designate by written notice substitute addresses or persons to whom such notices will be sent. Unless otherwise provided herein, all notices are effective upon receipt.
 - a. <u>BLM Representatives and Contact Addresses:</u> Robert Hall, Contracting Officer, is authorized to sign the Lease Agreement. Mr. Hall can be reached by physical mail at: Bureau of Land Management, Building 40, Denver Federal Center, Lakewood, CO 80225; by telephone at 303-329-0002; and by email at rhall@blm.gov. Roy Smith, Water Rights Specialist, is authorized to manage the day-to-day administration of the Lease Agreement. Mr. Smith can be reached by physical mail at: Bureau of Land Management, Building 40, Denver Federal Center, ., Lakewood, CO 80225; by telephone at 303-329-0002; and by email at: Bureau of Land Management, Building 40, Denver Federal Center, ., Lakewood, CO 80225; by telephone at 303-2393940; and by email at r20smith@blm.gov.
 - b. Board Representative and Contact Addresses:

Section Chief Stream and Lake Protection Section Colorado Water Conservation Board 1313 Sherman, 7th Floor DNR_CWCBISF@state.co.us

13. General Provisions

- a. <u>Assignment:</u> Neither Party has the right to transfer or sub-lease its rights or obligations under this Lease Agreement without the advanced written consent of the other Party.
- b. <u>**Binding Agreement:**</u> This Lease Agreement binds and benefits the Parties and their respective successors and assigns.
- c. **<u>Binding Arbitration Prohibited:</u>** Neither BLM or the Board agree to binding arbitration by any extra-judicial body or person. Any arbitration provision incorporated herein by reference is null and void.
- d. <u>Captions:</u> The captions and headings in the Lease Agreement are for convenience of reference only and will not be used to interpret, define, or limit its provisions.

- e. <u>Compliance with Applicable Laws:</u> At all times during the performance of this Lease Agreement, the Board will adhere to all applicable Federal and State laws, rules, and regulations then in effect. In addition:
 - The signatories to this Lease Agreement affirm that they are familiar with C.R.S. § 18-8-301, *et seq.* (Bribery and Corrupt Influences) and C.R.S. § 18-8-401, *et seq.* (Abuse of Public Office), and that no violation of such provisions has occurred in connection with the negotiation and signing of this Lease Agreement; and
 - ii. The signatories to this Lease Agreement affirm that to the best of their knowledge, no State employee has any personal or beneficial interest whatsoever in the service or property described herein.
- f. **CORA Disclosure:** To the extent not prohibited by Federal law, this Lease Agreement is subject to public release through the Colorado Open Records Act, C.R.S. § 24-72-101, *et seq.*
- g. <u>Entire Understanding</u>: This Lease Agreement represents the complete integration of all understandings between the Parties and all prior representations and understandings, oral or written, are merged herein. Prior or contemporaneous additions, deletions, or other changes hereto will not have any force or effect whatsoever, unless embodied herein.
- h. <u>Governing Law and Venue</u>: This Lease Agreement will be governed and enforced in accordance with the laws, and rules and regulations issued pursuant thereto, of the State of Colorado and under applicable Federal Law. Any provision included or incorporated herein by reference which conflicts with said laws, rules, and regulations will not be valid, enforceable, or available in any action at law, whether by way of complaint, defense, or otherwise. Venue for any action regarding water matters under this Lease Agreement will be in either the District Court for Ouray County, Colorado or Water Court in and for Water Division No. 7, as appropriate. Otherwise, for contract disputes, Federal Law applies. Venue for contract matters will be determined by the Contract Disputes Act of 1978, 41 U.S.C. §§7107-7109.
- i. <u>Governmental Immunity:</u> No term or condition in this Lease Agreement will 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.*, or the Federal Tort Claims Act, 28 U.S.C. §§ 1346(b) and 2671, *et seq.*, as applicable now or hereafter amended. Liability for claims for injuries to persons or property arising from the negligence of the State of Colorado, its departments, institutions, agencies, boards, officials, and employees is controlled and limited by the provisions of the Governmental Immunity Act, C.R.S. § 24-10-101, *et seq.* and the risk management statutes, C.R.S. § 24-30-1501, *et seq.*, as amended. Liability for claims for injuries to persons or property arising from the negligence of the Federal Government, its departments, institutions, agencies, boards, officials, and employees is controlled and limited by the provisions of the provisions of the Federal Tort Claims Act, 28 U.S.C. §§ 1346(b) and 2671, *et seq.*

- j. <u>Legal Counsel:</u> Each Party to this Lease Agreement has engaged legal counsel to negotiate, draft, or review this Lease Agreement. Therefore, in the construction and interpretation of this Lease Agreement, the Parties acknowledge and agree that it will not be construed against any Party on the basis of authorship.
- k. <u>Litigation Reporting</u>: Within ten (10) days after being served with any pleading in a legal action filed with a court or administrative agency related to this Lease Agreement or which may affect a Party's ability to comply with the terms and conditions of this Lease Agreement, the Party who is in receipt of the served pleading will notify the other Party of such action and deliver copies of such pleadings to the other Party, as set forth in paragraph 12 of this Lease Agreement.

1. Modification:

- i. <u>By the Parties:</u> Except as specifically provided in the Lease Agreement, modifications hereof will not be effective unless agreed to by the Parties in a written amendment hereto.
- ii. <u>By Operation of Law:</u> This Lease Agreement is subject to such modifications as may be required by changes in Federal law or Colorado State law, or their implementing regulations. Any such required modification will be automatically incorporated as part of the Lease Agreement on the effective date of such change, as if fully set forth herein.
- m. <u>Prior Agreements</u>: This Lease Agreement cancels and supersedes all prior agreements between the Parties related to the lease of the Mineral Point water rights, if any.
- n. <u>Third Party Enforcement:</u> The terms and conditions of this Lease Agreement, and all rights of action relating thereto, are strictly reserved to the Parties, and nothing in this Lease Agreement gives or allows any claim, right, or cause of action whatsoever by any other person not included in this Lease Agreement. Any person or entity, other than the Parties, receiving services or benefits under this Lease Agreement will be deemed an incidental beneficiary only.
- o. <u>Waiver:</u> A waiver of a breach of any provision of this Lease Agreement does not waive any subsequent breach of the same or different provision of this Lease Agreement. Any Party's failure in any one or more instances to insist upon strict performance of any of the terms and conditions of this Lease Agreement or another remedy for a breach of this Lease Agreement, or to exercise any right herein conferred will not be construed as a waiver or relinquishment of that right or of that Party's right to assert or rely upon the terms and conditions of this Lease Agreement. Any express waiver of a term of this Lease Agreement will not be binding and effective unless made in writing and properly executed by the waiving Party.

IN WITNESS WHEREOF, the Parties have executed this Lease Agreement effective as of the Effective Date first shown above.

BUREAU OF LAND MANAGEMENT

By:_____

Robert Hall, Contracting Officer

Date: ______

COLORADO WATER CONSERVATION BOARD

By:_____

Date: _____