Public Notice for Objections

- Public Notice for Objections Package
  - Notice Area List
  - Notice Area Map
  - Form Checklist
  - PN- Letter to applicant
  - PN- Letter to editor
  - PN- Certificate of service
  - PN- Invoice & tear sheet
  - PN- Return mail
  - Objection Files & associated documents

Public Notice for Objections

NOTICE AREA OBJECTION PERIOD

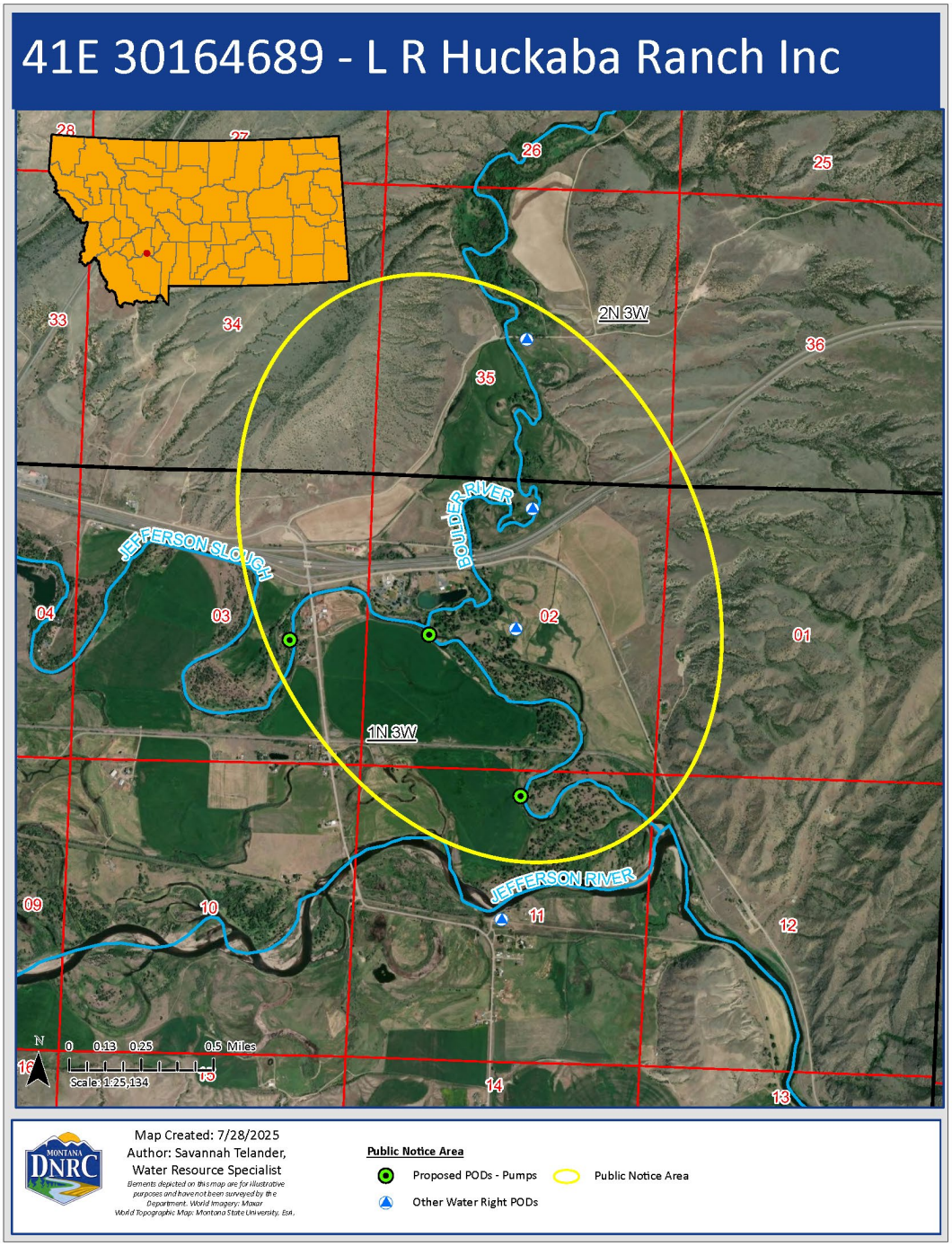
Application No. **41E 30164689** Regional Office # 05

Applicant's Name **L R Huckaba Ranch Inc**

Indian Reservation [ ] Yes [X] No If yes, Reservation _____

Irrigation District [ ] Yes [X] No If yes, District _____

Specialist **Savannah Telander** Date **10/23/2025**



Water Right Owner	Water Right # (Basin, ID, and Number)
Applicant: LR Huckaba Ranch Inc	41E 30164689
Other Water Right Owners:	
GOLDEN SUNLIGHT MINES INC	41E 143434 00
MONTANA, STATE OF DEPT OF FISH WILDLIFE & PARKS	41E 30017424
Helena Regional Office Standards:	
5HLN DEPT OF NATURAL RESOURCES & CONSERVATION	
1BIA BUREAU OF INDIAN AFFAIRS	
1BOR US DEPT OF INTERIOR	
1DSL MONTANA BOARD OF LAND COMMISSIONERS	
1EQC ENVIRONMENTAL QUALITY COUNCIL	
2FWP DEPT OF FISH WILDLIFE AND PARKS	
1NWE NORTHWESTERN ENERGY	
1SCH CANYON FERRY PROJECT OFFICE	
1TUL MT TROUT UNLIMITED	
1WQB DEPT OF ENVIRONMENTAL QUALITY	
2FWP DEPT OF FISH WILDLIFE AND PARKS	
5FWS US FISH AND WILDLIFE SERVICE	
1CFC CLARK FORK COALITION	
1WQB DEQ WATER PROTECTION BUREAU	
BANK OF COMMERCE	
5FP11 JEFFERSON COUNTY	

PUBLISHED: Whitehall Ledger

REMARKS: The following methodologies were employed to determine an appropriate public notice area:

1. All Helena Regional Office public notice standards for Jefferson County were included in the mailing
2. The following method was used to identify water rights for public notice:
    a. All water rights with points of diversion at the Cardwell Ditch headgate
    b. All water rights within the stretch of the Boulder River between the historical point of diversion (Cardwell Ditch headgate) and the confluence of the Jefferson Slough and the Jefferson River.
    c. After duplicate owner names were removed, two water rights were identified for public notice.

Preliminary Determination

- PD
- PD cover letter

Preliminary Determination

BEFORE THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION OF THE STATE OF MONTANA

* * * * * * *

APPLICATION TO CHANGE WATER RIGHT NO. 41E 30164689 by L R Huckaba Ranch Inc	**PRELIMINARY DETERMINATION TO GRANT CHANGE**

* * * * * * *

On March 6, 2025, HB Huckaba Ranch Inc (Applicant) submitted Application to Change Water Right No. 41E 30164689 to change Statements of Claim 41E 3407-00 and 41E 3408-00 to the Helena Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the Application on its website. The Department sent the Applicant a Deficiency Letter under §85-2-302, Montana Code Annotated (MCA), dated March 17, 2025. The Applicant responded with information dated May 9, 2025. A Preapplication Meeting was held between the Department and the Applicant's representatives, Patrick Byroth, Chris Edgington, and Allison Pardis on October 17, 2024, in which the Applicant's representatives designated that the Technical Analyses for this Application would be completed by the Department. The Applicant returned the completed Preapplication Meeting Form on December 19, 2024. The Department delivered the Department completed the Technical Analyses on January 17, 2025. The Application was determined to be Correct and Complete as of June 6, 2025. An Environmental Assessment for this Application was completed July 23, 2025. The Draft Preliminary Determination to Grant was sent to the Applicant July 28, 2025. The Department provided notice of opportunity to provide public comment to this Application per 85-2-307(4), MCA on August 27, 2025. One public comment was received and considered by the Department. This Preliminary Determination to Grant document incorporated the Department's consideration of, and response to the public comment.

INFORMATION

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Irrigation Application for Change of Appropriation Water Right, Form 606
- Attachments:
    - Proposed POD 02: Adequate Means of Diversion and Operation – Question 33, 35, 39, AquaTech, dated February 6, 2023

- Proposed POD 01 & 03 Adequate Means of Diversion and Operation – Questions 33, 35, 39, Jim Richards, undated
- Letter from Barrick Gold Corporation – Golden Sunlight Mine Inc, Kristi Murphy, dated November 2, 2024

- Maps:
  - Historic Use Map – Question 18, undated
  - Proposed Use Map – Question 19, undated
  - System Operation – Question 32, undated
  - Lower Boulder River Irrigation Infrastructure Improvement Project Huckaba Point of Diversion Change Site, undated
  - Huckaba Ranch West Side – V2, undated
- Department - completed Technical Analyses based on information provided in the Preapplication Meeting Form, dated January 17, 2025
  - Question 6, Proposed PODs Map, undated
  - Question 121 Map, undated
  - Question 122.G.i.3 Map, undated
  - Figure 1. Pump plate for 60 hp pump on Huckaba Ranch, Image of Pump Plate, undated
  - Figure 2. Pump plate for 50 hp pump on Huckaba Ranch, Image of Pump Plate, undated
  - AquaTech West Side – North Half Circle – V2 Receipt, February 6, 2023
  - Lower Boulder River Irrigation Infrastructure Improvement Project Huckaba Point of Diversion Site Flyer, undated

<u>Information within the Department's Possession/Knowledge</u>

- DNRC Change Application 41E 30164689 Surface Water Change Technical Analysis Report, dated January 17, 2025
- Water Resources Survey, Jefferson County, 1956
- USGS Photo 2109500070005, dated July 5, 1947
- USDA Photo 479-B6, dated August 29, 1979
- Statement of Claim 41E 3407-00 file
- Statement of Claim 41E 3408-00 file

- The Department also routinely considers the following information. The following information is not included in the administrative file for this Application, but is available

upon request. Please contact the Helena Regional Office at 406-444-6999 to request copies of the following documents.

- Department Standard Practice for Determining Historical Use
- Department Standard Practice for Analyzing Area of Potential Adverse Effect
- Technical Memorandum "Distributing Conveyance Loss on Multiple User Ditches" (Heffner, 2020)

Public Comments Received

- The Department received and considered the following comment for the Preliminary Determination. The comment is addressed in the respective criterion section. The public comment received can be found in the administrative file. The preliminary determination decision is to Grant.
    - One public comment was received regarding the measurement condition placed on the adequate diversion criterion. The Department has considered this public comment and has not modified the analysis of the adequate diversion criterion nor the preliminary decision.

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, part 4, MCA).

For the purposes of this document, Department or DNRC means the Department of Natural Resources & Conservation; CFS means cubic feet per second; GPM means gallons per minute; and AF means acre-feet.

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

1. Applicant seeks to change the point of diversion (POD) of Statements of Claim 41E 3407-00 and 41E 3408-00 in this Application. Table 1 below summarizes the rights proposed for change as currently claimed. These claims are diverted from the Boulder River for irrigation use for a volume not to exceed the amount put to historic and beneficial use.

Table 1. Water rights proposed for change

Water Right	Purpose	Flow Rate (CFS)	Volume (AF)	Period of Use	Point of Diversion	Place of Use	Priority Date	Acres
41E 3407-00	Irrigation	11.37	Historical Use Statement	4/1 to 10/30	NWSENW Section 35, T2N, R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1886.12.31	300
41E 3408-00	Irrigation	11.37	Historical Use Statement	4/1 to 10/30	NWSENW Section 35, T2N, R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1888.12.31	300

2. Both Statements of Claim 41E 3407-00 and 41E 3408-00 have a flow rate of 11.37 CFS and divert from the Boulder River by a means of headgate for the purpose of 300 acres of flood irrigation. The period of use and period of diversion for both Claims are April 1 to October 30. The historical POD is located in the NWSENW Section 35, T2N, R3W, Jefferson County, and water is conveyed to the place of use by the Cardwell Ditch[1].

3. Statements of Claim 41E 3407-00, 41E 3408-00, and 41E 3406-00 are supplemental rights that were historically used to irrigate 300 acres in SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, all within T1N, R3W, Jefferson County. Claim 41E 3406-00 is an irrigation right owned by the Applicant for water from Cold Spring with a maximum flow rate of 11.37 CFS. 41E 3406-00 is not included in the proposed Change Application but was factored in the historical consumptive use of the place of use (POU). Table 2 below summarizes the supplemental water rights.

[1] Also known as the Shaw Ditch.

Table 2. Supplemental Water Rights

Water Right	Flow Rate (CSF)	Period of Use	Point of Diversion	Place of Use	Priority Date	Acres
41E 3406-00	11.37	4/1 to 10/30	SWSESW Section 6, T2N, R2W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1968.12.31	300
41E 3407-00	11.37	4/1 to 10/30	NWSENW Section 35, T2N, R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1886.12.31	300
41E 3408-00	11.37	4/1 to 10/30	NWSENW Section 35, T2N, R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1888.12.31	300

4. The conveyance system, Cardwell Ditch, conveys the water rights to be changed along with Applicant owned Statement of Claim 41E 3406-00, and third-party owned Claims 41E 143433-00, 41E 143436-00, and 41E 143437-00. The Cardwell Ditch headgate is utilized as a secondary POD for Claim 41E 3406-00. Claims 41E 143433-00, 41E 143436-00, and 41E 143437-00 are owned by a neighboring third-party, Golden Sunlight Mines Inc.

5. No previous Change Authorizations are associated with the water right to be changed.

CHANGE PROPOSAL

FINDINGS OF FACT

6. The Applicant proposes to change the POD of Statements of Claim 41E 3407-00 and 41E 3408-00 from one headgate on the Boulder River to three pumps on the Jefferson Slough. The Applicant proposes to discontinue use of the historical POD in NWSENW Section 35, T2N, R3W, Jefferson County, and the Cardwell Ditch. The historical POD is proposed to be removed in part of the Shaw Diversion Dam Removal Project by Montana Trout Unlimited. The project involves Golden Sunlight Mine, with support by Montana Department of Fish, Wildlife & Parks (FWP), Natural Resource Conservation Services (NRCS), Trout and Salmon Foundation, Cross Charitable Foundation, and the Applicant. The proposed PODs are two pump sites approximately 1.21 and 1.74 miles downstream of the historical POD, and one pump site approximately 0.67

miles upstream of the Boulder River Jefferson Slough confluence on the Jefferson Slough[2]. The proposed PODs are in NENWSW Section 2, NENWSE Section 3[3], and NWNWNE Section 11, all within T1N, R3W, Jefferson County, seen on the map provided as Figure 1. Boulder River water will continue downstream in the Boulder River into the Jefferson Slough and pumped from the Jefferson Slough from two points of diversion in NENWSW Section 2 and NWNWNE Section 11, all within T1N, R3W, Jefferson County. Jefferson Slough water will be pumped from the POD in NENWSE Section 3 T1N, R3W, Jefferson County. Jefferson Slough water will be immediately replaced by Boulder River water at the confluence of the Boulder River and the Jefferson Slough. All purposed PODs are located on the Applicant's property. Water will be diverted through the proposed PODs into three pipeline systems to irrigate the historical 300-acre POU. The historical POD will no longer be used for irrigation on the Applicant's property as a result of this change. The period of diversion and use will remain the same as the water rights were historically operated. No changes to the POU, purpose, or storage are proposed in this Change Application.

[2] Technical Analyses Report for Change Preapplication No. 41I 30164689, dated January 17, 2025, inadvertently omitted reference to the pump 0.67 miles upstream of the Boulder River and Jefferson Slough confluence under Section 3.2 Area of Potential Adverse Effect.

[3] Technical Analyses Report for Change Preapplication No. 41I 30164689, dated January 17, 2025, states the proposed POD in Section 3 as NENWNE Section 3, T1N, R3W, Jefferson County. The legal land descriptions found in the Technical Analysis are based on the legal land descriptions give to the Department during the October 17, 2024, Preapplication Meeting. After review of the proposed use maps the Department determined the POD to be located in NENWSE Section 3, T1N, R3W, Jefferson County.

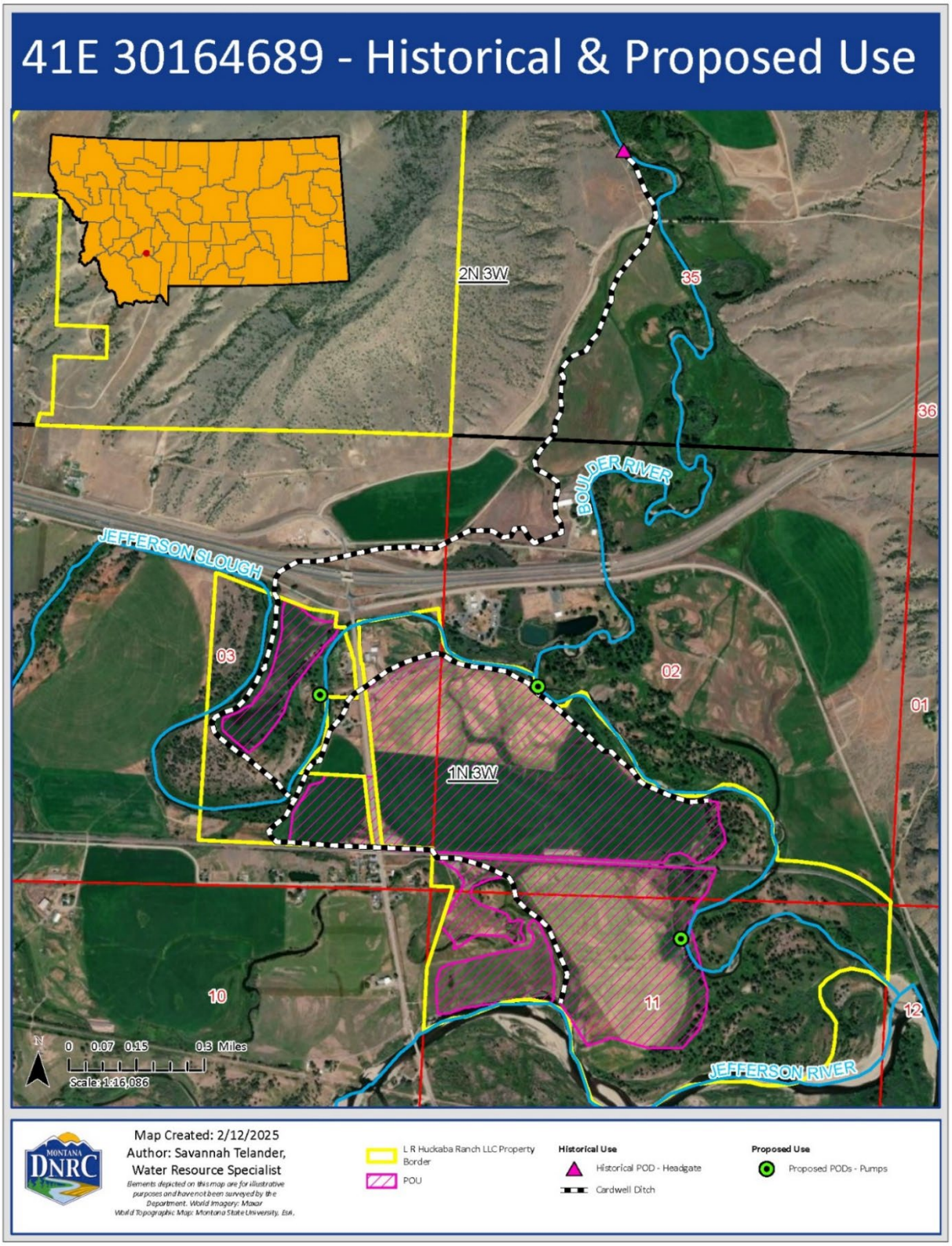


Figure 1. Map of Change Application 41E 30164689 historical and proposed use

CHANGE CRITERIA

7. The Department is authorized to approve a change if the Applicant meets its burden to prove the applicable § 85-2-402, MCA, criteria by a preponderance of the evidence. *Matter of Royston*, 249 Mont. 425, 429, 816 P.2d 1054, 1057 (1991); *Hohenlohe v. DNRC*, 2010 MT 203, ¶¶ 33, 35, and 75, 357 Mont. 438, 240 P.3d 628 (an Applicant's burden to prove change criteria by a preponderance of evidence is "more probable than not."); *Town of Manhattan v. DNRC*, 2012 MT 81, ¶ 8, 364 Mont. 450, 276 P.3d 920. Under this Preliminary Determination, the relevant change criteria in § 85-2-402(2), MCA, are:

> (2) Except as provided in subsections (4) through (6), (15), (16), and (18) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:
> (a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.
> (b) The proposed means of diversion, construction, and operation of the appropriation works are adequate, except for: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.
> (c) The proposed use of water is a beneficial use.
> (d) The Applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the Applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water. This subsection (2)(d) does not apply to: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

8. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. *E.g., Hohenlohe*, ¶¶ 29-31; *Town of Manhattan*, ¶ 8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation*

HISTORICAL USE AND ADVERSE EFFECT

FINDINGS OF FACT - Historical Use

9. Claim 41E 3407-00 is a filed right with a priority date of December 31, 1886, and Claim 3408-00 is a filed right with a priority date of December 31, 1888. Both Claims were included in the Montana Water Court 41E Boulder River, Tributary of Jefferson River Temporary Preliminary Decree on June 20, 1985, and the 41E Boulder River, Tributary of Jefferson River Preliminary Decree on October 19, 2022.

10. Statements of Claim 41E 3407-00 and 41E 3408-00 are supplemental and claimed for irrigation of 300 acres in SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, all within T1N, R3W, Jefferson County. The historical irrigation of 300 acres is supported by the Water Resources Survey (Jefferson County, 1956) and 1947 USGS Photo 2109500070005. The Department finds the maximum number of acres historically irrigated by Claims 41E 3407-00 and 41E 3408-00 to be 300 acres.

11. 41E 3407-00 and 41E 3408-00 were both originally claimed with a flow rate of 11.37 CFS. The Applicant's representatives state that the maximum flow rate diverted by 41E 3407-00 is 11.37 CFS and by 41E 3408-00 is 11.37 CFS. Based on the ditch measurements provided in the October 17, 2024, Preapplication Meeting, the maximum ditch capacity of the Cardwell Ditch has the carrying capacity for both water rights proposed for change. The Department finds the total maximum flow rate for the water rights proposed for change is 22.74 CFS.

12. Claims 41E 3407-00 and 41E 3408-00 divert water from the Boulder River by the means of the Cardwell Ditch headgate and diversion dam in NWSENW Section 35, T2N, R3W, Jefferson County. Water is conveyed from the headgate south along the west side of the Boulder River and continues under Interstate 90 onto the Applicants property. Once it enters the Applicant's property the ditch irrigates the POU on the north side of the Jefferson Slough in in E2 Section 3, T1N, R3W, Jefferson County. The ditch continues south until it dumps into the Jefferson Slough in the NESWSE Section 3, T1N, R3W, Jefferson County. Boulder River water is then pumped into a lateral of the Cardwell Ditch from the Jefferson Slough at a secondary POD[4] just across the source from where water is dumped into the Jefferson Slough. The ditch then continues to move water down to irrigate the POU south of the Jefferson Slough in Sections 2, 3, and 11, T1N, R3W, Jefferson County. The Cardwell Ditch can be seen on the map provided as Figure 1 above.

13. Statements of Claim 41E 3406-00, 41E 3407-00, 41E 3408-00, 41E 143433-00, 41E 143436-00 and 41E 143437-00 have historically utilized the Cardwell Ditch as a means of conveyance and stock POU. Claims 41E 3406-00, 41E 3407-00, and 41E 3408-00 historically

[4] 41E 3407-00 and 41E 3408-00 secondary POD in NESWNE Section 3, T1N, R3W, Jefferson County, was decreed onto the Claims during the Preliminary Decree.

conveyed water onto the Applicant's property from April 1 to October 30. Statement of Claim 41E 3406-00 is an irrigation right supplemental to the rights in this Change Application, claiming water from Cold Spring for irrigation of 300 acres on the Applicant's property. Cold Spring water, claimed under Claim 41E 3406-00, is diverted into the Cardwell Ditch headgate as a secondary POD. Claim 41E 3406-00 is included in conveyance loss calculations as this water right utilizes the Cardwell Ditch as a means of conveyance for irrigation on the Applicant's property. Statements of Claim 41E 143433-00, 41E 143436-00 and 41E 143437-00 are owned by a neighboring third party, Golden Sunlight Mines Inc. Claim 41E 143433-00 is an irrigation right and Claims 41E 143436-00 and 41E 143437-00 are diverted ditch stock water rights that claim the Cardwell Ditch as a means of conveyance and stock POU. Irrigation Claim 41E 143433-00 is included in conveyance loss calculations as this water right utilizes water out of the Cardwell Ditch above the Applicant's water rights proposed for change in this Change Application. Claims 41E 143436-00 and 41E 143437-00 were not included in conveyance losses because they are multiple use stock diverted ditch rights with Golden Sunlight Mines Inc. irrigation water rights.

14. The Applicant states water was historically diverted into the Cardwell Ditch headgate in NWSENW Section 35, T2N, R3W, Jefferson County, and conveyed through the Cardwell Ditch to the 300-acre POU. The Applicant states Claim 41E 3407-00 and 41E 3408-00 provided irrigation to the 300-acre POU for alfalfa, barley, oats, and grass hay. Water was typically diverted starting April 1 and ended as late as October 30 of each year.

15. The water rights proposed for change are Statements of Claim, and the historical use was evaluated as the rights existed prior to July 1, 1973. No prior Change Authorizations for the water rights have occurred, and no documented history of calls for Claims 41E 3407-00 and 41E 3408-00 exist. The Department calculated the historical use using the Department's standard methodology pursuant to ARM 36.12.1902.

16. Using information provided by the Applicant about historical irrigation practices as well as Department knowledge of the project area, the historical consumptive volume (HCV) was found for the historical POU. The total historical POU consumptive volume was distributed to Claims 41E 3407-00 and 41E 3408-00 based on the proportion of the total flow rate each water right delivers to the historical POU. The following equations were used to find the HCV, these calculations are summarized in Tables 2 and 3.

$$Supplemental\ HCV = HCV * Supplemental\ Flow\ Proportion$$

$$HCV = Crop\ Consumption + Historic\ Irrecoverable\ Losses$$

$$Crop\ Consumption = Boulder\ Weather\ Station\ * 1ft/12inches * Jefferson\ County\ Management\ Factor * Historic\ Acres\ Historic$$

$$Irrecoverable\ Losses = Field\ Applied * IL\%$$

$$Field\ Applied = Crop\ ConsumptionField\ Efficiency$$

Table 2. Historical consumptive volume of the historical POU

Irrigation Method	Acres	IWR (in)*	Mgmt. Factor^	Field Efficiency	Crop Consumption (AF)	Applied Volume (AF)	IL (AF)	Total Consumed Volume (AF)
Flood Irrigation, Wheeline & Handline	300	17.08	0.61	0.25	260.47	1041.88	52.09	312.56

*Boulder IWR Weather Station

^Jefferson County Historical Use Management Factor (1964-1973)

Table 3. Historical consumptive volume of the POU by water right

Water Right	Type of Use	Applied Volume - Supplemental (AF)	Consumed Volume - Supplemental (AF)	Non-Consumed Volume - Supplemental (AF)
41E 3406-00	Historical	347.29	104.19	243.11
41E 3407-00	Historical	347.29	104.19	243.11
41E 3408-00	Historical	347.29	104.19	243.11
Total		**1041.88**	**312.56**	**729.32**

17. The historical diverted volume (HDV) is the sum of the water applied to the field and seasonal conveyance losses. The HDV was calculated pursuant to ARM 36.12.1902(10) and the Department's standard methodology (Roberts and Heffner, 2012). The Department calculated the HDV based on information provided by the Applicant about the historical irrigation practices and the best available information about the Cardwell Ditch. The Applicant states water has been historically diverted starting April 1 and ended at the latest on October 30. The Applicant further states that the diversion was paused for two weeklong cuttings per season. The Department used the following equation to calculate the HDV, these calculations are summarized in Table 4.

$$Water\ Right\ HDV = \frac{Water\ Right\ Crop\ Consumption}{Field\ Efficiency} + Water\ Right\ Conveyance\ Loss$$

Table 4. Historical Diverted Volume of 41E 3407-00 and 41E 3408-00

Water Right	Consumed Volume - Supplemental (AF)	Field Efficiency	Conveyance Loss Volume (AF)	Historic Diverted Volume (AF)
41E 3407-00	104.19	0.25	285.63	632.92
41E 3408-00	104.19	0.25	285.63	632.92
Total	**208.38**		**571.26**	**1265.84**

18. Seasonal conveyance losses are the sum of seepage loss, vegetation loss, and losses due to ditch evaporation. Using down-ditch measurements and information provided by the Applicant, the Department calculated seasonal conveyance losses for the Cardwell Ditch. Conveyance losses were distributed to all water rights in the Cardwell Ditch based on the Department's memorandum "Distributing Conveyance Loss on Multiple User Ditches" (Heffner, 2020).

19. The Cardwell Ditch historically conveyed Claims 41E 3406-00, 41E 3407-00, 41E 3408-00, 41E 143433-00, 41E 143436-00, and 41E 143437-00[5]. Irrigation Claims were considered in calculating and distributing conveyance losses. Diverted stock use Claims 41E 143436-00 and 41E 143437-00 were not used to calculate conveyance losses, as they are multiple use rights based on appropriations of Golden Sunlight Mines Inc irrigation water rights and the rights share conveyance water. Due to the water rights in the Cardwell Ditch being conveyed at varying distances to multiple POUs over a different number of days, the Department divided the ditch into four down-ditch combinations. The water rights were assigned to a combination based on the carrying ditch segment lengths and diverted days. The ditch combinations for the Cardwell Ditch are summarized on Table 5 and can be seen on the map provided as Figure 2.

[5] Statements of Claim 41E 143436-00 and 41E 143437-00 were objected to in the Basin 41E Preliminary Decree. The Claims were adjusted (marshaled) to be direct from source on the Boulder River and direct from ditch for every ditch adjacent to the Golden Sunlight Mines Inc property, by the Water Court in the May 14, 2024, Notice of Filing of Master's Report for Case 41E-0198-R-2024. As a result to the 2024 Masters Report, Claims 41E 143436-00 and 41E 143437-00 claim the Cardwell Ditch (also known as the Shaw Ditch) diverting from the Boulder River in NWSENW Section 35, T2N, R3W, Jefferson County. 41E 143433-00 was also objected to in the Preliminary Decree to be marshaled across a larger area, but no master report have been released. The Department evaluated the Golden Sunlight Mines Inc stock and irrigation water rights claimed out of the Cardwell Ditch as multiple use rights.

Table 5. Down-Ditch Combinations for Cardwell Ditch

Down-Ditch Combination	Water Rights	Period of Use/Diversion	Days Irrigated	Total Flow Rate (CFS)	Ditch Length (ft)	Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate	Net Evap (in)
Cardwell A	41E 3406-00, 41E 3407-00, 41E 3408-00, 41E 143433-00	4/1 to 8/31	145	39.23	1055	4	9.59	1.2	13.86
Cardwell B	41E 3406-00, 41E 3407-00, 41E 3408-00	9/1 to 10/30	53	34.11	1055	4	9.59	1.2	8.88
Cardwell C	41E 3406-00, 41E 3407-00, 41E 3408-00	4/1 to 10/30	198	34.11	7886	4	9.59	1.2	22.74
Cardwell D	41E 3406-00, 41E 3407-00, 41E 3408-00	4/1 to 10/30	198	34.11	3089	4	9.59	1.2	22.48

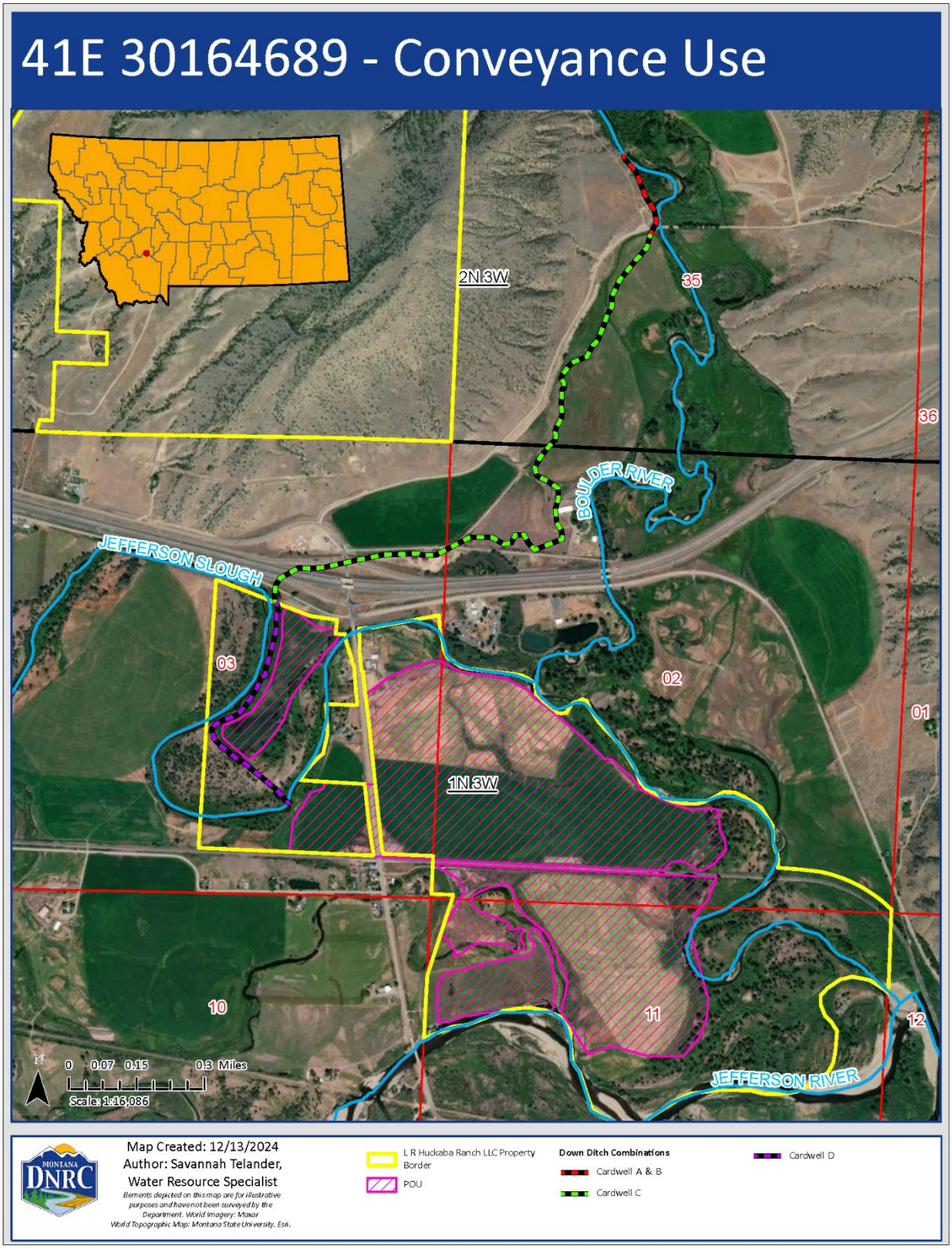


Figure 2. Cardwell Ditch Conveyance Use Map of Down-Ditch Combinations

20. Using ditch measurements provided by the Applicant during the Preapplication Meeting October 17, 2024, and third-party water right information found in water right files, seen in Table 5, the Department calculated conveyance losses for each down-ditch combination and the water rights proposed for change. Conveyance losses for the water rights included in this Change Application were distributed using the Department's memorandum "Distributing Conveyance Loss on Multiple User Ditches" (Heffner, 2020) and ARM 36.12.1902(10). The historical conveyance loss volume is equal to the sum of the historical seepage loss, vegetation loss, and ditch evaporation volumes. Conveyance loss volumes per down-ditch combination are provided below in Table 6 and the conveyance loss volumes per each water right in the Cardwell ditch are provided below in Table 7. The following equations were used to calculate conveyance loss volumes:

$$Ditch\ Combo\ Conveyance\ Losses_{Total} = Seepage\ Loss_{combo} + Vegetation\ Loss_{combo} + Evaporation\ Loss_{combo}$$

$$Seepage\ Loss_{combo} = (Wetted\ Perimeter_{combo} * Ditch\ Length_{combo} * Ditch\ Loss\ Rate * Days\ Diverted_{combo}) * \frac{1\ acre}{43560 ft^2}$$

$$Distributed\ Vegetation\ Loss_{combo} = 0.75\%\ loss\ per\ mile * \frac{Ditch\ Length_{combo}}{5280\ miles} * Flow\ Rate_{combo} * Days\ Diverted_{combo} * 2$$

$$Distributed\ Ditch\ Evaporation\ Loss_{combo} = (Surface\ Area * Adjusted\ Net\ Evaporation_{combo}) * \frac{1\ acre}{43560 ft^2}$$

$$Adjusted\ Net\ Evaporation_{combo} = Period\ of\ Diversion\ Net\ Evaporation * \frac{Days\ Irrigated}{365}$$

$$Surface\ Area = (Wetted\ Width\ ft) * Ditch\ Length_{combo}$$

$$Ditch\ Combo\ Conveyance\ Losses_{Water\ Right} = Ditch\ Combo\ Conveyance\ Losses_{Total} * Combo\ Flow\ Proportion_{Water\ Right}$$

$$Combo\ Flow\ Proportion_{Water\ Right} = Water\ Right\ Flow\ Rate_{ditch} * Ditch\ Combo\ Total\ Flow\ Rate$$

Table 6. Conveyance loss volumes for each down-ditch combination

Down-Ditch Combination	Length (ft)	Flow Rate (CFS)	Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate (ft3/ft/day)	Days Irrigated	Adj. Net Evap (in)	Seepage Loss (AF)	Vegetation Loss (AF)	Evaporative Loss (AF)	Total Conveyance Loss (AF)
Cardwell A	1055	39.23	4	9.59	1.2	145	13.86	40.41	17.05	0.11	57.57
Cardwell B	1055	34.11	4	9.59	1.2	53	8.88	14.77	5.42	0.07	20.26
Cardwell C	7886	34.11	4	9.59	1.2	198	22.74	412.51	151.31	1.37	565.19
Cardwell D	3089	34.11	4	9.59	1.2	198	22.48	161.58	59.27	0.53	221.38
Total								629.28	233.04	2.09	**864.41**

Table 7. Conveyance Loss Volume for Water Rights in Cardwell Ditch

Water Right	Down-Ditch Combination	Total Flow Rate (CFS)	Water Right Flow Rate (CFS)	Proportion	Down-Ditch Combination Conveyance Loss (AF)	Water Right Conveyance Loss (AF)	Water Right Total Conveyance Loss (AF)
41E 3406-00	Cardwell A	39.23	11.37	0.29	57.57	16.69	285.63
	Cardwell B	34.11	11.37	0.33	20.26	6.75	
	Cardwell C	34.11	11.37	0.33	565.19	188.4	
	Cardwell D	34.11	11.37	0.33	221.38	73.79	
41E 3407-00	Cardwell A	39.23	11.37	0.29	57.57	16.69	285.63
	Cardwell B	34.11	11.37	0.33	20.26	6.75	
	Cardwell C	34.11	11.37	0.33	565.19	188.4	
	Cardwell D	34.11	11.37	0.33	221.38	73.79	
41E 3408-00	Cardwell A	39.23	11.37	0.29	57.57	16.69	285.63
	Cardwell B	34.11	11.37	0.33	20.26	6.75	
	Cardwell C	34.11	11.37	0.33	565.19	188.4	
	Cardwell D	34.11	11.37	0.33	221.38	73.79	
41E 143433-00[5]	Cardwell A	39.23	5.12	0.13	57.57	7.51	7.51
Total						**864.41**	**864.41**

21. The Department finds the following historical use for Statements of Claims 41E 3407-00 and 41E 3408-00, as shown in Table 8.

Table 8. Summary of Historical Use of 41E 3407-00 and 41E 3408-00

Water Right	Purpose	Maximum Historical Acres	Priority Date	Point of Diversion	Place of Use	Maximum Flow Rate (CFS)	Consumed Volume (AF)	Diverted Volume (AF)
41E 3407-00	Irrigation	300	1886.12.31	NWSENW Section 35 T2N R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11 T1N R3W, Jefferson County	11.37	104.19	632.92
41E 3408-00	Irrigation	300	1888.12.31	NWSENW Section 35 T2N R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11 T1N R3W, Jefferson County	11.37	104.19	632.92
Total						**22.74**	**208.38**	**1265.84**

ADVERSE EFFECT

FINDINGS OF FACT

22. The Applicant proposes to change the POD for Statements of Claim 41E 3407-00 and 41E 3408-00. No changes in POU or purpose are proposed, and these water rights do not involve a place of storage. The historical POD and Cardwell Ditch will no longer be used by these water rights as a result of this change.

23. The proposed PODs are three pump sites located in NENWSW Section 2, NENWSE Section 3, and NWNWNE Section 11, all within T1N, R3W, Jefferson County. The proposed pump sites are approximately 1.21 and 1.74 miles downstream of the historical POD and 0.67 miles upstream of the Boulder River and Jefferson Slough confluence, all on the Jefferson Slough. The Applicant provided information regarding Cardwell Ditch diversion dam that is proposed to be removed in a Montana Trout Unlimited restoration project for ecological uplift in the Boulder and Jefferson Rivers. The current diversion dam has a fish ladder, but is frequently clogged with debris making it inaccessible for spawning. Due to the age of the infrastructure, the diversion dam and headgate have been increasingly difficult to operate. Water claimed under Claims 41E 3407-00 and 41E 3408-00 is proposed to continue downstream in the Boulder River into the Jefferson Slough. Boulder River and Jefferson Slough water will then be pumped by the three pump sites on the Applicant's property to irrigate the POU.

24. No changes in the POU are proposed, the consumptive use associated with the POU will remain the same as the historical consumed volume of 208.38 AF. The Department calculated the proposed diverted volume for Claims 41E 3407-00 and 41E 3408-00 using the same methodology as the historical diverted volume. The Applicant will continue to use water starting as early as April 1 and stop diversions as late as October 30 with two seven day pauses for cutting.

25. The Applicant proposes to change the POD from a headgate to three pump sites for Statements of Claim 41E 3407-00 and 41E 3408-00. The proposed PODs will pump Boulder River and Jefferson Slough water into a pipeline conveyance system to irrigate the 300-acre POU. No conveyance loss is associated with the proposed PODs. The proposed diverted volume of Claims 41E 3407-00 and 41E 3408-00 is equal to the historical applied volume of 694.58 AF (Table 3), 571.26 AF less than historically diverted.

26. The Applicant proposes to use a total flow rate of 4.52 CFS for 300 acres of irrigation from April 1 to October 30. Based on the pump information provided by the irrigation system installer in the deficiency letter response dated May 9, 2025, the total maximum pump capacity is 4.52

CFS. The proposed pump in NENWSW Section 2, T1N, R3W, Jefferson County, is a 15 horsepower pump that has a capacity of 2.67 CFS. The proposed pump in NENWSE Section 3, T1N, R3W, Jefferson County, is a General Electric 60 horsepower pump that has a capacity of 0.68 CFS. The proposed pump in NWNWNE Section 11, T1N, R3W, Jefferson County, is a Nedic Motor Company 50 horsepower pump that has a capacity of 1.16 CFS. The proposed irrigation system pump sites have the capability of pumping up to 4.52 CFS. Based on the pipeline specifications provided in the deficiency letter response dated May 9, 2025, the combined total pipeline capacity for the whole irrigation system is 2.83 CFS. The pipeline system does not have an equal carrying capacity as the proposed pumps. The Applicant further explains that two of the three pumps have been installed, and are capable of irrigating the POU as needed. The Applicant proposes to operate the proposed PODs the same as the historical POD and divert water from April 1 to October 30 with two seven day pauses for cutting. A water measurement condition required by the Department until notice of project completion will determine the proposed project's perfected flow rate needed for the Change Authorization.

27. No change in purpose or POU is proposed and return flows from irrigation of 300 acres will continue to accrue to the Jefferson Slough as it did historically. Per the Department's return flow policy, a quantification of the monthly volume returning to the hydraulically connected surface water was not conducted.

28. Claims 41E 3407-00 and 41E 3408-00 have historically utilized a pump on the Jefferson Slough in NESWSE Section 3, T1N, R3W, Jefferson County, as a secondary POD to irrigate the POU south of the Jefferson Slough. During the Preliminary Decree, this secondary POD was decreed onto the claims. The proposed POD in Section 3, T1N, R3W, Jefferson County, is approximately 0.23 miles downstream of the historical secondary POD decreed on Statements of Claim 41E 3407-00 and 41E 3408-00, on the Jefferson Slough. Additionally, the POD in Section 3, T1N, R3W, Jefferson County, is 0.67 miles upstream of the Boulder River and the Jefferson Slough confluence. Historically and under the proposed Change Application, Boulder River return flows claimed under Claims 41E 3407-00 and 41E 3408-00 have and will continue to accrue in the Jefferson Slough within the stretch where the Section 3 proposed POD is located. There are no intervening water rights diverting from the Jefferson Slough within the reach between the proposed POD in NENWSE Section 3 T1N, R3W, Jefferson County, and the confluence of the Jefferson Slough and Jefferson River.

29. Three third-party water rights, 41E 143433-00, 41E 143436-00, and 41E 143437-00, in the Cardwell Ditch are not included in this Change Application and are owned by Golden Sunlight

Mine Inc. Kristi Murphy, manager of Golden Sunlight Mine Inc, addressed a letter to the Department that acknowledges the water decrease in the Cardwell Ditch proposed in this Change Application. Murphy further states, that Golden Sunlight Mine Inc is supportive of the Applicant's proposed change and is preparing their own application for a change to their water rights to eliminate the need from the Cardwell Ditch diversion.

30. Two intervening water rights between the historical and proposed PODs, were identified by the Department. One irrigation water right (41E 143434-00) diverts from the Boulder River downstream at headgate in NWNWNE Section 2, T1N, R3W, Jefferson County. One Water Reservation (41E 30017424) owned by Montana Department of Fish, Wildlife & Parks on the Boulder River from Cold Spring to the confluence with the Jefferson Slough. There are no water rights on the Jefferson Slough between the proposed POD in NENWSE Section 3, T1N, R3W, Jefferson County, and the Jefferson Slough and Jefferson River confluence.

31. In the proposed change, Boulder River water historically diverted by the Cardwell Ditch, will continue down the source into the Jefferson Slough, where it will then be pumped for irrigation use under Claims 41E 3407-00 and 41E 3408-00. When Claims 41E 3407-00 and 41E 3408-00 are in use, the proposed pumps (PODs) will operate at a lower flow rate and require a lower diverted volume, 571.26 AF less than historically diverted. Water pumped from the Jefferson Slough upstream of the confluence, will be immediately replaced with Boulder River water via return flows from irrigation practices and at the confluence of the Boulder River and the Jefferson Slough. In the proposed change there will be more Boulder River water left instream between the historical POD and the Jefferson Slough, Jefferson River confluence, and will not create an adverse effect on other Boulder River, or Jefferson River users. No change in return flows will occur.

32. The Department finds there will be no adverse effect from the proposed change under the terms and conditions set out in this Preliminary Determination.

BENEFICIAL USE

FINDINGS OF FACT

33. The Applicant proposes to use water for irrigation, which is a recognized beneficial use of water in the State of Montana. The Applicant also provided evidence of the necessity for the change in POD due to stream restoration and inoperable infrastructure of the historical diversion dam and headgate. Per Montana Trout Unlimited, debris build up within the diversion dam has negatively affected fish spawning and habitat. The age of the diversion structure has also caused

difficulties in operation. The proposed project will improve fish habitat and allow the Applicant to continue irrigation of 300 acres.

34. The Applicant proposed to use the 694.58 AF diverted volume and 4.52 CFS flow rate for continued irrigation of the 300-acre historical POU. The volume amount is determined by the Department's standards found in ARM 36.12.1902 for calculating consumptive and diverted volume for irrigation of 300 acres.

35. The Department finds the proposed 4.52 CFS and 694.58 AF diverted volume for irrigation purpose to be a beneficial use of water.

ADEQUATE DIVERSION

FINDINGS OF FACT

36. The Applicant proposes to change the POD to three pump sites to Statements of Claim 41E 3407-00 and 41E 3408-00. The proposed pumps will be located on the Applicant's property in NENWSW Section 2, NENWSE Section 3, and NWNWNE Section 11, all within T1N, R3W, Jefferson County. Boulder River water will convey through the Boulder River and Jefferson Slough where it will be diverted via two pump sites on the Applicant's property. The third pump site will be upstream of the Boulder River Jefferson Slough confluence, on the Applicant's property, pumping Jefferson Slough water. The proposed pumps are General Electric 60 horsepower pump capable of pumping 2.67 CFS, a 15 horsepower pump capable of pumping 0.77 CFS, and Nidec Motor capable of pumping 1.16 CFS. The cumulative flow rate for the proposed pumps is 2027 GPM or 4.52 CFS. The proposed pump sites allow the Applicant to divert water for the irrigation purpose.

37. The Department finds this diversion infrastructure to be adequate for the proposed irrigation. This Change Application will be subject to a condition in order to fulfill the adequacy of diversion criteria.

This Change Application will be subject to the following condition to fulfill the adequacy of diversion criteria:

WATER MEASUREMENT INFORMATION

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED WATER USE MEASURING DEVICE AT THE POINTS APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A

WRITTEN DAILY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED INCLUDING THE PERIOD OF OPERATION. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR UPON PROJECT COMPLETION AND UPON REQUEST THEREAFTER. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THE AUTHROIZATION. THE RECORDS MUST BE SENT TO THE HELENA DNRC WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

ISSUES RAISED BY PUBLIC COMMENT AND DEPARTMENT'S RESPONSE

38. The Department considered one comment on the adequate diversion criterion that raised concern about the water measurement condition.

39. Issue: Commentor raised concern regarding the frequency of the measurements for each point of diversion required in the water measurement condition being too high. Commentor also states that the Applicant provided pump information showing the proposed pumps (PODs) capacity adequate for the proposed project and will not exceed historical use. (Commentor: Trout Unlimited, Patrick Byroth)

40. Response: As described in FOF 26, the pipeline system does not have an equal carrying capacity as the proposed pumps (PODs). A water measurement condition is required by the Department until a Notice of Project Completion is filed to determine the pipeline system carrying capacity, confirming the flow rate needed for the Change Authorization. Once the Change Authorization flow rate is perfected, water measurements will be required upon request of the Department thereafter. The information supplied by the commenter fails to provide sufficient substantive information to demonstrate that the adequate diversion criterion was inadequately addressed and the Department will neither reevaluate the criterion nor modify the condition.

POSSESSORY INTEREST

FINDINGS OF FACT

41. The Applicant signed the affidavit on the Application form affirming the Applicant has possessory interest, or the written consent of the person with possessory interest, in the property where the water is to be put to beneficial use. See Department file 41E 30164689.

CONCLUSIONS OF LAW

HISTORICAL USE AND ADVERSE EFFECT

42. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one may change only that to which he or she has the right based upon beneficial use. A change to an existing water right may not expand the consumptive use of the underlying right or remove the well-established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. *McDonald v. State*, 220 Mont. 519, 530, 722 P.2d 598, 605 (1986) (beneficial use constitutes the basis, measure, and limit of a water right); *Featherman v. Hennessy*, 43 Mont. 310, 316-17, 115 P. 983, 986 (1911) (increased consumption associated with expanded use of underlying right amounted to new appropriation rather than change in use); *Quigley v. McIntosh*, 110 Mont. 495, 103 P.2d 1067, 1072-74 (1940) (appropriator may not expand a water right through the guise of a change – expanded use constitutes a new use with a new priority date junior to intervening water uses); *Allen v. Petrick*, 69 Mont. 373, 222 P. 451(1924) ("quantity of water which may be claimed lawfully under a prior appropriation is limited to that quantity within the amount claimed which the appropriator has needed, and which within a reasonable time he has actually and economically applied to a beneficial use. . . . it may be said that the principle of beneficial use is the one of paramount importance . . . The appropriator does not own the water. He has a right of ownership in its use only"); *Town of Manhattan*, ¶ 10 (an appropriator's right only attaches to the amount of water actually taken and beneficially applied).[6]

43. Sections 85-2-401(1) and -402(2)(a), MCA, codify the prior appropriation principles that Montana appropriators have a vested right to maintain surface and ground water conditions substantially as they existed at the time of their appropriation; subsequent appropriators may insist that prior appropriators confine their use to what was actually appropriated or necessary for their originally intended purpose of use; and, an appropriator may not change or alter its use in a manner that adversely affects another water user. *Spokane Ranch & Water Co. v. Beatty*, 37 Mont. 342, 96 P. 727, 731 (1908); *Quigley*, 110 Mont. at 505-11,103 P.2d at 1072-74; *Matter of*

[6] DNRC decisions are available at: https://dnrc.mt.gov/Directors-Office/HearingOrders

Royston, 249 Mont. at 429, 816 P.2d at 1057; *Hohenlohe*, ¶¶ 43-45.[7]

44. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the "historic use" of the water right being changed. *Town of Manhattan*, ¶10 (recognizing that the Department's obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change Applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a statement of claim, permit, or decree may not include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.[8] A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. *Quigley*, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right); *Royston*, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record could not sustain a conclusion of no adverse effect because the Applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); *Hohenlohe*, ¶ 44-45; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); Matter of Application For Beneficial Water Use Permit By City of Bozeman, *Memorandum*, Pgs. 8-22 (Adopted by DNRC *Final Order* January 9,1985)(evidence of historic use must be compared to the proposed

[7] *See also Holmstrom Land Co., Inc., v. Newlan Creek Water District*,185 Mont. 409, 605 P.2d 1060 (1979); *Lokowich v. Helena*, 46 Mont. 575, 129 P. 1063 (1913); *Thompson v. Harvey*, 164 Mont. 133, 519 P.2d 963 (1974) (plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); *McIntosh v. Graveley*, 159 Mont. 72, 495 P.2d 186 (1972) (appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); *Head v. Hale*, 38 Mont. 302, 100 P. 222 (1909) (successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); and, *Gassert v. Noyes*, 18 Mont. 216, 44 P. 959 (1896) (change in place of use was unlawful where reduced the amount of water in the source of supply available which was subject to plaintiff's subsequent right).

[8] A claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The claim does not constitute *prima facie* evidence of historical use in a change proceeding under § 85-2-402, MCA. For example, most water rights decreed for irrigation are not decreed with a volume and provide limited evidence of actual historic beneficial use. Section 85-2-234, MCA

change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).[9]

45. An Applicant must also analyze the extent to which a proposed change may alter historic return flows for purposes of establishing that the proposed change will not result in adverse effect. The requisite return flow analysis reflects the fundamental tenant of Montana water law that once water leaves the control of the original appropriator, the original appropriator has no right to its use and the water is subject to appropriation by others. *E.g., Hohenlohe*, ¶ 44; *Rock Creek Ditch & Flume Co. v. Miller*, 93 Mont. 248, 17 P.2d 1074, 1077 (1933); *Newton v. Weiler*, 87 Mont. 164, 286 P. 133 (1930); *Popham v. Holloron*, 84 Mont. 442, 275 P. 1099, 1102 (1929); *Galiger v. McNulty*, 80 Mont. 339, 260 P. 401 (1927); *Head v. Hale*, 38 Mont. 302, 100 P. 222 (1909); *Spokane Ranch & Water Co.*, 37 Mont. at 351-52, 96 P. at 731; *Hidden Hollow Ranch v. Fields*, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; ARM 36.12.101(56) (Return flow - that part of a diverted flow which is not consumed by the appropriator and returns underground to its original source or another source of water - is not part of a water right and is subject to appropriation by

[9] Other western states likewise rely upon the doctrine of historic use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District, 717 P.2d 955, 959 (Colo. 1986)("[O]nce an appropriator exercises his or her privilege to change a water right … the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right … which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right."); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo.,1999); Farmers Reservoir and Irr. Co. v. City of Golden, 44 P.3d 241, 245 (Colo. 2002)("We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation); Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (When an owner of a water right wishes to change a water right … he shall file a petition requesting permission to make such a change …. The change … may be allowed provided that the quantity of water transferred … shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.); Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 -566 (Wyo,1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.)

subsequent water users).[10]

46. Although the level of analysis may vary, analysis of the extent to which a proposed change may alter the amount, location, or timing return flows is critical in order to prove that the proposed change will not adversely affect other appropriators who rely on those return flows as part of the source of supply for their water rights. *Royston*, 249 Mont. at 431, 816 P.2d at 1059-60; *Hohenlohe*, at ¶¶ 45-46 and 55-6; *Spokane Ranch & Water Co.*, 37 Mont. at 351-52, 96 P. at 731.

47. In *Royston*, the Montana Supreme Court confirmed that an Applicant is required to prove lack of adverse effect through comparison of the proposed change to the historic use, historic consumption, and historic return flows of the original right. 249 Mont. at 431, 816 P.2d at 1059-60. More recently, the Montana Supreme Court explained the relationship between the fundamental principles of historic beneficial use, return flow, and the rights of subsequent appropriators as they relate to the adverse effect analysis in a change proceeding in the following manner:

> The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the "amount historically consumed" and the water that re-enters the stream as return flow. . . .
> An appropriator historically has been entitled to the greatest quantity of water he can put to use. The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. This limitation springs from a fundamental tenet of western water law-that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator "is entitled to have the water flow in the same manner as when he located," and the appropriator may insist that prior appropriators do not affect adversely his rights.
> This fundamental rule of Montana water law has dictated the Department's determinations in numerous prior change proceedings. The Department claims that historic consumptive use, as quantified in part by return flow analysis, represents a key element of proving historic beneficial use.
> We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe, at ¶¶ 42-45 (internal citations omitted).

[10] The Montana Supreme Court recently recognized the fundamental nature of return flows to Montana's water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell's flows are fed by irrigation return flows available for appropriation. *Bitterroot River Protective Ass'n, Inc. v. Bitterroot Conservation Dist.*, 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, 198 P.3d 219,(*citing Hidden Hollow Ranch v. Fields*, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

48. The Department's rules reflect the above fundamental principles of Montana water law and are designed to itemize the type evidence and analysis required for an Applicant to meet its burden of proof. ARM 36.12.1901 through 1903. These rules forth specific evidence and analysis required to establish the parameters of historic use of the water right being changed. ARM 36.12.1901 and 1902. The rules also outline the analysis required to establish a lack of adverse effect based upon a comparison of historic use of the water rights being changed to the proposed use under the changed conditions along with evaluation of the potential impacts of the change on other water users caused by changes in the amount, timing, or location of historic diversions and return flows. ARM 36.12.1901 and 1903.

49. Applicant seeks to change existing water rights represented by its Water Right Claims. The "existing water rights" in this case are those as they existed prior to July 1, 1973, because with limited exception, no changes could have been made to those rights after that date without the Department's approval. Analysis of adverse effect in a change to an "existing water right" requires evaluation of what the water right looked like and how it was exercised prior to July 1, 1973. In *McDonald v. State*, the Montana Supreme Court explained:

> The foregoing cases and many others serve to illustrate that what is preserved to owners of appropriated or decreed water rights by the provision of the 1972 Constitution is what the law has always contemplated in this state as the extent of a water right: such amount of water as, by pattern of use and means of use, the owners or their predecessors put to beneficial use. . . . the Water Use Act contemplates that all water rights, regardless of prior statements or claims as to amount, must nevertheless, to be recognized, pass the test of historical, unabandoned beneficial use. . . . To that extent only the 1972 constitutional recognition of water rights is effective and will be sustained.

220 Mont. at 529, 722 P.2d at 604; *see also Matter of Clark Fork River Drainage Area*, 254 Mont. 11, 17, 833 P.2d 1120 (1992).

50. Water Resources Surveys were authorized by the 1939 legislature. 1939 Mont. Laws Ch. 185, § 5. Since their completion, Water Resources Surveys have been invaluable evidence in water right disputes and have long been relied on by Montana courts. *In re Adjudication of Existing Rights to Use of All Water in North End Subbasin of Bitterroot River Drainage Area in Ravalli and Missoula Counties*, 295 Mont. 447, 453, 984 P.2d 151, 155 (1999) (Water Resources Survey used as evidence in adjudicating of water rights); *Wareing v. Schreckendgust*, 280 Mont. 196, 213, 930 P.2d 37, 47 (1996) (Water Resources Survey used as evidence in a prescriptive ditch easement case); *Olsen v. McQueary*, 212 Mont. 173, 180, 687 P.2d 712, 716 (1984) (judicial notice taken of Water Resources Survey in water right dispute concerning branches of a creek).

51. While evidence may be provided that a particular parcel was irrigated, the actual amount of water historically diverted and consumed is critical. *E.g., In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, DNRC Proposal for Decision adopted by Final Order (2005). The Department cannot assume that a parcel received the full duty of water or that it received sufficient water to constitute full-service irrigation for optimum plant growth. Even when it seems clear that no other rights could be affected solely by a particular change in the location of diversion, it is essential that the change also not enlarge an existing right. *See MacDonald*, 220 Mont. at 529, 722 P.2d at 604; *Featherman*, 43 Mont. at 316-17, 115 P. at 986; *Trail's End Ranch, L.L.C. v. Colorado Div. of Water Resources*, 91 P.3d 1058, 1063 (Colo., 2004).

52. The Department has adopted a rule providing for the calculation of historic consumptive use where the Applicant proves by a preponderance of the evidence that the acreage was historically irrigated. ARM 36.12.1902(16). In the alternative an Applicant may present its own evidence of historic beneficial use. In this case Applicant has elected to proceed under ARM 36.12.1902. (FOF No.15-16).

53. If an Applicant seeks more than the historic consumptive use as calculated by ARM 36.12.1902(16), the Applicant bears the burden of proof to demonstrate the amount of historic consumptive use by a preponderance of the evidence. The actual historic use of water could be less than the optimum utilization represented by the calculated duty of water in any particular case. *E.g., Application for Water Rights in Rio Grande County*, 53 P.3d 1165 (Colo., 2002) (historical use must be quantified to ensure no enlargement); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*; *Orr v. Arapahoe Water and Sanitation Dist.*, 753 P.2d 1217, 1223-1224 (Colo., 1988) (historical use of a water right could very well be less than the duty of water); *Weibert v. Rothe Bros., Inc.,* 200 Colo. 310, 317, 618 P.2d 1367, 1371 - 1372 (Colo. 1980) (historical use could be less than the optimum utilization "duty of water").

54. Based upon the Applicant's evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of 41E 3407-00 to be a diverted volume of 632.92 AF, a historically consumed volume of 104.19 AF, and flow rate of 11.37 CFS. Based upon the Applicant's evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of 41E 3408-00 to be a diverted volume of 632.92 AF, a historically consumed volume of 104.19 AF, and flow rate of 11.37 CFS. (FOF Nos. 9-21)

55. Based upon the Applicant's comparative analysis of historic water use and return flows to water use and return flows under the proposed change, the Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights

of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. Section 85-2-402(2)(a), MCA. (FOF Nos. 22-32)

BENEFICIAL USE

56. A change Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. Sections 85-2-102(4) and -402(2)(c), MCA. Beneficial use is and has always been the hallmark of a valid Montana water right: "[T]he amount actually needed for beneficial use within the appropriation will be the basis, measure, and the limit of all water rights in Montana . . ." McDonald, 220 Mont. at 532, 722 P.2d at 606. The analysis of the beneficial use criterion is the same for change authorizations under §85-2-402, MCA, and new beneficial permits under §85-2-311, MCA. ARM 36.12.1801. The amount of water that may be authorized for change is limited to the amount of water necessary to sustain the beneficial use. *E.g., Bitterroot River Protective Association v. Siebel, Order on Petition for Judicial Review*, Cause No. BDV-2002-519 (Mont. 1st Jud. Dist. Ct.) (2003) (*affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518); *Worden v. Alexander*, 108 Mont. 208, 90 P.2d 160 (1939); *Allen v. Petrick*, 69 Mont. 373, 222 P. 451(1924); *Sitz Ranch v. DNRC*, DV-10-13390,, *Order Affirming DNRC Decision*, Pg. 3 (Mont. 5th Jud. Dist. Ct.) (2011) (citing *BRPA v. Siebel*, 2005 MT 60, and rejecting Applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet); *Toohey v. Campbell*, 24 Mont. 13, 60 P. 396 (1900) ("The policy of the law is to prevent a person from acquiring exclusive control of a stream, or any part thereof, not for present and actual beneficial use, but for mere future speculative profit or advantage, without regard to existing or contemplated beneficial uses. He is restricted in the amount that he can appropriate to the quantity needed for such beneficial purposes."); § 85-2-312(1)(a), MCA (DNRC is statutorily prohibited from issuing a permit for more water than can be beneficially used).

57. Applicant proposes to use water for irrigation which is a recognized beneficial use. Section 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence irrigation is a beneficial use and that 694.58 AF of diverted volume and 22.74 CFS flow rate of water requested is the amount needed to sustain the beneficial. Section 85-2-402(2)(c), MCA (FOF Nos. 33-35).

ADEQUATE MEANS OF DIVERSION

58. Pursuant to § 85-2-402 (2)(b), MCA, the Applicant must prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate. This codifies the prior appropriation principle that the means of diversion

must be reasonably effective for the contemplated use and may not result in a waste of the resource. *Crowley v. 6th Judicial District Court*, 108 Mont. 89, 88 P.2d 23 (1939*); In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC* (DNRC Final Order 2002) (information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies based upon project complexity; design by licensed engineer adequate).

59. Pursuant to § 85-2-402 (2)(b), MCA, Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. (FOF Nos. 36-40)

POSSESSORY INTEREST

60. Pursuant to § 85-2-402(2)(d), MCA, the Applicant must prove by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. See also ARM 36.12.1802.

61. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. (FOF Nos. 41).

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 41E 30164689 should be GRANTED subject to the following.

The Applicant is authorized to divert Statements of Claim 41E 3407-00 and 41E 3408-00 from three pump sites in the NENWSW Section 2, NENWSE Section 3, and NWNWNE Section 11, T1N, R3W, Jefferson County. Under Change Application 41E 30164689, the Applicant may divert a maximum volume of 347.29 AF under 41E 3407-00 and a max volume of 347.29 AF under 41E 3408-00, a total of 694.58 AF. The maximum consumed volume for 41E 3407-00 is 104.19 AF and the maximum consumed volume for 41E 3408-00 is 104.19 AF, a total of 208.38 AF. Claims 41E 3407-00 and 41E 3408-00 are authorized to divert water at a flow rate of 4.52 CFS from April 1 to October 30 for irrigation of 300 acres in SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, all within T1N, R3W, Jefferson County.

This Application is subject to the following condition:

WATER MEASUREMENT INFORMATION

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED WATER USE MEASURING DEVICE AT THE POINTS APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN DAILY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED INCLUDING THE PERIOD OF OPERATION. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR UPON PROJECT COMPLETION AND UPON REQUEST THEREAFTER. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THE AUTHROIZATION. THE RECORDS MUST BE SENT TO THE HELENA DNRC WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

NOTICE

The Department will provide a notice of this Application and the Department's Preliminary Determination to Grant pursuant to § 85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§ 85-2-307, and -308, MCA. If this application receives a valid objection, it will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If this application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this application as herein approved. If this application receives a valid objection(s) and the valid objection(s) are conditionally withdrawn, the Department will consider the proposed condition(s) and grant the application with such conditions as the Department determines necessary to satisfy the applicable criteria, pursuant to sections 85-2-310, -312, MCA.

Only a person who has exhausted his or her administrative remedies available within the agency and is aggrieved by a final order of the Department is entitled to judicial review under Montana Administrative Procedure Act (§ 2-4-702, MCA).

DATED 23rd of October 2025.

Jennifer Daly, Manager
Helena Regional Office
Montana Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 23rd of October, 2025, by first class United States mail.

LR HUCKABA RANCH INC
26 MT HIGHWAY 356
CARDWELL, MT 59271

ALLISON PARDIS (TROUT UNLIMITED)
allison.pardis@TU.org

CHRIS EDGINGTON (TROUT UNLIMITED)
chris@montanatu.org

HELENA Regional Office, (406) 444-6999

Helena Regional Office
1424 Ninth Avenue P.O. Box 201601
Helena, MT 59620-1601
406-444-6999

10/23/2025

LR Huckaba Ranch Inc
26 MT Highway 356
Cardwell, MT 59271

Subject: Preliminary Determination to GRANT Water Right Change Application No. 41E 30164689

Dear Applicant,

The Department of Natural Resources and Conservation (Department or DNRC) has received and considered public comments pursuant to §85-2-307(5), MCA on the following aspects of the Department's Draft Preliminary Determination for your Application:

- ❑ Adequate Diversion

The Department has reviewed the public comments. Following consideration of the public comments for our evaluation of the criteria for issuance of change authorization found in [§85-2-311/ §85-2-402], MCA, the Department has preliminarily determined that the criteria are met, and this application should be granted. A copy of the Preliminary Determination to Grant your Application is attached.

The Department will prepare a notice of opportunity to object to the Application based on issues identified in the public comment(s), pursuant to §85-2-308, MCA. If no valid objections are received within the objection period, the Department will issue the PD as final pursuant to §85-2-307(5)(c), MCA.

If valid objections are received, the Department will schedule a contested case hearing no more than 90 days after the objection filing deadline, per §85-2-309(1), MCA.

Please let me know if you have any questions.

Best,

Savannah Telander
Water Resources Specialist
406-444-6810
Savannah.Telander@mt.gov

CC:

Chris Edgington, chris@montanatu.org
Alli Pardis, allison.pardis@tu.org

From: Telander, Savannah
To: Allison Pardis; Chris Edgington
Cc: Daly, Jennifer
Subject: Preliminary Determination to Grant Water Right Change Application No. 41E 30164989
Date: Thursday, October 23, 2025 9:57:00 AM
Attachments: image001.png
PD_41E 30164689_Huckaba_10232025.pdf

Greetings,

Attached is the Preliminary Determination to Grant Water Right Change Application No. 41E 30164989 that was sent to the Huckaba's today. The Department is preparing the Application for notice of opportunity to provide public objection.

Let us know if you have any questions.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

Environmental Assessment & Public Notice for Public Comment

- Environmental Assessment & supporting documents
- Public Notice for Public Comment package
  - Notice Area List
  - Notice Area Map
  - Form Checklist
  - PN- Letter to applicant
  - PN- Letter to editor
  - PN- Certificate of service
  - PN- Invoice & tear sheet
  - PN- Return mail
  - Public Comment files

Environmental Assessment & Public Notice for Public Comment

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address:

   LR Huckaba Ranch Inc

   26 MT Highway 356

   Cardwell, MT 59271

2. Type of action: APPLICATION TO CHANGE WATER RIGHT NO 41E 30164689 BY LR HUCKABA RANCH INC

3. Water source name: Boulder River & Jefferson Slough

4. Location affected by project: The Applicant proposed to change the point of diversion (POD) of Statements of Claim 41E 4307-00 and 41E 4308-00. The proposed PODs are three pump sites on Jefferson Slough located in NENWSW Section 2, NENWNE Section 3, and NWNWNE Section 11, T1N, R3W, Jefferson County.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: Applicant submitted Change Application 41E 30164689 on March 6, 2025, to the Helena DNRC Water Resources Office. The Applicant proposed to change the POD of Statements of Claim 41E 4307-00 and 41E 4308-00. There will be no change to place of use, purpose, or place of storage as part of this change. The DNRC shall issue a Change Authorization if the Applicant proves the criteria in 85-2-402 MCA are met.

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already*

dewatered condition.

Determination: No significant impact.

A February 7, 2025, search of DFWP data does not list the stretch of the Boulder River or the Jefferson Slough adjacent to the project as a periodically or chronically dewatered stream. The proposed diverted volume is lower than the historically diverted volume so water quantity in the source will not be decreased as result of the proposed change.

Water quality **-** *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: No significant impact.

The source of the water rights proposed for change is the Boulder River. A February 7, 2025, search on DEQ CWAIC website lists the Boulder River from Cottonwood Creek to the mouth (Jefferson Slough) as an impaired source on the Montana Impaired Waters 2020 list. This stretch of the Boulder River was found to not fully support aquatic life and drinking water. The proposed project is to remove a headgate and diversion dam within this stretch of stream to aid restoration to fishery habitat. The proposed POD will be located downstream of the historical POD and water will continue within this reach of stream for a longer period of time.

Groundwater **-** *Assess if the proposed project impacts ground water quality or supply.*
If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: No significant impact.

The proposed use does not involve a groundwater component.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: No significant impact.

The proposed project involves the installation of three pump diversions to divert Boulder River and Jefferson Slough water into the Applicant's irrigation systems. The historical POD will no longer be operated for irrigation use on the Applicants property. The Application did not report that the addition of the pumps created a barrier or modified flow regime of the Boulder River or Jefferson Slough. The installation of the pumps involves small scale and temporary disturbance to the riparian areas but is not expected to create significant impact on the source.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species **-** *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: No significant impact identified.

A February 10, 2025, search of the Montana Heritage Program's website for Sections 2, 3, and 11, T1N, R3W, Jefferson County returned the following results:

- 20 animal Species of Concern: Northern Leopard Frog, Western Toad, American White Pelican, Bobolink, Brewer's Sparrow, Cassin's Finch, Clark's Nutcracker, Evening Grosbeak, Ferruginous Hawk, Golden Eagle, Gray-crowned Rosy-Finch, Great Blue Heron, Green-tailed Towhee, Loggerhead Shrike, Long-billed Curlew, Pinyon Jay, Trumpeter Swan, Veery, Little Brown Myotis, Northern Hoary Bat
- 5 animal Potential Species of Concern: Common Poorwill, Hooded Merganser, Rufous Hummingbird, North American Porcupine, Silver-haired Bat
- 1 animal Special Status Species: Bald Eagle
- 1 plant Species of Concern: Whitebark Pine
- 1 plant Potential Species of Concern: Nuttall's Linanthus
- 0 plant Special Status Species

The proposed project will not increase the flow rate or volume of diverted water over historical values. The proposed project will move the POD downstream on the Jefferson Slough and has not been reported to impact the flow regime. The proposed diversion has not been reported to create a barrier to the migration or movement of aquatic species. The historical return flow will not change as a result of this change because the place of use is not proposed for change.

Wetlands **-** *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: No significant impact.

A February 10, 2025, search on the National Wetlands Inventory Mappers shows Freshwater Emergent Wetland, Herbaceous Riparian, and Forested/Shrub wetlands along the Jefferson Slough, where the proposed project is located. The proposed pump diversion installation may cause temporary and minor disturbance in the wetland areas but not anticipated to have significant impact.

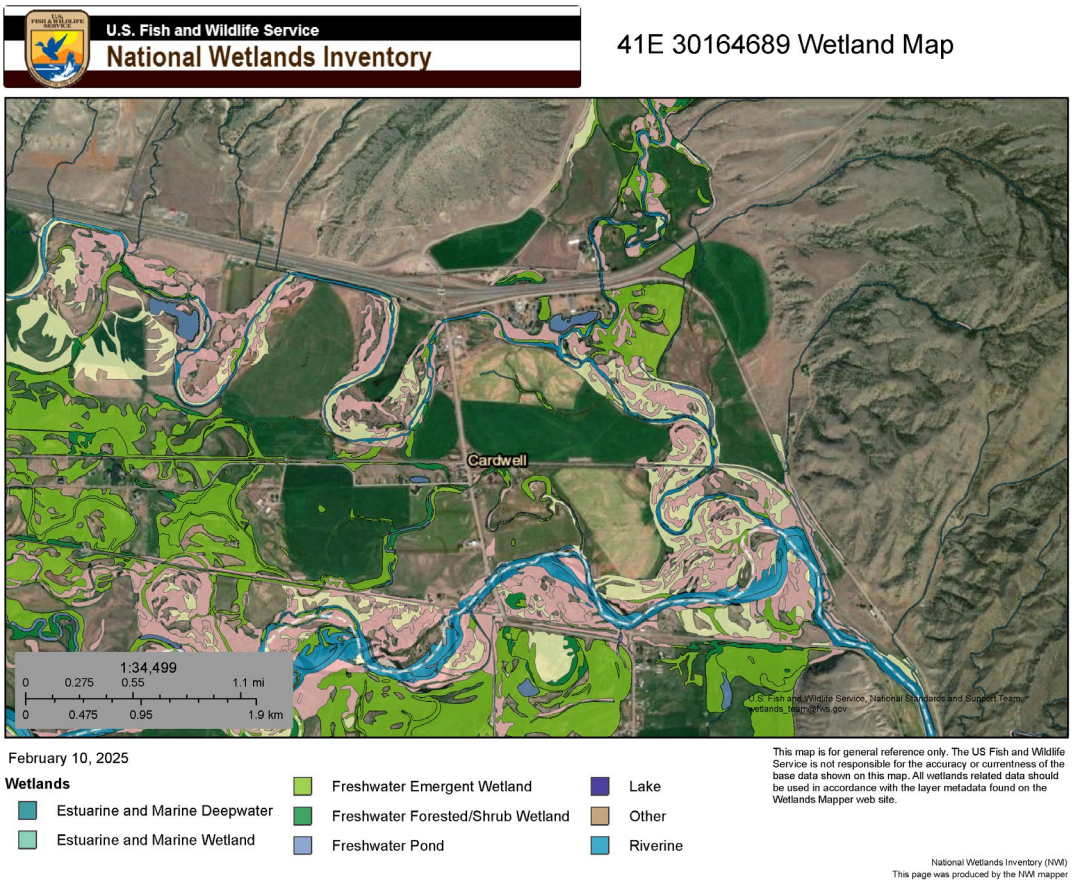


Figure 1. Wetlands surrounding the proposed project area

Ponds *- For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: No significant impact identified.

There are no ponds involved in the proposed project.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: No significant impact identified.

A February 10, 2025, search of the USDA Web Soil Survey identified a low surface salinization risk in the proposed project area. The proposed project is not predicted to increase soil salinization risk. The place of use will continue to be irrigated as it historically was. The proposed pump diversion installation may cause temporary and minor disturbance in the soil but not anticipated to have significant impact.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: No significant impact identified.

The disturbance associated with installing the pump diversions will be minimal and should not promote the establishment of noxious weeds. Under Montana law, private landowners are responsible for noxious weed control on their property.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No significant impact identified.

The proposed project will not impact air quality.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: No significant impact identified.

The proposed project is not located on State or Federal

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No significant impact identified.

No impacts on environmental resources of land, water and energy not already addressed above.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: No significant impact identified.

The proposed project is a Change Authorization proposing to change the POD of multiple Statement of Claims for irrigation use, which is a recognized beneficial use of water within the State of Montana (§85-2-102(5), MCA).

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: No significant impact identified.

The proposed project is to remove the historical POD due to inoperable infrastructure of the historical diversion dam and headgate and to aid stream restoration on the Boulder River. The proposed project will benefit fish populations and recreational fishing activities that occur in the Boulder River. The proposed PODs are located on the Applicant's property and will not impact or improve access to recreational and wilderness activities.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No significant impact identified.

The proposed project will not impact human health.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No_**X**__ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

Determination: No significant impact identified.

The proposed project does not impact government regulations on private property rights.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) Cultural uniqueness and diversity? No significant impact identified.

(*b) Local and state tax base and tax revenues?* No significant impact identified.

(c) Existing land uses? No significant impact identified.

(*d) Quantity and distribution of employment?* No significant impact identified.

(e) Distribution and density of population and housing? No significant impact identified.

(f) *Demands for government services?* No significant impact identified.

(g) *Industrial and commercial activity?* No significant impact identified.

(h) *Utilities?* No significant impact identified.

(i) *Transportation?* No significant impact identified.

(j) *Safety?* No significant impact identified.

(k) *Other appropriate social and economic circumstances?* No significant impact identified.

2. ***Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts: No significant secondary impact identified.

Cumulative Impacts: No significant cumulative impact identified.

3. ***Describe any mitigation/stipulation measures:*** The proposed project does not have mitigation or stipulation measures.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** If the Change Application is not authorized, Boulder River will continue to provide the same water for irrigation and fish habitat opportunities that is currently does. The no action alternative is for the water right owners to continues to divert water for irrigation use, as historically done.

PART III. Conclusion

1. ***Preferred Alternative:*** *The preferred alternative is to grant the Change Application if the Applicant has proven the criteria of §85-2-402, MCA.*

2 ***Comments and Responses***

3. ***Finding:***

*Yes___ No_**X**__ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

The EA is the appropriate level of analysis because the proposed project is to change the POD of Statements of Claim 41E 3407-00 and 41E 3408-00 from a headgate on the Boulder River to three pump sites on the Jefferson Slough. There are no changes to the purpose or the place of use. No significant impacts were identified as defined in ARM 36.2.524.

Name of person(s) responsible for preparation of EA:

Name: Savannah Telander
Title: Water Resources
Specialist *Date*: 7/23/2025

NOTICE AREA

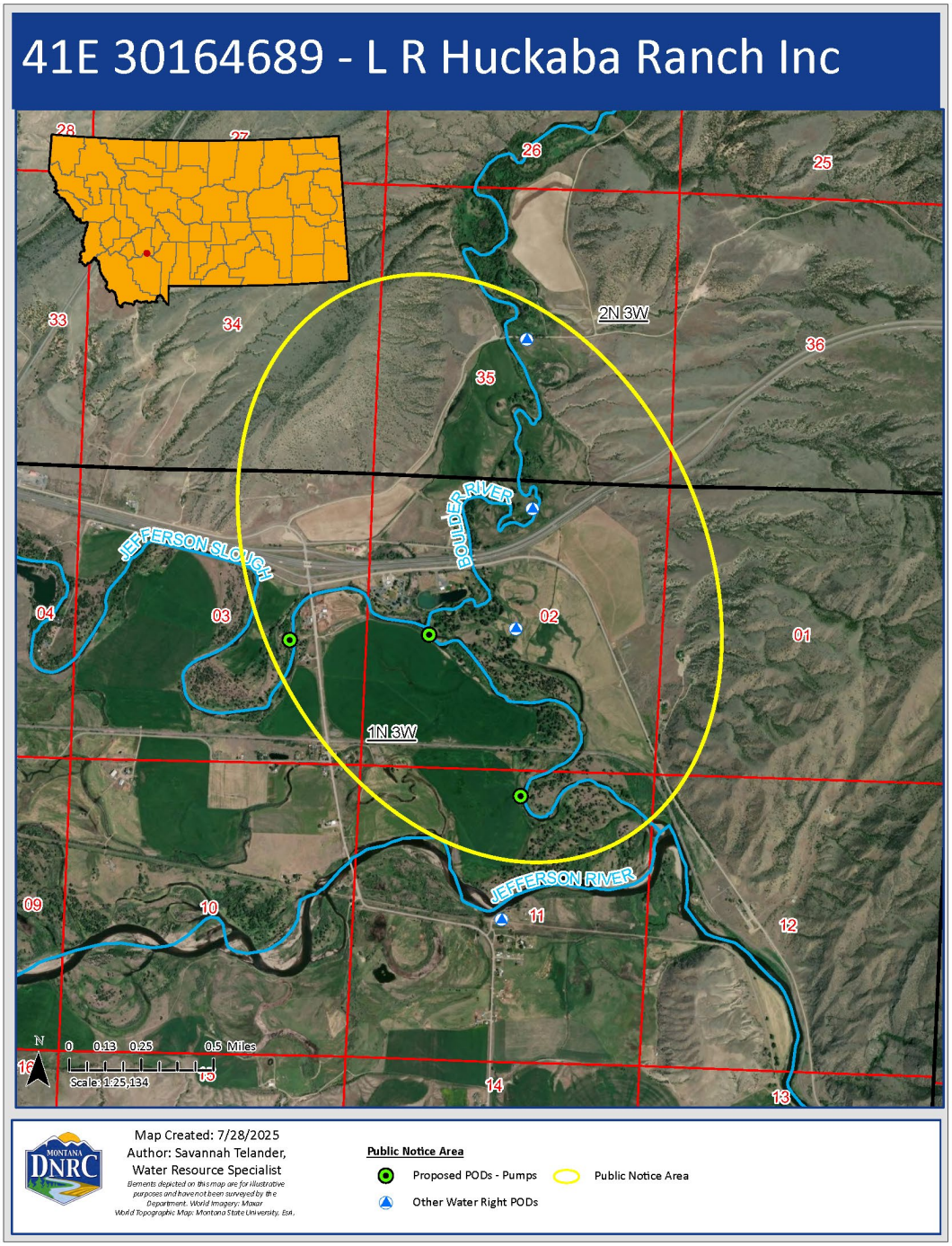
Application No. **41E 30164689** Regional Office # 05

Applicant's Name **L R Huckaba Ranch Inc**

Indian Reservation [ ] Yes [X] No If yes, Reservation _____

Irrigation District [ ] Yes [X] No If yes, District _____

Specialist **Savannah Telander** Date _____



Water Right Owner	Water Right # (Basin, ID, and Number)
Applicant: LR Huckaba Ranch Inc	41E 30164689
Other Water Right Owners:	
GOLDEN SUNLIGHT MINES INC	41E 143434 00
MONTANA, STATE OF DEPT OF FISH WILDLIFE & PARKS	41E 30017424
Helena Regional Office Standards:	
5HLN DEPT OF NATURAL RESOURCES & CONSERVATION	
1BIA BUREAU OF INDIAN AFFAIRS	
1BOR US DEPT OF INTERIOR	
1DSL MONTANA BOARD OF LAND COMMISSIONERS	
1EQC ENVIRONMENTAL QUALITY COUNCIL	
2FWP DEPT OF FISH WILDLIFE AND PARKS	
1NWE NORTHWESTERN ENERGY	
1SCH CANYON FERRY PROJECT OFFICE	
1TUL MT TROUT UNLIMITED	
1WQB DEPT OF ENVIRONMENTAL QUALITY	
2FWP DEPT OF FISH WILDLIFE AND PARKS	
5FWS US FISH AND WILDLIFE SERVICE	
1CFC CLARK FORK COALITION	
1WQB DEQ WATER PROTECTION BUREAU	
BANK OF COMMERCE	
5FP11 JEFFERSON COUNTY	

PUBLISHED: Whitehall Ledger

REMARKS: The following methodologies were employed to determine an appropriate public notice area:

1. All Helena Regional Office public notice standards for Jefferson County were included in the mailing
2. The following method was used to identify water rights for public notice:
    a. All water rights with points of diversion at the Cardwell Ditch headgate
    b. All water rights within the stretch of the Boulder River between the historical point of diversion (Cardwell Ditch headgate) and the confluence of the Jefferson Slough and the Jefferson River.
    c. After duplicate owner names were removed, two water rights were identified for public notice.

PUBLIC NOTICE
PROCESS COMPLETE

Application No: PN-41E-30164689 L R Huckaba Ranch INC

Regional or Central Office

- ☐ Billings
- ☐ Bozeman
- ☐ Glasgow
- ☐ Havre
- ☒ Helena
- ☐ Kalispell
- ☐ Lewistown
- ☐ Missoula
- ☐ Central Office - Bozeman
- ☐ Central Office - Helena

☐ *No Comments Received - Materials Included (Check box if included)*

Do not return if any of this information is missing.

- ☒ Public Notice - Comment Period
- ☒ Certificate of Service
- ☒ Letter to Applicant/Consultant or Attorney
- ☒ Letter to Newspaper
- ☒ Newspaper Invoice
- ☒ Affidavit and Certification of Publication
- ☒ Newspaper Tear Sheet
- ☒ Comments Received
- ☐ Copy of Return Mail

- ☒ 600 (PERMIT) OR 606 (CHANGE)
- ☐ 626 RENEW TEMPORARY CHANGE AUTHORIZATION
- ☐ 644 REPLACEMENT POD
- ☐ OTHER

PUBLIC NOTICE

PUBLIC COMMENT PERIOD

Notice to Water Users

(Pursuant to Section 85-2-307, MCA)

The following application has been submitted to change a water right in the State of Montana.

THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION PROPOSES TO GRANT AN APPLICATION TO CHANGE A WATER RIGHT. DESCRIBED BELOW ARE THE PERTINENT FACTS WHICH SUMMARIZE THE APPLICATION. THE DRAFT PRELIMINARY DETERMINATION (PD) DOCUMENTING THE FINDINGS OF FACT AND CONCLUSIONS OF LAW AND ANY CONDITIONS ATTACHED TO THE WATER RIGHT ARE AVAILABLE ON THE INTERNET AT https://dnrc.mt.gov/Water-Resources/Water-Rights/application-status-environmental-assessments/.

PUBLIC COMMENT DEADLINE: SEPTEMBER 26, 2025. THE DEPARTMENT CAN ONLY ACCEPT PUBLIC COMMENTS FILED ON A PUBLIC COMMENT FORM, FORM 654. MAIL THE COMPLETED FORM TO THE DNRC, PO BOX 201601, HELENA, MT 59620-1601 BY THE DEADLINE SPECIFIED. THE FORM IS AVAILABLE ON THE DEPARTMENT'S WEBSITE. PER 85-2-307(5)(C), MCA, IF NO PUBLIC COMMENTS ARE RECEIVED, THE DRAFT PD WILL BE ADOPTED AS FINAL AND THERE WILL BE NO OPPORTUNITY TO OBJECT TO THIS APPLICATION.

DIRECT ANY QUESTIONS PERTAINING TO THE APPLICATION, OR REQUESTS TO OBTAIN THE DRAFT PD OR PUBLIC COMMENT FORM TO THE WATER RESOURCES OFFICE AT 1424 9TH AVENUE, PO BOX 201601, HELENA, MT 59620-1601 FAX: 406-444-9317 PHONE: 406-444-6999.

Application Number: 41E 30164689

Applicant: L R HUCKABA RANCH INC
26 MT HIGHWAY 359
CARDWELL, MT 59721 9604

WATER RIGHT NUMBER(S) BEING CHANGED

Water Right Type	Water Right Number	Priority Date
STATEMENT OF CLAIM	41E 3407-00	DECEMBER 31, 1886
Historical Flow Rate: 11.37 CFS	Historical Consumptive Volume: 104.19 AC-FT Historical Diverted Volume: 632.92 AC-FT	
STATEMENT OF CLAIM	41E 3408-00	DECEMBER 31, 1888
Historical Flow Rate: 11.37 CFS	Historical Consumptive Volume: 104.19 AC-FT Historical Diverted Volume: 632.92 AC-FT	

PAST USE OF WATER

STATEMENTS OF CLAIM 41E 3407-00 AND 41E 3408-00 HISTORICALLY DIVERTED WATER FROM THE BOULDER RIVER VIA THE CARDWELL DITCH HEADGATE IN NWSENW SECTION 35, T2N, R3W, JEFFERSON COUNTY FOR IRRIGATION OF 300 ACRES IN SECTION 2, 3, AND 11 ALL WITHIN T1N, R3W, JEFFERSON COUNTY, FROM APRIL 1 TO OCTOBER 30. THE HISTORICAL USE FOR STATEMENT OF CLAIM 41E 3407-00 IS A MAXIMUM FLOW RATE OF 11.37 CFS, A DIVERTED VOLUME OF 632.92 AF, AND A CONSUMED VOLUME OF 104.19 AF. THE HISTORICAL USE FOR STATEMENT OF CLAIM 41E 3408-00 IS A MAXIMUM FLOW RATE OF 11.37 CFS, A DIVERTED VOLUME OF 632.92 AF, AND A CONSUMED VOLUME OF 104.19 AF.

PROPOSED CHANGE

FLOW RATE: 4.52 CFS **VOLUME:** 694.58 AC-FT **ACRES:** 300.00

THE APPLICANT PROPOSES TO CHANGE THE POINT OF DIVERSION OF STATEMENTS OF CLAIM 41E 3407-00 AND 41E 3408-00 FROM THE CARDWELL DITCH HEADGATE TO THREE PUMPSITES DOWNSTREAM ON THE APPLICANT'S PROPERTY. THE APPLICANT IS PROPOSING TO PUT THREE PUMPSITES IN NWNWNE SECTION 11, NENWSW SECTION 2, NENWSE SECTION 3 ALL WITHIN T1N, R3W, JEFFERSON COUNTY. THE PROJECT IS IN JEFFERSON COUNTY AND THE SOURCE IS THE BOULDER RIVER AND THE JEFFERSON SLOUGH. JEFFERSON SLOUGH WATER WILL BE IMMEDIATELY REPLACED BY BOULDER RIVER WATER AT THE CONFLUENCE OF THE BOULDER RIVER AND THE JEFFERSON SLOUGH. THE PURPOSE AND PLACE OF USE ARE NOT PROPOSED TO CHANGE. THE PROPOSED CHANGE WILL HAVE A TOTAL COMBINED FLOW RATE OF 4.52 CFS, A TOTAL DIVERTED VOLUME OF 694.58 AF, AND CONSUMED VOLUME OF 208.38 AF.

ADDITIONAL INFORMATION

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED WATER USE MEASURING DEVICE AT THE POINTS APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN DAILY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED INCLUDING THE PERIOD OF OPERATION. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR UPON PROJECT COMPLETION AND UPON REQUEST THEREAFTER. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THE AUTHROIZATION. THE RECORDS MUST BE SENT TO THE HELENA DNRC WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

PUBLISHED IN: WHITEHALL LEDGER ON AUGUST 27, 2025.

CERTIFICATE OF SERVICE

This certifies a true and correct copy of the public notice for application no. 41E 30164689 was served upon all individuals listed below. Notices were served as specified or by first class mail to the addresses shown.

Date 8/26/25

Kristi Irwin, Compliance Technician

<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<>>>

BUREAU OF INDIAN AFFAIRS
BILLINGS AREA DIRECTOR
ATTN: BRANCH OF WATER RESOURCES
2021 4TH AVE N
BILLINGS MT 59101 1461

CLARK FORK COALITION
PO BOX 7593
MISSOULA MT 59807 7593

MONTANA BOARD OF LAND COMMISSIONER
ATTN: LETTY MILLER
via email: elizabeth.miller@mt.gov

DEPT OF FISH WILDLIFE & PARKS
FISHERIES DIVISION-ANDY BRUMMOND
PO BOX 938
LEWISTOWN MT 59457 0938

US FISH & WILDLIFE SERVICE
ATTN: MAILSTOP 60189 DENVER FEDERAL CENTER
PO BOX 25486
DENVER CO 80225 0486

NORTHWESTERN ENERGY
% RYAN MCLANE
FRANZ & DRISCOLL PLLP
PO BOX 1155
HELENA MT 59624 1155

PPL MONTANA LLC
% RYAN MCLANE
FRANZ & DRISCOLL PLLP
PO BOX 1155
HELENA MT 59624 1155

MT TROUT UNLIMITED
via email through Water Right Notification Tool

DEPT OF ENVIRONMENTAL QUALITY
WATER PROTECTION BUREAU
PO BOX 200901
HELENA MT 59620 0901

DEPT OF FISH WILDLIFE & PARKS
FISHERIES DIVISION-STEPHEN BEGLEY
via email: sbegley@mt.gov

US FISH & WILDLIFE SERVICE
585 SHEPHARD WAY
HELENA MT 59601 9785

DEPT OF NATURAL RESOURCES & CONSERVATION
HELENA REGIONAL OFFICE
PO BOX 201601
HELENA MT 59620 1601

GOLDEN SUNLIGHT MINES INC
310 S MAIN ST STE 1150
SALT LAKE CITY UT 84101 2114

L R HUCKABA RANCH INC
26 MT HIGHWAY 359
CARDWELL MT 59721 9604

MONTANA, STATE OF DEPT OF FISH WILDLIFE & PARKS
UPPER MISSOURI RESERVATION
PO BOX 200701
HELENA MT 59620 0701

USA (DEPT OF ARMY CORPS OF ENGINEERS)
FORT PECK LAKE OFFICE
PO BOX 201
FORT PECK MT 59223

WHITEHALL LEDGER
PO BOX 1169
WHITEHALL MT 59759 1169

DEPT OF FISH WILDLIFE & PARKS
AMY GROEN
via email: amy.groen@mt.gov

DNRC Water Resources Division
1424 9th Ave
PO Box 201601
Helena MT 59620 1601
(406) 444-6601
www.dnrc.mt.gov

emailed 8/19/25 ki

August 19, 2025

L R HUCKABA RANCH INC
26 MT HIGHWAY 359
CARDWELL MT 59721 9604
lenhuckaba@icloud.com

ALLISON PARDIS
allison.pardis@tu.org

CHRIS EDGINGTON
chris@montanatu.org

RE: Public Notice of Public Comment Period for Application to Change a Water Right no. 41E-30164689

Dear Applicant/Consultant:

Please review the enclosed water right Public Notice of Public Comment Period. It will be published in the newspaper on the date indicated on the Notice. If you find an error, please call or e-mail me immediately at the contact information below and provide your name, water right application number, and a telephone number.

On the date of publication, please review the newspaper publication against this notice. If there is an error, or the paper fails to publish the notice, please call us. An uncorrected error may require the application to be re-advertised, and the process lengthened.

Sincerely,

Kristi Irwin

Kristi Irwin, Compliance Technician
DNRC, Water Rights Bureau
(406) 444-6671; kristi.irwin@mt.gov

Enclosure: Public Notice of Public Comment Period

DNRC Water Resources Division
1424 9th Ave
PO Box 201601
Helena MT 59620 1601
(406) 444-6601
www.dnrc.mt.gov

emailed 8/22/25 hi

August 22, 2025

WHITEHALL LEDGER
PO BOX 1169
WHITEHALL, MT 59759
whledger@gmail.com

RE: Public Notice of Public Comment Period for Application to Change a Water Right no. 41E-30164689

Dear Editor:

As required by law, you are authorized to publish in *column format* the enclosed water right Public Notice of Public Comment Period on **August 27, 2025**. PLEASE NOTE: It is important the notice be advertised on the date specified. If it can't be published on this date, please call.

****Please send confirmation that the Public Notice will publish in the newspaper on the date requested to the following e-mail:** kristi.irwin@mt.gov

Within 14 days after final publication, please submit a notarized Affidavit and Certification of Publication with tear sheet and statement of cost based on folios (see Administrative Rule of Montana 2.67.303). The basis of folio measure is to be on a word count of 100 words or any fraction thereof: i.e., 299 words = 3 folios, 301 words =4 folios, etc. with the heading and date of publication included in the word count. (Actual word count is: 665)

Please send invoice for payment, along with affidavit and tear sheet to the following address:

DNRC, Water Rights Bureau
Attn: Kristi Irwin
PO Box 201601
Helena, MT 59620-1601

If you have any questions, please call me at 406-444-6671.

Sincerely,

Kristi Irwin, Compliance Technician
DNRC, Water Rights Bureau
(406) 444-6671; kristi.irwin@mt.gov

Enc: Public Notice of Public Comment Period, Affidavit of Publication, Folio Costs

From:	Allison Pardis
To:	Telander, Savannah
Cc:	Daly, Jennifer
Subject:	[EXTERNAL] Re: Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164989
Date:	Monday, September 15, 2025 4:24:12 PM
Attachments:	image001.png

Ok, thank you Savannah!

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Monday, September 15, 2025 3:52 PM
To: Allison Pardis <allison.pardis@tu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: RE: Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164989

Alli,

There is not a way for the public to see comments during the public comment period. We have not received any comments on the Huckaba Change Application thus far.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Allison Pardis <allison.pardis@tu.org>
Sent: Monday, September 15, 2025 3:11 PM
To: Telander, Savannah <Savannah.Telander@mt.gov>
Subject: [EXTERNAL] Re: Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164989

Hi Savannah!

I hope all is well. I was wondering if there is a way to see what comments have been filed in response to the public notice?

Thanks,
Alli

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Monday, July 28, 2025 9:21:40 AM
To: Allison Pardis <allison.pardis@tu.org>; Chris Edgington Montana <chris@montanatu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164989

Greetings,

Attached is the Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164989 that was sent to the Huckaba's today. The Applicant has an opportunity to request an extension of time to submit additional information for the Department to consider in the decision, within 15 business days of this letter/email (**August 18, 2025**). If there is no response, the Department will prepare a notice of opportunity to provide public comment per §85-2-307(4), MCA.

Let us know if you have any questions.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

Irwin, Kristi

From:	Irwin, Kristi
Sent:	Friday, August 22, 2025 3:37 PM
To:	Chris Edgington; Allison Pardis
Cc:	lenhuckaba@icloud.com; Quinn, Karson
Subject:	RE: Public Notice of Public Comment Period for Application to Change a Water Right no. 41E-30164689
Attachments:	PN COMMENT 41E-30164689 L R Huckaba Ranch Inc.pdf

Good afternoon,

I sent the public notice to the Whitehall Ledger, changing the publish date to August 27 with a comment deadline of September 26. I am waiting on confirmation from the Whitehall Ledger that they will publish on that date.

Attached is the updated public notice.

Thank you,

Kristi Irwin | Compliance Technician
Data Quality and Standards Program, Water Rights Bureau
Montana Department of Natural Resources and Conservation
1424 9th Ave, Helena, MT 59601
DESK: 406-444-6671 **EMAIL:** kristi.irwin@mt.gov
Website | Facebook | X (Twitter) | Instagram
How did we do? Let us know here: Feedback Survey

From: Chris Edgington <chris@montanatu.org>
Sent: Friday, August 22, 2025 1:36 PM
To: Allison Pardis <allison.pardis@tu.org>; Irwin, Kristi <Kristi.Irwin@mt.gov>
Cc: lenhuckaba@icloud.com
Subject: [EXTERNAL] Re: Public Notice of Public Comment Period for Application to Change a Water Right no. 41E-30164689

Thanks, Kristi and Alli.

I just spoke with Lenny. All is good with him. For the Whitehall Ledger, you'll need to submit on Monday by 5 pm for Wednesday printing. Since Monday the 1st is Labor Day, please submit it next week, August 25th for the 27th printing. We need to get Lenny irrigating!

Thanks, have a great weekend, all.

Chris Edgington
Jefferson Watershed Project Manager
MONTANA TROUT UNLIMITED

C: 406.451.3035
O: 406.543.0054

HEALTHY RIVERS & WILD TROUT
MONTANA TROUT UNLIMITED
SINCE 1964

From: Allison Pardis <allison.pardis@tu.org>
Sent: Thursday, August 21, 2025 10:29 AM
To: Irwin, Kristi <Kristi.Irwin@mt.gov>; Chris Edgington <chris@montanatu.org>
Cc: lenhuckaba@icloud.com <lenhuckaba@icloud.com>
Subject: Re: Public Notice of Public Comment Period for Application to Change a Water Right no. 41E-30164689

Thank you, Kristi.

I did not find any errors in the attached public notice.

Alli

Alli Pardis / Instream Flow Project Manager

allison.pardis@tu.org / (406) 431-5981

From: Irwin, Kristi <Kristi.Irwin@mt.gov>
Sent: Tuesday, August 19, 2025 5:05 PM
To: Chris Edgington Montana <chris@montanatu.org>
Cc: lenhuckaba@icloud.com <lenhuckaba@icloud.com>; Allison Pardis <allison.pardis@tu.org>
Subject: FW: Public Notice of Public Comment Period for Application to Change a Water Right no. 41E-30164689

Chris,

I previously sent this but notice I had your email address incorrect. My apologies.

Thank you,

Kristi Irwin | Compliance Technician
Data Quality and Standards Program, Water Rights Bureau
Montana Department of Natural Resources and Conservation
1424 9th Ave, Helena, MT 59601
DESK: 406-444-6671 **EMAIL:** kristi.irwin@mt.gov
Website | Facebook [facebook.com]**| X (Twitter** [twitter.com]**)** | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Irwin, Kristi
Sent: Tuesday, August 19, 2025 4:54 PM
To: lenhuckaba@icloud.com; allison.pardis@tu.org; chris@montanaus.org
Cc: Quinn, Karson <Karson.Quinn@mt.gov>
Subject: Public Notice of Public Comment Period for Application to Change a Water Right no. 41E-30164689

August 19, 2025

L R HUCKABA RANCH INC
26 MT HIGHWAY 359
CARDWELL MT 59721 9604
lenhuckaba@icloud.com

ALLISON PARDIS
allison.pardis@tu.org

CHRIS EDGINGTON
chris@montanatu.org

RE: Public Notice of Public Comment Period for Application to Change a Water Right no. 41E-30164689

Dear Applicant/Consultant:

Please review the enclosed water right Public Notice of Public Comment Period. It will be published in the newspaper on the date indicated on the Notice. If you find an error, please call or e-mail me immediately at the contact information below and provide your name, water right application number, and a telephone number.

On the date of publication, please review the newspaper publication against this notice. If there is an error, or the paper fails to publish the notice, please call us. An uncorrected error may require the application to be re-advertised, and the process lengthened.

Sincerely,

Kristi Irwin| Compliance Technician
Data Quality and Standards Program, Water Rights Bureau
Montana Department of Natural Resources and Conservation
1424 9th Ave, Helena, MT 59601
DESK: 406-444-6671 **EMAIL**: kristi.irwin@mt.gov
Website | Facebook [facebook.com]**| X (Twitter** [twitter.com]**)** | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

Enclosure: Public Notice of Public Comment Period

INVOICE

Whitehall Ledger
PO BOX 1169
Whitehall, MT 59759

WHLEDGER@GMAIL.COM
+1 (406) 287-5301
www.whitehallledger.com

Bill to
Montana DNRC
Box 201601
Helena, MT 59620-1601

Invoice details
Invoice no.: 196046
Terms: Net 30
Invoice date: 08/27/2025
Due date: 09/26/2025

#	Date	Product or service	Description	Qty	Rate	Amount
1.		**Legal Notice**	PUBLIC NOTICE: Public Comment Period - Notice to Water Users (Huckaba) - 1 week run	1	$50.00	$50.00

Total **$50.00**

Ways to pay

View and pay

Org. # 4401
Date 9/18/25
Amount $50.00
Approval Kristi
Approval Mallory

the WHITEHALL LEDGER

Affidavit of Publication

STATE OF MONTANA)
) ss.
County of Jefferson)

ELIZABETH PULLMAN, being first duly sworn, states she is the Publisher of the WHITEHALL LEDGER, a newspaper of general circulation printed weekly in the Town of Whitehall, in the said County and State, and is chief clerk and foreman of said newspaper, and that the advertisement **PUBLIC NOTICE - PUBLIC COMMENT PERIOD** *Notice to Water Users* (Huckaba)
a copy of which is hereunto attached, was correctly published in its regular and entire issue of every number of said newspaper once a week for 1 consecutive weeks, the first publication thereof having been made on the 27 day of AUGUST 2025 and the last publication thereof having been made on the 27 day of AUGUST 2025.

COPY OF PUBLICATION

PUBLIC NOTICE
PUBLIC COMMENT PERIOD
Notice to Water Users
(Pursuant to Section 85-2-307, MCA)
The following application has been submitted to change a water right in the State of Montana.

THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION proposed to grant an application to change a water right. Described below are the pertinent facts which summarize the application. The draft Preliminary Determination (PD) documenting the findings of fact and conclusions of law and any conditions attached to the water right are available on the internet at https://dnrc.mt.gov/Water-Resources/Water-Rights/application-status-environmental-assessments.

PUBLIC COMMENT DEADLINE: SEPTEMBER 26, 2025. The Department can only acccept public comments filed on a public comment form, FORM 654. Mail the completed form to the DNRC, PO BOX 201601, HELENA, MT 59620-1601 by the deadline specified. The form is available on the department's website. Per 85-2-307(5)(C), MCA, if no public comments are received, the draft PD will be adopted as final and there will be no opportunity to object to this application.

Elizabeth A. Pullman, PUBLISHER

Subscribed and sworn to before me at Whitehall, Jefferson County, Montana, on this 27 day of August A.D., 2025

Brooklynn Lanes

Notary Public for the State of Montana, residing at Whitehall, Jefferson County. My commission expires July 10, 2028

BROOKLYNN LANES NOTARIAL SEAL STATE OF MONTANA

BROOKLYNN LANES
NOTARY PUBLIC for the
State of Montana
Residing at Whitehall, MT
My Commission Expires
July 10, 2028

Public Comments – Considered

41E-30164689 L R Huckaba Ranch INC

Commenter	Criteria commented on:
58 – Trout Unlimited, Pat Byorth	Adequate Diversion

Public Comments
(Considered)

PUBLIC COMMENT ON APPLICATION

§85-2-307, MCA
Form No. 654 *(Revised 01/2024)*

Instructions
Use this form to file a public comment about an application for a water use permit, change authorization, or forest service water reservation.

Use one form for each application about which you are filing a public comment. Individual water right owners must file separate public comments. **This form must be received on or before the deadline specified in the public notice.**

Submit form to:
Montana Department of Natural Resources and Conservation (DNRC)
Water Rights Bureau
1424 9th Avenue, PO Box 201601, Helena, MT 59620-1601

For Department Use Only

RECEIVED
SEP 25 2025
DNRC-WRD

Date Received 09/25/2025
Received By KH

Comment # 58
Entered By KQ
Date 9/25/2025

1. Name of Commenter Trout Unlimited, Pat Byorth Contact ID: 310688
Mailing Address 321 East Main Street
City Bozeman State MT Zip 59715
Home Phone (406) 548-4830 Other Phone
Email: pbyorth@tu.org

2. On which application are you filing a public comment? Application Number 41E 30164689
Applicant Name L R Huckaba Ranch Inc

3. How do you have standing to file this public comment? A person has standing if his or her property, water rights, or interests would be adversely affected by the proposed appropriation. Explain your interest and how it would be adversely affected.

Trout Unlimited has assisted the applicant throughout the change process and invested in the irrigation infrastructure and future monitoring associated with the proposed change.

4. Will your water right be affected? If so, provide the water right number.

☐ (W) Statement of Claim No.
☐ (P) Permit to Appropriate Water No.
☐ (C) Certificate of Water Right No.
☐ (D) Powder River Final Decree No.
☐ (M/R) Reservation of Water No.
☐ (E) Exempt Notice No.
☐ (F) Non-recorded Exempt Right (For a filing not on record with the DNRC, complete the information below).

Type of Use ☐ Stock ☐ Domestic Date of First Use
☐ Groundwater (For example, well or developed spring)
☐ Instream Surface water Source
Amount Used Flow Rate Gallons Per Minute Volume Acre-Feet
Point of Diversion ____1/4 ____1/4 ____1/4 Section ____, Township ____ ☐ N ☐ S, Range ____ ☐ E ☐ W
County
Lot/Tract Block Subdivision Name

☐ 5. Water Quality – Note that an applicant is required to prove these criteria only if a valid objection is received (§85-2-311(2), MCA). Therefore, the Department will not respond to public comments on these criteria but will provide notice of the opportunity to object to the application if public comments on these criteria are received. Identify why you believe the criteria cannot be met:

- ☐ a. Water Quality Issue §85-2-402(2)(f), MCA
- ☐ b. Effect on effluent limitations of discharge permit holder §85-2-402(2)(g), MCA

☐ 6. Reasonable Use – (only for applications to change a purpose of use or place of use of an appropriation of 4,000 or more acre-feet of water a year and 5.5 cubic feet per second of water) Identify how the draft PD does not adequately address why the proposed appropriation is a reasonable use based on § 85-2-402(4)(b), MCA.

Section C: Complete information if you are filing a public comment about a Forest Service Reservation Application. Attach a separate sheet and provide the following information:

1. The application number, applicant name, and your name.
2. The corresponding letters shown below to clearly indicate on which criteria you are filing a public comment.
3. For each criterion on which you are submitting a public comment, identify how one of the applicable objector proofs set forth in § 85-20-1401, Article VI, sec. B.3(a) or (b), MCA, is met. The comment must specifically describe why or how one of the objector proofs are met.

☐ (A) The amount of water under the wetted perimeter methodology or other methodology was not accurately measured or calculated;

☐ (B) The wetted perimeter methodology or other methodology could not suitably be applied to the stream reach applied for;

☐ (C) There is not an existing population of the fish species set forth in § 85-20-1401 Art. VI sec. B.1(a)(iii)(B), MCA, identified in the application in the stream reach applied for; or

☐ (D) There is a proposed or projected water development project: that is feasible; reliably projected to be commenced within 10 years or within 10 years after a basin closure is removed; in which the objector has or can reasonably obtain a possessory interest (or consent) in the property where the water is to be impounded, stored, transported and put to beneficial use; for which the amount of water needed for the project is reasonable; for which water is not reasonably available from any other water source; for which the water would be unavailable if the proposed reservation was granted; that would not be feasible with water either in a lesser amount or at a different location if the reservation was granted; and that serves a significant public need.

6. Are you represented by counsel? YES ☐ NO ■

Counsel Name _____

Mailing Address _____

City _____ State _____ Zip _____ Phone _____

Email: _____

7. Person preparing this form, if different than commenter:

Name _____

Mailing Address _____

City _____ State _____ Zip _____ Phone _____

Email: _____

8. Commenter's Signature: If you are represented by counsel, counsel may sign.

SIGNATURE _____ DATE 09/25/2025

SIGNATURE _____ DATE _____

SIGNATURE _____ DATE _____

5. Why are you filing a public comment?

Statute requires that a commenter identify how one or more of the application criteria is not adequately addressed in the draft preliminary determination (PD) for the application. Please note that for applications received by the Department on or after January 1, 2024, there will be an opportunity to object to an application only if public comments are received (§85-2-307(5)(c), MCA). Objections will be limited to only those issues on which a public comment was received (§85-2-308(1)(b), MCA).

Complete section A, B, or C below for the type of application to which you are filing a public comment.

Sections A and B: Complete information for only Section A (public comments on a permit application) OR Section B (public comments on a change application). Attach a separate sheet and provide the following information:

1. The application number, applicant name, and your name.
2. The corresponding numbers shown below to clearly indicate on which criteria you are submitting a public comment.
3. For each criterion on which you are submitting a public comment, identify how the draft preliminary determination does not adequately address that criterion.

A) Public Comment About a Permit Application– For each box that is checked, identify how one or more of the criteria in §85-2-311, MCA, is not adequately addressed in the draft PD for the application.

- ☐ 1. Physical Availability – Identify how the draft PD does not adequately address how water can be considered physically available.
- ☐ 2. Legal Availability – Identify how the draft PD does not adequately address how water can considered legally available.
- ☐ 3. Adverse Effect – Identify how the draft PD does not adequately address how this proposed use will not adversely affect your water right.
- ☐ 4. Diversion Works – Identify how the draft PD does not adequately address why the construction of the project is adequate.
- ☐ 5. Beneficial Use – Identify how the draft PD does not adequately address why the use (purpose) or flow rate and volume may be considered beneficial.
- ☐ 6. Possessory Interest – Identify how the draft PD does not adequately address how the applicant has possessory interest in the place of use.
- ☐ 7. Water Quality – Note that an applicant is required to prove these criteria only if a valid objection is received (§85-2-311(2), MCA). Therefore, the Department will not respond to public comments on these criteria but will provide notice of the opportunity to object to the application if public comments on these criteria are received. Identify why you believe the criteria cannot be met:
  - ☐ a. Water Quality Issue §85-2-311(1)(f), MCA
  - ☐ b. Effect on effluent limitations of discharge permit holder §85-2-311(1)(h), MCA

  Only DEQ or local water quality district may object to:
  - ☐ c. Effect on classification of water §75-5-301(1), MCA and §85-2-311(1)(g), MCA
- ☐ 8. Reasonable Use – (only for applications for an appropriation of 4,000 or more acre-feet of water a year and 5.5 cubic feet per second of water) Identify how the draft PD does not adequately address why the proposed appropriation is a reasonable use based on consideration of § 85-2-311(3), MCA.

B) Public Comment About a Change Application – For each box that is checked, identify how one or more of the criteria in § 85-2-402, MCA, is not adequately addressed in the draft preliminary determination for the application.

- ☐ 1. Adverse Effect – Identify how the draft PD does not adequately address how this proposed change will not adversely affect your water right or interest or how the historical use of the water right proposed for change is different than described in the application.
- ☒ 2. Diversion Works – Identify how the draft PD does not adequately address why the construction of the project is adequate.
- ☐ 3. Beneficial Use – Identify how the draft PD does not adequately address why the use (purpose) or the flow rate and volume may be considered beneficial.
- ☐ 4. Possessory Interest – Identify how the draft PD does not adequately address how the applicant has possessory interest in the place of use.

Patrick Byorth, Montana Water Director

Montana Department of Natural Resources and Conservation
Attn: Jennifer Daly, Regional Manager
Helena Regional office
1424 Ninth Avenue, PO Box 201601
Helena, MT 59620-1601

Subject: Application #41E 30164689, LR Huckaba Ranch Inc., Trout Unlimited Comment B) Public Comment About a Change Application, 2. Diversion Works

Dear Ms. Daly,

Thank you for the opportunity to comment on the draft Preliminary Determination for change application No. 41E 30164689. As you may recall, Trout Unlimited has worked closely with applicant LR Huckaba Ranch, Inc. in support of the subject change application. The broader project benefits wild trout populations in the Boulder and Jefferson Rivers through fish passage and improved flow conditions and benefits the Huckaba Ranch by upgrading irrigation infrastructure and improving operational efficiency. Trout Unlimited finds that the draft preliminary decision requirements for flow monitoring are impractical and overly onerous, by requiring extensive documentation by the irrigator or expensive metering equipment to be installed at the applicant's expense. Trout Unlimited believes that less stringent monitoring requirements are available to ensure that the applicant abides by conditions of the proposed change and while continuing to exercising their water rights more effectively with less water.

Trout Unlimited suggests that the Department modify monitoring requirements to a less onerous but equally effective metering protocol to reduce both economic and time burdens:

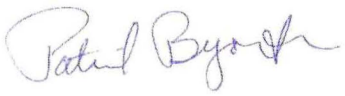
- Record monthly accrued volumetric measurements at each proposed point of diversion.
- Report monthly volumes from April through the conclusion of each irrigation season.
- Submit records to the DNRC Helena Regional Office by November 30th of each year.

Coupled with application materials provided, this proposed metering protocol will ensure that the applicant remains within the bounds of the change authorization. Proposed POD 01 and 03 are downstream of the confluence of the Boulder and Jefferson Rivers. Therefore, the original source of the applicant's water right will flow directly to the new PODs where pump capacities limit the irrigator's flow rate to a combined flow rate of 1762 gpm or 3.93 cfs, well below the historic diverted flow rate. The applicant has provided DNRC with the pump performance curves that ensure the irrigator will cannot exceed those flow rates. Proposed POD 02 is located in Jefferson Slough, 0.7 river miles upstream of the Boulder's confluence with the slough. The applicant has

provided a performance curve for the pump at proposed POD 02 with a design flow rate of 307 gpm or 0.7 cfs. All three new PODs have a combined maximum flow rate of 4.63 cfs, well below the combined maximum flow rate of the three water rights of 22.74 cfs specified in the Draft Preliminary Determination (at paragraph 11), while the irrigation season and consumptive use will remain constant. Further, streamflow data from the DNRC Streamflow gauge on the Boulder River from the past two irrigations seasons shows that the minimum average daily discharge in the Boulder River was 18.82 cfs, more than adequate to meet the maximum combined pumping capacities while leaving historic ditch losses and return flows in the Jefferson system. Therefore, DNRC can surmise that pump flow rates and Boulder River flow are adequate to limit the proposed elements of the change and the suggested metering requirements outlined above will provide the DNRC with the necessary information to ensure the applicant is not exceeding their changed annual volume, without subjecting the applicant to unnecessary and burdensome metering requirements.

Trout Unlimited appreciates the opportunity to work with the applicant and the Department and respectfully request modifications of the monitoring requirements in the Final Determination. Thanks for your consideration and please feel free to contact me if you have any questions.

Sincerely,



Patrick Byorth

C: LR Huckaba Ranch, Chris Edgington, MTU

Draft Preliminary Determinations

- Draft PD
- Draft PD cover letter
- Updated Draft PD
- Updated Draft PD cover letter
- Any correspondence with the applicant regarding the draft PDs

Draft Preliminary Determinations

BEFORE THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION OF THE STATE OF MONTANA

* * * * * * * *

APPLICATION TO CHANGE WATER RIGHT NO. 41E 30164689 by L R Huckaba Ranch Inc	**DRAFT PRELIMINARY DETERMINATION TO GRANT CHANGE**

* * * * * * * *

On March 6, 2025, HB Huckaba Ranch Inc (Applicant) submitted Application to Change Water Right No. 41E 30164689 to change Statements of Claim 41E 3407-00 and 41E 3408-00 to the Helena Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the Application on its website. The Department sent the Applicant a Deficiency Letter under §85-2-302, Montana Code Annotated (MCA), dated March 17, 2025. The Applicant responded with information dated May 9, 2025. A Preapplication Meeting was held between the Department and the Applicant's representatives, Patrick Byroth, Chris Edgington, and Allison Pardis on October 17, 2024, in which the Applicant's representatives designated that the Technical Analyses for this Application would be completed by the Department. The Applicant returned the completed Preapplication Meeting Form on December 19, 2024. The Department delivered the Department completed the Technical Analyses on January 17, 2025. The Application was determined to be Correct and Complete as of June 6, 2025.

INFORMATION

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Irrigation Application for Change of Appropriation Water Right, Form 606
- Attachments:
    - Proposed POD 02: Adequate Means of Diversion and Operation – Question 33, 35, 39, AquaTech, dated February 6, 2023
    - Proposed POD 01 & 03 Adequate Means of Diversion and Operation – Questions 33, 35, 39, Jim Richards, undated
    - Letter from Barrick Gold Corporation – Golden Sunlight Mine Inc, Kristi Murphy, dated November 2, 2024
- Maps:

- Historic Use Map – Question 18, undated
- Proposed Use Map – Question 19, undated
- System Operation – Question 32, undated
- Lower Boulder River Irrigation Infrastructure Improvement Project Huckaba Point of Diversion Change Site, undated
- Huckaba Ranch West Side – V2, undated

- Department - completed Technical Analyses based on information provided in the Preapplication Meeting Form, dated January 17, 2025
  - Question 6, Proposed PODs Map, undated
  - Question 121 Map, undated
  - Question 122.G.i.3 Map, undated
  - Figure 1. Pump plate for 60 hp pump on Huckaba Ranch, Image of Pump Plate, undated
  - Figure 2. Pump plate for 50 hp pump on Huckaba Ranch, Image of Pump Plate, undated
  - AquaTech West Side – North Half Circle – V2 Receipt, February 6, 2023
  - Lower Boulder River Irrigation Infrastructure Improvement Project Huckaba Point of Diversion Site Flyer, undated

Information within the Department's Possession/Knowledge

- DNRC Change Application 41E 30164689 Surface Water Change Technical Analysis Report, dated January 17, 2025
- Water Resources Survey, Jefferson County, 1956
- USGS Photo 2109500070005, dated July 5, 1947
- USDA Photo 479-B6, dated August 29, 1979
- Statement of Claim 41E 3407-00 file
- Statement of Claim 41E 3408-00 file

- The Department also routinely considers the following information. The following information is not included in the administrative file for this Application, but is available upon request. Please contact the Helena Regional Office at 406-444-6999 to request copies of the following documents.
  - Department Standard Practice for Determining Historical Use
  - Department Standard Practice for Analyzing Area of Potential Adverse Effect
  - Technical Memorandum "Distributing Conveyance Loss on Multiple User Ditches" (Heffner, 2020)

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, part 4, MCA).

For the purposes of this document, Department or DNRC means the Department of Natural Resources & Conservation; CFS means cubic feet per second; GPM means gallons per minute; and AF means acre-feet.

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

1. Applicant seeks to change the point of diversion (POD) of Statements of Claim 41E 3407-00 and 41E 3408-00 in this Application. Table 1 below summarizes the rights proposed for change as currently claimed. These claims are diverted from the Boulder River for irrigation use for a volume not to exceed the amount put to historic and beneficial use.

Table 1. Water rights proposed for change

Water Right	Purpose	Flow Rate (CFS)	Volume (AF)	Period of Use	Point of Diversion	Place of Use	Priority Date	Acres
41E 3407-00	Irrigation	11.37	Historical Use Statement	4/1 to 10/30	NWSENW Section 35, T2N, R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1886.12.31	300
41E 3408-00	Irrigation	11.37	Historical Use Statement	4/1 to 10/30	NWSENW Section 35, T2N, R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1888.12.31	300

2. Both Statements of Claim 41E 3407-00 and 41E 3408-00 have a flow rate of 11.37 CFS and divert from the Boulder River by a means of headgate for the purpose of 300 acres of flood irrigation. The period of use and period of diversion for both Claims are April 1 to October 30. The

historical POD is located in the NWSENW Section 35, T2N, R3W, Jefferson County, and water is conveyed to the place of use by the Cardwell Ditch[1].

3. Statements of Claim 41E 3407-00, 41E 3408-00, and 41E 3406-00 are supplemental rights that were historically used to irrigate 300 acres in SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, all within T1N, R3W, Jefferson County. Claim 41E 3406-00 is an irrigation right owned by the Applicant for water from Cold Spring with a maximum flow rate of 11.37 CFS. 41E 3406-00 is not included in the proposed Change Application but was factored in the historical consumptive use of the place of use (POU). Table 2 below summarizes the supplemental water rights.

Table 2. Supplemental Water Rights

Water Right	Flow Rate (CSF)	Period of Use	Point of Diversion	Place of Use	Priority Date	Acres
41E 3406-00	11.37	4/1 to 10/30	SWSESW Section 6, T2N, R2W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1968.12.31	300
41E 3407-00	11.37	4/1 to 10/30	NWSENW Section 35, T2N, R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1886.12.31	300
41E 3408-00	11.37	4/1 to 10/30	NWSENW Section 35, T2N, R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1888.12.31	300

4. The conveyance system, Cardwell Ditch, conveys the water rights to be changed along with Applicant owned Statement of Claim 41E 3406-00, and third-party owned Claims 41E 143433-00, 41E 143436-00, and 41E 143437-00. The Cardwell Ditch headgate is utilized as a secondary POD for Claim 41E 3406-00. Claims 41E 143433-00, 41E 143436-00, and 41E 143437-00 are owned by a neighboring third-party, Golden Sunlight Mines Inc.

5. No previous Change Authorizations are associated with the water right to be changed.

[1] Also known as the Shaw Ditch.

CHANGE PROPOSAL

FINDINGS OF FACT

6. The Applicant proposes to change the POD of Statements of Claim 41E 3407-00 and 41E 3408-00 from one headgate on the Boulder River to three pumps on the Jefferson Slough. The Applicant proposes to discontinue use of the historical POD in NWSENW Section 35, T2N, R3W, Jefferson County, and the Cardwell Ditch. The historical POD is proposed to be removed in part of the Shaw Diversion Dam Removal Project by Montana Trout Unlimited. The project involves Golden Sunlight Mine, with support by Montana Department of Fish, Wildlife & Parks (FWP), Natural Resource Conservation Services (NRCS), Trout and Salmon Foundation, Cross Charitable Foundation, and the Applicant. The proposed PODs are two pump sites approximately 1.21 and 1.74 miles downstream of the historical POD, and one pump site approximately 0.67 miles upstream of the Boulder River Jefferson Slough confluence on the Jefferson Slough[2]. The proposed PODs are in NENWSW Section 2, NENWSE Section 3[3], and NWNWNE Section 11, all within T1N, R3W, Jefferson County, seen on the map provided as Figure 1. Boulder River water will continue downstream in the Boulder River into the Jefferson Slough and pumped from the Jefferson Slough from two points of diversion in NENWSW Section 2 and NWNWNE Section 11, all within T1N, R3W, Jefferson County. Jefferson Slough water will be pumped from the POD in NENWSE Section 3 T1N, R3W, Jefferson County. Jefferson Slough water will be immediately replaced by Boulder River water at the confluence of the Boulder River and the Jefferson Slough. All purposed PODs are located on the Applicant's property. Water will be diverted through the proposed PODs into three pipeline systems to irrigate the historical 300-acre POU. The historical POD will no longer be used for irrigation on the Applicant's property as a result of this change. The period of diversion and use will remain the same as the water rights were historically operated. No changes to the POU, purpose, or storage are proposed in this Change Application.

[2] Technical Analyses Report for Change Preapplication No. 41I 30164689, dated January 17, 2025, inadvertently omitted reference to the pump 0.67 miles upstream of the Boulder River and Jefferson Slough confluence under Section 3.2 Area of Potential Adverse Effect.

[3] Technical Analyses Report for Change Preapplication No. 41I 30164689, dated January 17, 2025, states the proposed POD in Section 3 as NENWNE Section 3, T1N, R3W, Jefferson County. The legal land descriptions found in the Technical Analysis are based on the legal land descriptions give to the Department during the October 17, 2024, Preapplication Meeting. After review of the proposed use maps the Department determined the POD to be located in NENWSE Section 3, T1N, R3W, Jefferson County.

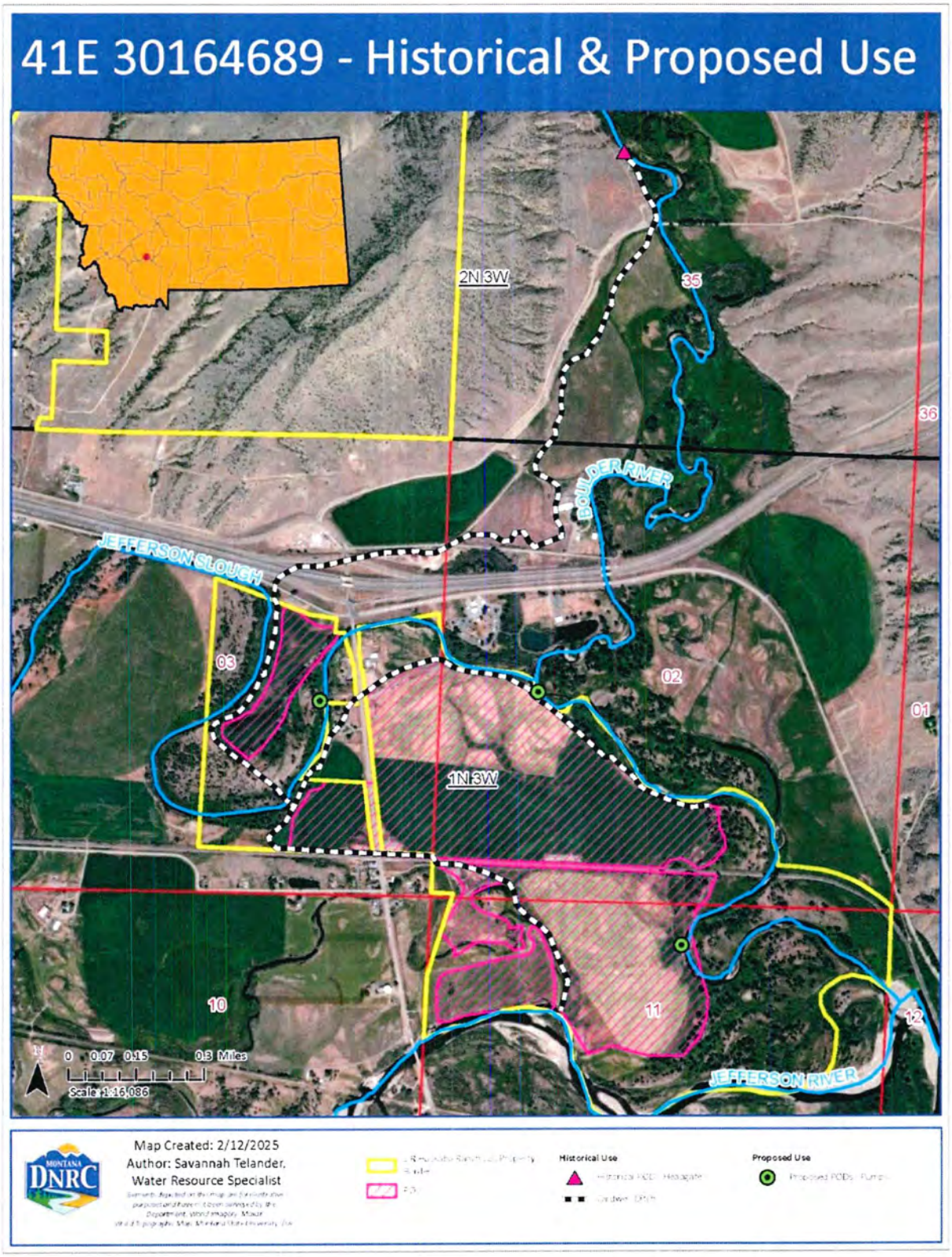


Figure 1. Map of Change Application 41E 30164689 historical and proposed use

CHANGE CRITERIA

7. The Department is authorized to approve a change if the Applicant meets its burden to prove the applicable § 85-2-402, MCA, criteria by a preponderance of the evidence. *Matter of Royston*, 249 Mont. 425, 429, 816 P.2d 1054, 1057 (1991); *Hohenlohe v. DNRC*, 2010 MT 203, ¶¶ 33, 35, and 75, 357 Mont. 438, 240 P.3d 628 (an Applicant's burden to prove change criteria by a preponderance of evidence is "more probable than not."); *Town of Manhattan v. DNRC*, 2012 MT 81, ¶ 8, 364 Mont. 450, 276 P.3d 920. Under this Preliminary Determination, the relevant change criteria in § 85-2-402(2), MCA, are:

> (2) Except as provided in subsections (4) through (6), (15), (16), and (18) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:
> (a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.
> (b) The proposed means of diversion, construction, and operation of the appropriation works are adequate, except for: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.
> (c) The proposed use of water is a beneficial use.
> (d) The Applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the Applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water. This subsection (2)(d) does not apply to: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

8. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. *E.g., Hohenlohe*, ¶¶ 29-31; *Town of Manhattan*, ¶ 8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation*

HISTORICAL USE AND ADVERSE EFFECT

FINDINGS OF FACT - Historical Use

9. Claim 41E 3407-00 is a filed right with a priority date of December 31, 1886, and Claim 3408-00 is a filed right with a priority date of December 31, 1888. Both Claims were included in the Montana Water Court 41E Boulder River, Tributary of Jefferson River Temporary Preliminary Decree on June 20, 1985, and the 41E Boulder River, Tributary of Jefferson River Preliminary Decree on October 19, 2022.

10. Statements of Claim 41E 3407-00 and 41E 3408-00 are supplemental and claimed for irrigation of 300 acres in SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, all within T1N, R3W, Jefferson County. The historical irrigation of 300 acres is supported by the Water Resources Survey (Jefferson County, 1956) and 1947 USGS Photo 2109500070005. The Department finds the maximum number of acres historically irrigated by Claims 41E 3407-00 and 41E 3408-00 to be 300 acres.

11. 41E 3407-00 and 41E 3408-00 were both originally claimed with a flow rate of 11.37 CFS. The Applicant's representatives state that the maximum flow rate diverted by 41E 3407-00 is 11.37 CFS and by 41E 3408-00 is 11.37 CFS. Based on the ditch measurements provided in the October 17, 2024, Preapplication Meeting, the maximum ditch capacity of the Cardwell Ditch has the carrying capacity for both water rights proposed for change. The Department finds the total maximum flow rate for the water rights proposed for change is 22.74 CFS.

12. Claims 41E 3407-00 and 41E 3408-00 divert water from the Boulder River by the means of the Cardwell Ditch headgate and diversion dam in NWSENW Section 35, T2N, R3W, Jefferson County. Water is conveyed from the headgate south along the west side of the Boulder River and continues under Interstate 90 onto the Applicants property. Once it enters the Applicant's property the ditch irrigates the POU on the north side of the Jefferson Slough in in E2 Section 3, T1N, R3W, Jefferson County. The ditch continues south until it dumps into the Jefferson Slough in the NESWSE Section 3, T1N, R3W, Jefferson County. Boulder River water is then pumped into a lateral of the Cardwell Ditch from the Jefferson Slough at a secondary POD[4] just across the source from where water is dumped into the Jefferson Slough. The ditch then continues to move water down to irrigate the POU south of the Jefferson Slough in Sections 2, 3, and 11, T1N, R3W, Jefferson County. The Cardwell Ditch can be seen on the map provided as Figure 1 above.

13. Statements of Claim 41E 3406-00, 41E 3407-00, 41E 3408-00, 41E 143433-00, 41E 143436-00 and 41E 143437-00 have historically utilized the Cardwell Ditch as a means of conveyance and stock POU. Claims 41E 3406-00, 41E 3407-00, and 41E 3408-00 historically

[4] 41E 3407-00 and 41E 3408-00 secondary POD in NESWNE Section 3, T1N, R3W, Jefferson County, was decreed onto the Claims during the Preliminary Decree.

conveyed water onto the Applicant's property from April 1 to October 30. Statement of Claim 41E 3406-00 is an irrigation right supplemental to the rights in this Change Application, claiming water from Cold Spring for irrigation of 300 acres on the Applicant's property. Cold Spring water, claimed under Claim 41E 3406-00, is diverted into the Cardwell Ditch headgate as a secondary POD. Claim 41E 3406-00 is included in conveyance loss calculations as this water right utilizes the Cardwell Ditch as a means of conveyance for irrigation on the Applicant's property. Statements of Claim 41E 143433-00, 41E 143436-00 and 41E 143437-00 are owned by a neighboring third party, Golden Sunlight Mines Inc. Claim 41E 143433-00 is an irrigation right and Claims 41E 143436-00 and 41E 143437-00 are diverted ditch stock water rights that claim the Cardwell Ditch as a means of conveyance and stock POU. Irrigation Claim 41E 143433-00 is included in conveyance loss calculations as this water right utilizes water out of the Cardwell Ditch above the Applicant's water rights proposed for change in this Change Application. Claims 41E 143436-00 and 41E 143437-00 were not included in conveyance losses because they are multiple use stock diverted ditch rights with Golden Sunlight Mines Inc. irrigation water rights.

14. The Applicant states water was historically diverted into the Cardwell Ditch headgate in NWSENW Section 35, T2N, R3W, Jefferson County, and conveyed through the Cardwell Ditch to the 300-acre POU. The Applicant states Claim 41E 3407-00 and 41E 3408-00 provided irrigation to the 300-acre POU for alfalfa, barley, oats, and grass hay. Water was typically diverted starting April 1 and ended as late as October 30 of each year.

15. The water rights proposed for change are Statements of Claim, and the historical use was evaluated as the rights existed prior to July 1, 1973. No prior Change Authorizations for the water rights have occurred, and no documented history of calls for Claims 41E 3407-00 and 41E 3408-00 exist. The Department calculated the historical use using the Department's standard methodology pursuant to ARM 36.12.1902.

16. Using information provided by the Applicant about historical irrigation practices as well as Department knowledge of the project area, the historical consumptive volume (HCV) was found for the historical POU. The total historical POU consumptive volume was distributed to Claims 41E 3407-00 and 41E 3408-00 based on the proportion of the total flow rate each water right delivers to the historical POU. The following equations were used to find the HCV, these calculations are summarized in Tables 2 and 3.

$$Supplemental\ HCV = HCV * Supplemental\ Flow\ Proportion$$

$$HCV = Crop\ Consumption + Historic\ Irrecoverable\ Losses$$

$$Crop\ Consumption = Boulder\ Weather\ Station * 1ft/12inches * Jefferson\ County\ Management\ Factor * Historic\ Acres\ Historic$$

$$Irrecoverable\ Losses = Field\ Applied * IL\%$$

$$Field\ Applied = Crop\ ConsumptionField\ Efficiency$$

Table 2. Historical consumptive volume of the historical POU

Irrigation Method	Acres	IWR (in)*	Mgmt. Factor^	Field Efficiency	Crop Consumption (AF)	Applied Volume (AF)	IL (AF)	Total Consumed Volume (AF)
Flood Irrigation, Wheeline & Handline	300	17.08	0.61	0.25	260.47	1041.88	52.09	312.56

*Boulder IWR Weather Station

^Jefferson County Historical Use Management Factor (1964-1973)

Table 3. Historical consumptive volume of the POU by water right

Water Right	Type of Use	Applied Volume - Supplemental (AF)	Consumed Volume - Supplemental (AF)	Non-Consumed Volume - Supplemental (AF)
41E 3406-00	Historical	347.29	104.19	243.11
41E 3407-00	Historical	347.29	104.19	243.11
41E 3408-00	Historical	347.29	104.19	243.11
Total		**1041.88**	**312.56**	**729.32**

17. The historical diverted volume (HDV) is the sum of the water applied to the field and seasonal conveyance losses. The HDV was calculated pursuant to ARM 36.12.1902(10) and the Department's standard methodology (Roberts and Heffner, 2012). The Department calculated the HDV based on information provided by the Applicant about the historical irrigation practices and the best available information about the Cardwell Ditch. The Applicant states water has been historically diverted starting April 1 and ended at the latest on October 30. The Applicant further states that the diversion was paused for two weeklong cuttings per season. The Department used the following equation to calculate the HDV, these calculations are summarized in Table 4.

$$Water\ Right\ HDV = \frac{Water\ Right\ Crop\ Consumption}{Field\ Efficiency} + Water\ Right\ Conveyance\ Loss$$

Table 4. Historical Diverted Volume of 41E 3407-00 and 41E 3408-00

Water Right	Consumed Volume - Supplemental (AF)	Field Efficiency	Conveyance Loss Volume (AF)	Historic Diverted Volume (AF)
41E 3407-00	104.19	0.25	285.63	632.92
41E 3408-00	104.19	0.25	285.63	632.92
Total	**208.38**		**571.26**	**1265.84**

18. Seasonal conveyance losses are the sum of seepage loss, vegetation loss, and losses due to ditch evaporation. Using down-ditch measurements and information provided by the Applicant, the Department calculated seasonal conveyance losses for the Cardwell Ditch. Conveyance losses were distributed to all water rights in the Cardwell Ditch based on the Department's memorandum "Distributing Conveyance Loss on Multiple User Ditches" (Heffner, 2020).

19. The Cardwell Ditch historically conveyed Claims 41E 3406-00, 41E 3407-00, 41E 3408-00, 41E 143433-00, 41E 143436-00, and 41E 143437-00[5]. Irrigation Claims were considered in calculating and distributing conveyance losses. Diverted stock use Claims 41E 143436-00 and 41E 143437-00 were not used to calculate conveyance losses, as they are multiple use rights based on appropriations of Golden Sunlight Mines Inc irrigation water rights and the rights share conveyance water. Due to the water rights in the Cardwell Ditch being conveyed at varying distances to multiple POUs over a different number of days, the Department divided the ditch into four down-ditch combinations. The water rights were assigned to a combination based on the carrying ditch segment lengths and diverted days. The ditch combinations for the Cardwell Ditch are summarized on Table 5 and can be seen on the map provided as Figure 2.

[5] Statements of Claim 41E 143436-00 and 41E 143437-00 were objected to in the Basin 41E Preliminary Decree. The Claims were adjusted (marshaled) to be direct from source on the Boulder River and direct from ditch for every ditch adjacent to the Golden Sunlight Mines Inc property, by the Water Court in the May 14, 2024, Notice of Filing of Master's Report for Case 41E-0198-R-2024. As a result to the 2024 Masters Report, Claims 41E 143436-00 and 41E 143437-00 claim the Cardwell Ditch (also known as the Shaw Ditch) diverting from the Boulder River in NWSENW Section 35, T2N, R3W, Jefferson County. 41E 143433-00 was also objected to in the Preliminary Decree to be marshaled across a larger area, but no master report have been released. The Department evaluated the Golden Sunlight Mines Inc stock and irrigation water rights claimed out of the Cardwell Ditch as multiple use rights.

Table 5. Down-Ditch Combinations for Cardwell Ditch

Down-Ditch Combination	Water Rights	Period of Use/Diversion	Days Irrigated	Total Flow Rate (CFS)	Ditch Length (ft)	Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate	Net Evap (in)
Cardwell A	41E 3406-00, 41E 3407-00, 41E 3408-00, 41E 143433-00	4/1 to 8/31	145	39.23	1055	4	9.59	1.2	13.86
Cardwell B	41E 3406-00, 41E 3407-00, 41E 3408-00	9/1 to 10/30	53	34.11	1055	4	9.59	1.2	8.88
Cardwell C	41E 3406-00, 41E 3407-00, 41E 3408-00	4/1 to 10/30	198	34.11	7886	4	9.59	1.2	22.74
Cardwell D	41E 3406-00, 41E 3407-00, 41E 3408-00	4/1 to 10/30	198	34.11	3089	4	9.59	1.2	22.48

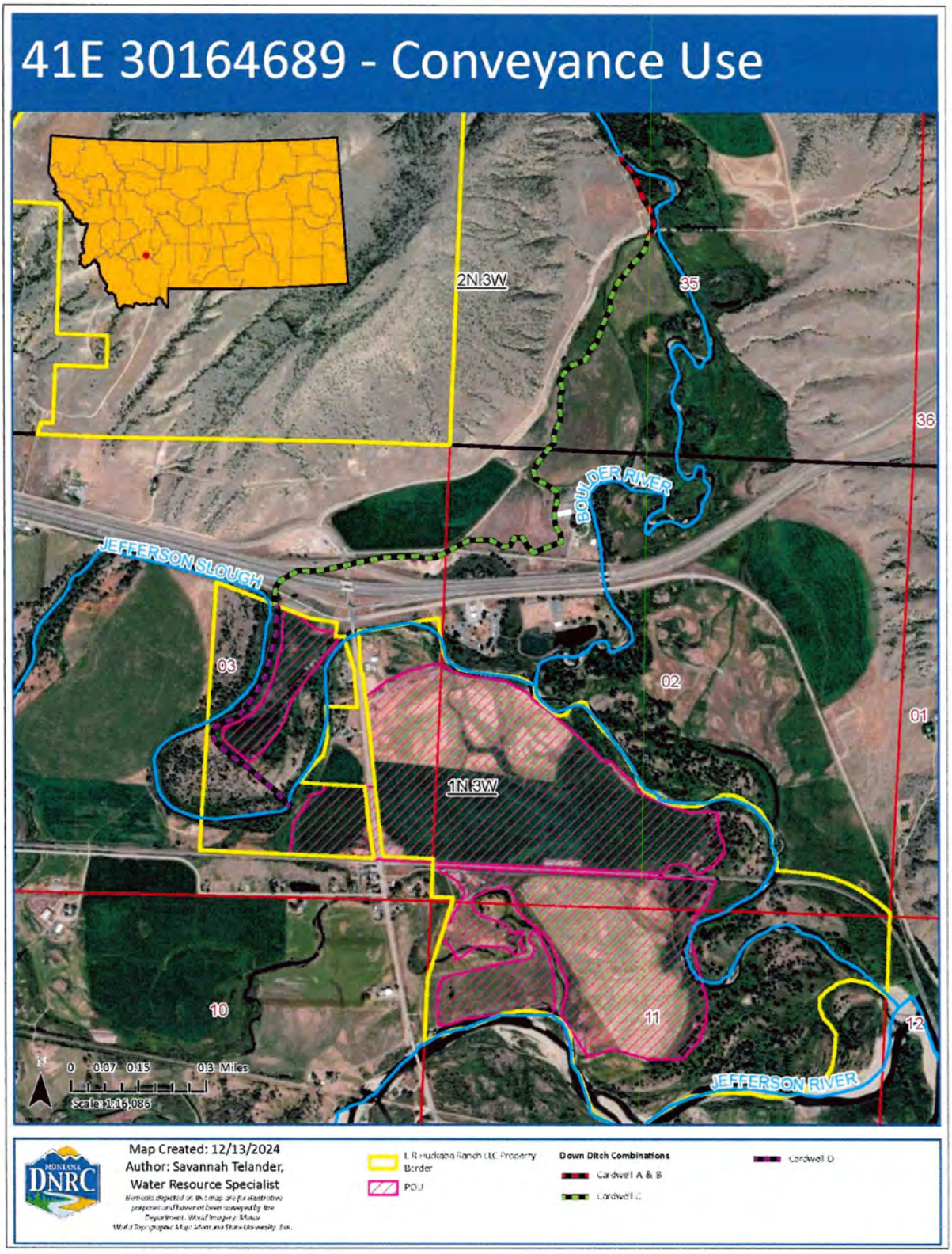


Figure 2. Cardwell Ditch Conveyance Use Map of Down-Ditch Combinations

20. Using ditch measurements provided by the Applicant during the Preapplication Meeting October 17, 2024, and third-party water right information found in water right files, seen in Table 5, the Department calculated conveyance losses for each down-ditch combination and the water rights proposed for change. Conveyance losses for the water rights included in this Change Application were distributed using the Department's memorandum "Distributing Conveyance Loss on Multiple User Ditches" (Heffner, 2020) and ARM 36.12.1902(10). The historical conveyance loss volume is equal to the sum of the historical seepage loss, vegetation loss, and ditch evaporation volumes. Conveyance loss volumes per down-ditch combination are provided below in Table 6 and the conveyance loss volumes per each water right in the Cardwell ditch are provided below in Table 7. The following equations were used to calculate conveyance loss volumes:

$$Ditch\ Combo\ Conveyance\ Losses_{Total} = Seepage\ Loss_{combo} + Vegetation\ Loss_{combo} + Evaporation\ Loss_{combo}$$

$$Seepage\ Loss_{combo} = (Wetted\ Perimeter_{combo} * Ditch\ Length_{combo} * Ditch\ Loss\ Rate * Days\ Diverted_{combo}) * \frac{1\ acre}{43560 ft^2}$$

$$Distributed\ Vegetation\ Loss_{combo} = 0.75\%\ loss\ per\ mile * \frac{Ditch\ Length_{combo}}{5280\ miles} * Flow\ Rate_{combo} * Days\ Diverted_{combo} * 2$$

$$Distributed\ Ditch\ Evaporation\ Loss_{combo} = (Surface\ Area * Adjusted\ Net\ Evaporation_{combo}) * \frac{1\ acre}{43560 ft^2}$$

$$Adjusted\ Net\ Evaporation_{combo} = Period\ of\ Diversion\ Net\ Evaporation * \frac{Days\ Irrigated}{365}$$

$$Surface\ Area = (Wetted\ Width\ ft) * Ditch\ Length_{combo}$$

$$Ditch\ Combo\ Conveyance\ Losses_{Water\ Right} = Ditch\ Combo\ Conveyance\ Losses_{Total} * Combo\ Flow\ Proportion_{Water\ Right}$$

$$Combo\ Flow\ Proportion_{Water\ Right} = Water\ Right\ Flow\ Rate_{ditch} * Ditch\ Combo\ Total\ Flow\ Rate$$

Table 6. Conveyance loss volumes for each down-ditch combination

Down-Ditch Combination	Length (ft)	Flow Rate (CFS)	Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate (ft3/ft/day)	Days Irrigated	Adj. Net Evap (in)	Seepage Loss (AF)	Vegetation Loss (AF)	Evaporative Loss (AF)	Total Conveyance Loss (AF)
Cardwell A	1055	39.23	4	9.59	1.2	145	13.86	40.41	17.05	0.11	57.57
Cardwell B	1055	34.11	4	9.59	1.2	53	8.88	14.77	5.42	0.07	20.26
Cardwell C	7886	34.11	4	9.59	1.2	198	22.74	412.51	151.31	1.37	565.19
Cardwell D	3089	34.11	4	9.59	1.2	198	22.48	161.58	59.27	0.53	221.38
Total								629.28	233.04	2.09	**864.41**

Table 7. Conveyance Loss Volume for Water Rights in Cardwell Ditch

Water Right	Down-Ditch Combination	Total Flow Rate (CFS)	Water Right Flow Rate (CFS)	Proportion	Down-Ditch Combination Conveyance Loss (AF)	Water Right Conveyance Loss (AF)	Water Right Total Conveyance Loss (AF)
41E 3406-00	Cardwell A	39.23	11.37	0.29	57.57	16.69	285.63
	Cardwell B	34.11	11.37	0.33	20.26	6.75	
	Cardwell C	34.11	11.37	0.33	565.19	188.4	
	Cardwell D	34.11	11.37	0.33	221.38	73.79	
41E 3407-00	Cardwell A	39.23	11.37	0.29	57.57	16.69	285.63
	Cardwell B	34.11	11.37	0.33	20.26	6.75	
	Cardwell C	34.11	11.37	0.33	565.19	188.4	
	Cardwell D	34.11	11.37	0.33	221.38	73.79	
41E 3408-00	Cardwell A	39.23	11.37	0.29	57.57	16.69	285.63
	Cardwell B	34.11	11.37	0.33	20.26	6.75	
	Cardwell C	34.11	11.37	0.33	565.19	188.4	
	Cardwell D	34.11	11.37	0.33	221.38	73.79	
41E 143433-00[5]	Cardwell A	39.23	5.12	0.13	57.57	7.51	7.51
Total						**864.41**	**864.41**

21. The Department finds the following historical use for Statements of Claims 41E 3407-00 and 41E 3408-00, as shown in Table 8.

Table 8. Summary of Historical Use of 41E 3407-00 and 41E 3408-00

Water Right	Purpose	Maximum Historical Acres	Priority Date	Point of Diversion	Place of Use	Maximum Flow Rate (CFS)	Consumed Volume (AF)	Diverted Volume (AF)
41E 3407-00	Irrigation	300	1886.12.31	NWSENW Section 35 T2N R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11 T1N R3W, Jefferson County	11.37	104.19	632.92
41E 3408-00	Irrigation	300	1888.12.31	NWSENW Section 35 T2N R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11 T1N R3W, Jefferson County	11.37	104.19	632.92
Total						**22.74**	**208.38**	**1265.84**

ADVERSE EFFECT

FINDINGS OF FACT

22. The Applicant proposes to change the POD for Statements of Claim 41E 3407-00 and 41E 3408-00. No changes in POU or purpose are proposed, and these water rights do not involve a place of storage. The historical POD and Cardwell Ditch will no longer be used by these water rights as a result of this change.

23. The proposed PODs are three pump sites located in NENWSW Section 2, NENWSE Section 3, and NWNWNE Section 11, all within T1N, R3W, Jefferson County. The proposed pump sites are approximately 1.21 and 1.74 miles downstream of the historical POD and 0.67 miles upstream of the Boulder River and Jefferson Slough confluence, all on the Jefferson Slough. The Applicant provided information regarding Cardwell Ditch diversion dam that is proposed to be removed in a Montana Trout Unlimited restoration project for ecological uplift in the Boulder and Jefferson Rivers. The current diversion dam has a fish ladder, but is frequently clogged with debris making it inaccessible for spawning. Due to the age of the infrastructure, the diversion dam and headgate have been increasingly difficult to operate. Water claimed under Claims 41E 3407-00 and 41E 3408-00 is proposed to continue downstream in the Boulder River into the Jefferson Slough. Boulder River and Jefferson Slough water will then be pumped by the three pump sites on the Applicant's property to irrigate the POU.

24. No changes in the POU are proposed, the consumptive use associated with the POU will remain the same as the historical consumed volume of 208.38 AF. The Department calculated the proposed diverted volume for Claims 41E 3407-00 and 41E 3408-00 using the same methodology as the historical diverted volume. The Applicant will continue to use water starting as early as April 1 and stop diversions as late as October 30 with two seven day pauses for cutting.

25. The Applicant proposes to change the POD from a headgate to three pump sites for Statements of Claim 41E 3407-00 and 41E 3408-00. The proposed PODs will pump Boulder River and Jefferson Slough water into a pipeline conveyance system to irrigate the 300-acre POU. No conveyance loss is associated with the proposed PODs. The proposed diverted volume of Claims 41E 3407-00 and 41E 3408-00 is equal to the historical applied volume of 694.58 AF (Table 3), 571.26 AF less than historically diverted.

26. The Applicant proposes to use a total flow rate of 4.52 CFS for 300 acres of irrigation from April 1 to October 30. Based on the pump information provided by the irrigation system installer in the deficiency letter response dated May 9, 2025, the total maximum pump capacity is 4.52

CFS. The proposed pump in NENWSW Section 2, T1N, R3W, Jefferson County, is a 15 horsepower pump that has a capacity of 2.67 CFS. The proposed pump in NENWSE Section 3, T1N, R3W, Jefferson County, is a General Electric 60 horsepower pump that has a capacity of 0.68 CFS. The proposed pump in NWNWNE Section 11, T1N, R3W, Jefferson County, is a Nedic Motor Company 50 horsepower pump that has a capacity of 1.16 CFS. The proposed irrigation system pump sites have the capability of pumping up to 4.52 CFS. Based on the pipeline specifications provided in the deficiency letter response dated May 9, 2025, the combined total pipeline capacity for the whole irrigation system is 2.83 CFS. The pipeline system does not have an equal carrying capacity as the proposed pumps. The Applicant further explains that two of the three pumps have been installed, and are capable of irrigating the POU as needed. The Applicant proposes to operate the proposed PODs the same as the historical POD and divert water from April 1 to October 30 with two seven day pauses for cutting. A water measurement condition required by the Department until notice of project completion will determine the proposed project's perfected flow rate needed for the Change Authorization.

27. No change in purpose or POU is proposed and return flows from irrigation of 300 acres will continue to accrue to the Jefferson Slough as it did historically. Per the Department's return flow policy, a quantification of the monthly volume returning to the hydraulically connected surface water was not conducted.

28. Claims 41E 3407-00 and 41E 3408-00 have historically utilized a pump on the Jefferson Slough in NESWSE Section 3, T1N, R3W, Jefferson County, as a secondary POD to irrigate the POU south of the Jefferson Slough. During the Preliminary Decree, this secondary POD was decreed onto the claims. The proposed POD in Section 3, T1N, R3W, Jefferson County, is approximately 0.23 miles downstream of the historical secondary POD decreed on Statements of Claim 41E 3407-00 and 41E 3408-00, on the Jefferson Slough. Additionally, the POD in Section 3, T1N, R3W, Jefferson County, is 0.67 miles upstream of the Boulder River and the Jefferson Slough confluence. Historically and under the proposed Change Application, Boulder River return flows claimed under Claims 41E 3407-00 and 41E 3408-00 have and will continue to accrue in the Jefferson Slough within the stretch where the Section 3 proposed POD is located. There are no intervening water rights diverting from the Jefferson Slough within the reach between the proposed POD in NENWSE Section 3 T1N, R3W, Jefferson County, and the confluence of the Jefferson Slough and Jefferson River.

29. Three third-party water rights, 41E 143433-00, 41E 143436-00, and 41E 143437-00, in the Cardwell Ditch are not included in this Change Application and are owned by Golden Sunlight

Mine Inc. Kristi Murphy, manager of Golden Sunlight Mine Inc, addressed a letter to the Department that acknowledges the water decrease in the Cardwell Ditch proposed in this Change Application. Murphy further states, that Golden Sunlight Mine Inc is supportive of the Applicant's proposed change and is preparing their own application for a change to their water rights to eliminate the need from the Cardwell Ditch diversion.

30. Two intervening water rights between the historical and proposed PODs, were identified by the Department. One irrigation water right (41E 143434-00) diverts from the Boulder River downstream at headgate in NWNWNE Section 2, T1N, R3W, Jefferson County. One Water Reservation (41E 30017424) owned by Montana Department of Fish, Wildlife & Parks on the Boulder River from Cold Spring to the confluence with the Jefferson Slough. There are no water rights on the Jefferson Slough between the proposed POD in NENWSE Section 3, T1N, R3W, Jefferson County, and the Jefferson Slough and Jefferson River confluence.

31. In the proposed change, Boulder River water historically diverted by the Cardwell Ditch, will continue down the source into the Jefferson Slough, where it will then be pumped for irrigation use under Claims 41E 3407-00 and 41E 3408-00. When Claims 41E 3407-00 and 41E 3408-00 are in use, the proposed pumps (PODs) will operate at a lower flow rate and require a lower diverted volume, 571.26 AF less than historically diverted. Water pumped from the Jefferson Slough upstream of the confluence, will be immediately replaced with Boulder River water via return flows from irrigation practices and at the confluence of the Boulder River and the Jefferson Slough. In the proposed change there will be more Boulder River water left instream between the historical POD and the Jefferson Slough, Jefferson River confluence, and will not create an adverse effect on other Boulder River, or Jefferson River users. No change in return flows will occur.

32. The Department finds there will be no adverse effect from the proposed change under the terms and conditions set out in this Draft Preliminary Determination.

BENEFICIAL USE

FINDINGS OF FACT

33. The Applicant proposes to use water for irrigation, which is a recognized beneficial use of water in the State of Montana. The Applicant also provided evidence of the necessity for the change in POD due to stream restoration and inoperable infrastructure of the historical diversion dam and headgate. Per Montana Trout Unlimited, debris build up within the diversion dam has negatively affected fish spawning and habitat. The age of the diversion structure has also caused

difficulties in operation. The proposed project will improve fish habitat and allow the Applicant to continue irrigation of 300 acres.

34. The Applicant proposed to use the 694.58 AF diverted volume and 4.52 CFS flow rate for continued irrigation of the 300-acre historical POU. The volume amount is determined by the Department's standards found in ARM 36.12.1902 for calculating consumptive and diverted volume for irrigation of 300 acres.

35. The Department finds the proposed 4.52 CFS and 694.58 AF diverted volume for irrigation purpose to be a beneficial use of water.

ADEQUATE DIVERSION

FINDINGS OF FACT

36. The Applicant proposes to change the POD to three pump sites to Statements of Claim 41E 3407-00 and 41E 3408-00. The proposed pumps will be located on the Applicant's property in NENWSW Section 2, NENWSE Section 3, and NWNWNE Section 11, all within T1N, R3W, Jefferson County. Boulder River water will convey through the Boulder River and Jefferson Slough where it will be diverted via two pump sites on the Applicant's property. The third pump site will be upstream of the Boulder River Jefferson Slough confluence, on the Applicant's property, pumping Jefferson Slough water. The proposed pumps are General Electric 60 horsepower pump capable of pumping 2.67 CFS, a 15 horsepower pump capable of pumping 0.77 CFS, and Nidec Motor capable of pumping 1.16 CFS. The cumulative flow rate for the proposed pumps is 2027 GPM or 4.52 CFS. The proposed pump sites allow the Applicant to divert water for the irrigation purpose.

37. The Department finds this diversion infrastructure to be adequate for the proposed irrigation. This Change Application will be subject to a condition in order to fulfill the adequacy of diversion criteria.

38. This Change Application will be subject to the following condition to fulfill the adequacy of diversion criteria:

WATER MEASUREMENT INFORMATION

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED WATER USE MEASURING DEVICE AT THE POINTS APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A

WRITTEN DAILY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED INCLUDING THE PERIOD OF OPERATION. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR UPON PROJECT COMPLETION AND UPON REQUEST THEREAFTER. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THE AUTHROIZATION. THE RECORDS MUST BE SENT TO THE HELENA DNRC WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

POSSESSORY INTEREST

FINDINGS OF FACT

39. The Applicant signed the affidavit on the Application form affirming the Applicant has possessory interest, or the written consent of the person with possessory interest, in the property where the water is to be put to beneficial use. See Department file 41E 30164689.

CONCLUSIONS OF LAW

HISTORICAL USE AND ADVERSE EFFECT

40. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one may change only that to which he or she has the right based upon beneficial use. A change to an existing water right may not expand the consumptive use of the underlying right or remove the well-established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. *McDonald v. State*, 220 Mont. 519, 530, 722 P.2d 598, 605 (1986) (beneficial use constitutes the basis, measure, and limit of a water right); *Featherman v. Hennessy*, 43 Mont. 310, 316-17, 115 P. 983, 986 (1911) (increased consumption associated with expanded use of underlying right amounted to new appropriation rather than change in use); *Quigley v. McIntosh*, 110 Mont. 495, 103 P.2d 1067, 1072-74 (1940) (appropriator may not expand a water right through the guise of a change – expanded use constitutes a new use with a new priority date junior to intervening water uses); *Allen v. Petrick*, 69 Mont. 373, 222 P. 451(1924) ("quantity of water which may be claimed lawfully under a prior appropriation is limited to that quantity within the amount claimed which the appropriator has needed, and which within a reasonable time he has actually and economically applied to a beneficial use. . . . it may be said

that the principle of beneficial use is the one of paramount importance . . . The appropriator does not own the water. He has a right of ownership in its use only"); *Town of Manhattan*, ¶ 10 (an appropriator's right only attaches to the amount of water actually taken and beneficially applied).[6]

41. Sections 85-2-401(1) and -402(2)(a), MCA, codify the prior appropriation principles that Montana appropriators have a vested right to maintain surface and ground water conditions substantially as they existed at the time of their appropriation; subsequent appropriators may insist that prior appropriators confine their use to what was actually appropriated or necessary for their originally intended purpose of use; and, an appropriator may not change or alter its use in a manner that adversely affects another water user. *Spokane Ranch & Water Co. v. Beatty*, 37 Mont. 342, 96 P. 727, 731 (1908); *Quigley*, 110 Mont. at 505-11,103 P.2d at 1072-74; *Matter of Royston*, 249 Mont. at 429, 816 P.2d at 1057; *Hohenlohe*, ¶¶ 43-45.[7]

42. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the "historic use" of the water right being changed. *Town of Manhattan*, ¶10 (recognizing that the Department's obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change Applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a statement of claim, permit, or decree may not include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.[8] A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. *Quigley*, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides

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[6] DNRC decisions are available at: https://dnrc.mt.gov/Directors-Office/HearingOrders

[7] *See also Holmstrom Land Co., Inc., v. Newlan Creek Water District*,185 Mont. 409, 605 P.2d 1060 (1979); *Lokowich v. Helena*, 46 Mont. 575, 129 P. 1063 (1913); *Thompson v. Harvey*, 164 Mont. 133, 519 P.2d 963 (1974) (plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); *McIntosh v. Graveley*, 159 Mont. 72, 495 P.2d 186 (1972) (appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); *Head v. Hale*, 38 Mont. 302, 100 P. 222 (1909) (successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); and, *Gassert v. Noyes*, 18 Mont. 216, 44 P. 959 (1896) (change in place of use was unlawful where reduced the amount of water in the source of supply available which was subject to plaintiff's subsequent right).

[8] A claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The claim does not constitute *prima facie* evidence of historical use in a change proceeding under § 85-2-402, MCA. For example, most water rights decreed for irrigation are not decreed with a volume and provide limited evidence of actual historic beneficial use. Section 85-2-234, MCA

a limited description of the right); *Royston*, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record could not sustain a conclusion of no adverse effect because the Applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); *Hohenlohe*, ¶ 44-45; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); Matter of Application For Beneficial Water Use Permit By City of Bozeman, *Memorandum*, Pgs. 8-22 (Adopted by DNRC *Final Order* January 9,1985)(evidence of historic use must be compared to the proposed change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).[9]

43. An Applicant must also analyze the extent to which a proposed change may alter historic return flows for purposes of establishing that the proposed change will not result in adverse effect. The requisite return flow analysis reflects the fundamental tenant of Montana water law that once water leaves the control of the original appropriator, the original appropriator has no right to its use and the water is subject to appropriation by others. *E.g., Hohenlohe*, ¶ 44; *Rock Creek Ditch & Flume Co. v. Miller*, 93 Mont. 248, 17 P.2d 1074, 1077 (1933); *Newton v. Weiler*, 87 Mont. 164,

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[9] Other western states likewise rely upon the doctrine of historic use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District, 717 P.2d 955, 959 (Colo. 1986)("[O]nce an appropriator exercises his or her privilege to change a water right ... the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right ... which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right."); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo.,1999); Farmers Reservoir and Irr. Co. v. City of Golden, 44 P.3d 241, 245 (Colo. 2002)("We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation); Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (When an owner of a water right wishes to change a water right ... he shall file a petition requesting permission to make such a change .... The change ... may be allowed provided that the quantity of water transferred ... shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.); Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 -566 (Wyo,1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.)

286 P. 133 (1930); *Popham v. Holloron*, 84 Mont. 442, 275 P. 1099, 1102 (1929); *Galiger v. McNulty*, 80 Mont. 339, 260 P. 401 (1927); *Head v. Hale*, 38 Mont. 302, 100 P. 222 (1909); *Spokane Ranch & Water Co.*, 37 Mont. at 351-52, 96 P. at 731; *Hidden Hollow Ranch v. Fields*, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; ARM 36.12.101(56) (Return flow - that part of a diverted flow which is not consumed by the appropriator and returns underground to its original source or another source of water - is not part of a water right and is subject to appropriation by subsequent water users).[10]

44. Although the level of analysis may vary, analysis of the extent to which a proposed change may alter the amount, location, or timing return flows is critical in order to prove that the proposed change will not adversely affect other appropriators who rely on those return flows as part of the source of supply for their water rights. *Royston*, 249 Mont. at 431, 816 P.2d at 1059-60; *Hohenlohe*, at ¶¶ 45-46 and 55-6; *Spokane Ranch & Water Co.*, 37 Mont. at 351-52, 96 P. at 731.

45. In *Royston*, the Montana Supreme Court confirmed that an Applicant is required to prove lack of adverse effect through comparison of the proposed change to the historic use, historic consumption, and historic return flows of the original right. 249 Mont. at 431, 816 P.2d at 1059-60. More recently, the Montana Supreme Court explained the relationship between the fundamental principles of historic beneficial use, return flow, and the rights of subsequent appropriators as they relate to the adverse effect analysis in a change proceeding in the following manner:

> The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the "amount historically consumed" and the water that re-enters the stream as return flow. . . .
> An appropriator historically has been entitled to the greatest quantity of water he can put to use. The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. This limitation springs from a fundamental tenet of western water law-that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator "is entitled to have the water flow in the same manner as when he located," and the appropriator may insist that prior appropriators do not affect adversely his rights.
> This fundamental rule of Montana water law has dictated the Department's determinations in numerous prior change proceedings. The Department claims that historic consumptive use, as quantified in part by return flow analysis,

[10] The Montana Supreme Court recently recognized the fundamental nature of return flows to Montana's water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell's flows are fed by irrigation return flows available for appropriation. *Bitterroot River Protective Ass'n, Inc. v. Bitterroot Conservation Dist.*, 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, 198 P.3d 219,(*citing Hidden Hollow Ranch v. Fields*, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

> represents a key element of proving historic beneficial use.
> We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe, at ¶¶ 42-45 (internal citations omitted).

46. The Department's rules reflect the above fundamental principles of Montana water law and are designed to itemize the type evidence and analysis required for an Applicant to meet its burden of proof. ARM 36.12.1901 through 1903. These rules forth specific evidence and analysis required to establish the parameters of historic use of the water right being changed. ARM 36.12.1901 and 1902. The rules also outline the analysis required to establish a lack of adverse effect based upon a comparison of historic use of the water rights being changed to the proposed use under the changed conditions along with evaluation of the potential impacts of the change on other water users caused by changes in the amount, timing, or location of historic diversions and return flows. ARM 36.12.1901 and 1903.

47. Applicant seeks to change existing water rights represented by its Water Right Claims. The "existing water rights" in this case are those as they existed prior to July 1, 1973, because with limited exception, no changes could have been made to those rights after that date without the Department's approval. Analysis of adverse effect in a change to an "existing water right" requires evaluation of what the water right looked like and how it was exercised prior to July 1, 1973. In *McDonald v. State*, the Montana Supreme Court explained:

> The foregoing cases and many others serve to illustrate that what is preserved to owners of appropriated or decreed water rights by the provision of the 1972 Constitution is what the law has always contemplated in this state as the extent of a water right: such amount of water as, by pattern of use and means of use, the owners or their predecessors put to beneficial use. . . . the Water Use Act contemplates that all water rights, regardless of prior statements or claims as to amount, must nevertheless, to be recognized, pass the test of historical, unabandoned beneficial use. . . . To that extent only the 1972 constitutional recognition of water rights is effective and will be sustained.

220 Mont. at 529, 722 P.2d at 604; *see also Matter of Clark Fork River Drainage Area*, 254 Mont. 11, 17, 833 P.2d 1120 (1992).

48. Water Resources Surveys were authorized by the 1939 legislature. 1939 Mont. Laws Ch. 185, § 5. Since their completion, Water Resources Surveys have been invaluable evidence in water right disputes and have long been relied on by Montana courts. *In re Adjudication of Existing Rights to Use of All Water in North End Subbasin of Bitterroot River Drainage Area in Ravalli and Missoula Counties*, 295 Mont. 447, 453, 984 P.2d 151, 155 (1999) (Water Resources

Survey used as evidence in adjudicating of water rights); *Wareing v. Schreckendgust*, 280 Mont. 196, 213, 930 P.2d 37, 47 (1996) (Water Resources Survey used as evidence in a prescriptive ditch easement case); *Olsen v. McQueary*, 212 Mont. 173, 180, 687 P.2d 712, 716 (1984) (judicial notice taken of Water Resources Survey in water right dispute concerning branches of a creek).

49. While evidence may be provided that a particular parcel was irrigated, the actual amount of water historically diverted and consumed is critical. *E.g., In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, DNRC Proposal for Decision adopted by Final Order (2005). The Department cannot assume that a parcel received the full duty of water or that it received sufficient water to constitute full-service irrigation for optimum plant growth. Even when it seems clear that no other rights could be affected solely by a particular change in the location of diversion, it is essential that the change also not enlarge an existing right. *See MacDonald*, 220 Mont. at 529, 722 P.2d at 604; *Featherman*, 43 Mont. at 316-17, 115 P. at 986; *Trail's End Ranch, L.L.C. v. Colorado Div. of Water Resources*, 91 P.3d 1058, 1063 (Colo., 2004).

50. The Department has adopted a rule providing for the calculation of historic consumptive use where the Applicant proves by a preponderance of the evidence that the acreage was historically irrigated. ARM 36.12.1902(16). In the alternative an Applicant may present its own evidence of historic beneficial use. In this case Applicant has elected to proceed under ARM 36.12.1902. (FOF No.15-16).

51. If an Applicant seeks more than the historic consumptive use as calculated by ARM 36.12.1902(16), the Applicant bears the burden of proof to demonstrate the amount of historic consumptive use by a preponderance of the evidence. The actual historic use of water could be less than the optimum utilization represented by the calculated duty of water in any particular case. *E.g., Application for Water Rights in Rio Grande County*, 53 P.3d 1165 (Colo., 2002) (historical use must be quantified to ensure no enlargement); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*; *Orr v. Arapahoe Water and Sanitation Dist.*, 753 P.2d 1217, 1223-1224 (Colo., 1988) (historical use of a water right could very well be less than the duty of water); *Weibert v. Rothe Bros., Inc.*, 200 Colo. 310, 317, 618 P.2d 1367, 1371 - 1372 (Colo. 1980) (historical use could be less than the optimum utilization "duty of water").

52. Based upon the Applicant's evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of 41E 3407-00 to be a diverted volume of 632.92 AF, a historically consumed volume of 104.19 AF, and flow rate of 11.37 CFS. Based upon the Applicant's evidence of historic use, the Applicant has proven by a preponderance of the evidence

the historic use of 41E 3408-00 to be a diverted volume of 632.92 AF, a historically consumed volume of 104.19 AF, and flow rate of 11.37 CFS. (FOF Nos. 9-21)

53. Based upon the Applicant's comparative analysis of historic water use and return flows to water use and return flows under the proposed change, the Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. Section 85-2-402(2)(a), MCA. (FOF Nos. 22-32)

BENEFICIAL USE

54. A change Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. Sections 85-2-102(4) and -402(2)(c), MCA. Beneficial use is and has always been the hallmark of a valid Montana water right: "[T]he amount actually needed for beneficial use within the appropriation will be the basis, measure, and the limit of all water rights in Montana . . ." McDonald, 220 Mont. at 532, 722 P.2d at 606. The analysis of the beneficial use criterion is the same for change authorizations under §85-2-402, MCA, and new beneficial permits under §85-2-311, MCA. ARM 36.12.1801. The amount of water that may be authorized for change is limited to the amount of water necessary to sustain the beneficial use. *E.g., Bitterroot River Protective Association v. Siebel, Order on Petition for Judicial Review*, Cause No. BDV-2002-519 (Mont. 1st Jud. Dist. Ct.) (2003) (*affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518); *Worden v. Alexander*, 108 Mont. 208, 90 P.2d 160 (1939); *Allen v. Petrick*, 69 Mont. 373, 222 P. 451(1924); *Sitz Ranch v. DNRC*, DV-10-13390,, *Order Affirming DNRC Decision*, Pg. 3 (Mont. 5th Jud. Dist. Ct.) (2011) (citing *BRPA v. Siebel*, 2005 MT 60, and rejecting Applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet); *Toohey v. Campbell*, 24 Mont. 13, 60 P. 396 (1900) ("The policy of the law is to prevent a person from acquiring exclusive control of a stream, or any part thereof, not for present and actual beneficial use, but for mere future speculative profit or advantage, without regard to existing or contemplated beneficial uses. He is restricted in the amount that he can appropriate to the quantity needed for such beneficial purposes."); § 85-2-312(1)(a), MCA (DNRC is statutorily prohibited from issuing a permit for more water than can be beneficially used).

55. Applicant proposes to use water for irrigation which is a recognized beneficial use. Section 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence irrigation is a

beneficial use and that 694.58 AF of diverted volume and 22.74 CFS flow rate of water requested is the amount needed to sustain the beneficial. Section 85-2-402(2)(c), MCA (FOF Nos. 33-35).

ADEQUATE MEANS OF DIVERSION

56. Pursuant to § 85-2-402 (2)(b), MCA, the Applicant must prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate. This codifies the prior appropriation principle that the means of diversion must be reasonably effective for the contemplated use and may not result in a waste of the resource. *Crowley v. 6th Judicial District Court*, 108 Mont. 89, 88 P.2d 23 (1939); *In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC* (DNRC Final Order 2002) (information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies based upon project complexity; design by licensed engineer adequate).

57. Pursuant to § 85-2-402 (2)(b), MCA, Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. (FOF Nos. 36-38)

POSSESSORY INTEREST

58. Pursuant to § 85-2-402(2)(d), MCA, the Applicant must prove by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. See also ARM 36.12.1802.

59. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. (FOF Nos. 39).

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 41E 30164689 should be GRANTED subject to the following.

The Applicant is authorized to divert Statements of Claim 41E 3407-00 and 41E 3408-00 from three pump sites in the NENWSW Section 2, NENWSE Section 3, and NWNWNE Section 11, T1N, R3W, Jefferson County. Under Change Application 41E 30164689, the Applicant may divert a maximum volume of 347.29 AF under 41E 3407-00 and a max volume of 347.29 AF under

41E 3408-00, a total of 694.58 AF. The maximum consumed volume for 41E 3407-00 is 104.19 AF and the maximum consumed volume for 41E 3408-00 is 104.19 AF, a total of 208.38 AF. Claims 41E 3407-00 and 41E 3408-00 are authorized to divert water at a flow rate of 4.52 CFS from April 1 to October 30 for irrigation of 300 acres in SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, all within T1N, R3W, Jefferson County.

This Application is subject to the following condition:

WATER MEASUREMENT INFORMATION

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED WATER USE MEASURING DEVICE AT THE POINTS APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN DAILY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED INCLUDING THE PERIOD OF OPERATION. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR UPON PROJECT COMPLETION AND UPON REQUEST THEREAFTER. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THE AUTHROIZATION. THE RECORDS MUST BE SENT TO THE HELENA DNRC WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

NOTICE

The Department will provide a notice of opportunity for public comment on this Application and the Department's Draft Preliminary Determination to Grant pursuant to § 85-2-307, MCA. The Department will set a deadline for public comments to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives public comment, the Department shall consider the public comments, respond to the public comments, and issue a preliminary determination to grant the application, grant the application in modified form, or deny the application. If no public comments are received pursuant to § 85-2-307(4), MCA, the Department's preliminary determination will be adopted as the final determination.

To exhaust your administrative remedies under the Montana Administrative Procedure Act (Title 2, Chapter 4, MCA) on a denial of an application, you must proceed to the show cause hearing, complete the hearing process and receive a final order from the Department. Only a person who has exhausted his or her administrative remedies available within the agency and is aggrieved by a final order of the Department is entitled to judicial review under Montana Administrative Procedure Act (§ 2-4-702, MCA).

DATED 28th of July, 2025.

Jennifer Daly, Manager
Helena Regional Office
Montana Department of Natural Resources and Conservation

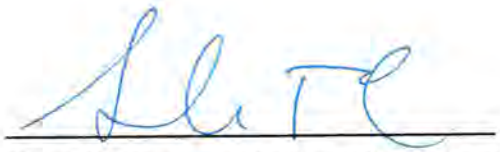
CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the DRAFT PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 28th of July, 2025, by first class United States mail.

LR HUCKABA RANCH INC
26 MT HIGHWAY 356
CARDWELL, MT 59271

ALLISON PARDIS (TROUT UNLIMITED)
allison.pardis@TU.org

CHRIS EDGINGTON (TROUT UNLIMITED)
chris@montanatu.org



HELENA Regional Office, (406) 444-6999

Helena Regional Office
1424 Ninth Avenue P.O. Box 201601
Helena, MT 59620-1601
406-444-6999

July 28, 2025

LR Huckaba Ranch Inc
26 MT Highway 356
Cardwell, MT 59271

Subject: Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164689

Dear Applicant,

The Department of Natural Resources and Conservation (Department or DNRC) has completed a preliminary review of your application. This review consists of an evaluation of the criteria for issuance of a change authorization found in §85-2-402, MCA. The Department has preliminarily determined that the criteria are met, and this application should be granted. A copy of the Draft Preliminary Determination to Grant your application is attached.

You have the opportunity to request an extension of time to submit additional information for the Department to consider in the decision, within 15 business days of the date of this letter. If no response is received by August 18, 2025, the Department will prepare a notice of opportunity to provide public comment per §85-2-307(4), MCA.

Sincerely,

Savannah Telander
Water Resources Specialist
406-444-6810
Savannah.Telander@mt.gov

From: Allison Pardis
To: Daly, Jennifer; Telander, Savannah
Cc: Chris Edgington; lenhuckaba@icloud.com
Subject: [EXTERNAL] Re: Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164989
Date: Monday, August 18, 2025 4:49:49 PM
Attachments: image001.png

Ok, thanks Jen. We will just move forward as is.

Best,
Alli

From: Daly, Jennifer <JDaly2@mt.gov>
Sent: Monday, August 18, 2025 4:21 PM
To: Allison Pardis <allison.pardis@tu.org>; Telander, Savannah <Savannah.Telander@mt.gov>
Cc: Chris Edgington Montana <chris@montanatu.org>; lenhuckaba@icloud.com <lenhuckaba@icloud.com>
Subject: RE: Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164989

If the applicant requests an extension, then they can use that time to propose different language for the condition if they don't agree with the current conditions. But today is the last day to request extension. Hope this helps, Jenn Daly

---

From: Allison Pardis <allison.pardis@tu.org>
Sent: Monday, August 18, 2025 4:14 PM
To: Telander, Savannah <Savannah.Telander@mt.gov>
Cc: Daly, Jennifer <JDaly2@mt.gov>; Chris Edgington <chris@montanatu.org>; lenhuckaba@icloud.com
Subject: [EXTERNAL] Re: Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164989

Thanks Savannah.

Sorry it isn't clear to me, is there additional information that would effect the monitoring requirements?

Alli

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Monday, August 18, 2025 4:10 PM
To: Allison Pardis <allison.pardis@tu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>; Chris Edgington Montana <chris@montanatu.org>; lenhuckaba@icloud.com <lenhuckaba@icloud.com>
Subject: RE: Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164989

Alli,

If the Applicant does not agree with the condition text found in the Draft PD, they can request an extension of time to submit additional information for the Department. Today is the last day to submit a request of extension, as mentioned below.

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com] | **X (Twitter** [twitter.com]) |
Instagram [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Allison Pardis <allison.pardis@tu.org>
Sent: Monday, August 18, 2025 2:17 PM
To: Telander, Savannah <Savannah.Telander@mt.gov>; Chris Edgington <chris@montanatu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: [EXTERNAL] Re: Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164989

Thanks for sending this Savannah. And sorry for the delay on my response. I was on vacation and I've been in the field quite a bit.

The only question I had after reviewing the preliminary determination was about the monitoring requirements. It says the operator will record a daily flow rate and volume at each approved point. For similar projects with approved change authorizations we typically report a monthly volume from a flow meter. Daily flow rates and volume would require some sort of data logging device with power or exceptional record keeping on the irrigators part. Is there a reason why the monitoring requirements for this particular change are more intensive than other change authorizations? Is there flexibility in the requirements?

Thanks!
Alli

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Monday, July 28, 2025 9:22 AM
To: Allison Pardis <allison.pardis@tu.org>; Chris Edgington Montana <chris@montanatu.org>

Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164989

Greetings,

Attached is the Draft Preliminary Determination to Grant Water Right Change Application No. 41E 30164989 that was sent to the Huckaba's today. The Applicant has an opportunity to request an extension of time to submit additional information for the Department to consider in the decision, within 15 business days of this letter/email (**August 18, 2025**). If there is no response, the Department will prepare a notice of opportunity to provide public comment per §85-2-307(4), MCA.

Let us know if you have any questions.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) |
Instagram [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

Processing Materials

- Work copies of applicant-submitted information
- Deficiency letter
- Deficiency response
- Correct & complete determination
- Any correspondence with the applicant after application receipt and prior to sending the Draft PD

Processing Materials

Helena Regional Office
1424 Ninth Avenue P.O. Box 201601
Helena, MT 59620-1601
406-444-6999

June 2, 2025

LR Huckaba Ranch LLC
26 MT Highway 356
Cardwell, MT 59271

Subject: Water Right Change Application 41E 30164689

Dear Applicant,

The Department of Natural Resources and Conservation (Department) has determined that your Application is correct and complete pursuant to ARM 36.12.1601. Please remember that correct and complete **does not mean that your application will be granted.** The purpose of this letter is to indicate that the Department has enough information to analyze your water right application.

The Department will issue a Draft Preliminary Determination within 60 days of the date of this letter per §85-2-307(2)(b), MCA.

Following issuance of the Draft Preliminary Determination, you (Applicant) will have 15 business days to request an extension of time to submit additional information, if desired pursuant to §85-2-307(3)(a), MCA.

If no extension of time is requested and the Draft Preliminary Determination decision is to grant your application or grant your Application in modified form, the Department will prepare a notice of opportunity to provide public comment, per §85-2-307(4)(a), MCA.

If no extension of time is requested and the Draft Preliminary Determination decision is to deny your application, the Department will adopt the Draft Preliminary Determination as the final determination per §85-2-307(3)(d)(ii), MCA.

If you have any questions or concerns about the Application process, please contact me.

Sincerely,

Savannah Telander
Water Resources Specialist
406-444-6810
Savannah.Telander@mt.gov

CC:
Chris Edgington, chris@montanatu.org
Alli Pardis, allison.pardis@tu.org

May 7, 2025

Re: Deficiency Letter for Change Application No. 41E 30164689

Dear Savannah,

Thank you for your assistance in reviewing responses to the issued Deficiency Letter for Change Application No. 41E 30164689 to LR Huckaba Ranch LLC. This change application is critical to the water conservation and restoration project on the Boulder River for the benefit of Montana fisheries and agriculture. Below you will find responses to each identified deficiency.

Thank you and please let me know if you have any questions.

Sincerely,

Alli Pardis

Trout Unlimited
(406) 431-5981
Allison.pardis@tu.org

31.4. Do other water rights share any of the proposed points of diversion

o Answer provided on Application: “No”

o Based on information provided to the Department, supplemental Statement of Claim 41E 3406- 00 historically utilized the historical point of diversion (Cardwell Ditch headgate) as a secondary point of diversion. Please clarify if the proposed points of diversion will be utilized by other water rights.

- Statement of Claim 41E 3406-00 primary point of diversion is located in the SWSESW ¼ sections of Section 6, Township 2N, Range 2 W of Jefferson County and conveyed through an undeveloped spring. The Cardwell Ditch has been historically used as a secondary point of diversion for this claim. The proposed points of diversion may be utilized as a secondary point of diversion for Statement of Claim 41E 3406-00.

o If the answer to 31.4. is yes, please describe how the proposed project will not adversely affect other water rights under 31.4.1.

- The proposed project moves the secondary point of diversion downstream, maintaining a higher flow rate in the Boulder River throughout the project reach. The project will not make call on any upstream water users. Per the technical analysis the proposed project uses an equal or lesser amount of diverted quantity from historical use, including supplemental water.

31.5. Do other water rights share any conveyance ditch associated with the proposed points of diversion?

o Answer provided on Application: “No”

o Based on information provided to the Department, Statement of Claim 41E 3406-00 historically utilized the historical means of conveyance (Cardwell Ditch) as a means of conveyance to the supplemental place of use. Please clarify if the proposed conveyance system will be utilized by other water rights.

- Statement of Claim 41E 3406-00 primary point of diversion is located in the SWSESW ¼ sections of Section 6, Township 2N, Range 2 W of Jefferson County and conveyed through an undeveloped spring. The Cardwell Ditch has been historically used as a secondary point of diversion for this claim. The proposed conveyance system may be utilized to convey Statement of Claim 41E 3406-00 to the supplemental place of use.

o If the answer to 31.5. is yes, please describe how the proposed project will not adversely affect other water right(s) under 31.6.

- Technical analysis shows that the proposed project uses an equal or lesser amount of diverted quantity from historical use, including supplemental water.

33. Describe specific information about the capacity of all proposed diversionary structures. This may include, where applicable: pump curve and total dynamic head calculations, headgate design specifications, and dike or dam height and length.

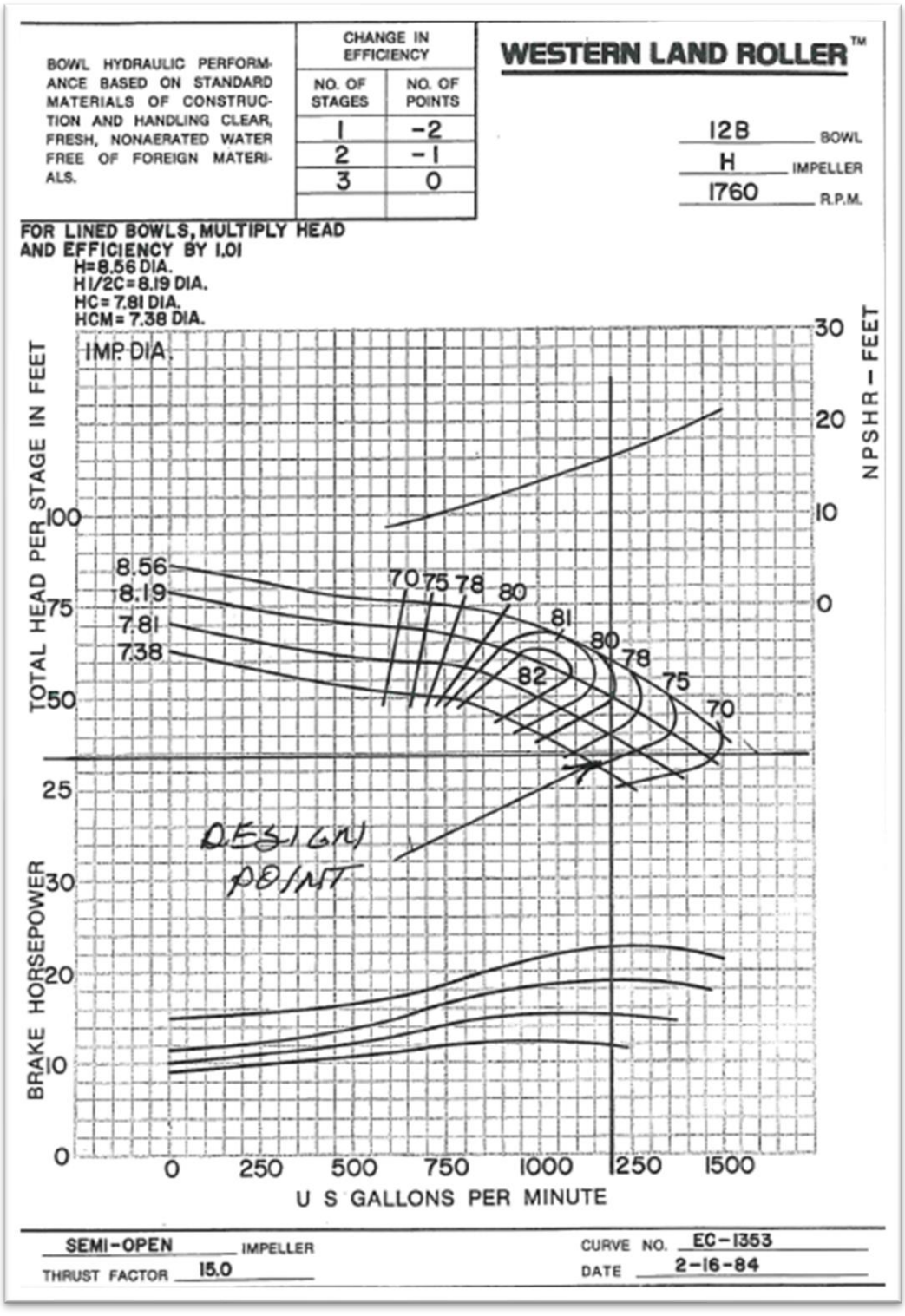
o Answer provided on Application: “See attached schematic”

o The provided information labeled for Question 33 are a receipt from AquaTech, a map of the proposed POD 2, three images of taken on the Jefferson Slough of “Huckaba POD”, map “West Side – V2”, and flow rates for four pivots from proposed PODs 1 and 3.

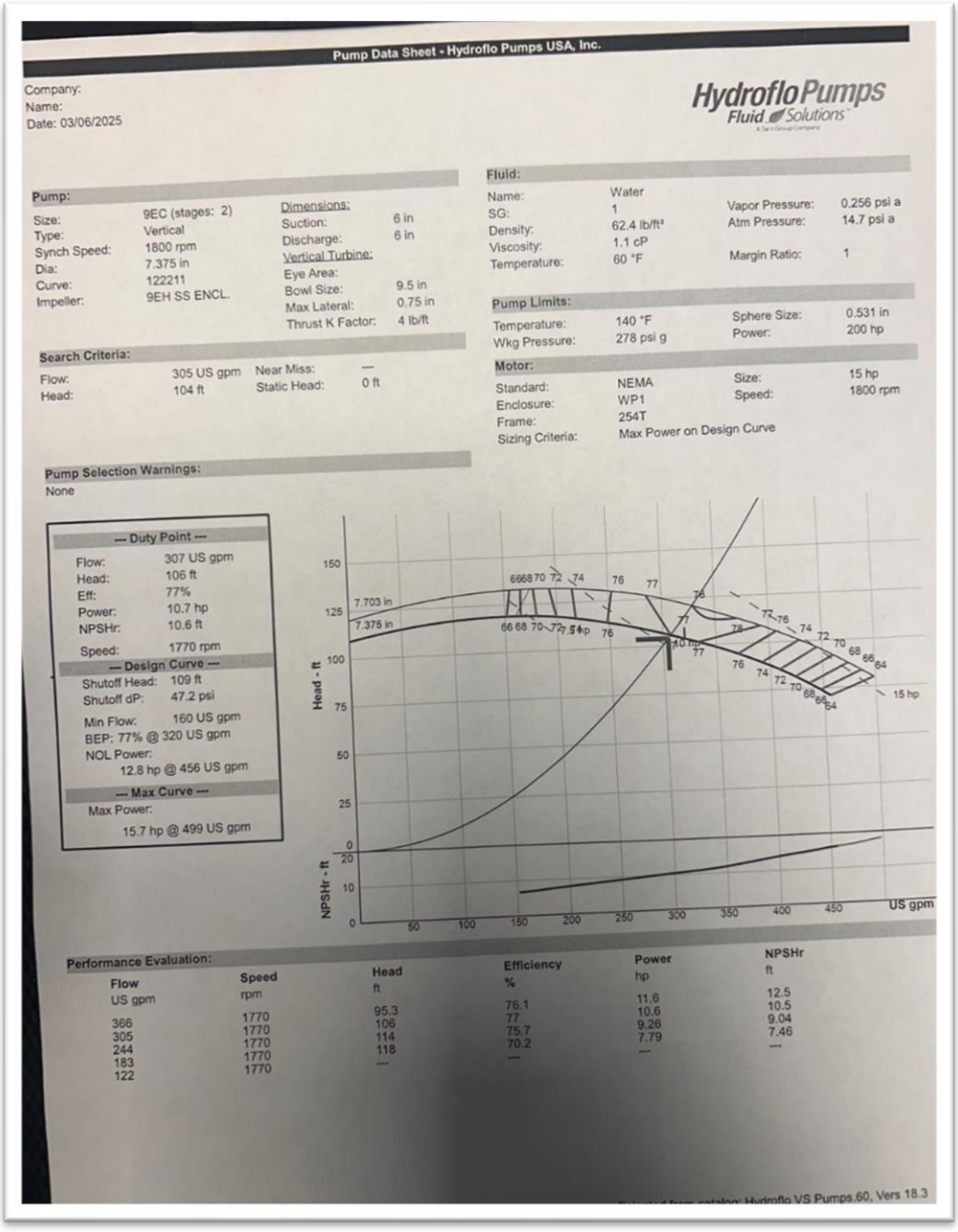
o Please provide information about the capacity of the proposed diversion pumps at each pump site on the Jefferson Slough. The information provided with the Application is not suitable to determine the capacity of the three proposed diversion pumps. The Department sent two viable options to gather the needed information for the pump capacities via email to the Montana Trout Unlimited contacts on December 13, 2024.

- The capacity of the proposed diversion pumps for each proposed POD is displayed below by the pumps performance curve and associated design point.

POD 01: Performance Curve



POD 02: Performance Curve



Pump Data Sheet - Hydroflo Pumps USA, Inc.

Company:
Name:
Date: 03/06/2025

HydrofloPumps Fluid Solutions

Pump:

		Dimensions:	
Size:	9EC (stages: 2)	Suction:	6 in
Type:	Vertical	Discharge:	6 in
Synch Speed:	1800 rpm	Vertical Turbine:	
Dia:	7.375 in	Eye Area:	
Curve:	122211	Bowl Size:	9.5 in
Impeller:	9EH SS ENCL.	Max Lateral:	0.75 in
		Thrust K Factor:	4 lb/ft

Search Criteria:

Flow:	305 US gpm	Near Miss:	---
Head:	104 ft	Static Head:	0 ft

Fluid:

Name:	Water		
SG:	1	Vapor Pressure:	0.256 psi a
Density:	62.4 lb/ft³	Atm Pressure:	14.7 psi a
Viscosity:	1.1 cP		
Temperature:	60 °F	Margin Ratio:	1

Pump Limits:

Temperature:	140 °F	Sphere Size:	0.531 in
Wkg Pressure:	278 psi g	Power:	200 hp

Motor:

Standard:	NEMA	Size:	15 hp
Enclosure:	WP1	Speed:	1800 rpm
Frame:	254T		
Sizing Criteria:	Max Power on Design Curve		

Pump Selection Warnings:
None

--- Duty Point ---

Flow:	307 US gpm
Head:	106 ft
Eff:	77%
Power:	10.7 hp
NPSHr:	10.6 ft
Speed:	1770 rpm

--- Design Curve ---

Shutoff Head:	109 ft
Shutoff dP:	47.2 psi
Min Flow:	160 US gpm

BEP: 77% @ 320 US gpm
NOL Power:
12.8 hp @ 456 US gpm

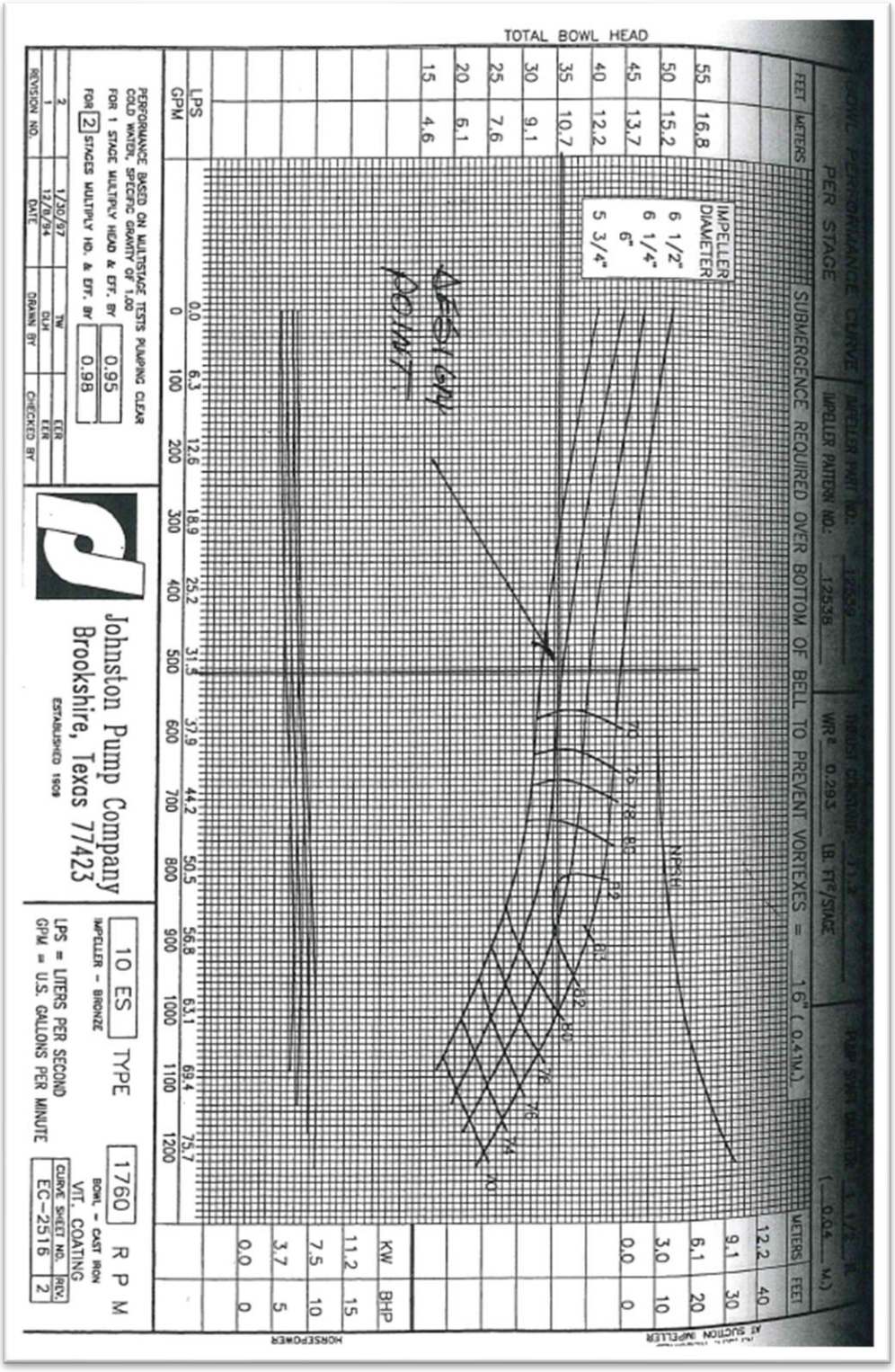
--- Max Curve ---
Max Power:
15.7 hp @ 499 US gpm

Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
366	1770	95.3	76.1	11.6	12.5
305	1770	106	77	10.6	10.5
244	1770	114	75.7	9.26	9.04
183	1770	118	70.2	7.79	7.46
122	1770	---	---	---	---

Printed from catalog: Hydroflo VS Pumps.60, Vers 18.3

POD 03: Performance Curve



35. Describe the size and configuration of infrastructure to convey water from all proposed points of diversion to all proposed places of use. This may include, where applicable: ditch capacity and/or pipeline size and configuration.

o Answer provided on Application: “See attached schematic”

o The provided information labeled for Question 35 are a receipt from AquaTech, a map of the proposed POD 2, three images of taken on the Jefferson Slough of “Huckaba POD”, map “West Side – V2”, and flow rates for four pivots from proposed PODs 1 and 3.

o Please provide information regarding what the proposed means of conveyance is, as well as the size and configuration of each conveyance system within the proposed project.

- The three proposed PODs use enclosed, pressurized pipelines to convey water to pivots for irrigation application. Each proposed POD system is described in more detail below.

  POD 01 serves three pivots and operates at 1200 GPM (See attached performance curve). Two pipelines split to serve the center full circle pivot and eastern part circle pivot. There are 1820’ of 6” 100# PIP PVC pipe buried to serve the eastern part circle pivot and water is conveyed through the pipeline at 300 GPM. To serve the center full circle there are 660’ of buried 10” 100# Pip PVC that run from the pump south, which connects to 360’ of 8” 100# PIP PVC pipe running south, the pipeline then splits westward and 600’ of 8” 100# PIP PVC which delivers 696 GPM of water to the center full circle pipeline. From the split off to the center full circle 600’ of buried 10” 100# PIP PVC travel south, transitioning to 660’ of 8” 100# POP PVC. The pipeline then splits westward and 2560’ of buried 100# PIP PVC pipe serves the western part circle pivot with 200 GPM of water. The combine flow rate for the whole system is operated at 1196 GPM.

  POD 02 serves two pivots and operates at 300 GPM (See attached performance curve). A single 462’ long buried 6” 100# IPS PVC pipeline will run from the pump to a split along the eastern end of the field. 616’ of buried 4” 125# IPS PVC pipe will run north from the split to serve the northern part circle pivot at 150 GPM. From the split 528’ of buried 4” 125# IPS PVC pipe runs south to serve the southern part circle pivot at 150 GPM. The total flow rate for the system is operated at 300 GPM.

  POD 03 serves a single pivot and operates at 520 GPM (See attached performance curve). A single 1304’ buried 8” 100# PIP PVC pipe runs from the pump to serve the part circle pivot and delivers 513 GPM.

Specifications and pipeline configuration from the installer are provided below. Please note each map with pipeline configuration is for reference only and information about pipeline length and size should be used based on the specifications provided by the installer below.

POD 01: Pipeline size and configuration

Mainline Data:

1- To Full Circle:

660' - 10" 100# Pip PVC
360' - 8" 100# PIP PVC
600' - 8" 100# PIP PVC

2- To West Part Circle

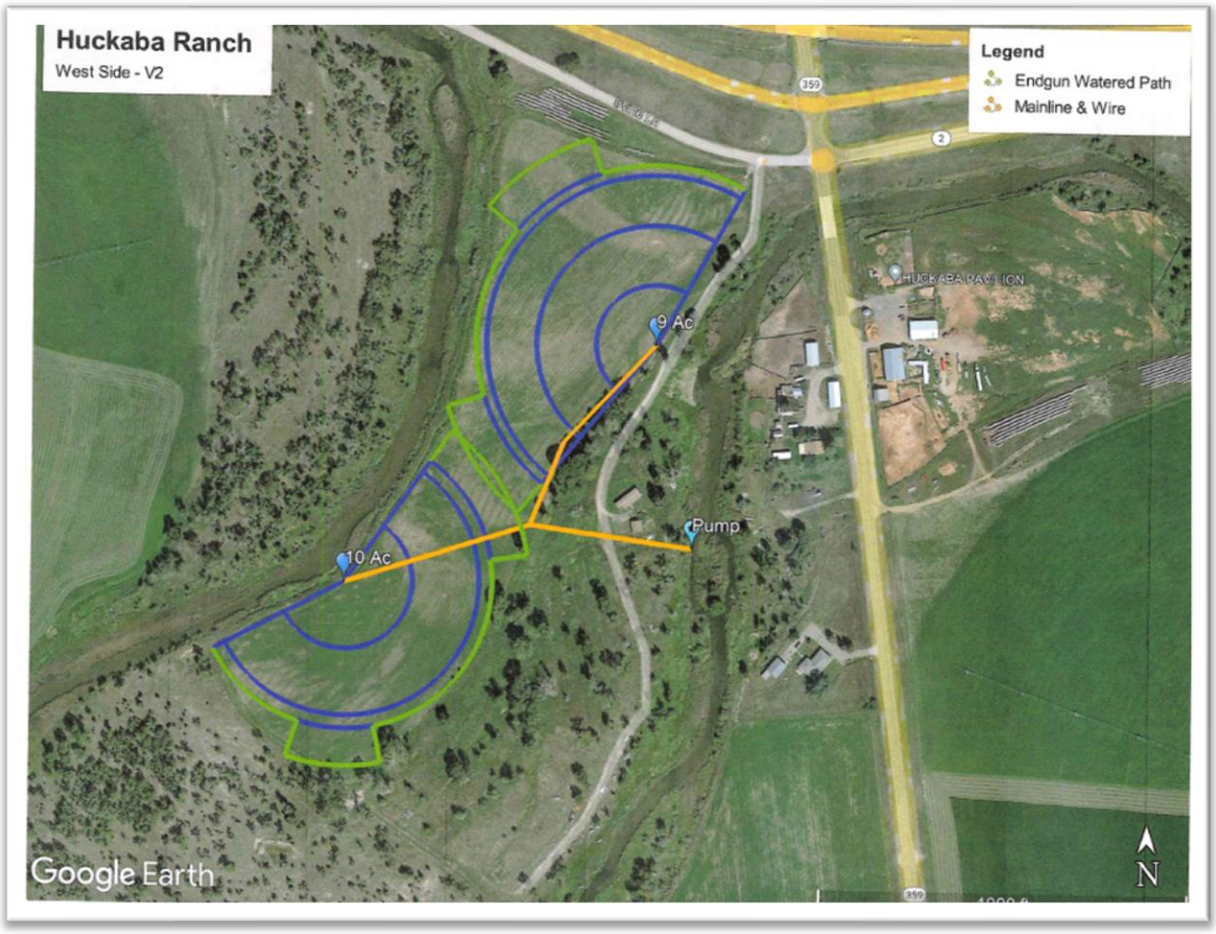
600'- 10" 100# PIP PVC
360'- 8" 100# PIP PVC
300' - 8" 100# PIP PVC
180' - 6" 100# PIP PVC
2380'- 6" 100" PIP PVC

3- To East Park Circle

1820'- 6" 100# PIP PVC

POD 02: Pipeline size and configuration

Mainline: 462’ - 6” 100# IPS PVC Pipe
North Half Circle: 616’ – 4” 125# IPS PVC Pipe
South Half Circle: 528 – 4” 125# IPS PVC Pipe



POD 03: Pipeline size and configuration

Mainline: 1304’ – 8” 100# PIP PVO

39. Describe specific information about how water is delivered within the place of use. This may include where applicable, the range of flow rates needed for a pivot, the output and configuration of sprinkler heads, and pipelines within the place of use.

For each proposed POD water is delivered within the place of use from the proposed POD via a buried pipeline that is pressurized (see question 35 for pipeline configuration). The pipelines deliver pressurized water to each pivot at the below described flow rates and is applied using rotating sprinkler heads and end guns from each pivot.

POD 01: Flow rates needed for pivot

Proposed POD 01 supplies three pivots, one full circle and two part circles to the east and west of the full circle, water in pumped from the POD into the pressurized pipeline to the pivots where water is applied to the crops through rotating sprinkler heads. See question 35 for pipeline configuration. The follow flow rates are delivered to each pivot:

Full Circle Flow Rate = 696 GPM
East Part Circle Flow Rate = 300 GPM
West Part Circle Flow Rate = 200 GPM
Max Flow Rate = 1196 GPM

POD 02: Flow rates needed for pivot

Proposed POD 02 supplies two part circle pivots, water in pumped from the POD into the pressurized pipeline to the pivots where water is applied to the crops through rotating sprinkler heads. See question 35 for pipeline configuration. The system is designed with the following flow rates:

North Part Circle Flow Rate = 150 GPM
South Part Circle Flow Rate = 150 GPM
Max Flow Rate = 300 GPM

POD 03: Flow rates needed for pivot

Proposed POD 03 supplies a single part circle pivot, water in pumped from the POD into the pressurized pipeline to the pivot where water is applied to the crops through rotating sprinkler heads. See questions 35 for pipeline configuration. The following flow rate is delivered to the pivot.

South Part Circle Flow Rate = 513 GPM

Helena Regional Office
1424 Ninth Avenue P.O. Box 201601
Helena, MT 59620-1601
406-444-6999

March 17, 2025

LR Huckaba Ranch LLC
26 MT Highway 356
Cardwell, MT 59271

Subject: Deficiency Letter for Change Application No. 41E 30164689

Dear Applicant,

The Department of Natural Resources and Conservation (DNRC or Department) has begun reviewing your Application. This letter is to notify you of the deficiencies in your Application as required in ARM 36.12.1501(1) and §85-2-302(5)(b), MCA. An Applicant is required to submit substantial and credible information addressing the rules and statutes that are relative to your Application. You must provide the information specified below for your Application to be considered correct and complete. "Correct and complete" means all of the information provided is substantial and credible and provides all of the information as required by applicable rules and statutes. The Application as submitted contains deficiencies in the following section(s):

ADVERSE EFFECT – ARM 36.12.1903

- ❑ **31.4.** Do other water rights share any of the proposed points of diversion
  - Answer provided on Application: "*No*"
  - Based on information provided to the Department, supplemental Statement of Claim 41E 4306-00 historically utilized the historical point of diversion (Cardwell Ditch headgate) as a secondary point of diversion. Please clarify if the proposed points of diversion will be utilized by other water rights.

- If the answer to 31.4. is yes, please describe how the proposed project will not adversely affect other water rights under 31.4.1.

❑ **31.5.** Do other water rights share any conveyance ditch associated with the proposed points of diversion?
- Answer provided on Application: "*No*"
- Based on information provided to the Department, Statement of Claim 41E 4306-00 historically utilized the historical means of conveyance (Cardwell Ditch) as a means of conveyance to the supplemental place of use. Please clarify if the proposed conveyance system will be utilized by other water rights.
- If the answer to 31.5. is yes, please describe how the proposed project will not adversely affect other water right(s) under 31.6.

ADEQUATE MEANS OF DIVERSION AND OPERATION – ARM 36.12.1904

❑ **33.** Describe specific information about the capacity of all proposed diversionary structures. This may include, where applicable: pump curve and total dynamic head calculations, headgate design specifications, and dike or dam height and length.
- Answer provided on Application: "*See attached schematic*"
- The provided information labeled for Question 33 are a receipt from AquaTech, a map of the proposed POD 2, three images of taken on the Jefferson Slough of "Huckaba POD", map "West Side – V2", and flow rates for four pivots from proposed PODs 1 and 3.
- Please provide information about the capacity of the proposed diversion pumps at each pump site on the Jefferson Slough. The information provided with the Application is not suitable to determine the capacity of the three proposed diversion pumps. The Department sent two viable options to gather the needed information for the pump capacities via email to the Montana Trout Unlimited contacts on December 13, 2024.

❑ **35.** Describe the size and configuration of infrastructure to convey water from all proposed points of diversion to all proposed places of use. This may include, where applicable: ditch capacity and/or pipeline size and configuration.
- Answer provided on Application: "*See attached schematic*"
- The provided information labeled for Question 35 are a receipt from AquaTech, a map of the proposed POD 2, three images of taken on the Jefferson Slough of "Huckaba POD", map "West Side – V2", and flow rates for four pivots from proposed PODs 1 and 3.
- Please provide information regarding what the proposed means of conveyance is, as well as the size and configuration of each conveyance system within the proposed project.

❑ **39.** Describe specific information about how water is delivered within the place of use. This may include where applicable, the range of flow rates needed for a pivot, the output and configuration of sprinkler heads, and pipelines within the place of use.

- Answer provided on Application: "*See attached schematic*"
- The provided information labeled for Question 39 are a receipt from AquaTech, a map of the proposed POD 2, three images of taken on the Jefferson Slough of "Huckaba POD", map "West Side – V2", and flow rates for four pivots from proposed PODs 1 and 3.
- Please provide more information regarding how water gets from the proposed points of diversion to the place of use.

As stated above, the information submitted to address the rules and statutes listed in this deficiency letter must be substantial credible information to be acceptable at the correct and complete determination. §§85-2-102 (9) and (26), MCA.

Please submit the information specified above to the Helena Regional Office by March 17, 2025. This is the only deficiency letter that will be sent. An application not corrected or completed within 120 days from the date of this letter is terminated per ARM 36.12.1501(2) and §85-2-302(6)(a), MCA.

Please let me know if you have any questions.

Best,

Savannah Telander
Water Resources Specialist
Helena Regional Office
Savannah.Telander@mt.gov
406-444-6810

CC:
Chris Edgington, chris@montanatu.org
Alli Pardis, allison.pardis@tu.org

IMPORTANT NOTICE: This will be the final opportunity for you to provide the required information to the Department. If all of the requested information in this letter is not postmarked or submitted within 120 days of this letter, the application will be terminated within 30 days and the application fee will not be refunded.

From: Telander, Savannah
To: Allison Pardis; Chris Edgington
Cc: Daly, Jennifer
Subject: Correct & Complete for Beneficial Water Use Change Application 41E 30164689
Date: Monday, June 2, 2025 9:13:00 AM
Attachments: image001.png
41E 30164689 Correct & Complete Letter.pdf

Greetings,

The Department has determined that the Huckaba Change Application 41E 30164689 correct and complete pursuant to ARM 36.12.1601. Please remember that correct and complete **does not mean that your application will be granted**. The purpose of this letter is to indicate that the Department has enough information to analyze the Change Application. The Department will issue a Draft Preliminary Determination within **60 days** of the date of the is letter (by 8/1/2025). The Application will be posted on the Departments Application Status website found here: https://dnrc.mt.gov/Water-Resources/Water-Rights/application-status-environmental-assessments/.

Attached to this email is the Correct & Complete Letter sent to the Applicant today.

Please let me know if you have any questions.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Allison Pardis
To: Telander, Savannah
Subject: [EXTERNAL] Re: Deficiency Letter for Change Application No. 41E 30164689
Date: Thursday, May 15, 2025 12:05:08 PM
Attachments: image001.png

Thank you, Savannah!

Alli

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Thursday, May 15, 2025 10:06 AM
To: Allison Pardis <allison.pardis@tu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: RE: Deficiency Letter for Change Application No. 41E 30164689

Alli,

My apologies for not notifying you about receiving the deficiency letter response. We did receive it, and the electronic version will work just fine. The correct and complete deadline for the Department is June 8, 2025. So, you should be hearing from us within the next couple of weeks.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Allison Pardis <allison.pardis@tu.org>
Sent: Thursday, May 15, 2025 10:00 AM
To: Telander, Savannah <Savannah.Telander@mt.gov>
Subject: [EXTERNAL] Re: Deficiency Letter for Change Application No. 41E 30164689

Hi Savannah,

Did you receive the responses to the Deficiency Letter for Change Application No. 41E 30164689? It was unclear if we needed to submit a physical copy to the Helena Office as well, but I'm happy to do that if it is required.

Thanks!

Alli

From: Allison Pardis <allison.pardis@tu.org>
Sent: Friday, May 9, 2025 4:35 PM
To: Telander, Savannah <Savannah.Telander@mt.gov>
Cc: Daly, Jennifer <JDaly2@mt.gov>; Chris Edgington Montana <chris@montanatu.org>
Subject: Re: Deficiency Letter for Change Application No. 41E 30164689

Good afternoon,

Find attached responses to the issued Deficiency Letter for Change Application No. 41E 30164689. Thanks for your help in reviewing our responses before submission. Please let me know if you have any questions.

Happy weekend!

Alli

Alli Pardis
Trout Unlimited
(406) 431-5981

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Monday, March 17, 2025 9:11 AM
To: Chris Edgington Montana <chris@montanatu.org>; Allison Pardis <allison.pardis@tu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: Deficiency Letter for Change Application No. 41E 30164689

Greetings,

The DNRC has issued a Deficiency Letter for Change Application No. 41E 30164689 to LR Huckaba Ranch LLC. Attached is a copy of the letter that was sent to the Applicant today. A response to the Deficiency Letter must be received by the Helena Regional Office within 120 days from the date on the letter, i.e., must be received by July 15, 2025.

If you have any questions, please to not hesitate to reach out.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov

Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]

How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Allison Pardis
To: Telander, Savannah
Cc: Daly, Jennifer; Chris Edgington
Subject: [EXTERNAL] Re: Deficiency Letter for Change Application No. 41E 30164689
Date: Friday, May 9, 2025 4:36:21 PM
Attachments: image001.png
Deficiency Response 41E 30164689 20250509.pdf

Good afternoon,

Find attached responses to the issued Deficiency Letter for Change Application No. 41E 30164689. Thanks for your help in reviewing our responses before submission. Please let me know if you have any questions.

Happy weekend!

Alli

Alli Pardis
Trout Unlimited
(406) 431-5981

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Monday, March 17, 2025 9:11 AM
To: Chris Edgington Montana <chris@montanatu.org>; Allison Pardis <allison.pardis@tu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: Deficiency Letter for Change Application No. 41E 30164689

Greetings,

The DNRC has issued a Deficiency Letter for Change Application No. 41E 30164689 to LR Huckaba Ranch LLC. Attached is a copy of the letter that was sent to the Applicant today. A response to the Deficiency Letter must be received by the Helena Regional Office within 120 days from the date on the letter, i.e., must be received by July 15, 2025.

If you have any questions, please to not hesitate to reach out.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

Application Materials

- Application
- Any information submitted with Application including maps

Application Materials

APPLICATION TO CHANGE A WATER RIGHT

§ 85-2-302

Form No. 606 *(Revised 04/2024)*

For Department Use Only

RECEIVED
MAR 06 2025
DNRC-HRO

Application # 30164689 Basin 41B
Priority Date _____ Time 14:04 AM/PM
Rec'd By ST
Fee Rec'd $ 1000.00 Check # 7908
Deposit Receipt # HES2S1809S
Payor MT Trout Unlimited
Refund $ _____ Date _____

FILING FEE

$2500/$1500 – Without/with filing fee reduction.

$400 – ***(The following types do not qualify for a filing fee reduction)***

- **Replacement well that exceeds 35 GPM or 10 AF per year**
- **Replacement municipal well that exceeds 450 GPM**
- **Replacement reservoir on the same source**

INFORMATION

An application will be eligible for a filing fee reduction and expedited timelines if the applicant completes a preapplication meeting with the Department (ARM 36.12.1302(1)), which includes submitting any follow-up information identified by the Department (ARM 36.12.1302(3)(c)) and receiving either Department-completed technical analyses or Department review of applicant-submitted technical analyses (ARM 36.12.1302(4) and (5)). An application for the proposed project also must be submitted within 180 days of delivery of Department technical analyses or scientific credibility review and no element on the submitted application can be changed from the completed preapplication meeting form (ARM 36.12.1302(6)).

Applicant Information: ***Add more as necessary.***

Applicant Name LR Huckaba Ranch LLC
Mailing Address 26 MT Highway 359 City Cardwell State MT Zip 59271-9604
Phone Numbers: Home _____ Work _____ Cell 406-490-4919
Email Address lenhuckaba@icloud.com

Applicant Name _____
Mailing Address _____ City _____ State _____ Zip _____
Phone Numbers: Home _____ Work _____ Cell _____
Email Address _____

Applicant Name _____
Mailing Address _____ City _____ State _____ Zip _____
Phone Numbers: Home _____ Work _____ Cell _____
Email Address _____

Contact/Representative Information: ***Add more as necessary.***

Contact/Representative is: ___ Applicant ___ Consultant ___ Attorney X Other
Contact/Representative Name Alli Pardis
Mailing Address 321 E Mail St #411 City Bozeman State MT Zip 59725
Phone Numbers: Home _____ Work 406-431-5981 Cell _____
Email Address allison.pardis@tu.org

NOTE: *If a contact person is identified as an attorney, all communication will be sent only to the attorney unless the attorney provides written instruction to the contrary. If a contact person is identified as a consultant, employee, or lessee, the individual filing the water right form or objection form will receive all correspondence and a copy may be sent to the contact person.*

DIRECTIONS

Answer every question and applicable follow-up questions. Use the checkboxes to denote yes ("Y"), no ("N"), or not applicable ("NA"). Questions that require items to be submitted to the Department have a submitted ("S") checkbox, which is checked when the required item is attached to the Application. Label all submitted items with the question number for which they were submitted. Narrative responses that are larger than the space provided can be answered in an attachment. If an attachment is used, specify "see attachment" on this form, and label the attachment with the question number. Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label units in narrative responses. Responses in the form of a table may be entered into the table provided on this form or in an attachment. Responses in the form of a table that are larger than the table provided on this form should be placed in an attachment. If an attachment is used, the table must have the exact headings found on this form, and "see attachment" must be placed on this form. For tables on this form, circle correct unit at header of column when table has unit options. For tables in attachments, label all units.

PREAPPLICATION AND TECHNICAL ANALYSIS INFORMATION

1. ☒ **Y** ☐ **N** Did you have a preapplication meeting AND complete a Form 606P Change Preapplication Meeting Form?

IF QUESTION 1 IS YES,

2. ☒ **Y** ☐ **N** Did you elect on Form 606P to have the Department conduct Technical Analysis?

3. ☐ **Y** ■ **N** Has any element of the application changed from Form 606P or the Technical Analysis conducted as part of the preapplication process? A Technical Analysis Addendum (Form 606-TAA) is required if changes have occurred.

4. Submit the following items:

4.1. ■ **S** Technical Analyses you would like the Department to use to conduct criteria assessment.

4.2. ☐ **S** ■ **NA** Scientific Credibility Review, if applicable.

4.3. ☐ **S** ■ **NA** Technical Analysis Addendum (Form 606-TAA), if applicable, per question 3.

IF QUESTION 1 IS NO,

5. ☐ **S** Submit the Technical Analysis Addendum (Form 606-TAA).

6. ☐**Y** ☐ **N** Do you elect to have the Department conduct Technical Analysis?

6.1. ☐ **S** If no, submit all the required Technical Analyses. See the Technical Analysis Guide for more information.

APPLICATION ADDENDA AND REVIEW

7. ☐ **S** ■ **NA** If the proposed change is on a non-filed water project, then submit the Non-Filed Water Project Addendum (Form 606/634-NFWPA) if you have not already submitted it with the Preapplication Meeting Form (606P). The project must meet the requirements of the addendum.

8. ☐ **S** ■ **NA** If the project involves an appropriation that is greater than 5.5 CFS and 4,000 acre-feet, then submit a Reasonable Use Addendum (Form 606-B).

9. ☐ **S** ■ **NA** If the project involves out-of-state water use, then submit the Out-of-State Use Addendum (Form 600/606-OSA).

10. ☐ **S** ■ **NA** If the proposed purposes include marketing or selling water, then submit the Water Marketing Purpose Addendum (Form 600/606-WMA).

11. ☐ **S** ■ **NA** If the proposed purpose includes instream flow, then submit Change to Instream Flow Addendum (Form 606-IFA).

12. ☐ **S** ■ **NA** If the proposed purposes include mitigation or aquifer recharge, then submit a Mitigation Purpose Addendum (Form 606/606-MIT).

13. ☐ **S** ■ **NA** If the project is in designated sage grouse habitat, then submit a review letter from the Montana Sage Grouse Habitat Conservation Program (https://sagegrouse.mt.gov).

14. ■ **Y** ☐ **N** ☐ **NA** You must provide a written notice of the application to each owner of an appropriation right sharing the point of diversion or means of conveyance (e.g., canal, ditch, flume, pipeline, or constructed waterway). Have you sent this notice to all applicable parties? Your application cannot be deemed correct and complete until you have sent this notice pursuant to §85-2-302(4)(c), MCA.

APPLICATION DETAILS

15. How many change applications will be needed for this project? Refer to ARM 36.12.1305 for more information. 1

16. Fill out the table below.

Water Right No. Proposed for Change	Current Flow Rate (GPM or CFS)	Flow Rate Needed for Project (GPM or CFS)
41E 3407-00	11.37 CFS	11.37 CFS
41E 3408-00	11.37 CFS	11.37 CFS

17. Identify the water right elements proposed for change, with a checkmark, for each water right proposed for change.

Water Right No.	41E 3407-00	41E 3408-00				
Point of Diversion	■	■	☐	☐	☐	☐
Place of Use	☐	☐	☐	☐	☐	☐
Purpose of Use	☐	☐	☐	☐	☐	☐
Place of Storage	☐	☐	☐	☐	☐	☐

18. ■ **S** Submit a historical use map created on an aerial photograph or topographic map that shows the following: section corners, township and range, a north arrow, all historical points of diversion (POD) labeled with a unique POD ID letter, all historical places of use (POU), all historical conveyance structures, all historical places of storage, and historical place of use for all overlapping water rights.

19. ■ **S** Submit a proposed use map created on an aerial photograph or topographic map that shows the following: section corners, township and range, a north arrow, all proposed points of diversion labeled with a unique POD ID number, all proposed places of use, all proposed conveyance structures, all proposed places of storage, and place of use for all overlapping water rights.

20. ■ **Y** ☐ **N** Does the proposed change involve a change in point of diversion?

IF YES,

20.1. Is the source for the new POD(s) surface water or groundwater? Surface water

20.2. What is the source name for the new POD(s)? Jefferson Slough

20.3. What is the means of diversion for all new POD(s)? Means of diversion for surface water includes headgate, pump, dam, and others. Means of diversion for groundwater includes well, developed spring, pit pond, and others.

Pumps

20.4. Describe the proposed location for all new points of diversion to the nearest 10 acres. Label POD # with the same POD ID number assigned for the proposed use map (question 19).

POD #	¼	¼	¼	Sec.	Twp.	Rge.	County	Lot	Block	Tract	Subdivision	Gov. Lot
1	NW	NW	NE	11	1N	3W	Jefferson					
2	NE	NW	SW	2	1N	3W	Jefferson					
3	NE	NW	NE	3	1N	3W	Jefferson					

21. ☐ **Y** ■ **N** Does the proposed change involve a change in place of use?

IF YES,

21.1. What are the geocodes of the proposed place of use?

-	-
-	-
-	-
-	-
-	-

21.2. Describe the legal land description of the proposed place of use, and if the water rights being changed will have an irrigation or lawn and garden purpose, list the number of irrigated acres.

Acres	Gov't Lot	¼	¼	¼	Sec.	Twp.	Rge.	County

22. ■ **Y** ☐ **N** Did all owners of the historical place of use for the water rights being changed sign this application? If ownership cannot be established for the entirety of the water rights being changed, a Form 641 or Form 642 must be received and processed by the Department prior to application submittal. The follow-up questions for question 22 help to establish whether a split is required before application submittal in the case all owners of the historical place of use did not sign the application.

IF NO,

22.1. List all water rights proposed for change for which you do not own the entire historical place of use.

_____

_____

_____

22.2. ☐ **Y** ☐ **N** Are the water rights listed in question 22.1 severed from the historical place of use?

22.2.1. ☐ **Y** ☐ **N** ☐ **NA** Do you own the entirety of the severed water rights proposed for change?

22.3. ☐ **Y** ☐ **N** Are you filing on behalf of another entity?

22.3.1. If yes, explain.

_____

_____

_____

23. ☐ **Y** ■ **N** Do you meet one of the exceptions to possessory interest requirements, pursuant to ARM 36.12.1802? Exceptions include cases of an instream flow application, or where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use.

ADVERSE EFFECT

24. ■ **Y** ☐ **N** Do you have evidence that the proposed use does not exceed the historical use for flow rate, consumed volume, and diverted volume?

24.1. If yes, explain.

Yes, DNRC technical analysis confirms that flow rate, consumed volume and diverted volume are equal to or less than historic use.

25. ☐ **Y** ■ **N** Are there any factors that would limit your ability to turn off your appropriation in response to a call?

25.1. If yes, explain.

26. Explain how you can control your diversion in response to a call being made.

Pumps can be shut off.

27. ☐ **Y** ■ **N** Are you aware of any calls that have been made on the source of supply or depleted surface water source?

27.1. If yes, explain.

System Operat

28. ☐ **Y** ■ **N** Does a water commissioner distribute water or oversee water distribution on your proposed source or any identified depleted surface water sources?

28.1. If yes, list the sources.

29. Describe your plan to ensure existing water rights will be satisfied during times of water shortage.

The proposed change does not make call on any upstream water users. The proposed changes uses an equal or lesser amount of diverted quantity from historical use.

30. When was the last time the water rights proposed for change were appropriated and used beneficially?

2024 irrigation season

IF THERE HAS BEEN A PERIOD OF NONUSE,

30.1. Why was the water right not used?

30.2. Why will a resumption of use not adversely affect other water users?

30.3. ☐ **Y** ☐ **N** Is the period of nonuse greater than 10 years?

30.4. ☐ **Y** ☐ **N** Have new water rights been authorized to use the source during the period of nonuse?

System eratio -

31. For point of diversion changes:

31.1. Are the proposed points of diversion upstream or downstream of the historical points of diversion?

Downstream

31.2. ■ **Y** ☐ **N** Are there intervening water rights between the historical and proposed points of diversion?

31.2.1. If yes, list the water rights.

41E 143433 00, 41E 143434 00, 41E 143436 00, 41E 143437 00, 41E 30017424

31.3. ☐ **Y** ■ **N** Does the proposed point of diversion allow for diverting water longer during times of shortage?

31.3.1. If yes, explain how you will prevent an expansion of use.

31.4. ☐ **Y** ■ **N** Do other water rights share any of the proposed points of diversion?

31.4.1. If yes, describe how the proposed project will not adversely affect these water rights.

31.5. ☐ **Y** ■ **N** Do other water rights share any conveyance ditch associated with the proposed points of diversion?

31.6. If yes, describe how the proposed project will not adversely affect these water rights.

ADEQUATE MEANS OF DIVERSION AND OPERATION

32. ■ **S** Provide a diagram of how you will operate your system from all proposed points of diversion to all proposed places of use.

33. Describe specific information about the capacity of all proposed diversionary structures. This may include, where applicable: pump curves and total dynamic head calculations, headgate design specifications, and dike or dam height and length.

See attached schematic.

34. ■ **Y** ☐ **N** Is the diversion capable of providing the full amount of water requested through the period of diversion?

34.1. If no, explain.

35. Describe the size and configuration of infrastructure to convey water from all proposed points of diversion to all proposed places of use. This may include, where applicable: ditch capacity and/or pipeline size and configuration.

See attached schematic.

36. Describe any losses related to the proposed conveyance.

The proposed conveyance system is an enclosed system, reducing loss.

37. ■ **Y** ☐ **N** ☐ **NA** Is the proposed conveyance infrastructure capable of providing the required flow and volume, plus any conveyance losses?

37.1. If no, explain.

38. ☐ **Y** ■ **N** Does the proposed conveyance require easements?

38.1. If yes, explain.

39. Describe specific information about how water is delivered within the place of use. This may include, where applicable, the range of flow rates needed for a pivot, the output and configuration of sprinkler heads, and pipelines within the place of use.

See attached schematic.

40. ☐ **Y** ■ **N** Will your system be designed to discharge water from the project?

40.1. If yes, explain the way water will be discharged.

40.2. ☐ **Y** ☐ **N** ■ **NA** Have the necessary permits been obtained to comply with §§ 75-5-410 and 85-2-364, MCA?

41. ☐ **Y** ■ **N** Is the means of diversion for any proposed point of diversion a well?

IF YES,

41.1. ☐ **Y** ☐ **N** Have all wells already been drilled?

41.2. For all wells that have been drilled, what is the name of the well driller and, if available, what is their license number?

41.3. ☐ **Y** ☐ **N** For all wells yet to be drilled, will a licensed well driller construct the wells?

41.4. ☐ **S** ☐ **NA** Submit any additional well logs for wells drilled after submittal of Form 606P.

BENEFICIAL USE

42. Why is the requested flow rate and volume the amount needed for the purposes?

The requested flow rate and volume are equal to or less than historical use.

43. ■ **Y** ☐ **N** Does the Department have a standard for the purposes for which water is proposed? Department standards can be found in the DNRC Water Calculation Guide, ARM 36.12.112, ARM 36.12.115, and ARM 36.12.1902.

43.1. ■ **Y** ☐ **N** If yes, does the proposed beneficial use fall within Department standards?

43.2. If no Department standard exists, or if proposed beneficial use falls outside of Department standards, explain how the use is reasonable for the purpose.

44. ☐ **Y** ■ **N** Will your proposed project be subject to DEQ requirements for a public water supply (PWS) system or Certificate of Subdivision Approval (COSA)?

44.1. ☐ **Y** ☐ **N** If yes, have you researched or consulted with DEQ regarding those requirements?

45. ☐ **Y** ■ **N** Are you proposing to use surface water for in-house domestic use?

45.1. ☐ **Y** ☐ **N** If yes, does a COSA exist for the proposed place of use?

45.1.1. ☐ **S** ☐ **NA** If yes, please submit the COSA.

45.1.2. ☐ **Y** ☐ **N** If no, have you researched or consulted with DEQ regarding their requirements?

PROPOSED COMPLETION PERIOD

46. How many years will be needed to complete this project and to submit to the DNRC a Project Completion Notice (Form 618)? 1

47. Why is this amount of time needed?

Pump installation is planned for the spring of 2025.

AFFIDAVIT & CERTIFICATION

Read carefully before you sign and review with legal counsel if you have any questions. All owners (or trustees) must sign the form. ***If the owner is a business or trust, include the title of the representative(s) signing the form (i.e., president, trustee, managing partner, etc.) and provide documentation that establishes the authority of the representative to sign the application.*

I affirm the information provided for this application is to the best of my knowledge true and correct. I am aware that my application for this project will not qualify for a discounted filing fee and expedited timelines if upon submittal of the application to the department, I changed any element of the proposed application from the preapplication meeting form and follow-up materials (ARM 36.12.1302(6)(a)).

I affirm I have possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use, unless this application meets an exception to the possessory interest requirements in ARM 36.12.1802(1)(b).

I understand that making a false statement under oath or affirmation in this application and official proceedings throughout the examination of my application may subject me to prosecution under §45-7-202, MCA, a misdemeanor punishable by a jail term not to exceed 6 months or a fine not to exceed $500, or both. I have read this Affidavit and understand the terms and conditions.

I declare under penalty of perjury and under the laws of the state of Montana that the foregoing is true and correct.

Applicant Signature Susanne Huckaba Date: 2/28/25

Printed Name Susanne Huckaba

Title Sec. - Treasurer

Applicant Signature Leonard W. Huckaba Date: 2-28-25

Printed Name Leonard W. Huckaba

Title President

Applicant Signature _____ Date: _____

Printed Name _____

Title _____

February 28, 2025

LR Huckaba Ranch, LLC.
26 MT Highway 359
Cardwell, MT 59271

Barrick Gold Corp. – Golden Sunlight Mine, Inc.
453 Mountain Highway 2 East
Whitehall, MT 59759

RE: LR Huckaba Ranch, Application 41E – 30164689

Dear Mr. Buus, and Golden Sunlight Mine,

We are writing to inform you that we will submit a Point of Diversion (POD) change for the LR Huckaba Ranch Inc. (Huckaba Ranch), Application 41E – 30164689 on February 28, 2025.

For the past three years, the Huckaba Ranch has been working with the Natural Resource Conservation Service, Montana Fish, Wildlife & Parks, Montana Trout Unlimited, and Trout Unlimited to improve an irrigation system on our ranch.

Thank you for submitting a letter of support for this POD change in November 2024.

Lenny Huckaba
LR Huckaba Ranch, Inc.

BARRICK

Golden Sunlight
463 Mountain Highway 2 East
Whitehall, MT 59759
www.barrick.com

November 27, 2024

Helena Water Resources Office
Montana DNRC
c/o Savannah Telander
1424 Ninth Avenue
P.O. Box 201601
Helena, MT 59620-1601

RE: L.R Huckaba Ranch, Application 41E - 30164689

Dear Helena Water Resources Office representatives,

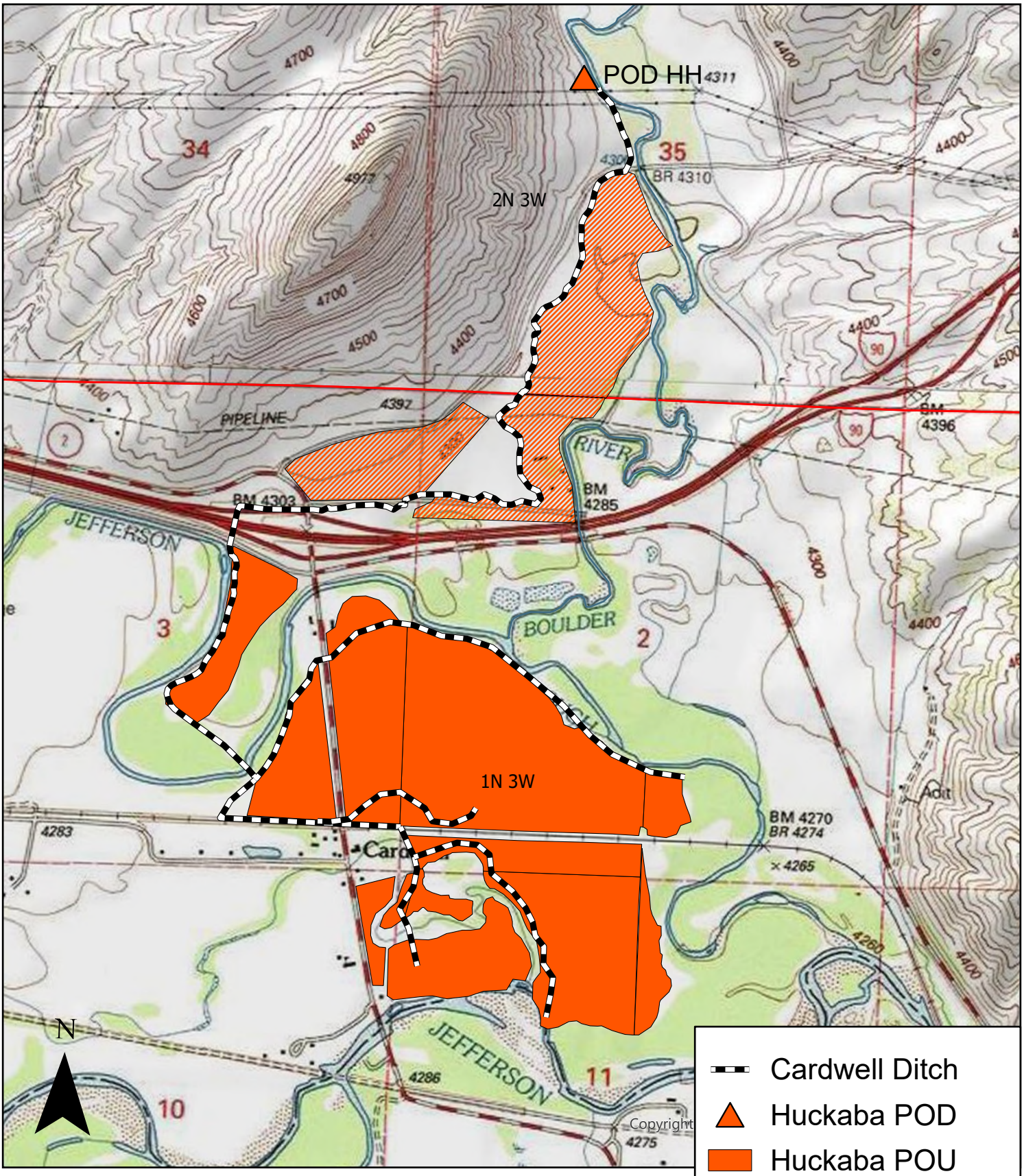
Barrick Gold Corp. - Golden Sunlight Mine Inc. (GSM) would like to express our support for a Point of Diversion (POD) change for the L.R Huckaba Ranch Inc. (Huckaba Ranch), Application 41E – 30164689. We are working with the Huckaba Ranch and Montana Trout Unlimited (MTU) to remove the antiquated Shaw Diversion Dam to complete a portion of river restoration.

The Shaw Diversion Dam and ditch system supplies irrigation for much of the Candle Stick Ranch, as well as a portion of the Huckaba Ranch. The Huckaba Ranch's application to move their POD is a necessary step towards dam removal. We understand that the POD change will affect the legal amount of water the Shaw ditch is allowed to carry. GSM is preparing our own irrigation system change to eliminate the need for the dam and ditch system as the adjudication process proceeds.

Thank you for the opportunity to comment in support of this Point of Diversion change.

Kristi Murphy FOR KM
Manager, Golden Sunlight Mine

Historic Use Map - Question 18



Proposed Use Map - Question 19

Name	Size
POD 01	60 hp
POD 02	15 hp
POD 03	50 hp

N

0 0.13 0.25 0.5 Miles

Proposed PODs

System Operation - Question 32

Proposed POD 02: Adequate Means of Diversion and Operation - Questions 33, 35, 39

AquaTech
210 Arden Drive
Belgrade, MT 59714
(406)388-3315
1-800-426-4921

Huckaba Ranch
26 Highway 359
Cardwell, MT 59721
406.287.5556

Valley 7000

February 6, 2023
Prepared by: John Gardner
West Side - North Half Circle - V2
8.0 Pivot Acres
1.4 End Gun Acres
9.4 Total Acres
484.1 Foot Long Machine

Pivot Point	
1	6 5/8" Pivot Point
1	6" Pivot Flex (for 6 5.8" PP)
1	Pivot Ladder
Controls	
1	Icon5 Panel (5 YR Warranty)
1	GPS Pivot Position
1	11 Conductor Collector Ring
1	Aluminum Power Distribution Block
1	High Voltage Surge Protection
1	Temperature Sensor
1	Icon Link - Remote Monitoring and Control
Spans	
2	6" 160' Span w/ 108" Spacing (7000)
1	6" 135' Span w/ 108" Spacing (7000)
1	27' Overhang w/ 108" Spacing
Drive Unit	
3	11.2 X 38" Tire on 10" Galv Rim
3	Tubes in Tires
3	Valley gearbox
3	34 RPM Center Drive
3	Pivot Alignment
Accessories	
1	Running Light
1	End of Field Stop w/ Auto Reverse - Customer Sets Barricades
Sprinkler Package	
1	Nelson Rotators w/ Brown plates on 1st & 2nd Spans, Spinners w/ Yellow Plates on rest, 15 psi Nelson Regulators on 5.5' hose drops using integrated weights
1	2 HP Booster Pump
1	27' OH Booster Hose
1	Nelson SR 75 End Gun
1	2" Nelson Valve 1000
1	Senninger End Spray Drain

Pivot Sub-Total	$60,874
Pivot Total	$60,874
Ancillary Total (see next page for details)	$62,287
Project Total	**$123,161**

Freight & Installation Included

Price good until: February 28, 2023

AquaTech
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(406)388-3315
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Huckaba Ranch
26 Highway 359
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February 6, 2023
Prepared by: John Gardner

West Side - North Half Circle - V2

Pivot Tie In		
1	Pivot Pad	$1,785
1	4" Dogleg	$682
2	Thrust Block	$430
1	Clemons 700 Filter	$2,833
1	4" Control Valve	$1,728
1	4" Gear-op Butterfly Valve	$324
1	2" Airvent	$158
1	4" Surge Relief Valve	$222
1	Misc Fittings and Install	$295
1	4" Electronic Flowmeter w/ Cable	$2,639
1	Misc Fittings and Install	$295
1	Epoxy Paint for NRCS Spec	$750
Pump Station		
1	15 HP Turbine Pump	$15,504
1	Size 2 Pump Panel - Installed	$1,504
1	30 Amp Disconnect	$563
1	Meter Base Installed on Pole	$1,900
1	Pump Discharge, Check Valve, Box and Screen	$15,649
1	6" Dogleg	$784
1	Thrust Block	$215
1	6" Gear-op Butterfly Valve	$394
1	2" Airvent	$158
1	4" Surge Relief Valve	$222
1	2" Drain at Dogleg	$140
1	Epoxy Paint for NRCS Spec	$750
Mainline and Wire		
462	6" 100# PIP PVC Pipe - Installed	$3,812
616	4" 125# IPS PVC Pipe - Installed	$3,844
2	2" Air Vent on Saddle Riser	$666
1178	#4 AL Wire w/ 12-2 Control Wire in Conduit	$4,041
	** All Lengths are estimates to be confirmed by survey	
	** Any additional digging or pipe bedding for rock will be charged at additional rate	
	** Due to Current Volatility in the PVC Market - PVC Prices will be Confirmed at Time of Order and are Subject to Change with Notice	
	Total Ancillary Equipment	$62,287
	Pivot Total	$60,874
	Project Total	$123,161

Price good until: February 28, 2023

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Huckaba Ranch
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Cardwell, MT 59721
406.287.5556

February 6, 2023
Prepared by: John Gardner

West Side - North Half Circle - V2

OPTIONS

	Prices in addition to those listed above		
1	Valley 8000 series Machine	$	2,256
1	11.2 X 38" Tire on 10" Galv Rim - 6 Ply	$	189
1	11.2 X 38" ND Tire on 10" Galv Rim - 6 Ply	$	643
1	Chemigation Pigtail	$	305

We Propose hereby to furnish material and labor - complete in accordance with above specification, for the sum of:
$123,161

Payment to be made as follows:
25% Down payment, 70% Upon Pivot Delivery, 5% Upon AquaTech's Completion

All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifics involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond the seller's control. Buyer to carry fire, tornado and other necessary insurance. Seller disclaims any express or implied warranties of fitness for a particular purpose and merchantability. Seller shall not be liable for consequential damages.

Authorized Signature: _____

Acceptance of Proposal: The above prices, specification and conditions are satisfactory and are hereby accepted. Seller is authorized to do the work as specified. Payment will be made as outlined above. Buyer grants a purchase money security interest in all of the material described above including accessions and attachments now or hereafter acquired together with any proceeds thereof to secure the performance and payment of all obligation of buyer to seller under the terms of this contract. Buyer agrees that seller shall have a lien for all services provided. Buyer agrees to sign financing statements upon request of seller. Buyer acknowledges that he has read all of the terms and provisions of this contract and that it constitutes the entire agreement between the parties relative hereto and neither party shall be bound by an agreement, statement or representation not incorporated herein. All accounts not paid in accordance with the above terms are subject to a finance charge in the amount of 1.5% (18% APR) with a minimum of $1.50. Should any accounts be referred for outside collection, buyer agrees to pay all collection costs, attorney fees, & court costs. Any checks returned to seller by bank will be assessed an additional $30 charge.

Signature: _____ Date: _____

Price good until: February 28, 2023

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Valley 7000

February 6, 2023
Prepared by: John Gardner
West Side - South Half Circle - V2
8.3 Pivot Acres
1.5 End Gun Acres
9.9 Total Acres
448.6 Foot Long Machine

Pivot Point	
1	6 5/8" Pivot Point
1	6" Pivot Flex (for 6 5.8" PP)
1	Pivot Ladder
Controls	
1	Icon5 Panel (5 YR Warranty)
1	GPS Pivot Position
1	11 Conductor Collector Ring
1	Aluminum Power Distribution Block
1	High Voltage Surge Protection
1	Temperature Sensor
1	Icon Link - Remote Monitoring and Control
Spans	
1	6" 185' Span w/ 108" Spacing (7000)
1	6" 180' Span w/ 108" Spacing (7000)
1	82' Overhang w/ 108" Spacing
Drive Unit	
2	11.2 X 38" Tire on 10" Galv Rim
2	Tubes in Tires
2	Valley gearbox
2	34 RPM Center Drive
2	Pivot Alignment
Accessories	
1	Running Light
1	End of Field Stop w/ Auto Reverse - Customer Sets Barricades
Sprinkler Package	
1	Nelson Rotators w/ Brown plates on 1st & 2nd Spans, Spinners w/ Yellow Plates on rest, 15 psi Nelson Regulators on 5.5' hose drops using integrated weights
1	2 HP Booster Pump
1	36' OH Booster Hose
1	Nelson SR 75 End Gun
1	2" Nelson Valve 1000
1	Senninger End Spray Drain

Pivot Sub-Total	$52,555
Pivot Total	$52,555
Ancillary Total (see next page for details)	$19,073
Project Total	**$71,628**

Freight & Installation Included

Price good until: February 28, 2023

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1-800-426-4921

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February 6, 2023
Prepared by: John Gardner

West Side - South Half Circle - V2

Pivot Tie In		
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1	Thrust Block	$215
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1	2" Airvent	$158
1	4" Surge Relief Valve	$222
1	2" Drain at Dogleg	$140
1	4" Electronic Flowmeter w/ Cable	$2,639
1	Epoxy Paint for NRCS Spec	$750
Pump Station		
1	30 Amp Disconnect	$563
Mainline and Wire		
528	4" 125# IPS PVC Pipe - Installed	$3,295
1090	#4 AL Wire w/ 12-2 Control Wire in Conduit	$3,740
	** All Lengths are estimates to be confirmed by survey	
	** Any additional digging or pipe bedding for rock will be charged at additional rate	
	** Due to Current Volatility in the PVC Market - PVC Prices will be Confirmed at Time of Order and are Subject to Change with Notice	
	Total Ancillary Equipment	$19,073
	Pivot Total	$52,555
	Project Total	$71,628

Price good until: February 28, 2023

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February 6, 2023
Prepared by: John Gardner

West Side - South Half Circle - V2

OPTIONS

	Prices in addition to those listed above		
1	Valley 8000 series Machine	$	1,914
1	11.2 X 38" Tire on 10" Galv Rim - 6 Ply	$	126
1	11.2 X 38" ND Tire on 10" Galv Rim - 6 Ply	$	429
1	Chemigation Pigtail	$	305

We Propose hereby to furnish material and labor - complete in accordance with above specification, for the sum of:
$71,628

Payment to be made as follows:
25% Down payment, 70% Upon Pivot Delivery, 5% Upon AquaTech's Completion

All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifics involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond the seller's control. Buyer to carry fire, tornado and other necessary insurance. Seller disclaims any express or implied warranties of fitness for a particular purpose and merchantability. Seller shall not be liable for consequential damages.

Authorized Signature: _____

Acceptance of Proposal: The above prices, specification and conditions are satisfactory and are hereby accepted. Seller is authorized to do the work as specified. Payment will be made as outlined above. Buyer grants a purchase money security interest in all of the material described above including accessions and attachments now or hereafter acquired together with any proceeds thereof to secure the performance and payment of all obligation of buyer to seller under the terms of this contract. Buyer agrees that seller shall have a lien for all services provided. Buyer agrees to sign financing statements upon request of seller. Buyer acknowledges that he has read all of the terms and provisions of this contract and that it constitutes the entire agreement between the parties relative hereto and neither party shall be bound by an agreement, statement or representation not incorporated herein. All accounts not paid in accordance with the above terms are subject to a finance charge in the amount of 1.5% (18% APR) with a minimum of $1.50. Should any accounts be referred for outside collection, buyer agrees to pay all collection costs, attorney fees, & court costs. Any checks returned to seller by bank will be assessed an additional $30 charge.

Signature: _____ Date:_____

Price good until: February 28, 2023

Lower Boulder River Irrigation Infrastructure Improvement Project
Huckaba Point of Diversion Change Site

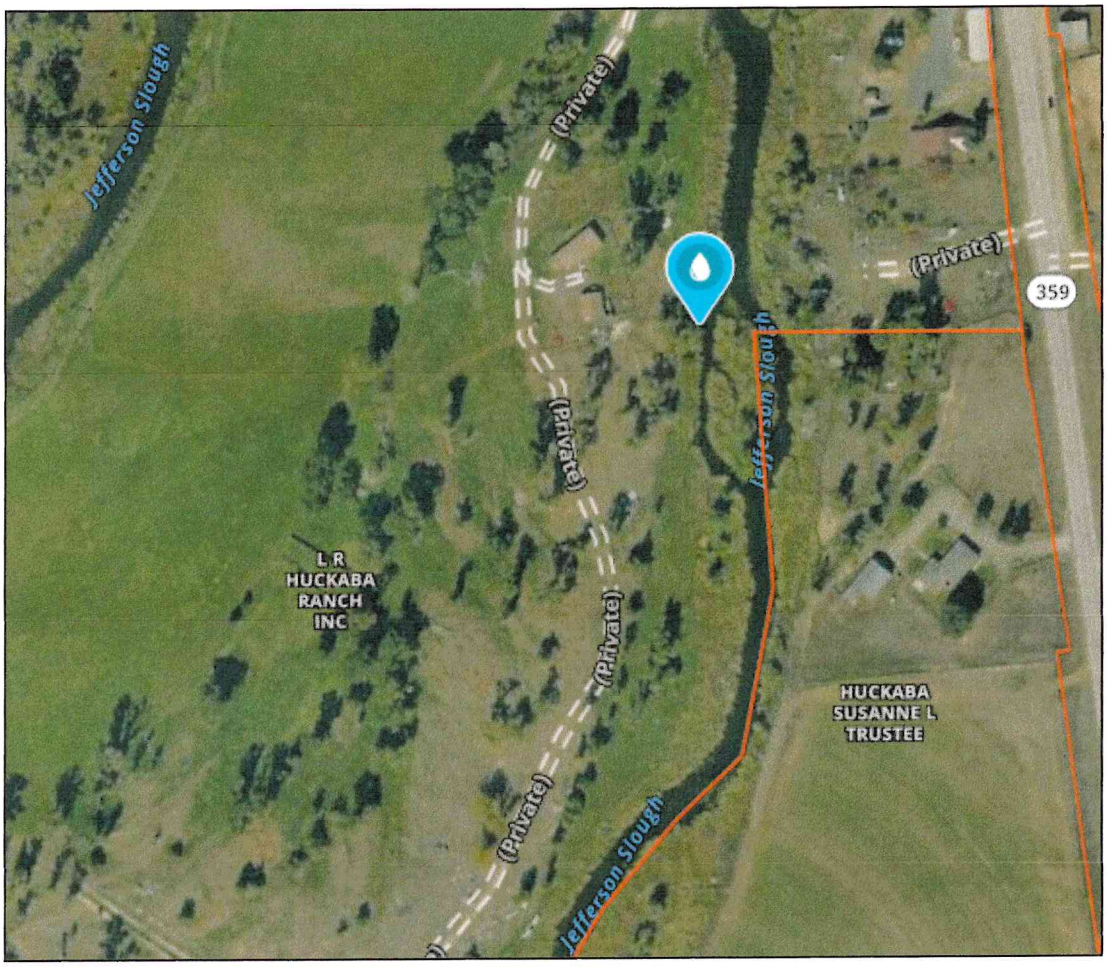
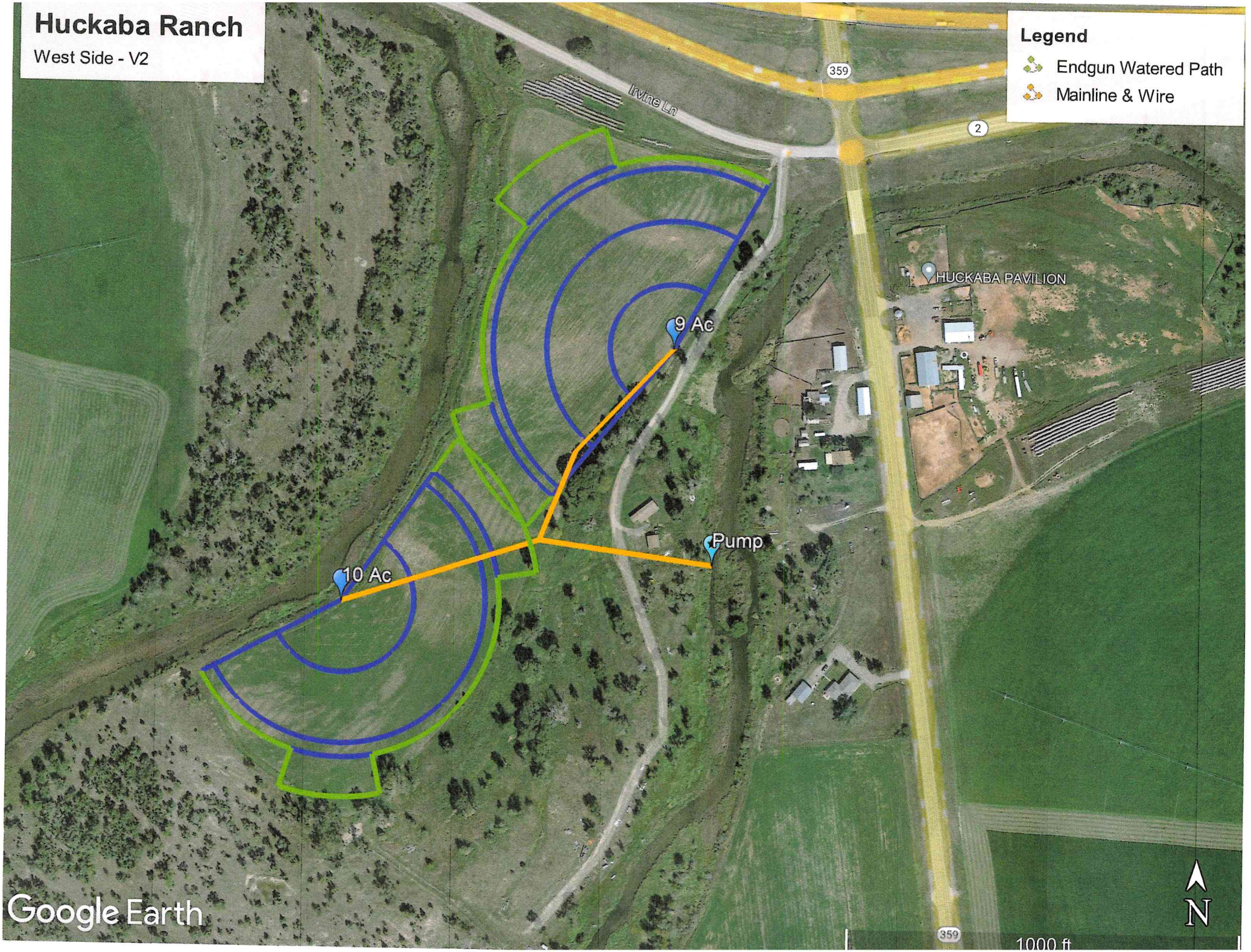


Figure 1. Location of Huckaba Point of Diverision change, 45.86594, -111.95569.

Figure 2. Looking across the Jefferson slough from the Huckaba POD change site.

Figure 3. Looking upstream on the Jefferson Slough from the Huckaba POD change site.

Figure 4. Looking downstream on the Jefferson Slough from the Huckaba POD change site.


Huckaba Ranch
West Side - V2
Legend
Endgun Watered Path
Mainline & Wire
Irvine Ln
359
2
HUCKABA PAVILION
9 Ac
Pump
10 Ac
Google Earth
N
1000 ft

Hackaba Ranch.

50 h.p. — Pivot system 5c. of railroad tracks : 514 GPM

60 h.p.
- 6 tower pivot system No. of tracks. 696 GPM
- 5 tower pivot system No. of tracks. 483 GPM
- 4 tower pivot system W of highway 200 GPM.

Jim Richards —
President
International Irrigation Inc.
406-925-9931 Cell -

Surface Water Change Technical Analyses Report

Department of Natural Resources and Conservation (DNRC or Department)
Water Resources Division
Savannah Telander, Water Resources Specialist, Helena Regional Office

Application No.	41E 30164689	**Proposed Points of Diversion**	NENWSE Section 2, NENWNE Section 3, and NWNWNE Section 11, all within T1N R3W, Jefferson County
Applicant	LR Huckaba Ranch LLC		

Overview

This report analyzes data submitted by the Applicant in support of the above-mentioned water right Change Application. This report provides technical analyses as required under the Administrative Rules of Montana (ARM) 36.12.1303 in support of the water rights criteria assessment as required in §85-2-402, Montana Code Annotated (MCA). This report was completed by regional office staff.

This Surface Water Change Technical Analyses Report contains the following sections:

1.0 Application Details

The Applicant proposes to change the point of diversion (POD) for Statements of Claim 41E 3407-00 and 41E 3408-00. Claims 41E 3407-00 and 41E 3408-00 historically diverted water from the Boulder River by the Cardwell Ditch[1] headgate in NWSENW Section 35, T2N, R3W, Jefferson County. A map of the historic POD is provided below as Figure 1. The Applicant proposes to change the POD to three pump sites downstream of the historical POD, in NENWSE Section 2, NENWNE Section 3, and NWNWNE Section 11, all within T1N R3W, Jefferson County, on the Jefferson Slough. The proposed PODs can be seen on Figure 2. The Applicant proposes to continue to divert Boulder River water for irrigation of 300 acres in SW, SWSE, Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County, from April 1 to October 30. No change is proposed for the place of use (POU), purpose, or place of storage. The water rights proposed for change are provided in Table 1 below.

Table 1. Water rights proposed for change

Water Right	Purpose	Flow Rate (CFS*)	Volume (AF^)	Period of Use	Point of Diversion	Place of Use	Priority Date	Acres
41E 3407-00	Irrigation	11.37	Historical Use Statement	4/1 to 10/30	NWSENW Section 35, T2N, R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1886.12.31	300
41E 3408-00	Irrigation	11.37	Historical Use Statement	4/1 to 10/30	NWSENW Section 35, T2N, R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1888.12.31	300

*Cubic feet per second
^Acre-feet

[1] Also known as the Shaw Ditch.

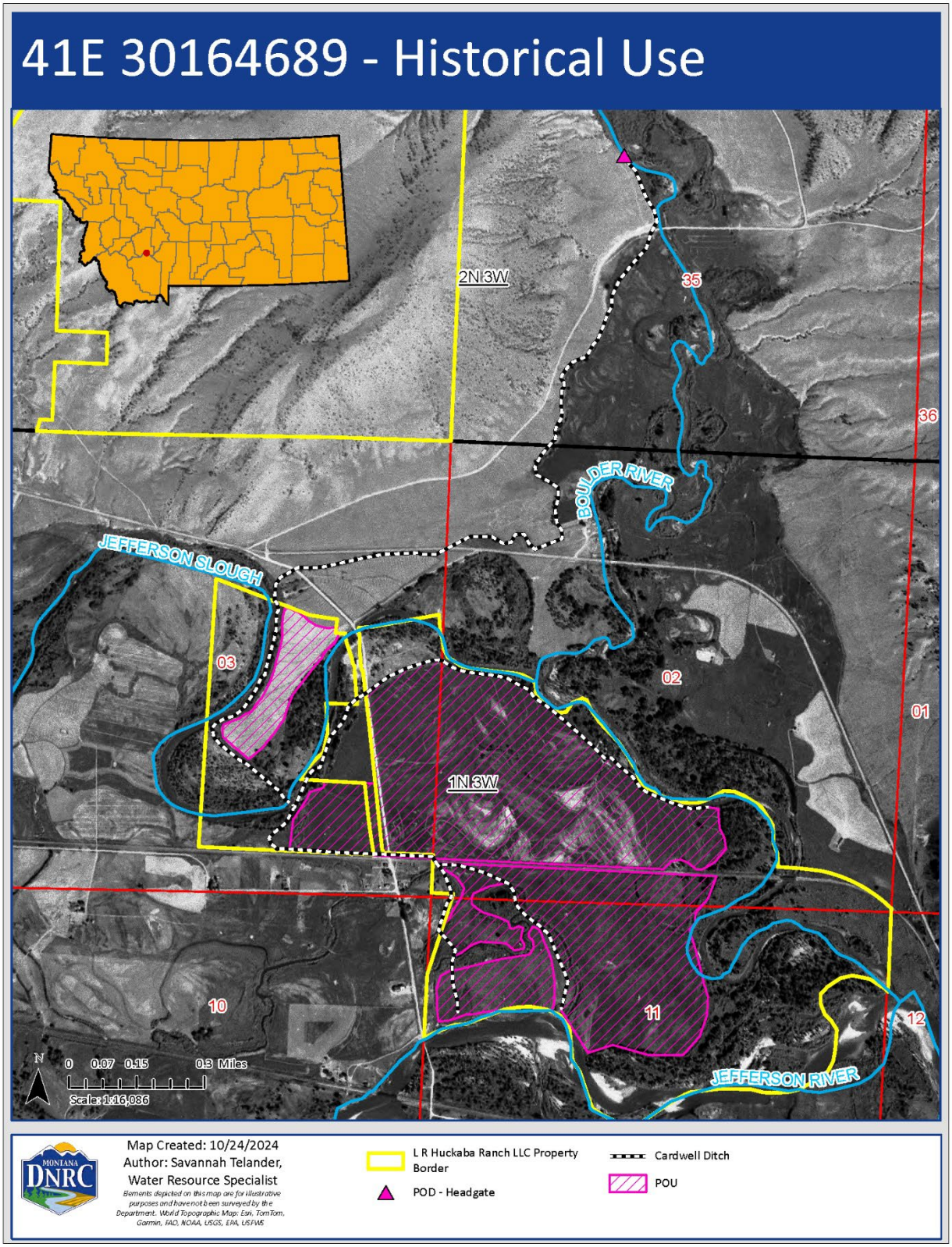


Figure 1: Map of 41E 3407-00 and 41E 3408-00 historical use.

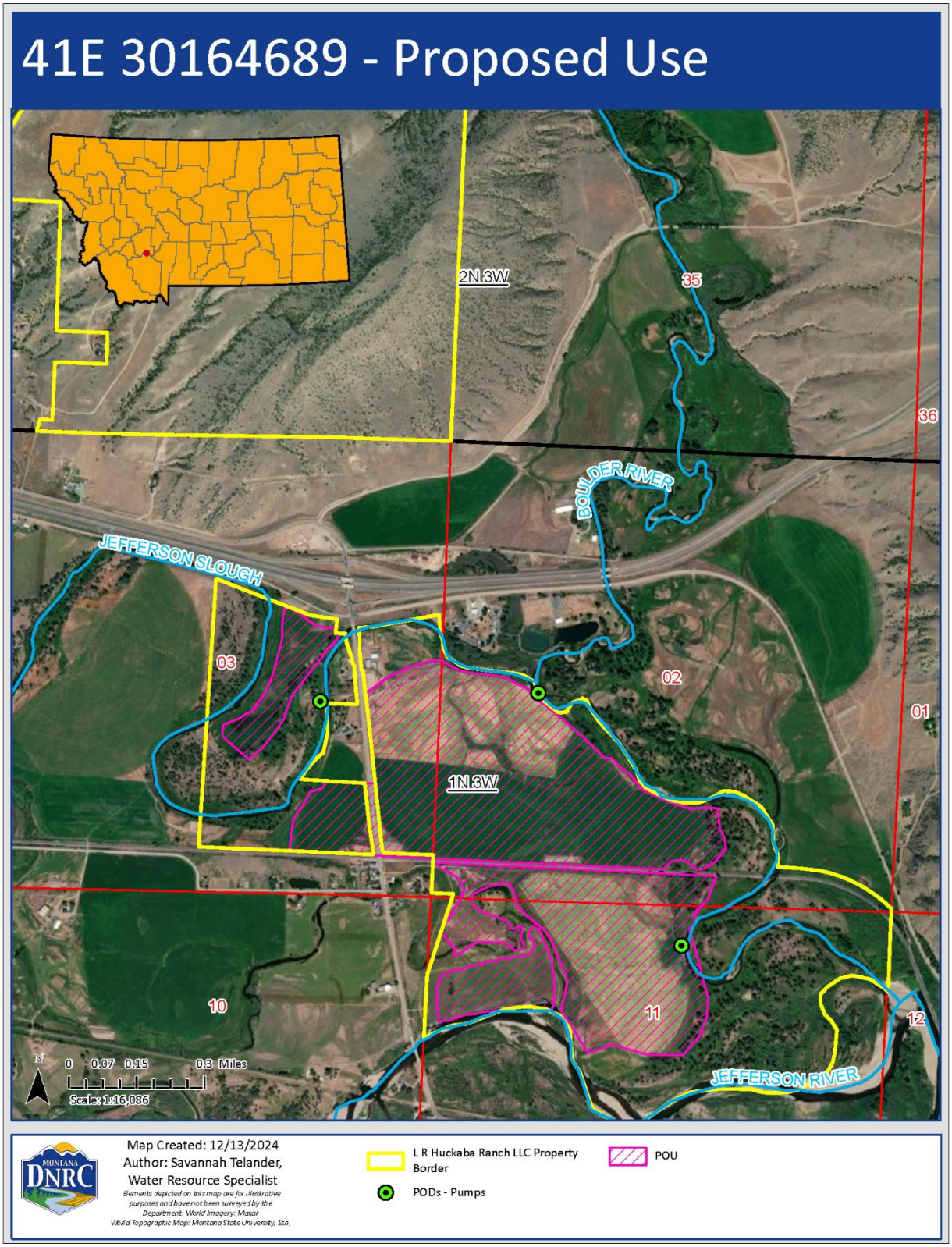


Figure 2: Map of 41E 3407-00 and 41E 3408-00 proposed use

2.0 Historical Use Technical Analysis

2.1 Historical Field Consumed and Applied Volumes

Statements of Claim 41E 3407-00 and 41E 3408-00 were originally claimed and currently indexed for 300 acres of irrigation located in the SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, all within T1N, R3W, Jefferson County. The Water Resources Survey (WRS) for Jefferson County and historical aerial imagery, listed below, support the claimed 300 acres of irrigation.

- WRS Jefferson County, dated June 1956, maximum 300 acres found
- USGS Photo 2109500070005, dated July 5, 1947, maximum 300 acres found
- USDA Photo 479-B6, dated August 29, 1979, maximum 300 acres found

The maximum historical acres found for Claims 41E 3407-00 and 41E 3408-00 is 300 acres, seen on the map provided as Figure 1. The Department conducted historical use analysis using 300 historically irrigated acres.

Statements of Claim 41E 3407-00 and 41E 3408-00 historically diverted water from the Boulder River by the Cardwell Ditch headgate in NWSENW Section 35, T2N, R3W, Jefferson County. Claims 41E 3407-00 and 41E 3408-00 both have a maximum flow rate of 11.37 CFS. The total flow rate for the water rights proposed for change is 22.74 CFS.

The total historical consumptive volume (HCV) for the historical POU is 312.56 AF. The Department calculated the HCV using the Department's standard methodology, pursuant to ARM 36.12.1902. The water rights proposed for change are Statements of Claim, and the historical use will be evaluated as the rights existed prior to July 1, 1973. The consumed volume for irrigation is based on the net irrigation requirement (NIR) from USDA Natural Resources Conservation Service Irrigation Water Requirements (IWR) at a representative weather station. The NIR is multiplied by a county-wide management factor (from ARM 36.12.1902) to produce an adjusted NIR representative of actual crop yields in Montana. Crop consumption is determined by multiplying the adjusted NIR by the number of acres of irrigation. Crop consumption is then divided by the field efficiency identified from the irrigation method and ARM 36.12.115. Irrecoverable losses (IL) are 5% of the field applied volume for flood irrigation or 10% for sprinkler irrigation. The total consumed volume for irrigation is the crop consumption plus irrecoverable losses. The total non-consumed volume is the field applied volume minus the total consumed volume.

The Applicant asserts that Statements of Claim 41E 3407-00 and 41E 3408-00 were historically diverted water from the Boulder River by the Cardwell Ditch headgate in NWSENW Section 35, T2N, R3W, Jefferson County. The Applicant states that water was diverted from the beginning of April (4/1) to the end of October (10/30), with two seven day pauses for cutting, for a total of 198 days. The POU is used for production of alfalfa, barley, oats, and grass hay. Given the historical use description, the Department has calculated HCV assuming full-service irrigation for the 198 days of irrigation.

The Applicant states that the entire POU was wild flood irrigated using contour ditches. The HCV for the historical POU was found using the following equations and information:

$$Supplemental\ HCV = HCV * Supplemental\ Flow\ Proportion$$

$$HCV = Crop\ Consumption + Historic\ Irrecoverable\ Losses$$

$$Crop\ Consumption = Boulder\ Weather\ Station * 1ft/12inches * Jefferson\ County\ Management\ Factor * Historic\ Acres\ Historic$$

$$Irrecoverable\ Losses = Field\ Applied * IL\%$$

$$Field\ Applied = Crop\ ConsumptionField\ Efficiency$$

The historical consumed and field applied volumes have been calculated with the inputs shown in Table 2 following the methods described above and in ARM 36.12.1902.

Table 2. Historical use for all water rights proposed for change.

Irrigation Method	Acres	IWR (in)*	Mgmt. Factor^	Field Efficiency	Crop Consumption (AF)	Applied Volume (AF)	IL (AF)	Total Consumed Volume (AF)
Flood Irrigation, Wheeline & Handline	300	17.08	0.61	0.25	260.47	1041.88	52.09	312.56

*Boulder IWR Weather Station
^Jefferson County Historical Use Management Factor (1964-1973)

Statements of Claim 41E 3406-00, 41E 3407-00 and 41E 3408-00 are fully supplemental. Claim 41E 4306-00 is an irrigation Claim owned by the Applicant for water from Cold Spring with a maximum flow rate of 11.37 CFS. 41E 4306-00 is not included in the proposed change. The HCV for the historical POU was distributed to all water rights based on their proportion of the total flow rate, shown in Table 3. The supplemental consumed volume was determined using the equation as described below.

$$Supplemental\ Consumed\ Volume_{water\ right} = Field\ HCV * Supplemental\ Flow\ Proportion_{water\ right}$$

Table 3. Historical consumptive use of the POU by water right

Water Right	Type of Use	Applied Volume - Supplemental (AF)	Consumed Volume - Supplemental (AF)	Non-Consumed Volume - Supplemental (AF)
41E 4306-00	Historical	347.29	104.19	243.11
41E 4307-00	Historical	347.29	104.19	243.11
41E 4308-00	Historical	347.29	104.19	243.11
Total		**1041.88**	**312.56**	**729.32**

2.2 Historical Conveyance Losses

The historical means of conveyance from the POD to the POU is the Cardwell Ditch. The Cardwell Ditch runs south from the headgate in NWSENW Section 35, T2N, R3W, Jefferson County, on the west side of the Boulder River. It continues south under Interstate 90 onto the Applicant's property and irrigates the POU north of the Jefferson Slough in E2 Section 3, T1N, R3W, Jefferson County. The ditch continues south until it dumps into the Jefferson Slough in the Section 3, T1N, R3W, Jefferson County. Boulder River water is then pumped from the Jefferson Slough at the secondary POD in NESWNE Section 3, T1N, R3W, Jefferson County, into the Applicant's ditch system that irrigates the POU south of the Jefferson Slough in Sections 2, 3, and 11, T1N, R3W, Jefferson County. The Cardwell Ditch can be seen on the historical use map provided as Figure 1 above.

Statements of Claim 41E 4306-00, 41E 4307-00, 41E 4308-00, 41E 143433-00, 41E 143436-00 and 41E 143437-00 utilized the Cardwell Ditch as a means of conveyance and/or POU. Statements of Claim 41E 4306-00, 41E 4307-00, 41E 4308-00 historically conveyed water to the Applicants property from April 1 to October 30. Claims 41E 143433-00, 41E 143436-00 and 41E 143437-00 are owned by a neighboring third-party, Golden Sunlight Mines Inc. Claim 41E 143433-00 is an irrigation right and Claims 41E 143436-00 and 41E 143437-00 are diverted ditch stock water rights that claim the Cardwell Ditch as a means of conveyance and/or POU. Irrigation Claim 41E 143433-00 is included in conveyance loss calculations as this water right utilized water out of the Cardwell Ditch above the Applicant's water rights proposed for change in this Change Application. Claims 41E 143436-00 and 41E 143437-00 were not included in conveyance losses because they are multiple use diverted ditch rights of Golden Sunlight Mines Inc irrigation water rights.

Due to the Cardwell Ditch conveying multiple water rights over varying distances to the multiple POUs over different number of days, the Department divided the ditch into four down-ditch combinations. The water rights were assigned to a combination based on the varying ditch segments and days. The down-ditch combinations for the Cardwell Ditch are shown in Table 4 and Figure 3.

Table 4: Down-ditch combinations for Cardwell Ditch

Down-Ditch Combination	Water Rights	Period of Use/Diversion	Days Irrigated	Total Flow Rate (CFS)	Ditch Length (ft)	Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate	Net Evap (in)
Cardwell A	41E 3406-00, 41E 3407-00, 41E 3408-00, 41E 143433-00	4/1 to 8/31	145	39.23	1055	4	9.59	1.2	13.86
Cardwell B	41E 3406-00, 41E 3407-00, 41E 3408-00	9/1 to 10/30	53	34.11	1055	4	9.59	1.2	8.88
Cardwell C	41E 3406-00, 41E 3407-00, 41E 3408-00	4/1 to 10/30	198	34.11	7886	4	9.59	1.2	22.74
Cardwell D	41E 3406-00, 41E 3407-00, 41E 3408-00	4/1 to 10/30	198	34.11	3089	4	9.59	1.2	22.48

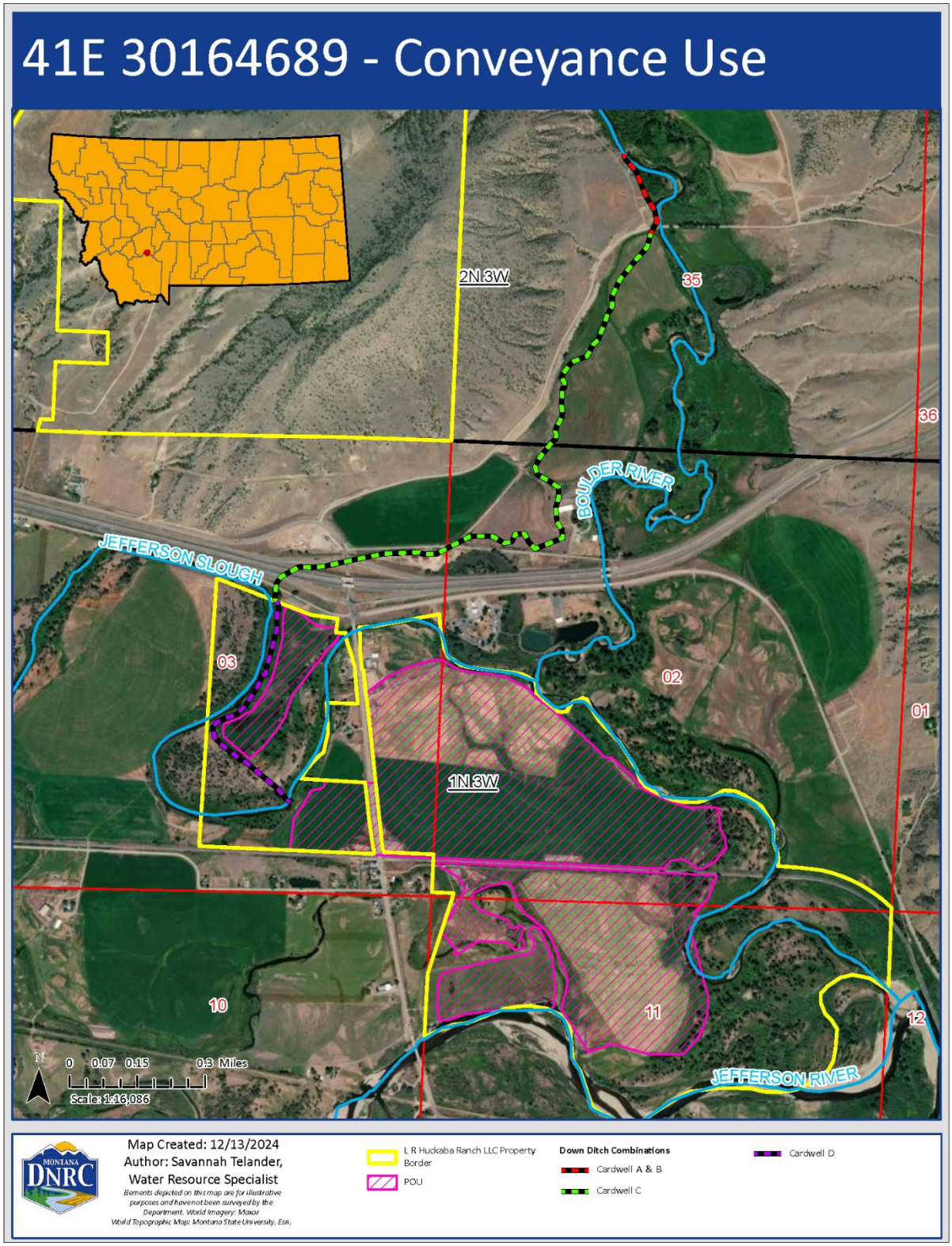


Figure 3: Cardwell Ditch conveyance use map of down-ditch combinations

Using ditch measurements and third-party water right information provided by the Applicant, seen in Table 4, the Department calculated conveyance losses for each down-ditch combination and the water rights proposed for change. Conveyance losses for the water rights included in this Change Application were distributed using the Department's standard methodology pursuant to the technical memorandum "Distributing Conveyance Loss on Multiple User Ditches" (Heffner, 2020) and ARM 36.12.1902(10). The historical conveyance loss volume is equal to the sum of the historical seepage loss, vegetation loss, and ditch evaporation volumes. Conveyance loss volumes per down-ditch combination is provided below in Table 5 and the conveyance loss volumes per each water right in the Cardwell ditch is provided below in Table 6. The following equations were used to calculate conveyance loss volumes:

$$Ditch\ Combo\ Conveyance\ Losses_{Total} = Seepage\ Loss_{combo} + Vegetation\ Loss_{combo} + Evaporation\ Loss_{combo}$$

$$Seepage\ Loss_{combo} = (Wetted\ Perimeter_{combo} * Ditch\ Length_{combo} * Ditch\ Loss\ Rate * Days\ Diverted_{combo}) * \frac{1\ acre}{43560 ft^2}$$

$$Distributed\ Vegetation\ Loss_{combo} = 0.75\%\ loss\ per\ mile * \frac{Ditch\ Length_{combo}}{5280\ miles} * Flow\ Rate_{combo} * Days\ Diverted_{combo} * 2$$

$$Distributed\ Ditch\ Evaporation\ Loss_{combo} = (Surface\ Area * Adjusted\ Net\ Evaporation_{combo}) * \frac{1\ acre}{43560 ft^2}$$

$$Adjusted\ Net\ Evaporation_{combo} = Period\ of\ Diversion\ Net\ Evaporation * \frac{Days\ Irrigated}{365}$$

$$Surface\ Area = (Wetted\ Width\ ft) * Ditch\ Length_{combo}$$

$$Ditch\ Combo\ Conveyance\ Losses_{Water\ Right} = Ditch\ Combo\ Conveyance\ Losses_{Total} * Combo\ Flow\ Proportion_{Water\ Right}$$

$$Combo\ Flow\ Proportion_{Water\ Right} = Water\ Right\ Flow\ Rate_{ditch} * Ditch\ Combo\ Total\ Flow\ Rate$$

Table 5: Conveyance loss volumes of for each down-ditch combination

Down-Ditch Combination	Length (ft)	Flow Rate (CFS)	Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate (ft3/ft/day)	Days Irrigated	Adj. Net Evap (in)	Seepage Loss (AF)	Vegetation Loss (AF)	Evaporative Loss (AF)	Total Conveyance Loss (AF)
Cardwell A	1055	39.23	4	9.59	1.2	145	13.86	40.41	17.05	0.11	57.57
Cardwell B	1055	34.11	4	9.59	1.2	53	8.88	14.77	5.42	0.07	20.26
Cardwell C	7886	34.11	4	9.59	1.2	198	22.74	412.51	151.31	1.37	565.19
Cardwell D	3089	34.11	4	9.59	1.2	198	22.48	161.58	59.27	0.53	221.38
Total								629.28	233.04	2.09	**864.41**

Table 6: Conveyance loss volume for water rights in Cardwell Ditch

Water Right	Down-Ditch Combination	Total Flow Rate (CFS)	Water Right Flow Rate (CFS)	Proportion	Down-Ditch Combination Conveyance Loss (AF)	Water Right Conveyance Loss (AF)	Water Right Total Conveyance Loss (AF)
41E 4306-00	Cardwell A	39.23	11.37	0.29	57.57	16.69	285.63
	Cardwell B	34.11	11.37	0.33	20.26	6.75	
	Cardwell C	34.11	11.37	0.33	565.19	188.4	
	Cardwell D	34.11	11.37	0.33	221.38	73.79	
41E 4307-00	Cardwell A	39.23	11.37	0.29	57.57	16.69	285.63
	Cardwell B	34.11	11.37	0.33	20.26	6.75	
	Cardwell C	34.11	11.37	0.33	565.19	188.4	
	Cardwell D	34.11	11.37	0.33	221.38	73.79	
41E 4308-00	Cardwell A	39.23	11.37	0.29	57.57	16.69	285.63
	Cardwell B	34.11	11.37	0.33	20.26	6.75	
	Cardwell C	34.11	11.37	0.33	565.19	188.4	
	Cardwell D	34.11	11.37	0.33	221.38	73.79	
41E 143433-00	Cardwell A	39.23	5.12	0.13	57.57	7.51	7.51
Total						**864.41**	**864.41**

2.3 Historical Diverted Volume

Per ARM 36.12.1902(10), the historically diverted volume is equal to the sum of the historical consumptive volume divided by the field efficiency and historical conveyance loss volume. Table 7 below summarizes the historical supplemental consumed and conveyance loss volumes.

Table 7: Historic Diverted Volume of 41E 4307-00 and 41E 4308-00

Water Right	Consumed Volume - Supplemental (AF)	Field Efficiency	Conveyance Loss Volume (AF)	Historic Diverted Volume (AF)
41E 4307-00	104.19	0.25	285.63	632.92
41E 4308-00	104.19	0.25	285.63	632.92
Total	**208.38**		**571.26**	**1265.84**

2.4 Summary of Historical Use

The Department will consider the following values when evaluating the historical use of 41E 3407-00 and 41E 3408-00 for the adverse effect criterion:

Table 8: Summary of historical use of 41E 3407-00 and 41E 3408-00

Water Right	Historical Purpose	Maximum Historical Acres	Historical POU	Historical POD	Maximum Historical Flow Rate (CFS)	Historically Consumed Volume (AF)	Historically Diverted Volume (AF)
41E 3407-00	Irrigation	300	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11 T1N R3W	NWSENW Section 35 T2N R3W	11.37	104.19	632.92
41E 3408-00	Irrigation	300	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11 T1N R3W	NWSENW Section 35 T2N R3W	11.37	104.19	632.92
Total					**22.74**	**208.38**	**1265.84**

3.0 Analysis of Impacted Surface Water Sources

3.1 Summary of Proposed Use

The Applicant proposes to change the POD for Claims 41E 4307-00 and 41E 4308-00 from the Cardwell Headgate in NWSENW Section 35, T2N, R3W, Jefferson County, to three pump sites downstream of the historical POD on the Jefferson Slough. The proposed pump site locations are in NENWSW Section 2, NENWNE Section 3, and NWNWNE Section 11, all within T1N, R3W, Jefferson County, as seen in Figure 2. The source of the water will remain Boulder River and period of diversion and use will continue to be April 1 to October 30.

Through the proposed change, the Applicant will retire the Cardwell Ditch headgate so Boulder River water historically diverted into the Cardwell Ditch will continue down the Boulder River into Jefferson Slough. Boulder River water will be pumped by the three pump sites on the Applicant's property to irrigate the POU. No conveyance loss is associated with the proposed PODs, as water will be pumped from the proposed pump sites to the POU via pipelines. The proposed changes for Claims 41E 4307-00 and 41E 4308-00 are shown in Table 9:

Table 9. Summary of the proposed use of 41E 4307-00 and 41E 4308-00. See below for an explanation of the proposed use.

Water Right	Proposed Purpose	Proposed Acres	Proposed Place of Use	Proposed Points of Diversion	Proposed Flow Rate (CFS)	Proposed Consumptive Volume (AF)	Proposed Diverted Volume (AF)
41E 4307-00	Irrigation	300	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	NENWSW Section 2, NENWNE Section 3, and NWNWNE Section 11, T1N, R3W, Jefferson County	11.37	104.19	347.29
41E 4308-00	Irrigation	300	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	NENWSW Section 2, NENWNE Section 3, and NWNWNE Section 11, T1N, R3W, Jefferson County	11.37	104.19	347.29
Total					**22.74**	**208.28**	**694.58**

The historical and proposed consumed and diverted volumes for the water rights proposed for change are provided in Table 10 below.

Table 10: Volumes (AF) associated with historical and proposed use.

Water Right	Historically Consumed Volume	Historically Diverted Volume	Proposed Consumptive Volume	Proposed Diverted Volume
41E 4307-00	104.2	632.92	104.19	347.29
41E 4308-00	104.2	632.92	104.19	347.29
Total	**208.36**	**1265.84**	**208.28**	**694.58**

3.2 Area of Potential Adverse Effect

Statements of Claim 41E 4307-00 and 41E 4308-00 involve a POD change on a surface water source, Boulder River. The proposed PODs, three pump sites, will be approximately 1.21 and 1.74 miles downstream of the historical POD on the Jefferson Slough. The Department considered a

potentially impacted reach on the source of supply, considering the reach of surface water between the historical POD to the proposed PODs. This reach extends from historical POD on the Boulder River NWSENW Section 35, T2N, R3W, downstream to the proposed POD in NWNWNE Section 11, T1N, R3W, all within Jefferson County. There are five water rights within the reach, as illustrated in Appendix A. One of the proposed PODs is located in NENWNE Section 3, T1N, R3W, Jefferson County. This POD is located approximately half of a mile upstream of the Jefferson Slough and Boulder River confluence, on the Jefferson Slough. The Department also considered a potentially impacted reach between the POD in NENWNE Section 3, T1N, R3W, Jefferson County, to confluence of the Boulder River and Jefferson Slough. There are zero water rights within this reach.

Review

This document has been reviewed by the Department on January 15, 2025.

References

Department Standard Practice for Determining Historical Use
Department Standard Practice for Analyzing Area of Potential Adverse Effect
Technical Memorandum "Distributing Conveyance Loss on Multiple User Ditches" (Heffner, 2020)

Appendix A: Water Rights within the Area of Potential Adverse Effect

Water Right	Priority Date	Water Right Type	Source Name	Owners	Purposes
41E 143433 00	1888/12/31	STATEMENT OF CLAIM	BOULDER RIVER	GOLDEN SUNLIGHT MINES INC	IRRIGATION
41E 143434 00	1886/12/31	STATEMENT OF CLAIM	BOULDER RIVER	GOLDEN SUNLIGHT MINES INC	IRRIGATION
41E 143436 00	1886/12/31	STATEMENT OF CLAIM	BOULDER RIVER	GOLDEN SUNLIGHT MINES INC	STOCK
41E 143437 00	1868/12/31	STATEMENT OF CLAIM	BOULDER RIVER	GOLDEN SUNLIGHT MINES INC	STOCK
41E 30017424	7/1/1985	WATER RESERVATION	BOULDER RIVER	MONTANA, STATE OF DEPT OF FISH WILDLIFE & PARKS	FISHERY

Technical Analyses Report/ Scientific Credibility Review

- Departmental Technical Analyses Report/ Scientific Credibility Review
- Any correspondence relating to the Technical Analyses Report

Technical Analyses Report / Scientific Credibility Review

Surface Water Change Technical Analyses Report

Department of Natural Resources and Conservation (DNRC or Department)
Water Resources Division
Savannah Telander, Water Resources Specialist, Helena Regional Office

Application No.	41E 30164689	**Proposed Points of Diversion**	NENWSE Section 2, NENWNE Section 3, and NWNWNE Section 11, all within T1N R3W, Jefferson County
Applicant	LR Huckaba Ranch LLC		

Overview

This report analyzes data submitted by the Applicant in support of the above-mentioned water right Change Application. This report provides technical analyses as required under the Administrative Rules of Montana (ARM) 36.12.1303 in support of the water rights criteria assessment as required in §85-2-402, Montana Code Annotated (MCA). This report was completed by regional office staff.

This Surface Water Change Technical Analyses Report contains the following sections:

1.0 Application Details

The Applicant proposes to change the point of diversion (POD) for Statements of Claim 41E 3407-00 and 41E 3408-00. Claims 41E 3407-00 and 41E 3408-00 historically diverted water from the Boulder River by the Cardwell Ditch[1] headgate in NWSENW Section 35, T2N, R3W, Jefferson County. A map of the historic POD is provided below as Figure 1. The Applicant proposes to change the POD to three pump sites downstream of the historical POD, in NENWSE Section 2, NENWNE Section 3, and NWNWNE Section 11, all within T1N R3W, Jefferson County, on the Jefferson Slough. The proposed PODs can be seen on Figure 2. The Applicant proposes to continue to divert Boulder River water for irrigation of 300 acres in SW, SWSE, Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County, from April 1 to October 30. No change is proposed for the place of use (POU), purpose, or place of storage. The water rights proposed for change are provided in Table 1 below.

Table 1. Water rights proposed for change

Water Right	Purpose	Flow Rate (CFS*)	Volume (AF^)	Period of Use	Point of Diversion	Place of Use	Priority Date	Acres
41E 3407-00	Irrigation	11.37	Historical Use Statement	4/1 to 10/30	NWSENW Section 35, T2N, R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1886.12.31	300
41E 3408-00	Irrigation	11.37	Historical Use Statement	4/1 to 10/30	NWSENW Section 35, T2N, R3W, Jefferson County	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	1888.12.31	300

*Cubic feet per second
^Acre-feet

[1] Also known as the Shaw Ditch.

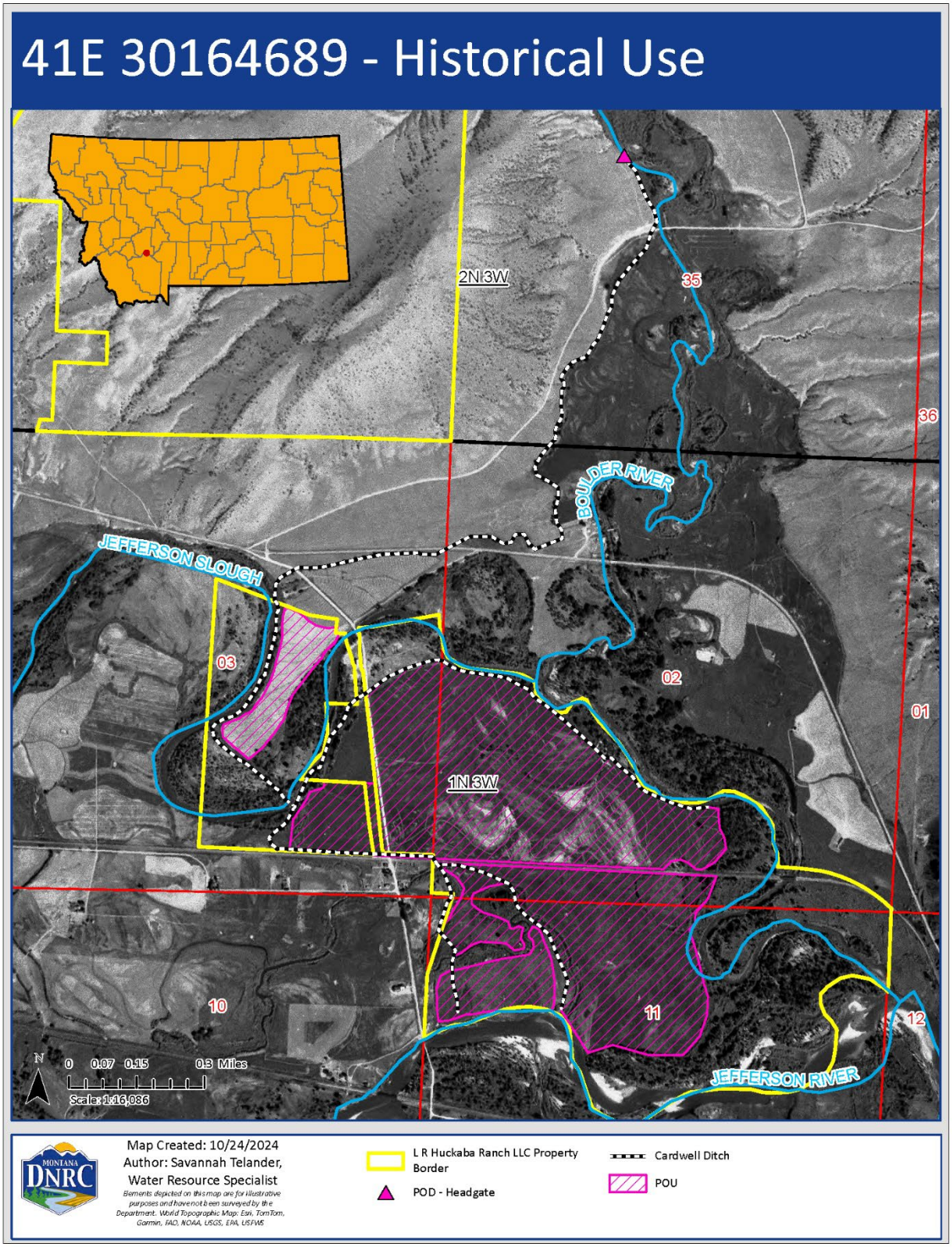


Figure 1: Map of 41E 3407-00 and 41E 3408-00 historical use.

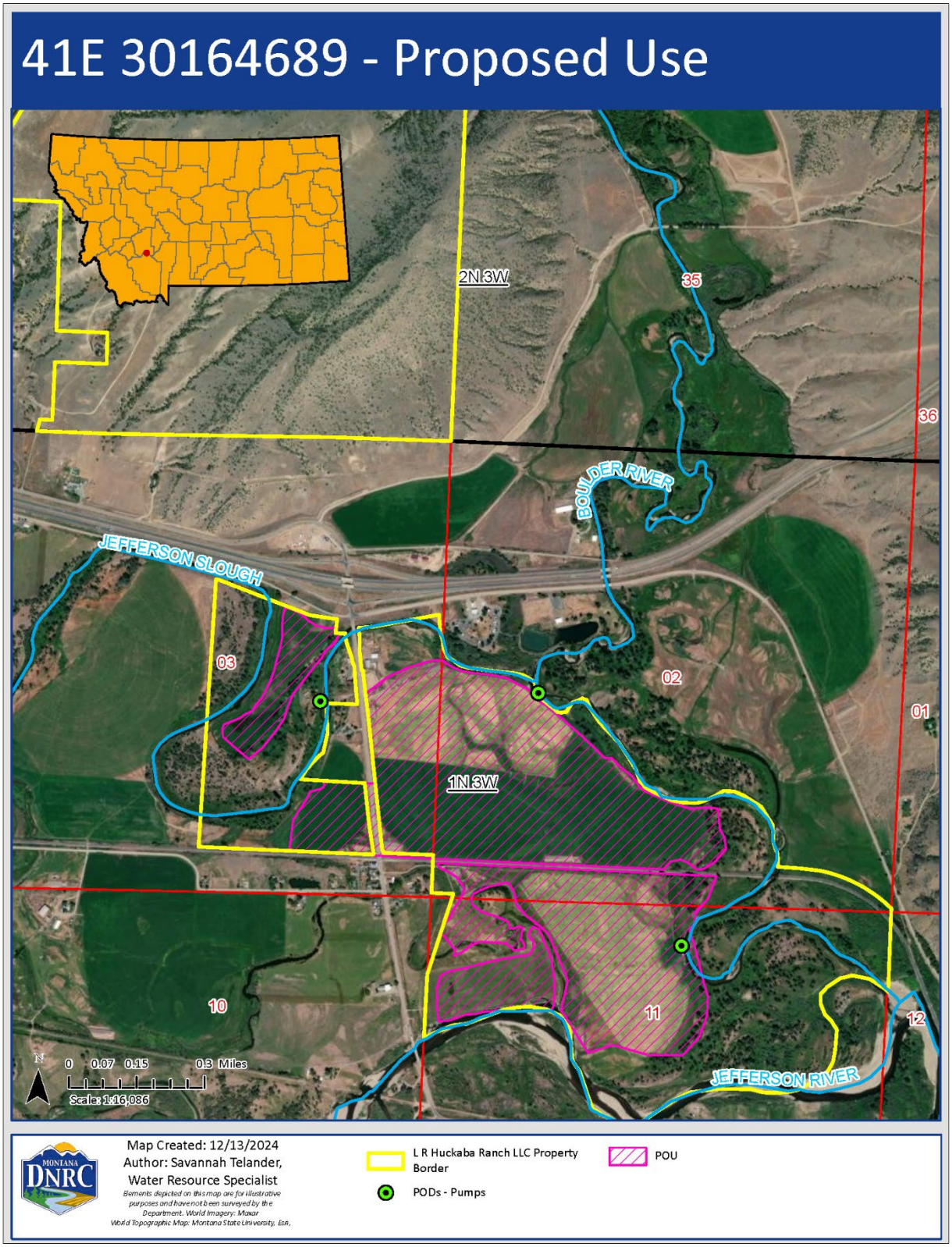


Figure 2: Map of 41E 3407-00 and 41E 3408-00 proposed use

2.0 Historical Use Technical Analysis

2.1 Historical Field Consumed and Applied Volumes

Statements of Claim 41E 3407-00 and 41E 3408-00 were originally claimed and currently indexed for 300 acres of irrigation located in the SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, all within T1N, R3W, Jefferson County. The Water Resources Survey (WRS) for Jefferson County and historical aerial imagery, listed below, support the claimed 300 acres of irrigation.

- WRS Jefferson County, dated June 1956, maximum 300 acres found
- USGS Photo 2109500070005, dated July 5, 1947, maximum 300 acres found
- USDA Photo 479-B6, dated August 29, 1979, maximum 300 acres found

The maximum historical acres found for Claims 41E 3407-00 and 41E 3408-00 is 300 acres, seen on the map provided as Figure 1. The Department conducted historical use analysis using 300 historically irrigated acres.

Statements of Claim 41E 3407-00 and 41E 3408-00 historically diverted water from the Boulder River by the Cardwell Ditch headgate in NWSENW Section 35, T2N, R3W, Jefferson County. Claims 41E 3407-00 and 41E 3408-00 both have a maximum flow rate of 11.37 CFS. The total flow rate for the water rights proposed for change is 22.74 CFS.

The total historical consumptive volume (HCV) for the historical POU is 312.56 AF. The Department calculated the HCV using the Department's standard methodology, pursuant to ARM 36.12.1902. The water rights proposed for change are Statements of Claim, and the historical use will be evaluated as the rights existed prior to July 1, 1973. The consumed volume for irrigation is based on the net irrigation requirement (NIR) from USDA Natural Resources Conservation Service Irrigation Water Requirements (IWR) at a representative weather station. The NIR is multiplied by a county-wide management factor (from ARM 36.12.1902) to produce an adjusted NIR representative of actual crop yields in Montana. Crop consumption is determined by multiplying the adjusted NIR by the number of acres of irrigation. Crop consumption is then divided by the field efficiency identified from the irrigation method and ARM 36.12.115. Irrecoverable losses (IL) are 5% of the field applied volume for flood irrigation or 10% for sprinkler irrigation. The total consumed volume for irrigation is the crop consumption plus irrecoverable losses. The total non-consumed volume is the field applied volume minus the total consumed volume.

The Applicant asserts that Statements of Claim 41E 3407-00 and 41E 3408-00 were historically diverted water from the Boulder River by the Cardwell Ditch headgate in NWSENW Section 35, T2N, R3W, Jefferson County. The Applicant states that water was diverted from the beginning of April (4/1) to the end of October (10/30), with two seven day pauses for cutting, for a total of 198 days. The POU is used for production of alfalfa, barley, oats, and grass hay. Given the historical use description, the Department has calculated HCV assuming full-service irrigation for the 198 days of irrigation.

The Applicant states that the entire POU was wild flood irrigated using contour ditches. The HCV for the historical POU was found using the following equations and information:

$$Supplemental\ HCV = HCV * Supplemental\ Flow\ Proportion$$

$$HCV = Crop\ Consumption + Historic\ Irrecoverable\ Losses$$

$$Crop\ Consumption = Boulder\ Weather\ Station * 1ft/12inches * Jefferson\ County\ Management\ Factor * Historic\ Acres\ Historic$$

$$Irrecoverable\ Losses = Field\ Applied * IL\%$$

$$Field\ Applied = Crop\ ConsumptionField\ Efficiency$$

The historical consumed and field applied volumes have been calculated with the inputs shown in Table 2 following the methods described above and in ARM 36.12.1902.

Table 2. Historical use for all water rights proposed for change.

Irrigation Method	Acres	IWR (in)*	Mgmt. Factor^	Field Efficiency	Crop Consumption (AF)	Applied Volume (AF)	IL (AF)	Total Consumed Volume (AF)
Flood Irrigation, Wheeline & Handline	300	17.08	0.61	0.25	260.47	1041.88	52.09	312.56

*Boulder IWR Weather Station
^Jefferson County Historical Use Management Factor (1964-1973)

Statements of Claim 41E 3406-00, 41E 3407-00 and 41E 3408-00 are fully supplemental. Claim 41E 4306-00 is an irrigation Claim owned by the Applicant for water from Cold Spring with a maximum flow rate of 11.37 CFS. 41E 4306-00 is not included in the proposed change. The HCV for the historical POU was distributed to all water rights based on their proportion of the total flow rate, shown in Table 3. The supplemental consumed volume was determined using the equation as described below.

$$Supplemental\ Consumed\ Volume_{water\ right} = Field\ HCV * Supplemental\ Flow\ Proportion_{water\ right}$$

Table 3. Historical consumptive use of the POU by water right

Water Right	Type of Use	Applied Volume - Supplemental (AF)	Consumed Volume - Supplemental (AF)	Non-Consumed Volume - Supplemental (AF)
41E 4306-00	Historical	347.29	104.19	243.11
41E 4307-00	Historical	347.29	104.19	243.11
41E 4308-00	Historical	347.29	104.19	243.11
Total		**1041.88**	**312.56**	**729.32**

2.2 Historical Conveyance Losses

The historical means of conveyance from the POD to the POU is the Cardwell Ditch. The Cardwell Ditch runs south from the headgate in NWSENW Section 35, T2N, R3W, Jefferson County, on the west side of the Boulder River. It continues south under Interstate 90 onto the Applicant's property and irrigates the POU north of the Jefferson Slough in E2 Section 3, T1N, R3W, Jefferson County. The ditch continues south until it dumps into the Jefferson Slough in the Section 3, T1N, R3W, Jefferson County. Boulder River water is then pumped from the Jefferson Slough at the secondary POD in NESWNE Section 3, T1N, R3W, Jefferson County, into the Applicant's ditch system that irrigates the POU south of the Jefferson Slough in Sections 2, 3, and 11, T1N, R3W, Jefferson County. The Cardwell Ditch can be seen on the historical use map provided as Figure 1 above.

Statements of Claim 41E 4306-00, 41E 4307-00, 41E 4308-00, 41E 143433-00, 41E 143436-00 and 41E 143437-00 utilized the Cardwell Ditch as a means of conveyance and/or POU. Statements of Claim 41E 4306-00, 41E 4307-00, 41E 4308-00 historically conveyed water to the Applicants property from April 1 to October 30. Claims 41E 143433-00, 41E 143436-00 and 41E 143437-00 are owned by a neighboring third-party, Golden Sunlight Mines Inc. Claim 41E 143433-00 is an irrigation right and Claims 41E 143436-00 and 41E 143437-00 are diverted ditch stock water rights that claim the Cardwell Ditch as a means of conveyance and/or POU. Irrigation Claim 41E 143433-00 is included in conveyance loss calculations as this water right utilized water out of the Cardwell Ditch above the Applicant's water rights proposed for change in this Change Application. Claims 41E 143436-00 and 41E 143437-00 were not included in conveyance losses because they are multiple use diverted ditch rights of Golden Sunlight Mines Inc irrigation water rights.

Due to the Cardwell Ditch conveying multiple water rights over varying distances to the multiple POUs over different number of days, the Department divided the ditch into four down-ditch combinations. The water rights were assigned to a combination based on the varying ditch segments and days. The down-ditch combinations for the Cardwell Ditch are shown in Table 4 and Figure 3.

Table 4: Down-ditch combinations for Cardwell Ditch

Down-Ditch Combination	Water Rights	Period of Use/Diversion	Days Irrigated	Total Flow Rate (CFS)	Ditch Length (ft)	Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate	Net Evap (in)
Cardwell A	41E 3406-00, 41E 3407-00, 41E 3408-00, 41E 143433-00	4/1 to 8/31	145	39.23	1055	4	9.59	1.2	13.86
Cardwell B	41E 3406-00, 41E 3407-00, 41E 3408-00	9/1 to 10/30	53	34.11	1055	4	9.59	1.2	8.88
Cardwell C	41E 3406-00, 41E 3407-00, 41E 3408-00	4/1 to 10/30	198	34.11	7886	4	9.59	1.2	22.74
Cardwell D	41E 3406-00, 41E 3407-00, 41E 3408-00	4/1 to 10/30	198	34.11	3089	4	9.59	1.2	22.48

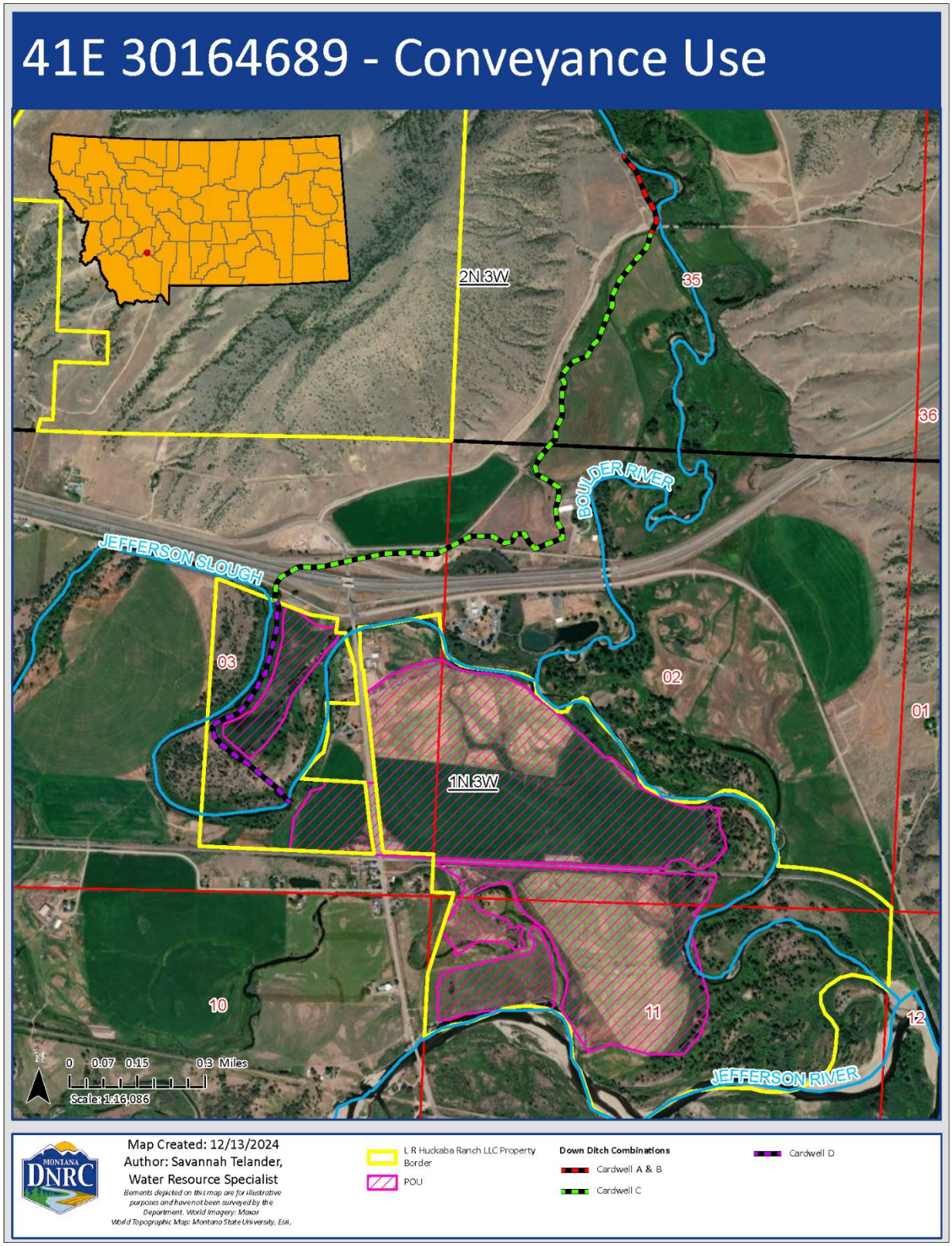


Figure 3: Cardwell Ditch conveyance use map of down-ditch combinations

Using ditch measurements and third-party water right information provided by the Applicant, seen in Table 4, the Department calculated conveyance losses for each down-ditch combination and the water rights proposed for change. Conveyance losses for the water rights included in this Change Application were distributed using the Department's standard methodology pursuant to the technical memorandum "Distributing Conveyance Loss on Multiple User Ditches" (Heffner, 2020) and ARM 36.12.1902(10). The historical conveyance loss volume is equal to the sum of the historical seepage loss, vegetation loss, and ditch evaporation volumes. Conveyance loss volumes per down-ditch combination is provided below in Table 5 and the conveyance loss volumes per each water right in the Cardwell ditch is provided below in Table 6. The following equations were used to calculate conveyance loss volumes:

$$Ditch\ Combo\ Conveyance\ Losses_{Total} = Seepage\ Loss_{combo} + Vegetation\ Loss_{combo} + Evaporation\ Loss_{combo}$$

$$Seepage\ Loss_{combo} = (Wetted\ Perimeter_{combo} * Ditch\ Length_{combo} * Ditch\ Loss\ Rate * Days\ Diverted_{combo}) * \frac{1\ acre}{43560 ft^2}$$

$$Distributed\ Vegetation\ Loss_{combo} = 0.75\%\ loss\ per\ mile * \frac{Ditch\ Length_{combo}}{5280\ miles} * Flow\ Rate_{combo} * Days\ Diverted_{combo} * 2$$

$$Distributed\ Ditch\ Evaporation\ Loss_{combo} = (Surface\ Area * Adjusted\ Net\ Evaporation_{combo}) * \frac{1\ acre}{43560 ft^2}$$

$$Adjusted\ Net\ Evaporation_{combo} = Period\ of\ Diversion\ Net\ Evaporation * \frac{Days\ Irrigated}{365}$$

$$Surface\ Area = (Wetted\ Width\ ft) * Ditch\ Length_{combo}$$

$$Ditch\ Combo\ Conveyance\ Losses_{Water\ Right} = Ditch\ Combo\ Conveyance\ Losses_{Total} * Combo\ Flow\ Proportion_{Water\ Right}$$

$$Combo\ Flow\ Proportion_{Water\ Right} = Water\ Right\ Flow\ Rate_{ditch} * Ditch\ Combo\ Total\ Flow\ Rate$$

Table 5: Conveyance loss volumes of for each down-ditch combination

Down-Ditch Combination	Length (ft)	Flow Rate (CFS)	Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate (ft3/ft/day)	Days Irrigated	Adj. Net Evap (in)	Seepage Loss (AF)	Vegetation Loss (AF)	Evaporative Loss (AF)	Total Conveyance Loss (AF)
Cardwell A	1055	39.23	4	9.59	1.2	145	13.86	40.41	17.05	0.11	57.57
Cardwell B	1055	34.11	4	9.59	1.2	53	8.88	14.77	5.42	0.07	20.26
Cardwell C	7886	34.11	4	9.59	1.2	198	22.74	412.51	151.31	1.37	565.19
Cardwell D	3089	34.11	4	9.59	1.2	198	22.48	161.58	59.27	0.53	221.38
Total								629.28	233.04	2.09	**864.41**

Table 6: Conveyance loss volume for water rights in Cardwell Ditch

Water Right	Down-Ditch Combination	Total Flow Rate (CFS)	Water Right Flow Rate (CFS)	Proportion	Down-Ditch Combination Conveyance Loss (AF)	Water Right Conveyance Loss (AF)	Water Right Total Conveyance Loss (AF)
41E 4306-00	Cardwell A	39.23	11.37	0.29	57.57	16.69	285.63
	Cardwell B	34.11	11.37	0.33	20.26	6.75	
	Cardwell C	34.11	11.37	0.33	565.19	188.4	
	Cardwell D	34.11	11.37	0.33	221.38	73.79	
41E 4307-00	Cardwell A	39.23	11.37	0.29	57.57	16.69	285.63
	Cardwell B	34.11	11.37	0.33	20.26	6.75	
	Cardwell C	34.11	11.37	0.33	565.19	188.4	
	Cardwell D	34.11	11.37	0.33	221.38	73.79	
41E 4308-00	Cardwell A	39.23	11.37	0.29	57.57	16.69	285.63
	Cardwell B	34.11	11.37	0.33	20.26	6.75	
	Cardwell C	34.11	11.37	0.33	565.19	188.4	
	Cardwell D	34.11	11.37	0.33	221.38	73.79	
41E 143433-00	Cardwell A	39.23	5.12	0.13	57.57	7.51	7.51
Total						**864.41**	**864.41**

2.3 Historical Diverted Volume

Per ARM 36.12.1902(10), the historically diverted volume is equal to the sum of the historical consumptive volume divided by the field efficiency and historical conveyance loss volume. Table 7 below summarizes the historical supplemental consumed and conveyance loss volumes.

Table 7: Historic Diverted Volume of 41E 4307-00 and 41E 4308-00

Water Right	Consumed Volume - Supplemental (AF)	Field Efficiency	Conveyance Loss Volume (AF)	Historic Diverted Volume (AF)
41E 4307-00	104.19	0.25	285.63	632.92
41E 4308-00	104.19	0.25	285.63	632.92
Total	**208.38**		**571.26**	**1265.84**

2.4 Summary of Historical Use

The Department will consider the following values when evaluating the historical use of 41E 3407-00 and 41E 3408-00 for the adverse effect criterion:

Table 8: Summary of historical use of 41E 3407-00 and 41E 3408-00

Water Right	Historical Purpose	Maximum Historical Acres	Historical POU	Historical POD	Maximum Historical Flow Rate (CFS)	Historically Consumed Volume (AF)	Historically Diverted Volume (AF)
41E 3407-00	Irrigation	300	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11 T1N R3W	NWSENW Section 35 T2N R3W	11.37	104.19	632.92
41E 3408-00	Irrigation	300	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11 T1N R3W	NWSENW Section 35 T2N R3W	11.37	104.19	632.92
Total					**22.74**	**208.38**	**1265.84**

3.0 Analysis of Impacted Surface Water Sources

3.1 Summary of Proposed Use

The Applicant proposes to change the POD for Claims 41E 4307-00 and 41E 4308-00 from the Cardwell Headgate in NWSENW Section 35, T2N, R3W, Jefferson County, to three pump sites downstream of the historical POD on the Jefferson Slough. The proposed pump site locations are in NENWSW Section 2, NENWNE Section 3, and NWNWNE Section 11, all within T1N, R3W, Jefferson County, as seen in Figure 2. The source of the water will remain Boulder River and period of diversion and use will continue to be April 1 to October 30.

Through the proposed change, the Applicant will retire the Cardwell Ditch headgate so Boulder River water historically diverted into the Cardwell Ditch will continue down the Boulder River into Jefferson Slough. Boulder River water will be pumped by the three pump sites on the Applicant's property to irrigate the POU. No conveyance loss is associated with the proposed PODs, as water will be pumped from the proposed pump sites to the POU via pipelines. The proposed changes for Claims 41E 4307-00 and 41E 4308-00 are shown in Table 9:

Table 9. Summary of the proposed use of 41E 4307-00 and 41E 4308-00. See below for an explanation of the proposed use.

Water Right	Proposed Purpose	Proposed Acres	Proposed Place of Use	Proposed Points of Diversion	Proposed Flow Rate (CFS)	Proposed Consumptive Volume (AF)	Proposed Diverted Volume (AF)
41E 4307-00	Irrigation	300	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	NENWSW Section 2, NENWNE Section 3, and NWNWNE Section 11, T1N, R3W, Jefferson County	11.37	104.19	347.29
41E 4308-00	Irrigation	300	SW, SWSE Section 2, E2 Section 3, W2NE, NW Section 11, T1N, R3W, Jefferson County	NENWSW Section 2, NENWNE Section 3, and NWNWNE Section 11, T1N, R3W, Jefferson County	11.37	104.19	347.29
Total					**22.74**	**208.28**	**694.58**

The historical and proposed consumed and diverted volumes for the water rights proposed for change are provided in Table 10 below.

Table 10: Volumes (AF) associated with historical and proposed use.

Water Right	Historically Consumed Volume	Historically Diverted Volume	Proposed Consumptive Volume	Proposed Diverted Volume
41E 4307-00	104.2	632.92	104.19	347.29
41E 4308-00	104.2	632.92	104.19	347.29
Total	**208.36**	**1265.84**	**208.28**	**694.58**

3.2 Area of Potential Adverse Effect

Statements of Claim 41E 4307-00 and 41E 4308-00 involve a POD change on a surface water source, Boulder River. The proposed PODs, three pump sites, will be approximately 1.21 and 1.74 miles downstream of the historical POD on the Jefferson Slough. The Department considered a

potentially impacted reach on the source of supply, considering the reach of surface water between the historical POD to the proposed PODs. This reach extends from historical POD on the Boulder River NWSENW Section 35, T2N, R3W, downstream to the proposed POD in NWNWNE Section 11, T1N, R3W, all within Jefferson County. There are five water rights within the reach, as illustrated in Appendix A. One of the proposed PODs is located in NENWNE Section 3, T1N, R3W, Jefferson County. This POD is located approximately half of a mile upstream of the Jefferson Slough and Boulder River confluence, on the Jefferson Slough. The Department also considered a potentially impacted reach between the POD in NENWNE Section 3, T1N, R3W, Jefferson County, to confluence of the Boulder River and Jefferson Slough. There are zero water rights within this reach.

Review

This document has been reviewed by the Department on January 15, 2025.

References

Department Standard Practice for Determining Historical Use
Department Standard Practice for Analyzing Area of Potential Adverse Effect
Technical Memorandum "Distributing Conveyance Loss on Multiple User Ditches" (Heffner, 2020)

Appendix A: Water Rights within the Area of Potential Adverse Effect

Water Right	Priority Date	Water Right Type	Source Name	Owners	Purposes
41E 143433 00	1888/12/31	STATEMENT OF CLAIM	BOULDER RIVER	GOLDEN SUNLIGHT MINES INC	IRRIGATION
41E 143434 00	1886/12/31	STATEMENT OF CLAIM	BOULDER RIVER	GOLDEN SUNLIGHT MINES INC	IRRIGATION
41E 143436 00	1886/12/31	STATEMENT OF CLAIM	BOULDER RIVER	GOLDEN SUNLIGHT MINES INC	STOCK
41E 143437 00	1868/12/31	STATEMENT OF CLAIM	BOULDER RIVER	GOLDEN SUNLIGHT MINES INC	STOCK
41E 30017424	7/1/1985	WATER RESERVATION	BOULDER RIVER	MONTANA, STATE OF DEPT OF FISH WILDLIFE & PARKS	FISHERY

January 17, 2024

LR Huckaba Ranch LLC
26 MT Highway 356
Cardwell, MT 59271

Subject: Completed Technical Analyses Report for Change Preapplication No. 41E 30164689

Dear Applicant,

As designated on the submitted Preapplication Meeting Form per §85-2-302(3)(b), MCA, the Department of Natural Resources and Conservation (DNRC or Department) has completed the technical analyses for Change Preapplication No. 41E 30164689 based on the information provided in your Preapplication Meeting Form submitted to the Department on December 19, 2024. The technical analyses can be found in the attached report.

This Technical Analyses Report **IS**: A collection of facts that the DNRC has gathered, including content provided in the Preapplication Meeting Form materials. The Department will use these data to analyze the criteria in §85-2- 402, MCA if you submit an application for the project described in the completed Preapplication Meeting Form.

This Technical Analyses Report **IS NOT**: An analysis or discussion of whether the Preapplication Meeting Form as filed meets the criteria (§85-2- 402, MCA).

You have 180 days to submit the Water Right Change Application Form 606 considering the information provided in the technical analyses and Preapplication Meeting Form. If the Application Form is not submitted to the Helena Regional Office by July 16, 2025, a new preapplication meeting will be required to process the Application with expedited timelines (ARM 36.12.1302(6)(b)). If any elements described in the submitted Application are changed from that of the submitted Preapplication Meeting Form, the discounted filing fee and expedited timelines will not apply (ARM 36.12.1302(6)(a)). Please note that the technical analyses will expire one year from the date of this letter (ARM 36.12.1302(8)).

Please let me know if you have any questions.

Best,

Savannah Telander
Water Resources Specialist
Helena Regional Office
Savannah.Telander@mt.gov
406-444-6810

CC:

Patrick Byroth, patrickbyorth@TU.org
Chris Edgington, chris@montanatu.org

Preapplication Materials

- Preapplication Meeting Request
- Preapplication Meeting Form
- All attachments
- All correspondence prior to application receipt

Preapplication Materials

PREAPPLICATION MEETING FORM
CHANGE
§ 85-2-302(3)(b)
Form No. 606P *(Revised 4/2024)*

For Department Use Only

Application # 30164689 Basin 41E
Meeting Date 10/17/24 Time 1:00 AM/PM
Completed Form Deadline 4/15/2024

PREAPPLICATION MEETING FEE
$ 500

RECEIVED
DEC 19 2024
DNRC-HRO

RECEIVED
DEC 10 2024
DNRC-HRO

FILING FEE REDUCTION & EXPEDITED TIMELINE
An application will be eligible for a filing fee reduction and expedited timelines if the applicant completes a preapplication meeting with the Department (ARM 36.12.1302(1)), which includes submitting any follow-up information identified by the Department (ARM 36.12.1302(3)(c)) and receiving either Department-completed technical analyses or Department review of applicant-submitted technical analyses (ARM 36.12.1302(4) and (5)). An application for the proposed project also must be submitted within 180 days of delivery of Department technical analyses or scientific credibility review and no element on the submitted application can be changed from the completed preapplication meeting form (ARM 36.12.1302(6)).

Completed Form Received 12/19/2024.
Fee Rec'd $ 500.00 Check # 7860
Deposit Receipt # HES250 89666
Payor MT Trout Unlimited
Refund $ _____ Date _____

The Department will fill out Form No. 606P and will identify follow-up during the preapplication meeting. The Department and Applicant will sign the Preapplication Meeting Affidavit and Certification within five business days. Within 180 days of the preapplication meeting, the Applicant will complete identified follow-up on a separate document with the question numbers clearly labeled.

Applicant Information: *Add more as necessary.*
Applicant Name LR Huckaba Ranch LLC
Mailing Address 26 MT Highway 359 City Cardwell State MT Zip 59271-9604
Phone Numbers: Home _____ Work _____ Cell 406-490-4919
Email Address LENHUCKABA@ICLOUD.COM

Applicant Name _____
Mailing Address _____ City _____ State _____ Zip _____
Phone Numbers: Home _____ Work _____ Cell _____
Email Address _____

Contact/Representative Information: *Add more as necessary.*
Contact/Representative is: ☐ Applicant ☐ Consultant ☐ Attorney ☑ Other (describe) Trout Unlimited
Contact/Representative Name Patrick Byorth
Mailing Address 321 E Main St #411 City Bozeman State MT Zip 59725
Phone Numbers: Home _____ Work 406-548-4830 Cell _____
Email Address PATRICK.BYORTH@TU.ORG

NOTE: *If a contact person is identified as an attorney, all communication will be sent only to the attorney unless the attorney provides written instruction to the contrary. If a contact person is identified as a consultant, employee, or lessee, the individual filing the water right form or objection form will receive all correspondence and a copy may be sent to the contact person.*

Meeting Attendees: *Add more as necessary.*

Name	Organization	Position
Patrick Byorth	Trout Unlimited	Director
Chris Edgington	MT Trout Unlimited	Project Manager
Len Huckaba	Applicant	
Jennifer Daly	MT DNRC	Regional Manager
Savannah Telander	MT DNRC	Water Resource Specialist
Allison Pardis	Trout Unlimited	

Table of Contents

Application Details

The following questions are mandatory and must be filled out before the Preapplication Meeting Form is determined to be complete. Narrative responses that are larger than the space provided can be answered in an attachment. If an attachment is used, mark the see attachment ("A") checkbox on this form and label the attachment with the question number. Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label units in narrative responses. Responses in the form of a table may be entered into the table provided on this form or in an attachment. Responses in the form of a table that are larger than the table provided on this form should be placed in an attachment. If an attachment is used, the table must have the exact headings found on this form, and the see attachment ("A") checkbox must be marked. For tables in this form, circle correct unit at header of column when faced with a choice of units. For tables in attachments, label all units. Questions that require Applicant to submit items to the Department have a submitted ("S") checkbox, which is marked when the required item is attached to the Preapplication Meeting Form. Label all submitted items with the question number for which they were submitted. For all questions where follow-up is necessary, mark the "F" checkbox in the "Follow-Up" column and write the question number on the "Follow-Up Page".

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
1. Do you elect to have DNRC conduct Technical Analyses?	■ Y ☐ N	☐ F
2. Which water right(s) are proposed for change? Include water right number, currently authorized flow rate (GPM or CFS), and flow rate needed for project (GPM or CFS).	☐ A	☐ F

Water Right Number	Current Flow Rate (GPM or CFS)	Flow Rate Needed for Project (GPM or CFS)
41E 3407-00	11.37 CFS	11.37 CFS
41E 3408-00	11.37 CFS	11.37 CFS

3. Is the proposed change on a non-filed water project?	☐ Y ■ N	☐ F
a. If yes, please submit a Non-Filed Water Project Addendum (Form 606/634-NFWPA). The project must meet the requirements of the addendum. The addendum is required before the Preapplication Meeting Form is completed.	☐ S	☐ F
4. How many change applications will be needed for this project? Please refer to ARM 36.12.1305 for more information. 1		☐ F
5. Please submit a historical use map created on an aerial photograph or topographic map that shows the following: section corners, township and range, a north arrow, all historical points of diversion (POD) labeled with a unique POD ID letter, all historical places of use (POU), all historical conveyance structures, all historical places of storage, and historical place of	■ S	☐ F

use for all overlapping water rights.		
6. Please submit a proposed use map created on an aerial photograph or topographic map that shows the following: section corners, township and range, a north arrow, all proposed points of diversion labeled with a unique POD ID number, all proposed places of use, all proposed conveyance structures, all proposed places of storage, and proposed place of use for all overlapping water rights.	☐ S	■ F
7. Identify the water right elements proposed for change, with an "X", for each water right proposed for change.	☐ A	☐ F

Water Right #	41E 3407-00	41E 3408-00					
Point of diversion	X	X					
Place of use							
Purpose of use							
Place of storage							

8. Does the change involve a change in point of diversion?	■ Y ☐ N	☐ F
a. If yes, describe the proposed location of the new point(s) of diversion to the nearest 10 acres, if source is groundwater (GW) or surface water (SW), source name, and means of diversion (e.g., pump, headgate, well). Label POD ID with the same numbers as the proposed use map (Question 6).	☐ A	☐ F

POD #	¼	¼	¼	**Sec**	**Twp**	**Rge**	**County**	**Lot**	**Block**	**Tract**	**Subdivision**	**Gov Lot**	**GW or SW**	**Source Name**	**Means**
1	NW	NW	NE	11	1N	3W	Jefferson						SW	Boulder River	Pump
2	NE	NW	SW	2	1N	3W	Jefferson						SW	Boulder River	Pump
3	NE	NW	NE	3	1N	3W	Jefferson						SW	Jefferson Slough	Pump

9. Does the change involve a change in place of use?	☐ Y ■ N	☐ F
a. If yes,		
i. What are the geocodes of the proposed place of use?	☐ A	☐ F

ii. Describe the legal land description of the proposed place of use and, if the water rights being changed will have an irrigation or lawn and garden purpose, list the number of irrigated acres.	☐ A	☐ F

Acres	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County
	Total							

b. Are you proposing to add a place of use on State of Montana Trust Land?	☐ Y ■ N	☐ F
i. If yes, you must submit an Authorization for Temporary Change in Appropriation Right Consent Form from the DNRC Trust Lands Management Division before the Preapplication Meeting Form is complete. A change authorization to add a POU on Trust Land will be temporary for the duration of the lease term. Answer project-specific questions for temporary changes (question 99 to 105).	☐ S	☐ F
10. Does the proposed change include a change in purpose of use? If yes, answer questions 106 to 109 for change in purpose of use.	☐ Y ■ N	☐ F
11. Do you propose to add or modify one or more place(s) of storage (reservoir or pond) with a storage capacity greater than 0.1 acre-feet? If yes, answer questions 110 to 119.	☐ Y ■ N	☐ F
12. Are conveyance ditches used for historical or proposed uses? If yes, answer ditch-specific questions 120 to 126.	■ Y ☐ N	☐ F
13. Do you have ownership of the entire historical POU for the water right(s) being changed?	■ Y ☐ N	☐ F
a. If no,		
i. List the water right(s) for which you do not own the entire historical POU. _____		☐ F
ii. Are the water right(s) listed in question 13.a.i severed from the historical POU?	☐ Y ☐ N	☐ F
1. If yes, do you own the entirety of the severed water right(s) proposed for change?	☐ Y ☐ N	☐ F

iii. Are you filing on behalf of another entity? If yes, describe. _____	☐ Y ☐ N	☐ F
iv. Are all owners of the historical place of use willing to sign the application?	■ Y ☐ N	☐ F
1. If no,		
a. A Form 641 or 642 to split the water right(s) being changed must be received and processed by the Department prior to application submittal	☐ S	☐ F
b. Describe how the water right(s) will be split, and which part of the split water right(s) will be proposed for change. _____ _____	☐ A	☐ F
14. Is the proposed use temporary? If yes, answer questions 99 to 105 for temporary changes.	☐ Y ■ N	☐ F
15. Is the application to change the purpose of use or place of use of an appropriation of 4,000 or more acre-feet (AF) of water a year and 5.5 or more cubic feet per second (CFS)? If yes, you must submit a Reasonable Use Addendum (Form 606-B) with the application. The reasonable use criteria are found in §85-2-402(4-5), MCA.	☐ Y ■ N	☐ F
16. Will you be transporting water for use outside of Montana? If yes, you will need submit an Out-of-State Use Addendum (Form 600/606- OSA) with the application. The out-of-state use criteria are outlined in §85-2-402(6), MCA.	☐ Y ■ N	☐ F
17. Is the project located in designated sage grouse habitat? If yes, you must have a consultation with and review of your project by the Montana Sage Grouse Habitat Conservation Program. The review letter will be required at application submittal.	☐ Y ■ N	☐ F
18. Does the application include the water marketing purpose? If yes, answer questions 127 to 134 for water marketing. A Water Marketing Purpose Addendum (Form 600/606-WMA) will be required with application submittal.	☐ Y ■ N	☐ F
19. Does the proposed purpose include instream flow? If yes, answer questions 135 to 145 for Instream Flow Changes. A Change to Instream Flow Addendum (Form 606-IFA) will be required with application submittal.	☐ Y ■ N	☐ F
20. Will the proposed use include salvage water? If yes, answer questions 146 to 150 for Salvage Water.	☐ Y ■ N	☐ F

Historical Use

The following questions are mandatory and must be filled out for both Surface Water and Groundwater Applications before the Preapplication Meeting Form is determined to be complete.

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
21. What type of water right(s) are proposed for change? Answer question 22 for each Statement of Claim, 23 for each Provisional Permit, and 24 for other types of water rights. Statements of claim	☐ A	☐ F
22. In the table below, write the water right number for each Statement of Claim proposed for change in the "Statement of Claim" column. If there is one or more previous change authorizations, write the application numbers for the change authorizations in the "Previous Change Authorization" column and if there are no previous change authorizations, write "none" instead. Write the date of the Project Completion Notice for each previous change authorization in the "Project Completion Notice" column and if the previous change authorization does not have a Project Completion Notice, write "none" instead. In the "Previous Historical Use Analysis" column, write "full" or "partial" if a historical use analysis was conducted for the previous change authorization, and "none" if no previous historical use analysis was conducted. In the "Use Historical Use Analysis for Current Application" column, write "yes" if the previous historical use analysis will be used for the current application and "no" if a new historical use analysis will be conducted.	☐ A	☐ F

Statement of Claim	Previous Change Authorization	Project Completion Notice	Previous Historical Use Analysis	Use Historical Use Analysis for Current Application
41E 3407-00	n/a			
41E 3408-00	n/a			

23. In the table below, write the water right number for each Provisional Permit proposed for change in the "Provisional Permit" column. If a Project Completion Notice has been submitted, write the date in the "Project Completion Notice" column, and if no Project Completion Notice has been submitted, write "none" instead. For each Provisional Permit proposed for change, if there are one or more previous change authorizations, write the application number for the change authorizations in the "Previous Change Authorization" column. If there are no previous change authorizations, write "none" in the "Previous Change Authorization" column and "NA" in all the remaining columns. Write the date of the Project	☐ A	☐ F

Completion Notice for each previous change authorization in the "Previous Change Project Completion Notice" column and if the previous change authorization does not have a Project Completion Notice, write "none" instead. In the "Previous Change Historical Use Analysis" column, write "full" or "partial" if a historical use analysis was conducted for the previous change authorization, and "none" if no previous historical use analysis was conducted. In the "Use Historical Use Analysis for Current Application" column, write "yes" if the previous historical use analysis will be used for the current application, "no" if a new historical use analysis will be conducted.

Provisional Permit	Project Completion Notice	Previous Change Authorization	Previous Change Project Completion Notice	Previous Change Historical Use Analysis	Use Historical Use Analysis for Current Application

24. In the table below, write the water right number for each water right with another type proposed for change, the type of water right, and the date of issuance.

☐ A ☐ F

Other Water Right Type Number	Other Water Right Type Description	Date of Issuance

25. Are there previous Montana Water Court approved stipulations, Water Master reports, or prior Montana Water Court or Department decisions related to the water right(s) being changed?

■ Y ☐ N ☐ F

a. If yes, explain.

■ A ☐ F

Verified motion to amend submitted

26. Fill in the table below based on ARM 36.12.1902(1) and the information provided in questions 21 to 25. In column "Water Right Number" list all water rights proposed for change. Select one of the three options from column "Historical Use Analysis Options" and fill in the "Information Required for Historical Use" associated with that option. Select "Full Historical Use Analysis NA" only if an unperfected Provisional Permit will be used to serve as historical use in lieu of analysis. If the "Existing Historical Use Analysis" or "Full Historical Use Analysis NA" option is selected, skip to question 42 because this section is complete.	☐ A	☐ F

Water Right No. Proposed for Change	**Historical Use Analysis Option and Information Required for Historical Use**
41E 3407-00	■ New Historical Use Analysis. Date for new Historical Use Analysis: _____
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: _____
	☐ Full Historical Use Analysis NA. Water right number serving as historical use in lieu of analysis: _____
41E 3408-00	■ New Historical Use Analysis. Date for new Historical Use Analysis: _____
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: _____
	☐ Full Historical Use Analysis NA. Water right number serving as historical use in lieu of analysis: _____
	☐ New Historical Use Analysis. Date for new Historical Use Analysis: _____
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: _____
	☐ Full Historical Use Analysis NA. Water right number serving as historical use in lieu of analysis: _____

	☐ New Historical Use Analysis. Date for new Historical Use Analysis: ______________________
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: ______________________
	☐ Full Historical Use Analysis NA. Water right number serving as historical use in lieu of analysis: ______________________
	☐ New Historical Use Analysis. Date for new Historical Use Analysis: ______________________
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: ______________________
	☐ Full Historical Use Analysis NA. Water right number serving as historical use in lieu of analysis: ______________________
	☐ New Historical Use Analysis. Date for new Historical Use Analysis: ______________________
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: ______________________
	☐ Full Historical Use Analysis NA. Water right number serving as historical use in lieu of analysis: ______________________

27. Do you have actual knowledge of historical use?	☒ Y ☐ N	☐ F
a. If yes,		
i. Is this firsthand knowledge?	☒ Y ☐ N	☐ F
ii. Who has this knowledge and what was their role? Suzanne & Lenny own the property and have been irrigated	☐ A	☐ F

b. If no,		
i. Where will the historical use data be derived? _____ _____	☐ A	☐ F

Historical Use: Place of Use

28. The historical use map provided for question 5 must clearly identify the entire place of use for each overlapping water right that intersects the historical place of use. Does your historical use map meet this requirement?	■ Y ☐ N	☐ F
29. Are you proposing to change all water right(s) associated with the historical place of use?	☐ Y ■ N	☐ F
a. If no, identify the water right(s) associated with the historical place of use that are not included in this application. Provide the priority date for each water right and explain why all overlapping water rights are not included in the application. Include water received via contract from a company, district, or water users' association.	☐ A	☐ F

Water Right No.	Priority Date	Reason Not Included in Change
41E 3406-00	12/31/1868	POD associated with this right is not changing

30. Answer the questions below related to the historical purpose for each of the water right(s) being changed.		
a. Irrigation		
i. Is the water right being changed a Statement of Claim?	■ Y ☐ N	☐ F
1. If yes,		
a. Does the Water Resources Survey corroborate the acres irrigated listed on the abstract?	■ Y ☐ N	☐ F
i. If no, provide aerial photograph(s) that can corroborate the historical place of use.	☐ S	☐ F
b. Does the legal land description from the abstract match the actual location of the historical place of use?	■ Y ☐ N	☐ F
i. If no, provide documentation of a written request submitted to the Water Court for amendment of the Claim as well as information to substantiate the requested amendment.	☐ S	☐ F

2. If no, provide one or more aerial photographs that can corroborate the historical place of use.	☐ S	☐ F
b. Lawn and garden		
i. Provide aerial photographs that can corroborate the historical place of use.	☐ S	☐ F
c. Stock		
i. Provide aerial photographs, grazing records, or other records to corroborate the historical place of use.	☐ S	☐ F
ii. Did the stock drink direct from source or direct from ditch?	☐ Y ☐ N	☐ F
1. If no, provide data sources that make clear the location of the stock watering infrastructure.	☐ S	☐ F
d. Multiple domestic, domestic, municipal, mining, commercial, and other purposes		
i. Provide aerial photographs, deeds, other recorded documents or records, affidavits, or other published documents, such as magazine articles, to corroborate the historical place of use.	☐ S	☐ F

Historical Use: Point of Diversion

31. For all historical point(s) of diversion, identify the means, location (¼ ¼ ¼ section), and if they are proposed for change. Label using the same POD ID letter as for the Historical Use Map (question 5).	☐ A	☐ F

POD ID	Means	Location (¼ ¼ ¼ Section)	Proposed for Change?
3407	Headgate	NWSENW Sec 35 Twp 2N Rge 3W	Yes
3408	Headgate	NWSENW Sec 35 Twp 2N Rge 3W	Yes

32. Does the legal land description from the abstract match the actual location of the historical point(s) of diversion?	■ Y ☐ N	☐ F
a. If no, do you have aerial photograph(s) that clearly show the location of the historical point(s) of diversion?	☐ Y ☐ N	☐ F
i. If yes,		
1. Provide the photograph(s).	☐ S	☐ F
2. Provide an explanation for the discrepancy and, if a Statement of Claim, provide documentation of a written request submitted to the Water Court for amendment of the Claim.	☐ S	☐ F
33. Answer questions below related to the diversion means for each of the historical point(s) of diversion.		
a. Headgate		
i. For each headgate, provide dimensions in feet (FT), slope of the channel at the headgate (%), material of the headgate, estimated historical capacity in gallons per minute (GPM) or CFS and the method used to estimate historical capacity. Label using the same POD ID letter as for the Historical Use Map (question 5).	■ A	☐ F

POD ID	Dimensions (FT)	Slope (%)	Material	Estimated Capacity (GPM or CFS)	Method
3407	5x5	0.5	steel slidegate	37 CFS	FlowMaster (Mannings)
3408	5x5	0.5	steel slidegate	37 CFS	FlowMaster (Mannings)

b. Pump, dike, dam, or other surface water point of diversion		
i. For each pump, dike, dam, or other surface water point of diversion, provide an estimate of the historical capacity (GPM or CFS) and the method used to estimate the historical capacity. Label using the same POD ID letter as for the Historical Use Map (question 5).	☐ A	☐ F

POD ID	Estimated Capacity (GPM or CFS)	Method

c. Well, pit, or other groundwater point of diversion		
i. For each well, pit, or other groundwater point of diversion, provide an estimate of the historical capacity (GPM or CFS) and the method used to estimate the historical capacity. Label using the same POD ID letter as for the Historical Use Map (question 5).	☐ A	☐ F

POD ID	Estimated Capacity (GPM or CFS)	Method

34. Do other water rights share the point(s) of diversion?	■ Y ☐ N	☐ F
a. If yes, list the water rights, their flow rates (GPM or CFS), and the nature of the relationship. Label using the same POD ID letter as for the Historical Use Map (question 5).	☐ A	☐ F

POD ID	Water Right No.	Flow (GPM or CFS)	Relationship
	41E 143433-00	5.12	Unrelated - associated with Golden Sunlight Mine's POU
	41E 143436 00		Golden Sunlight Mines Stock Water Right
	41E 143437 00		Golden Sunlight Mines Stock Water Right

Historical Use: Period of Diversion

35. Are the period of diversion and the period of use the same?	■ Y ☐ N	☐ F
a. If no,		
i. Why are they different? _____ _____	☐ A	☐ F
ii. Is there a place of storage?	☐ Y ☐ N	☐ F
36. When was water diverted for the purpose(s) of the water right(s) being changed?	☐ A	☐ F

Start Date (Month (MM)/Day (DD))	End Date (MM/DD)
04/01	10/30

37. Does the Department have a standard, found in ARM 36.12.112, for the period of diversion for the purposes for which water is used?	■ Y ☐ N	☐ F
a. If yes, does the period of diversion fall within Department standards?	■ Y ☐ N	☐ F
b. If no or if the period of diversion falls outside Department standards, explain how the period of diversion is reasonable for the purpose. _____ _____ _____ _____	☐ A	☐ F
38. If the water right(s) being changed have an irrigation purpose, answer the following questions.		
a. What were the crop(s) grown? alfalfa, barley, oats, grass hay		☐ F

i. If the crop(s) grown include hay, how many cuttings were there per season and how many days did they last? 2 cuttings, 5-7 days once round 7/4 and labor day		☐ F
b. Did diversions ever temporarily cease within the period of use? This may include water shortages or calls based on priority date.	■ Y ☐ N	☐ F
i. If yes, please explain. No calls or shortages. Huckaba is the last user on the slough. 41E 143434 00 owned by golden sunlight, but operated by Huckaba	☐ A	☐ F

Historical Use: Historical Diverted Volume

39. Answer the questions below related to the historical purposes of the water rights being changed.		
a. Irrigation		
i. Do you want ARM 36.12.1902(11) to be used to calculate historical diverted volume?	■ Y ☐ N	☐ F
1. If no, provide a Historical Water Use Addendum (Form 606-HUA). Form 606-HUA must be submitted to the Department before the Preapplication Meeting Form is completed.	☐ S	☐ F
b. Non-irrigation		
i. How often was water historically diverted?		☐ F
ii. What was the duration of each historical diversion?		☐ F
iii. Was wastewater historically discharged? If yes, what amount was discharged?	☐ Y ☐ N	☐ F
iv. What is the volume of water historically diverted (AF)?		☐ F
v. How did you determine the volume of water historically diverted?	☐ A	☐ F
vi. Did the historical diverted volume serve more than one purpose of use?	☐ Y ☐ N	☐ F

1. If yes, how much of the diverted volume served each purpose of use and how did you determine this? _____ _____ _____ _____	☐ A	☐ F

Historical Use: Historical Consumed Volume

40. Answer the questions below related to the historical purpose of the water rights being changed.		
a. Irrigation		
i. Will you use Department standards for historical consumptive use as defined in ARM 36.12.1902?	■ Y ☐ N	☐ F
1. If no,		
a. What method will you use to determine historical consumptive use? _____ _____	☐ A	☐ F
b. Provide a Historical Water Use Addendum (Form 606-HUA) to the Department. Form 606-HUA must be submitted to the Department before the Preapplication Meeting Form is completed.	☐ S	☐ F
2. If yes,		
a. What is the historical irrigation method type and subtype? Irrigation method types include flood and sprinkler. Flood irrigation subtypes include level border, graded border, furrow, contour ditch, or wild flood. Sprinkler subtypes include wheel line and center pivot. flood - wild flood _____	☐ A	☐ F
b. What was the slope of the historical place of use? slope <1%		☐ F
c. Are there any factors beyond irrigation method type/subtype and place of use slope that may influence percent efficiency of irrigation?	☐ Y ■ N	☐ F
i. If yes, provide evidence to support the modified percent efficiency of irrigation in the Historical Water Use Addendum (Form 606-HUA). These factors may include infrastructure age, soil characteristics, or field improvements. Form 606-HUA must be submitted to the Department before the Preapplication Meeting Form is	☐ S	☐ F

completed.		
d. Based on answers to the above questions, what is the percent efficiency of irrigation? 25%		☐ F
e. What is the County Management Factor? 61%		☐ F
f. What is evapotranspiration (ET) based on the irrigation method and county? 17.08		☐ F
g. What percent of applied water are irrecoverable losses per ARM 36.12.1902(17)? 5%		☐ F
h. Do other water rights supplement or overlap the historical place of use that contribute to the irrigation water demand?	■ Y ☐ N	☐ F
i. If yes,		
1. How were the water rights operated to serve the irrigation purpose? equal apportionment to the three water rights	☐ A	☐ F
2. For each supplemental or overlapping water right, please list the average period of diversion and use (MM/DD-MM/DD), flow rate (GPM or CFS), and the volume of water (AF) contributed to the total irrigation water demand.	☐ A	☐ F

Water Right No.	Avg. Period of Diversion (MM/DD-MM/DD)	Avg. Period of Use (MM/DD-MM/DD)	Flow Rate (GPM or CFS)	Volume Contributed (AF)
41E 3406-00	4/1	10/30	11.37	

b. Lawn and garden		
i. Will you use the Department standards for historical consumptive use volume for lawn and garden? Department standards include 2.5 acre-feet per acre, or a calculated volume based on Irrigation Water Requirements for turf grass.	☐ Y ☐ N	☐ F
1. If yes, which standard? _____		☐ F
2. If no, please provide an estimate of historical water use based on expert analysis and methods used to determine this estimate. _____ _____	☐ A	☐ F
c. Stock		
i. Which volume standard for animal units applies to historical use and why? The standards are either 15 or 30 gallons per animal unit per day. _____		☐ F
ii. How many animal units were historically served? _____		☐ F
iii. Did these animal units rely entirely on the water right(s) proposed for change for their full water demand?	☐ Y ☐ N	☐ F
1. If no, explain. _____ _____	☐ A	☐ F
d. Domestic and multiple domestic		
i. How many households were served? _____		☐ F
ii. Will the Department standard of 1 acre-foot per household be used? The same standard shall be applied to historical and proposed uses.	☐ Y ☐ N	☐ F
1. If no, what standard will be used? _____		☐ F
iii. Did the historical use include wastewater disposal and treatment?	☐ Y ☐ N	☐ F

1. If yes, which of the following best describes the wastewater disposal and treatment system? Individual drain fields, central treatment facility with minimal consumption, or evaporation basin or land application? _____	☐ A	☐ F
e. Municipal		
i. What is the volume of water (AF) historically consumed for municipal purposes? _____		☐ F
ii. Provide evidence to support historical municipal use such as commercial, lawn and garden, and/or multiple domestic uses. The data sources may include records that tie water use to the U.S Census, estimates of historical system capacity and estimates of leakage.	☐ S	☐ F
f. Other		
i. What is the volume of water (AF) historically consumed for other purposes? _____		☐ F
ii. Please submit to the Department evidence to support the volume of water historically consumed.	☐ S	☐ F

Historical Use: Historical Places of Storage

41. Did the historical use include one or more place(s) of storage, which may include reservoirs, ponds, and pits that are greater than 0.1 acre-feet in volume?	☐ Y ■ N	☐ F
a. If yes, for each historical place of storage please provide the surface area in acres (AC), capacity (AF), annual net evaporation (FT/year), and number of times per year the place of storage was filled.	☐ A	☐ F

ID	Surface Area (AC)	Capacity (AF)	Annual Net Evaporation (FT/YR)	# of Annual Fillings

Surface Water

■ **Applicable**, move on to question 42. ☐ **Not Applicable**, skip to question 67.

The following questions are mandatory for changes to surface water rights and must be filled out before the Preapplication Meeting Form is determined to be complete.

Surface Water: Return Flow Analysis

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
42. Do the purposes of the water rights proposed for change include irrigation?	■ Y ☐ N	☐ F
a. If yes, does the proposed change include a change in place of use *and/or* a change in purpose? A change in place of use includes retiring acres in the historical place of use and adding any new acres outside the historical place of use.	☐ Y ■ N	☐ F
i. If yes, a return flow analysis is required. Move on to answer question 43.		
ii. If no, this section is complete, and you may skip to question 51.		
43. Does the proposed change include a change in purpose?	☐ Y ■ N	
a. If yes, what is the consumptive use for the proposed non-irrigation purpose? Please explain. _____ _____ _____ _____ _____ _____	☐ A	☐ F
44. Does the proposed change include a change in place of use? If yes, move on to question 45. If no, this section is complete, and you may skip to question 51.	☐ Y ■ N	
45. Provide a map showing the historical and proposed places of use created on an aerial photograph or topographic map with section corners, township and range, and a north arrow.	☐ S	☐ F
46. How many acres, if any, will be retired from the historical place of use? _____		☐ F
47. Are irrigated acres proposed that are outside the historical place of use?	☐ Y ☐ N	☐ F
a. If yes,		
i. How many acres? _____		☐ F

ii. What is the proposed irrigation method type (e.g., flood or sprinkler) and subtype (e.g., level border, graded border, furrow, contour ditch, wild flood, center pivot, or wheel line) for the new acres? _____		☐ F
iii. What is the slope of the new place of use? _____		☐ F
iv. Based on 47.a.ii to 47.a.iii, what is the percent efficiency of irrigation for the new acres? _____		☐ F
v. What is the County Management Factor for the new acres? _____		☐ F
vi. What is the ET based on the irrigation method and county for the new acres? _____		☐ F
vii. What percent of applied water are irrecoverable losses for new acres per ARM 36.12.1902(17)? _____		☐ F
viii. Do other water rights supplement or overlap the new place of use that contribute to the irrigation water demand?	☐ Y ☐ N	☐ F
1. If yes,		
a. How will the water rights be operated to serve the irrigation purpose? _____ _____ _____ _____	☐ A	☐ F
b. For each supplemental or overlapping water right, please list the average period of diversion and use (MM/DD-MM/DD), flow rate (GPM or CFS), and the volume of water (AF) contributed to the total irrigation water demand.	☐ A	☐ F

Water Right No.	Avg. Period of Diversion (MM/DD-MM/DD)	Avg. Period of Use (MM/DD-MM/DD)	Flow Rate (GPM or CFS)	Volume Contributed (AF)

48. Do you have information for the Department to consider about the source and location where return flows historically accrued?	☐ Y ☐ N	☐ F
a. If yes, explain. _____ _____ _____	☐ A	☐ F
49. Based on the preliminary data provided by the Department at this preapplication meeting, to what surface water sources do return flows accrue before and after the proposed change? **Return flow data provided by the Department at the preapplication meeting is preliminary and is subject to change during the Technical Analysis.* _____ _____ _____	☐ A	☐ F
50. If an analysis of impacts to identified surface water rights is required as part of the return flow analysis, pursuant to ARM 36.12.1303(3)(c)(iii), do you elect to answer non-mandatory questions 161 to 163 to provide information required for this extended return flow analysis?	☐ Y ☐ N	☐ F
a. If yes, go to question 161. If an analysis of impacts to identified surface water rights is required, this information will be used for the analysis.		
b. If no, did you elect in question 1 for the Department to conduct technical analyses?	☐ Y ☐ N	☐ F
i. If yes, do you elect for the Department to use publicly available water quantity data for the analysis of impacts to identified surface water rights? If the extended return flow analysis is required and sufficient publicly available water quantity data is not available, then the Department will not be able to conduct the extended analysis. You will still have to prove a lack of adverse effect from the proposed change.	☐ Y ☐ N	☐ F
ii. If no, an analysis of impacts to identified surface water rights will need to be completed as part of the extended return flow analysis. The Department will include the extended analysis in its scientific credibility review of the Technical Analyses.		

Surface Water: Mitigation Analysis

51. Are you changing the purpose to mitigation to meet the criteria of issuance for another application? If yes, answer the questions in this section (questions 52 to 60). If no, this section is complete, and you can skip to question 61.	☐ Y ■ N	☐ F

52. Identify the water right(s) proposed for change to a mitigation purpose, the water right(s) identified as needing mitigation and the application number for the water right(s) identified as needing mitigation. _____	☐ A	☐ F
53. What source(s) have been identified as needing mitigation water? _____		☐ F
54. By what means will mitigation water be made available (e.g., infiltration gallery, water left instream)? You must provide a copy of all relevant discharge permits at application submittal (§85-2-364, MCA). _____ _____ _____	☐ A	☐ F
55. What is the location (¼ ¼ ¼ section of start and end of reach) and length (FT) of the mitigation reach? _____		☐ F
56. What is the amount, timing, and location (¼ ¼ ¼ section) of water needed for mitigation?	☐ A	☐ F

Month	Days	Amount	Location	Month	Days	Amount	Location
January				July			
February				August			
March				September			
April				October			
May				November			
June				December			

57. How do the priority dates of the water rights proposed for change to mitigation compare to other water rights on the source? _____ _____ _____	☐ A	☐ F
58. Do you have measurement records or Water Commissioner records that show the reliability of the water right(s) proposed for change to a mitigation purpose?	☐ Y ☐ N	☐ F

a. If yes, describe and submit them to the Department. _____ _____ _____ _____	☐ S	☐ F
59. Do the water rights proposed for change to mitigation have a period of use that is greater than or equal to the period when mitigation is necessary?	☐ Y ☐ N	☐ F
a. If no, how will mitigation water be made available during the entire period when mitigation is necessary? _____ _____	☐ A	☐ F
60. Will other water rights contribute to mitigation water?	☐ Y ☐ N	☐ F
a. If yes, what amount, at what timing, and at which location (¼ ¼ ¼ section) will they contribute?	☐ A	☐ F

Month	Days	Amount	Location	Month	Days	Amount	Location
January				**July**			
February				**August**			
March				**September**			
April				**October**			
May				**November**			
June				**December**			

Surface Water: Aquifer Recharge Analysis

61. Are you changing the purpose to aquifer recharge to serve a current purpose or changing the purpose to marketing for mitigation/aquifer recharge for a future mitigation purpose? If yes, answer the questions in this section (questions 62 to 66). If no, this section is complete, and you can skip to question 67.	☐ Y ■ N	☐ F
62. Is this aquifer recharge for a current mitigation need or marketing for mitigation/aquifer recharge for a future mitigation need? _____		☐ F
63. What sources have been identified as having net depletions in need of mitigation or as benefiting from marketing for mitigation/aquifer recharge water? _____		☐ F

64. By what means will aquifer recharge water be made available? You must provide a copy of all relevant discharge permits at application submittal (§85-2-364, MCA). _____ _____ _____ _____ _____	☐ A	☐ F
65. How do the priority dates of the water rights proposed for change to aquifer recharge compare to other water rights on the source? _____ _____ _____	☐ A	☐ F
66. Do you have measurement records or Water Commissioner records that show the reliability of the water rights proposed for change to aquifer recharge?	☐ Y ☐ N	☐ F
a. If yes, describe and submit them to the Department. _____ _____ _____ _____	☐ S	☐ F

Groundwater

☐ **Applicable**, move on to question 67. ☒ **Not Applicable**, skip to question 99.

The following questions are mandatory for changes to groundwater rights and must be filled out before the Preapplication Meeting Form is determined to be complete.

Groundwater: Adequacy of Diversion

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
67. What is the flow rate (GPM or CFS), volume (AF), and period of diversion (MM/DD-MM/DD) required at each new groundwater point of diversion? Label using the same POD ID number as the Proposed Use Map (question 6) to match this information with the location information.	☐ A	☐ F

POD #	Flow Rate (GPM or CFS)	Volume (AF)	Period of Diversion (MM/DD-MM/DD)

68. Will the monthly pumping schedule differ from an allocation of diverted volume by the number of days in the month for year-round uses or the IWR 80% net irrigation requirements for irrigation/lawn & garden uses (IWR, NRCS 2003)?	☐ Y ☐ N	☐ F
a. If yes, provide the monthly pumping schedule in the table below. Label using the same POD ID number as the Proposed Use Map (question 6).	☐ A	☐ F

Month	POD #	Volume (AF)	Month	POD #	Volume (AF)
January			**July**		
February			**August**		
March			**September**		
April			**October**		
May			**November**		
June			**December**		

69. Answer the following questions specific to the means of groundwater diversion.					
Well/Pit	Questions 70 to 71	**Developed Spring**	Question 72	**Pond**	Questions 73 to 76

Groundwater: Adequacy of Diversion: Well/Pit

☐ Applicable ☐ Not Applicable

70. Have you submitted a completed Form 633 to DNRC for review?	☐ Y ☐ N	☐ F
a. If no, submit Form 633 to DNRC for review. Form 633 is required by the time the Preapplication Meeting Form is deemed complete.	☐ S	☐ F
b. If yes, did the Department identify deficiencies?	☐ Y ☐ N	☐ F
1. If yes, are variances from ARM 36.12.121 needed?	☐ Y ☐ N	☐ F
a. If yes,		
i. Do you have data for aquifer characteristics?	☐ Y ☐ N	☐ F
1. If yes, provide the data to the Department.	☐ S	☐ F
ii. Have you submitted Form 653 to the Department?	☐ Y ☐ N	☐ F
1. If yes, was the variance granted?	☐ Y ☐ N	☐ F
71. Have all the wells/pits been constructed?	☐ Y ☐ N	☐ F
a. If yes, provide a map with the location of each well/pit labeled, the well/pit depth, and, if available, the GWIC ID. Create map on an aerial photograph or topographic map and include the following: well/pit location, well/pit depth, GWIC ID (if available), section corners, township and range, and a north arrow.	☐ S	☐ F
b. If no,		
i. When will the wells/pits be constructed? _____		☐ F
ii. Do you have an initial map with the proposed location of wells/pits?	☐ Y ☐ N	☐ F
1. If yes, provide an initial map to the Department. Create map on an aerial photograph or topographic map and include the following: proposed well/pit location, section corners, township and range, and a north arrow.	☐ S	☐ F
iii. What is the anticipated depth for each new well/pit? Label on the initial map if the proposed location is known. Otherwise provide the depth(s) here: _____ _____	☐ S	☐ F
iv. Is the requested volume for each new well/pit known?	☐ Y ☐ N	☐ F
1. If no, what is the total requested volume (AF) and the number of new PODs? _____		☐ F

Groundwater: Adequacy of Diversion: Developed Spring

☐ Applicable ■ Not Applicable

72. Have you measured the source?	☐ Y ☐ N	☐ F
a. If yes,		
i. Submit measurements to the Department.	☐ S	☐ F
ii. With what method were measurements collected? _____ _____	☐ A	☐ F
iii. What is the interval of measurements? _____		☐ F
iv. Is the interval of measurements sufficient to comply with ARM 36.12.1703(1)?	☐ Y ☐ N	☐ F
b. If no, or if measurements do not comply with ARM 36.12.1703(1),		
i. When do you plan to measure? _____		☐ F
ii. With what method and at what interval will measurements be collected? _____ _____	☐ A	☐ F

Groundwater: Adequacy of Diversion: Pond

☐ Applicable ■ Not Applicable

73. Have you submitted Form 653 to apply for a variance from ARM 36.12.121 for the Aquifer Test?	☐ Y ☐ N	☐ F
a. If yes, did the Department approve the variance request?	☐ Y ☐ N	☐ F
74. Submit pond bathymetry data, survey, or engineering plans to the Department.	☐ S	☐ F
75. Submit a map identifying the location of the proposed pond to the Department. Create map on an aerial photograph or topographic map and include the following: pond location, section corners, township and range, and a north arrow.	☐ S	☐ F
76. If you are conducting Technical Analyses, what is your plan to determine depth, surface area, and net evaporation of the pond? If the Department is conducting Technical Analyses, write N/A. _____ _____	☐ A	☐ F

Groundwater: Adverse Effect to Existing Groundwater Rights

All information to calculate the one-foot drawdown contour was collected in previous questions.

Groundwater: Adverse Effect to Surface Water Rights

Groundwater: Adverse Effect to Surface Water Rights: Surface Water Depletion Analysis

77. Does the proposed change include a change in point of diversion or a change in place of use or purpose that will lead to a change in consumptive use or pumping schedule? If you do not know if a change in place of use or purpose will lead to a change in consumptive use or pumping schedule, work through this with the Department. If yes, a surface water depletion analysis is required; move on to question 78. If no, this section is complete; skip to question 80.	☐ Y ☐ N	☐ F
78. Based on the preliminary data provided by the Department at this preapplication meeting, what are the hydraulically connected surface water sources before and after the proposed change? **Net depletion data provided by the Department at the preapplication meeting is preliminary and is subject to change during the Technical Analysis.* _____ _____ _____ _____	☐ A	☐ F
79. If an analysis of impacts to identified surface water rights is required as part of the surface water depletion analysis, pursuant to ARM 36.12.1903(2)(f), do you elect to answer non-mandatory questions 166 to 168 to provide information required for this extended surface water depletion analysis?	☐ Y ☐ N	☐ F
a. If yes, go to question 166. If an analysis of impacts to identified surface water rights is required for the surface water depletion analysis, this information will used for the analysis.		
b. If no, did you elect in question 1 for the Department to conduct technical analyses?	☐ Y ☐ N	☐ F
i. If yes, do you elect for the Department to use publicly available water quantity data for the analysis of impacts to identified surface water rights for the surface water depletion analysis? If this extended surface water depletion analysis is required and sufficient publicly available water quantity data is not available, then the Department will not be able to conduct the extended surface water depletion analysis. You will still have to prove a lack of adverse effect from the proposed change.	☐ Y ☐ N	☐ F
ii. If no, you may still include the analysis of impacts to identified surface water rights with the surface water depletion analysis. The Department will include the extended analysis in its scientific credibility review of the Technical Analyses.		

80. Do the purposes of the water rights proposed for change include irrigation?	☐ Y ☐ N	☐ F
a. If yes, does the proposed change include a change in place of use *and/or* a change in purpose? A change in place of use includes retiring acres in the historical place of use and adding any new acres outside the historical place of use.	☐ Y ☐ N	☐ F
i. If yes, a return flow analysis is required. Move on to answer question 81.		
ii. If no, this section is complete, and you may skip to question 89.		
81. Does the proposed change include a change in purpose?	☐ Y ☐ N	
a. If yes, what is the consumptive use for the proposed non-irrigation purpose? Please explain. _____ _____ _____ _____ _____ _____	☐ A	☐ F
82. Does the proposed change include a change in place of use? If yes, move on to question 83. If no, this section is complete, and you may skip to question 89.	☐ Y ☐ N	
83. Provide a map showing the historical and proposed places of use. Create map on an aerial photograph or topographic map that shows the following: section corners, township and range, and a north arrow.	☐ S	☐ F
84. How many acres, if any, will be retired from the historical place of use? _____		☐ F
85. Are irrigated acres proposed that are outside the historical place of use?	☐ Y ☐ N	☐ F
a. If yes,		
i. How many acres? _____		☐ F
ii. What is the proposed irrigation method type and subtype (e.g., level border, graded border, furrow, contour ditch, or wild flood) for the new acres? _____		☐ F
iii. What is the slope of the new place of use? _____		☐ F
iv. Based on question 85.a.ii to 85.a.iii, what is the percent efficiency of irrigation for the new acres? _____		☐ F

v. What is the County Management Factor for the new acres? _____		☐ F
vi. What is the ET based on the irrigation method and county for the new acres? _____		☐ F
vii. What percent of applied water are irrecoverable losses for new acres? _____		☐ F
viii. Do other water rights supplement or overlap the new place of use that contribute to the irrigation water demand?	☐ Y ☐ N	☐ F
1. If yes,		
a. How will the water rights be operated to serve the irrigation purpose? _____ _____ _____ _____ _____ _____ _____	☐ A	☐ F
b. For each supplemental or overlapping water right, please list the average period of diversion and use (MM/DD-MM/DD), flow rate (GPM or CFS), and the volume of water (AF) contributed to the total irrigation water demand.	☐ A	☐ F

Water Right No.	Avg. Period of Diversion (MM/DD-MM/DD)	Avg. Period of Use (MM/DD-MM/DD)	Flow Rate (GPM or CFS)	Volume Contributed (AF)

86. Do you have information for the Department to consider about the source and location where return flows historically accrued?	☐ Y ☐ N	☐ F

a. If yes, explain. _____ _____ _____	☐ A	☐ F
87. Based on the preliminary data provided at this preapplication meeting, to what surface water sources will return flows accrue before and after the proposed change? **Return flow data provided by the Department at the preapplication meeting is preliminary and is subject to change during the Technical Analysis.* _____ _____ _____	☐ A	☐ F
88. If an analysis of impacts to identified surface water rights is required as part of the return flow analysis, pursuant to ARM 36.12.1303(5)(d)(iii), do you elect to answer non-mandatory questions 161 to 163 to provide information required for this extended analysis?	☐ Y ☐ N	☐ F
a. If yes, go to question 161. If an analysis of impacts to identified surface water rights is required as part of the return flow analysis, this information will used for the analysis.		
b. If no, did you elect in question 1 for the Department to conduct technical analyses?	☐ Y ☐ N	☐ F
i. If yes, do you elect for the Department to use publicly available water quantity data for the analysis of impacts to identified surface water rights? If this extended return flow analysis is required and sufficient publicly available water quantity data is not available, then the Department will not be able to conduct the extended analysis. You will still have to prove a lack of adverse effect from the proposed change.	☐ Y ☐ N	☐ F
ii. If no, an analysis of impacts to identified surface water rights will need to be completed as part of the return flow analysis. The Department will include the extended analysis in its scientific credibility review of the Technical Analyses.		

Groundwater: Mitigation

89. Do you require mitigation water to meet the criteria of issuance for this change application or for a different application? If yes, answer the questions in this section (questions 90 to 98). If no, this section is complete, and you can skip to question 99.	☐ Y ☐ N	☐ F
90. Please identify the water rights proposed for change to a mitigation purpose and the water rights identified as needing mitigation. _____	☐ A	☐ F

91. What sources have been identified as needing mitigation water? _____		☐ F
92. By what means will mitigation water be made available? _____ _____	☐ A	☐ F
93. What is the location (¼ ¼ ¼ section of start and end of reach) and length (feet) of the mitigation reach? _____		☐ F
94. What is the amount, timing, and location (¼ ¼ ¼ section) of water needed for mitigation?	☐ A	☐ F

Month	Days	Amount	Location	Month	Days	Amount	Location
January				**July**			
February				**August**			
March				**September**			
April				**October**			
May				**November**			
June				**December**			

95. How do the priority dates of the water rights proposed for change to mitigation compare to other water rights on the source? _____ _____	☐ A	☐ F
96. Do you have measurement records or Water Commissioner records that show the reliability of the water right(s) proposed for change to a mitigation purpose?	☐ Y ☐ N	☐ F
a. If yes, describe and submit them to the Department. _____ _____ _____	☐ S	☐ F
97. Do the water rights proposed for change to mitigation have a period of use that is greater than or equal to the period when mitigation is necessary?	☐ Y ☐ N	☐ F

a. If no, how will mitigation water be made available during the entire period when mitigation is necessary? _____ _____ _____	☐ A	☐ F
98. Will other water rights contribute to mitigation water?	☐ Y ☐ N	☐ F
a. If yes, what amount, at what timing, and at which location (¼ ¼ ¼ section) will they contribute?	☐ A	☐ F

Month	Days	Amount	Location (¼ ¼ ¼ Section)	Month	Days	Amount	Location (¼ ¼ ¼ Section)
January				**July**			
February				**August**			
March				**September**			
April				**October**			
May				**November**			
June				**December**			

Project-Specific Questions

The following questions are mandatory when applicable and must be filled out before the Preapplication Meeting Form is determined to be complete.

Temporary Change

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
99. Does the proposal include a temporary change? If yes, please answer the questions in this section (questions 100 to 105) for each water right being changed. If no, or if you answered these questions earlier in the preapplication meeting, this section is complete and you can skip to question 106.	☐ Y ■ N	☐ F
100. What element(s) of the water right(s) are being temporarily changed? _____		☐ F
101. For how many years will the water right(s) be temporarily changed? _____		☐ F
102. Will the temporary change be intermittent over the years?	☐ Y ☐ N	☐ F
a. If yes, explain. _____	☐ A	☐ F
103. For what purpose will the water rights be temporarily used? _____		☐ F

104. Is the quantity of water subject to the temporary change being made available from the development of a new water conservation or storage project?	☐ Y ☐ N	☐ F
a. If yes, explain the water conservation or storage project. _____ _____ _____	☐ A	☐ F
105. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 10 if you are proposing to add a place of use on State of Montana Trust Land and question 15 if you are proposing a temporary change that does not involve State of Montana Trust Land. If you are answering in consecutive order, go to question 106.		

Change in Purpose

106. Does the project involve a change in purpose? If yes, answer the questions in this section (questions 107 to 109). If no, of if you answered these questions earlier in the preapplication meeting, this section is complete and you can skip to question 110.	☐ Y ■ N	☐ F
107. Identify the proposed new purpose, flow rate (GPM or CFS), volume (AF), and period of use (MM/DD-MM/DD) for each purpose.	☐ A	☐ F

Purpose	**Flow Rate (GPM or CFS)**	**Volume (AF)**	**Period of Use Start (MM/DD-MM/DD)**	**Period of Use End (MM/DD-MM/DD)**

108. Explain why the requested flow rate and volume is the amount needed for the purpose. _____ _____ _____	☐ A	☐ F
109. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 11 and if you are answering in consecutive order, go to question 110.		

Change in Place of Storage

110. Does the project involve a change in place of storage? If yes, answer the questions in this section (questions 111 to 119) for each individual place of storage (use additional Change in Place of Storage sheet for additional places of storage). If no, or if you answered these questions earlier in the preapplication meeting, this section is complete; skip to question 120.	☐ Y ■ N	☐ F
111. Submit a map showing the location of the place of storage. Create map on an aerial photograph or topographic map that shows the following: place of storage, section corners, township and range, and a north arrow.	☐ S	☐ F
112. Is this application to add a new place of storage or change an existing place of storage? _____		☐ F
a. If application is to change an existing place of storage, list the water rights that include the place of storage and a short description of the proposed change. _____ _____	☐ A	☐ F
113. Is the place of storage located on-stream?	☐ Y ☐ N	☐ F
a. If no, explain the conveyance means to and from the off-stream place of storage and any losses that may occur with that conveyance. _____ _____	☐ A	☐ F
114. What is the proposed capacity of the place of storage? Use bathymetry data, survey, or engineering plans for capacity. Submit the data source used with this form. In lieu of these data sources, use the following equation: *Surface Acres x Maximum Depth (FT) x 0.5 (0.4-0.6 depending on side slope) = Capacity (AF)* _____	☐ S	☐ F
115. Will the place of storage include primary and/or emergency spillways? Preliminary design specifications for primary and emergency spillways must be included with application submittal (ARM 36.12.113).	☐ Y ☐ N	☐ F
116. Will the place of storage be lined?	☐ Y ☐ N	☐ F
117. What is the annual net evaporation of water from the place of storage using the standards in ARM 36.12.116(1) and the Department's Gridded Net Evaporation Layer? _____		☐ F
118. Is the place of storage capacity calculated to be greater than 50 acre-feet?	☐ Y ☐ N	☐ F
a. If yes, have you made an application to the DNRC Water Operations Bureau for a determination of whether the dam or reservoir is a high-hazard dam?	☐ Y ☐ N	☐ F

119. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 12 and if you are answering in consecutive order, go to question 120.		

Ditch-Specific Questions

120. Does the historical use of water include at least one conveyance ditch? If yes, answer questions 121 to 122. If no, or if you answered these questions earlier in the preapplication meeting, skip to question 123.	■ Y ☐ N	☐ F
121. Submit a Historical Use Ditch Map that shows every ditch conveying water for the historical use of all water right(s) proposed for change. Label the ditch name(s), POD(s), the POU(s), and the ditch measurement locations (requested in question 122.d). The map should be created on an aerial photograph or topographic map with the following: section corners, township and range, and a north arrow.	☐ S	■ F
122. For each historical conveyance ditch, answer question 122.a to 122.h. If there is more than one historical conveyance ditch, use an Additional Historical Ditch Sheet for each additional ditch.		
a. What is the ditch name? Shaw Ditch (Cardwell Ditch decreed by Water Court)		☐ F
b. List the water right(s) proposed for change that were conveyed by the ditch. 41E 3407-00, 41E 3408-00		☐ F
c. What is the distance water was historically carried by the conveyance ditch? Only include segments between the POD and start of the POU; do not include segments within the POU. 8,941ft - POD to the first field in POU	☐ A	☐ F
d. Provide at least one set of ditch measurements, which include width (FT), depth (FT), and slope (%). Discuss ditch characteristics with DNRC to determine the minimum number of ditch measurements. Include the location of each measurement, labeled with the 2-digit measurement ID number, used on the map submitted for question 121.	☐ S	☐ F

ID #	Width (FT)	Depth (FT)	Slope (%)	Date of Measurement
100ft from headgate	6'5 (top)/4' (bottom)	2.5'	0.5%	8/7/2023

e. What is a reasonable Manning's n value? List the factors used for estimation. If you do not know this value, please work through estimation with the Department. n=.045 cobble/gravel bottom, earth/gravel constructed channel, jagged/irregular (submitted Mannings values)	☐ A	☐ F

f. What type of soils compose the historical conveyance ditch? For lined ditches, write "lined" instead. bedrock to sandy/silty small gravels	☐ A	☐ F
g. Are other water rights conveyed by the historical conveyance ditch?	■ Y ☐ N	☐ F
i. If yes,		
1. What are the water right numbers? 41E 3406-00, 41E 143433-00, 41E 143436 00, 41E 143437 00	☐ A	☐ F
2. What is the sum of the flow rates (GPM or CFS) for all water rights conveyed? 39.23 CFS	☐ A	☐ F
3. Provide a map with your best estimate of the historical POUs for the other water rights conveyed by the historical conveyance ditch. Include only POUs between the historical POD and your historical POU. If you do not know this information, the Department can help you create the map. The map should be created on an aerial photograph or topographic map and show the following: section corners, township and range, and a north arrow.	☐ S	■ F
h. Were any water rights proposed for change part of one historical water right that was split?	☐ Y ■ N	☐ F
i. If yes, were all split water rights split in such a way to ensure each post-split water right could stand alone and not be reliant on the others for carriage water?	☐ Y ☐ N	☐ F
1. If no, do any of the water right(s) proposed for change have a carriage water requirement?	☐ Y ■ N	☐ F
a. If yes,		
i. List the water right(s) with a carriage water requirement		☐ F
ii. Update your Historical Use Ditch Map to label the ditch segments where a carriage water requirement exists for a water right proposed for change. Also, use your best estimate to label the POUs for all water rights included in the carriage water requirement. If you do not know this information, the Department can help you update the map.	☐ S	☐ F
123. Does the proposed use include at least one existing or new conveyance ditch? If yes, answer questions 124 to 126. If no, or if you answered these questions earlier in the preapplication meeting, this section is complete; skip to question 127.	☐ Y ■ N	☐ F

124. Submit a Proposed Use Ditch Map that shows every ditch conveying the water right(s) proposed for change, including any unchanged portions. Label all unchanged and proposed PODs, all unchanged and proposed POUs, and additional ditch measurement locations (requested in question 125.e). The map should be created on an aerial photograph or topographic map with the following: section corners, township and range, and a north arrow.	☐ S	☐ F
125. For each proposed use conveyance ditch, answer the questions 125.a to 125.i. If there is more than one proposed use conveyance ditch, use an Additional Proposed Use Ditch Sheet for each additional ditch.		
a. What is the ditch name? _____		☐ F
b. Is this ditch a historical conveyance ditch detailed in questions 121 to 122?	☐ Y ☐ N	☐ F
i. If yes, have any of the following details changed, to the best of your knowledge, from historical conditions: ditch length, distance water conveyed, ditch lining, or water rights conveyed by the ditch?	☐ Y ☐ N	☐ F
1. If yes, answer questions 125.c to 125.i using current data.		
2. If no, do not answer questions 125.c to 125.i for this ditch because the information remains unchanged. Move on to the next proposed use conveyance ditch, or if none remain, skip to question 127.		
c. List the water right(s) proposed for change that are going to be conveyed by the ditch. _____		☐ F
d. What is the distance water will be carried by the conveyance ditch? Only include segments between the POD and start of the POU; do not include segments within the POU. _____ _____	☐ A	☐ F
e. Provide at least one set of ditch measurements, which include width (FT), depth (FT), and slope (%). Discuss ditch characteristics with DNRC to determine the minimum number of ditch measurements. Include the location of each measurement, labeled with the 2-digit measurement ID number, used on the map submitted for question 124.	☐ S	☐ F

ID #	Width (FT)	Depth (FT)	Slope (%)	Date of Measurement

f. What is a reasonable Manning's n value? List the factors used for estimation. If you do not know this value, please work through estimation with the Department. _____ _____	☐ A	☐ F
g. What type of soils compose the proposed conveyance ditch? For lined ditches, write "lined" instead. _____ _____	☐ A	☐ F
h. Are other water rights conveyed by the proposed conveyance ditch?	☐ Y ■ N	☐ F
i. If yes,		
1. What are the water right numbers? _____ _____ _____	☐ A	☐ F
2. What is the sum of the flow rates (GPM or CFS) for all water rights conveyed? _____ _____ _____	☐ A	☐ F
3. Provide a map with your best estimate of the current POUs for the other water rights conveyed by the proposed conveyance ditch. Include only POUs between the POD and your proposed POU. If you do not know this information, the Department can help you create the map. The map should be created on an aerial photograph or topographic map and show the following: section corners, township and range, and a north arrow.	☐ S	☐ F
i. Were any water right(s) proposed for change identified as having a carriage water requirement in question 122.h.i.1.a.i?	☐ Y ■ N	☐ F
i. If yes, update your Proposed Use Ditch Map to label the ditch segments where a carriage water requirement exists for a water right proposed for change. Also, use your best estimate to label the POUs for all water rights included in the carriage water requirement. If you do not know this information, the Department can help you update the map.	☐ S	☐ F
126. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 13 and if you are answering in consecutive order, go to question 127.		

Water Marketing

127. Does this project involve water marketing? If yes, answer the questions in this section (questions 128 to 134). If no, or if you answered these questions earlier in the preapplication meeting, this section is complete; skip to question 135.	☐ Y ■ N	☐ F
128. Identify the flow rate (GPM or CFS) and volume of water (AF) that will be marketed. _____		☐ F
129. Will the marketed water return to the source?	☐ Y ☐ N	☐ F
a. If yes, explain how that determination was made. _____ _____ _____	☐ A	☐ F
130. For what purpose(s) will the marketed water be used? _____ _____	☐ A	☐ F
131. How will you control or limit access to the water? _____ _____	☐ A	☐ F
132. Do you have contracts for the entire volume and flow rate sought?	☐ Y ☐ N	☐ F
133. Provide a service area map. Create map on an aerial photograph or topographic map and shows the following: general service area boundary, section corners, township and range, and a north arrow.	☐ S	☐ F
134. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 19 and if you are answering in consecutive order, go to question 135.		

Instream Flow Change

135. Does the project involve an instream flow change? If yes, answer the questions in this section (questions 136 to 145). If no, or if you answered these questions earlier in the preapplication meeting, this section is complete; skip to question 146.	☐ Y ■ N	☐ F
136. Is the proposal to retire all the use from the historical purpose throughout the entire period of use?	☐ Y ☐ N	☐ F
a. If no, describe why not in detail. _____ _____ _____	☐ A	☐ F

137. What is the name of the source of water where streamflow will be maintained or enhanced? _____		☐ F
138. Provide specific information on the location (¼ ¼ ¼ section of start and end of reach) and length (FT) of the stream reach in which the streamflow is to be maintained or enhanced. _____	☐ A	☐ F
139. Does the protected reach begin at the existing point of diversion?	☐ Y ☐ N	☐ F
a. If no, does the proposed protected reach begin upstream of or downstream from the existing point of diversion? _____		☐ F
140. Does return flow go back to the source of supply? The Department provides an initial estimate of the sources where return flow historically accrued at the preapplication meeting.	☐ Y ☐ N	☐ F
141. Describe the way the streamflow is to be maintained or enhanced. _____ _____ _____	☐ A	☐ F
142. Provide initial details about a streamflow measuring plan, which include the points where measurements occur, the interval of measurement, and the methods and equipment used. A complete streamflow measuring plan will be required for the application. _____ _____ _____ _____ _____	☐ A	☐ F
143. Provide initial details about an operation plan, which include the proposed flow rate (GPM or CFS) to be protected up to the proposed volume (AF) and the period when protection is to occur. If there is a "trigger flow" associated with your operation plan, please explain. A complete operation plan, based on the Technical Analysis, will be required for the application. _____ _____ _____ _____ _____	☐ A	☐ F

144. Is the amount of water proposed for change in the application made available through creation of a "water saving method," as defined in ARM 36.12.101?	☐ Y ☐ N	☐ F
a. If yes, complete the Salvage Water section (questions 146 to 150).	☐ S	☐ F
145. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 20 and if you are answering in consecutive order, go to question 146.		

Salvage Water

146. Does this project involve salvage water? Salvage water does not include destroying phreatophytes, removing vegetation, converting to a less consumptive crop, or converting to a partial irrigation schedule. If yes, answer the questions in this section (questions 147 to 150). If no, or if you answered these questions earlier in the preapplication meeting, this section is complete and you can skip to question 151.	☐ Y ■ N	☐ F
147. What water saving method was implemented? This may include lining an unlined ditch or canal, converting unlined ditch or canal to pipeline, converting high profile or high-pressure sprinklers to low pressure, and other (explain). _____ _____	☐ A	☐ F
148. How much water was salvaged from creation of the water saving method? Include flow rate (GPM or CFS) and volume (AF). _____		☐ F
149. How did you determine the amount of water salvaged? _____ _____ _____ _____ _____ _____	☐ A	☐ F
150. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 21 and if you are answering in consecutive order, go to question 151.		

Non-Mandatory Questions for Criteria Analysis

The following questions are not mandatory. They should be discussed in the Preapplication Meeting, but do not need to be filled out before the Preapplication Meeting Form is determined to be complete.

Adverse Effect

Questions, Narrative Responses, and Tables	Check-boxes
151. Once the historical use analysis is complete for the application, be ready to compare the historical use with the proposed use. Do you have evidence the proposed use exceeds the historical use for flow rate, consumed volume, or diverted volume?	☐ Y ☒ N
a. If yes, what is your plan to address this with the permitting process? _____ _____	☐ A
152. Describe your plan to ensure that existing water rights will be satisfied during times of water shortage. _____ _____ _____	☐ A
153. Explain how you can control your diversion in response to call being made. _____ _____ _____	☐ A
154. Are you aware of any calls that have been made on the source of supply or depleted surface water source?	☐ Y ☒ N
a. If yes, explain. _____ _____	☐ A
155. Does a water commissioner distribute water or oversee water distribution on your proposed source or depleted surface water source?	☐ Y ☒ N
156. Will the proposed use change the ability for you to make call?	☐ Y ☒ N

157. When was the last time water was appropriated and used beneficially? 2024 If there has been a period of nonuse, explain below:	
a. Why the water right was not used. _____ _____	☐ A
b. Why a resumption of use will not adversely affect other water users. _____ _____	☐ A
c. Is the period of nonuse greater than 10 years?	☐ Y ■ N
d. Have water rights been authorized to use the source during the period of nonuse?	☐ Y ■ N
158. For point of diversion changes:	
a. Is the proposed point of diversion upstream or downstream of the historical point of diversion? downstream	
b. Are there intervening water users between the historical and proposed point of diversion?	■ Y ☐ N
c. Does the proposed point of diversion allow for diverting water longer during times of shortage?	☐ Y ■ N
159. For place of use changes, will changes to the rate, location, volume, or timing of return flows adversely affect other appropriators?	☐ Y ■ N

Adverse Effect: Evaluation of Impacts to Identified Water Rights for Return Flow Analysis

160. Respond to questions in this section if you elected in questions 50 or 88 to answer optional questions 161 to 163. If you did not elect to answer these questions or answered these questions earlier in the preapplication meeting, this section is complete; skip to question 165.	
161. For each surface water source receiving return flows, is gage data available?	☐ Y ☐ N
a. If yes, answer the following questions for the number of stream gages that are available.	
i. One stream gage is available	
1. What is the gage name? _____	
2. Who operates and maintains the gage? _____	

3. Is the stream gage upstream or downstream of the point(s) of diversion? _____	
4. Is there a limiting or controlling factor that would make the Drainage Area Method not practical? This includes dams that control the flow and streams with large gaining and/or losing reaches. If you have questions about this, please contact the Regional Hydro-Specialist or the Water Sciences Bureau.	☐ Y ☐ N
5. Is the period of record greater than or equal to 10 years?	☐ Y ☐ N
6. How frequently is stage data recorded? _____	
7. If data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	☐ Y ☐ N
8. Was the rating curve established and maintained throughout the duration of the period of record using measurements taken near the reference gage and stage recorder according to USGS protocols?	☐ Y ☐ N
9. Were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N
10. Does the gage data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N
a. If yes, skip to question 163.	
b. If no, answer question 161.b.	
ii. More than one stream gage is available	
1. List the gage names. _____	
2. Who operates and maintains the gages? _____	
3. Is one stream gage upstream and one downstream of point(s) of diversion?	☐ Y ☐ N
4. Do the stream gages have similar periods of record?	☐ Y ☐ N
5. Are the periods of record each greater than or equal to 10 years?	☐ Y ☐ N
6. How frequently is stage data recorded at each gage? _____	
7. For each gage, if data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	☐ Y ☐ N

8. Were the rating curves established and maintained throughout the duration of the period of record using measurements taken near the reference gages and stage recorders according to USGS protocols?	☐ Y ☐ N
9. For each gage, were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N
10. Does the gage data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N
a. If yes, skip to question 163.	
b. If no, answer question 161.b.	
b. If no gage data is available or if available gage data does not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion, is the source otherwise measured?	☐ Y ☐ N
i. If yes,	
1. Submit measurements to the Department.	☐ S
2. Who collected the measurements? _____	☐ A
3. With what method was the data collected? _____ _____	☐ A
4. What is the period of record? _____	
5. What is the frequency of measurement? _____	
6. Are there gaps in the data?	☐ Y ☐ N
a. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? _____ _____ _____ _____	☐ A
7. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N

a. If yes, explain. _____ _____ _____ _____	☐ A
8. Does available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N
a. If yes, skip to question 163.	
b. If no, answer question 162.	
162. For each surface water source receiving return flows, does the available measurement data, gage and/or otherwise measured, meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for validation of a department-accepted estimation technique?	☐ Y ☐ N
a. If yes, describe the estimation technique. _____ _____ _____	☐ A
b. If no, will measurements be collected prior to submission of a completed Form No. 606P that meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for validation of a department-accepted estimation technique?	☐ Y ☐ N
i. If yes,	
1. With what method will the data be collected? _____ _____ _____	☐ A
2. What will be the interval of measurement? _____	

3. Describe the proposed estimation technique. _____ _____ _____ _____	☐ A
ii. If no, describe your plan supply measurements for return flow receiving sources. _____ _____ _____	☐ A
163. If you are conducting Technical Analysis, how will the Area of Potential Adverse Effect be defined for evaluating return flow impacts? If the Department is conducting Technical Analyses, write N/A. _____ _____ _____ _____	☐ A
164. If you went straight to this section when referenced, go back to question 51 for surface water changes and question 88 for groundwater changes. If you waited to answer in consecutive order and have completed all prior sections, move to question 165.	

Adverse Effect: Evaluation of Impacts to Identified Water Rights for Surface Water Depletion Analysis

165. Respond to questions in this section if you elected in question 79 to answer optional questions 166 to 168. If you did not elect to answer these questions or answered these questions earlier in the preapplication meeting, this section is complete; skip to question 170.	
166. For each hydraulically connected surface water source, is gage data available?	☐ Y ☐ N
a. If yes, answer the following questions for the number stream gages are available.	
i. One stream gage is available	
1. What is the gage name? _____	

2. Who operates and maintains the gage? _____	
3. Is the stream gage upstream or downstream of the start of the depletion? _____	
4. Is there a limiting or controlling factor that would make the Drainage Area Method not practical? This includes dams that control the flow and streams with large gaining and/or losing reaches. If you have questions about this, please contact the Regional Hydro-Specialist or the Water Sciences Bureau.	☐ Y ☐ N
5. Is the period of record greater than or equal to 10 years?	☐ Y ☐ N
6. How frequently is stage data recorded? _____	
7. If data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	☐ Y ☐ N
8. Was the rating curve established and maintained throughout the duration of the period of record using measurements taken near the reference gage and stage recorder according to USGS protocols?	☐ Y ☐ N
9. Were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N
10. Does the gage data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N
a. If yes, skip to question 168.	
b. If no, answer question 166.b.	
ii. More than one stream gage is available	
1. List the gage names. _____	
2. Who operates and maintains the gages? _____	
3. Is one stream gage upstream and one downstream of the start of the depletion?	☐ Y ☐ N
4. Do the stream gages have similar periods of record?	☐ Y ☐ N
5. Are the periods of record each greater than or equal to 10 years?	☐ Y ☐ N
6. How frequently is stage data recorded at each gage? _____	

7. For each gage, if data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	☐ Y ☐ N
8. Were the rating curves established and maintained throughout the duration of the period of record using measurements taken near the reference gages and stage recorders according to USGS protocols?	☐ Y ☐ N
9. For each gage, were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N
10. Does the gage data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N
a. If yes, skip to question 168.	
b. If no, answer question 166.b.	
b. If no gage data is available or if available gage data does not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion, is the source otherwise measured?	☐ Y ☐ N
i. If yes,	
1. Submit available measurements to the Department	☐ S
2. Who collected the measurements? _____	☐ A
3. With what method was the data collected? _____ _____	☐ A
4. What is the period of record? _____	
5. What is the frequency of measurement? _____	
6. Are there gaps in the data?	☐ Y ☐ N
a. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? _____ _____ _____ _____	☐ A
7. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N

a. If yes, explain. _____ _____ _____	☐ A
8. Does available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N
a. If yes, skip to question 168.	
b. If no, answer question 167.	
167. For each hydraulically connected surface water source, does the available measurement data, gage and/or otherwise measured, meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for validation of a department-accepted estimation technique?	☐ Y ☐ N
a. If yes, describe the estimation technique. _____ _____ _____ _____	☐ A
b. If no,	
i. Will measurements be collected prior to submission of a completed Form No. 606P that meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for validation of a department-accepted estimation technique?	☐ Y ☐ N
1. If yes,	
a. With what method will the data be collected? _____ _____ _____	☐ A
b. What will be the interval of measurement? _____	

c. Describe the proposed estimation technique. _____ _____ _____ _____	☐ A
2. If no, describe your plan to comply with the measurement requirements for hydraulically connected surface water sources. _____ _____ _____	☐ A
168. If you are conducting Technical Analysis, how will the Area of Potential Adverse Effect be defined for evaluating changes to net depletions? If the Department is conducting Technical Analyses, write N/A. _____ _____ _____ _____	☐ A
169. If you went straight to this section when referenced, go back to question 80. If you waited to answer in consecutive order and have completed all prior sections, move to question 170.	

Adequate Means of Diversion and Operation

170. Provide a diagram of how you will operate your system from the point of diversion to the place of use.	☐ S
171. Describe specific information about the capacity of the diversionary structure(s). This may include, where applicable: pump curves and total dynamic head calculations, headgate design specifications, and dike or dam height and length. timing depending on flow but follow historical patterns _____	☐ A
172. Is the diversion capable of providing the full amount requested through the period of diversion?	■ Y ☐ N

173. Describe the size and configuration of infrastructure to convey water from point of diversion to place of use. This may include, where applicable: ditch capacity and/or pipeline size and configuration. In Huckaba Pump Specs for pump in Section 3.	☐ A
174. Describe any losses related to conveyance.	☐ A
175. Is the conveyance infrastructure capable of providing the required flow and volume and any losses?	■ Y ☐ N
176. Does the proposed conveyance require easements?	☐ Y ■ N
a. If yes, explain.	☐ A
177. Describe any places of storage, including whether drainage devices will be installed, and provide preliminary designs, if available. Preliminary designs will be required at application submittal.	☐ A
178. Describe specific information about how water is delivered within the place of use. This may include, where applicable, the range of flow rates needed for a pivot and output and configuration of sprinkler heads.	☐ A
179. Is the water delivery system capable of providing the requested beneficial use?	■ Y ☐ N
180. Will your system be designed to discharge water from the project?	☐ Y ☐ N
a. If yes, explain the way water will be discharged and the wastewater disposal method.	☐ A

181. Provide a plan of operations. _____ _____ _____	☐ A
182. Can the plan of operations deliver the flow rate and volume for the beneficial use being requested?	☐ Y ☐ N
183. Do you have any plans to measure your diversion and use?	☐ Y ☐ N
a. If yes, describe the plan and the type of measurements you will take. _____ _____	☐ A
184. Is the means of diversion a well?	☐ Y ☐ N
a. If yes, are well log(s) available?	☐ Y ☐ N
i. If yes, submit well log(s) to DNRC	☐ S
ii. If no, who drilled the well? _____	

Beneficial Use

185. Why is the requested flow rate and volume the amount needed for the purpose? _____ _____	☐ A
186. Does the Department have a standard for the purposes for which water is used? Department standards can be found in ARM 36.12.112.	☐ Y ☐ N
a. If yes, does the proposed beneficial use fall within Department standards?	☐ Y ☐ N
187. If no standard or if proposed beneficial use falls outside of Department standards, explain how the use is reasonable for the purpose. _____ _____ _____ _____	☐ A
188. Will your proposed project be subject to DEQ requirements for a public water supply (PWS) system or Certificate of Subdivision Approval (COSA)?	☐ Y ☐ N

a. If yes,	
i. Have you researched or consulted with DEQ regarding those requirements?	☐ Y ☐ N
189. Are you proposing to use surface water for in-house domestic use?	☐ Y ☐ N
a. If yes, does a COSA exist for the proposed place of use?	☐ Y ☐ N
i. If yes, please submit the COSA.	☐ S
ii. If no, have you researched or consulted with DEQ regarding their requirements?	☐ Y ☐ N

Possessory Interest

190. Do you have possessory interest, or the permission of the party with possessory interest, of the proposed place of use? Proof of possessory interest or permission of the party with possessory interest is required at application submittal.	■ Y ☐ N
a. If no, explain. _____ _____ _____	☐ A

PREAPPLICATION MEETING AFFIDAVIT & CERTIFICATION

"We attest that the information on this form accurately describes the proposed project discussed during the preapplication meeting and that the items marked for follow-up will require the applicant to provide additional information before the form is deemed complete."

"Applicant acknowledges that any information provided by the Department during the preapplication is preliminary and subject to change."

"Applicant acknowledges that if the follow-up information provided to the Department substantially changes the proposed project, for example in a way that alters which sections of the form are applicable or which technical analyses are required, or who is to complete the technical analyses, the applicant will need to schedule a new preapplication meeting so that the department can identify any additional information necessary for completion of the technical analyses (ARM 36.12.1302(3)(c))."

Upon Department receipt of the completed form (within 180 days following the meeting), the Department reserves the first five days of the 45-day period in ARM 36.12.1302(4) or (5) to return the form to the applicant if:

1 – the completed form does not include all necessary follow-up information identified in the meeting, OR
2 – the completed form is not adequate for the Department to proceed with technical analyses, OR
3 – the applicant has elected to complete technical analyses and has not submitted each piece of technical analysis required, OR
4 – the applicant has substantially changed the details of the proposed project, such as in a way that alters which sections of the form are applicable, which technical analyses are required, or who is to complete the technical analyses.

If the Department returns the form to the Applicant within these five days due to reasons 1-3 above, the Applicant can use the balance of their 180-day period in ARM 36.12.1302(4) or (5) to gather the remaining follow-up information needed. If there is no time remaining in the 180-day period, the Applicant can submit a written request for a new preapplication meeting, pursuant to ARM 36.12.1302(2). Even if there is still time remaining, the Applicant can choose to schedule a new preapplication meeting. The Department shall transfer the $500 payment received to the new preapplication meeting, or refund the payment to the Applicant if the Applicant desires. If the Department returns the form to the Applicant within these five days due to reason (4) above, the Applicant must submit a written request for a new preapplication meeting, pursuant to ARM 36.12.1302(2). The Department shall transfer the $500 payment received to the new preapplication meeting, or refund the payment to the Applicant if the Applicant desires.

Leonard W. Huckaby — 10-18-24

Applicant Signature — Date

Susanne Huckaba — 10-18-24

Applicant Signature — Date

[signature] — 10-28-2024

Department Signature — Date

FOLLOW-UP PAGE

Applicant will provide all responses to questions marked for follow-up on a separate document entitled "Follow-up Responses" with the question number labeled. Answer questions in the same format as the form. For responses in the form of checkboxes, write "Y", "N", or "S". Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label units in narrative responses and tables. Tables must have the exact headings found on the form. Questions that require items to be submitted to the Department may be marked "S" when the required item is attached to the Preapplication Meeting Form. Label all submitted items with the question number for which they were submitted. The Applicant may not alter the Preapplication Meeting Form signed at the Preapplication Meeting. Instead, the Applicant must use the Amended Responses procedure defined below. Do not include additional information for questions not marked for follow-up here; instead include any additional information pursuant to the process for amending responses defined below.

Questions marked for follow-up

- 6	- 121
- 122.g.i.3	-
-	-
- 171 (Non-Mandatory Question but was discussed in preapplication)	-
-	-
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AMENDED RESPONSES PAGE

The Applicant may not alter the Preapplication Meeting Form signed at the Preapplication Meeting or the Follow-up Page. If a response has changed to a question answered at the preapplication meeting, the Applicant can provide a new response in a separate document entitled "Amended Responses" with the question number labeled. Answer questions in the same format as the form. For responses in the form of checkboxes, write "Y", "N", or "S". Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label units in narrative responses and tables. Tables must have the exact headings found on the form. Questions that require items to be submitted to the Department may be marked "S" when the required item is attached to the Preapplication Meeting Form. Label all submitted items with the question number for which they were submitted. The Applicant will mark all question numbers with an amended response in the table below and note for each question whether the response will replace the response given at the preapplication meeting or will provide additional information to consider in conjunction with the response given at the preapplication meeting. The Applicant will return the "Amended Responses" document with the "Follow-up Responses" document and the signed Preapplication Meeting Form.

Questions with amended responses

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FOLLOW-UP PAGE AFFIDAVIT & CERTIFICATION

"I/we attest that this preapplication meeting form, follow-up page, and amended responses page accurately portray my proposed project. I am aware that my application for this project will not qualify for a discounted filing fee and expedited timelines if upon submittal of the application to the department, I change any element of the proposed application from the preapplication meeting form and follow-up materials (ARM 36.12.1302(6)(a))."

Susie Huckula 12-18-24

Applicant Signature Date

Leonard W. Huckaby 12-18-24

Applicant Signature Date

"We confirm that the preapplication form and follow-up information are adequate for the Department to proceed with technical analyses in ARM 36.12.1303. If the applicant has elected to complete technical analyses, we confirm they have submitted each piece of technical analysis required based on the proposed project and the Department is able to proceed with the scientific credibility review (ARM 36.12.1303(8))."

12/19/2024

Department Signature Date

Department Signature Date

Huckaba POU - Historic Acreage compared to Amended POU and Proposed

ID	QQ	Sec	TR	Claim Map Digitized (ac)	Abstract (ac)	PD as Amended (ac)	WRS (ac)	Proposed (ac)
1	E2	3	01N 03W	77	70	70	93.3	70
2	SW	2	01N 03W	122.2	130	123.2	118	108.5
3	NW	11	01N 03W	73.5	100	90.8	80.5	46
4	SWSE	2	01N 03W	8.6		6.8	6.8	6.8
5	W2NE	11	01N 03W	9.2		9.2	9.2	9.2
				290.5	300	300	307.8	240.5
			Net Reduction					59.5

AquaTech
210 Arden Drive
Belgrade, MT 59714
(406)388-3315
1-800-426-4921

Huckaba Ranch
26 Highway 359
Cardwell, MT 59721
406.287.5556

Valley 7000

February 6, 2023
Prepared by: John Gardner
West Side - North Half Circle - V2
8.0 Pivot Acres
1.4 End Gun Acres
9.4 Total Acres
484.1 Foot Long Machine

Pivot Point	
1	6 5/8" Pivot Point
1	6" Pivot Flex (for 6 5.8" PP)
1	Pivot Ladder
Controls	
1	Icon5 Panel (5 YR Warranty)
1	GPS Pivot Position
1	11 Conductor Collector Ring
1	Aluminum Power Distribution Block
1	High Voltage Surge Protection
1	Temperature Sensor
1	Icon Link - Remote Monitoring and Control
Spans	
2	6" 160' Span w/ 108" Spacing (7000)
1	6" 135' Span w/ 108" Spacing (7000)
1	27' Overhang w/ 108" Spacing
Drive Unit	
3	11.2 X 38" Tire on 10" Galv Rim
3	Tubes in Tires
3	Valley gearbox
3	34 RPM Center Drive
3	Pivot Alignment
Accessories	
1	Running Light
1	End of Field Stop w/ Auto Reverse - Customer Sets Barricades
Sprinkler Package	
1	Nelson Rotators w/ Brown plates on 1st & 2nd Spans, Spinners w/ Yellow Plates on rest, 15 psi Nelson Regulators on 5.5' hose drops using integrated weights
1	2 HP Booster Pump
1	27' OH Booster Hose
1	Nelson SR 75 End Gun
1	2" Nelson Valve 1000
1	Senninger End Spray Drain

Pivot Sub-Total	$60,874
Pivot Total	$60,874
Ancillary Total (see next page for details)	$62,287
Project Total	**$123,161**

Freight & Installation Included

Price good until: February 28, 2023

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February 6, 2023
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West Side - North Half Circle - V2

Pivot Tie In		
1	Pivot Pad	$1,785
1	4" Dogleg	$682
2	Thrust Block	$430
1	Clemons 700 Filter	$2,833
1	4" Control Valve	$1,728
1	4" Gear-op Butterfly Valve	$324
1	2" Airvent	$158
1	4" Surge Relief Valve	$222
1	Misc Fittings and Install	$295
1	4" Electronic Flowmeter w/ Cable	$2,639
1	Misc Fittings and Install	$295
1	Epoxy Paint for NRCS Spec	$750
Pump Station		
1	15 HP Turbine Pump	$15,504
1	Size 2 Pump Panel - Installed	$1,504
1	30 Amp Disconnect	$563
1	Meter Base Installed on Pole	$1,900
1	Pump Discharge, Check Valve, Box and Screen	$15,649
1	6" Dogleg	$784
1	Thrust Block	$215
1	6" Gear-op Butterfly Valve	$394
1	2" Airvent	$158
1	4" Surge Relief Valve	$222
1	2" Drain at Dogleg	$140
1	Epoxy Paint for NRCS Spec	$750
Mainline and Wire		
462	6" 100# PIP PVC Pipe - Installed	$3,812
616	4" 125# IPS PVC Pipe - Installed	$3,844
2	2" Air Vent on Saddle Riser	$666
1178	#4 AL Wire w/ 12-2 Control Wire in Conduit	$4,041
	** All Lengths are estimates to be confirmed by survey	
	** Any additional digging or pipe bedding for rock will be charged at additional rate	
	** Due to Current Volatility in the PVC Market - PVC Prices will be Confirmed at Time of Order and are Subject to Change with Notice	
	Total Ancillary Equipment	$62,287
	Pivot Total	$60,874
	Project Total	$123,161

Price good until: February 28, 2023

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February 6, 2023
Prepared by: John Gardner

West Side - North Half Circle - V2

OPTIONS

	Prices in addition to those listed above		
1	Valley 8000 series Machine	$	2,256
1	11.2 X 38" Tire on 10" Galv Rim - 6 Ply	$	189
1	11.2 X 38" ND Tire on 10" Galv Rim - 6 Ply	$	643
1	Chemigation Pigtail	$	305

We Propose hereby to furnish material and labor - complete in accordance with above specification, for the sum of:
$123,161

Payment to be made as follows:
25% Down payment, 70% Upon Pivot Delivery, 5% Upon AquaTech's Completion

All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifics involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond the seller's control. Buyer to carry fire, tornado and other necessary insurance. Seller disclaims any express or implied warranties of fitness for a particular purpose and merchantability. Seller shall not be liable for consequential damages.

Authorized Signature: _____

Acceptance of Proposal: The above prices, specification and conditions are satisfactory and are hereby accepted. Seller is authorized to do the work as specified. Payment will be made as outlined above. Buyer grants a purchase money security interest in all of the material described above including accessions and attachments now or hereafter acquired together with any proceeds thereof to secure the performance and payment of all obligation of buyer to seller under the terms of this contract. Buyer agrees that seller shall have a lien for all services provided. Buyer agrees to sign financing statements upon request of seller. Buyer acknowledges that he has read all of the terms and provisions of this contract and that it constitutes the entire agreement between the parties relative hereto and neither party shall be bound by an agreement, statement or representation not incorporated herein. All accounts not paid in accordance with the above terms are subject to a finance charge in the amount of 1.5% (18% APR) with a minimum of $1.50. Should any accounts be referred for outside collection, buyer agrees to pay all collection costs, attorney fees, & court costs. Any checks returned to seller by bank will be assessed an additional $30 charge.

Signature: _____ Date: _____

Price good until: February 28, 2023

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Valley 7000

February 6, 2023
Prepared by: John Gardner
West Side - South Half Circle - V2
8.3 Pivot Acres
1.5 End Gun Acres
9.9 Total Acres
448.6 Foot Long Machine

Pivot Point	
1	6 5/8" Pivot Point
1	6" Pivot Flex (for 6 5.8" PP)
1	Pivot Ladder
Controls	
1	Icon5 Panel (5 YR Warranty)
1	GPS Pivot Position
1	11 Conductor Collector Ring
1	Aluminum Power Distribution Block
1	High Voltage Surge Protection
1	Temperature Sensor
1	Icon Link - Remote Monitoring and Control
Spans	
1	6" 185' Span w/ 108" Spacing (7000)
1	6" 180' Span w/ 108" Spacing (7000)
1	82' Overhang w/ 108" Spacing
Drive Unit	
2	11.2 X 38" Tire on 10" Galv Rim
2	Tubes in Tires
2	Valley gearbox
2	34 RPM Center Drive
2	Pivot Alignment
Accessories	
1	Running Light
1	End of Field Stop w/ Auto Reverse - Customer Sets Barricades
Sprinkler Package	
1	Nelson Rotators w/ Brown plates on 1st & 2nd Spans, Spinners w/ Yellow Plates on rest, 15 psi Nelson Regulators on 5.5' hose drops using integrated weights
1	2 HP Booster Pump
1	36' OH Booster Hose
1	Nelson SR 75 End Gun
1	2" Nelson Valve 1000
1	Senninger End Spray Drain

Pivot Sub-Total	$52,555
Pivot Total	$52,555
Ancillary Total (see next page for details)	$19,073
Project Total	**$71,628**

Freight & Installation Included

Price good until: February 28, 2023

AquaTech
210 Arden Drive
Belgrade, MT 59714
(406)388-3315
1-800-426-4921

Huckaba Ranch
26 Highway 359
Cardwell, MT 59721
406.287.5556

February 6, 2023
Prepared by: John Gardner

West Side - South Half Circle - V2

Pivot Tie In		
1	Pivot Pad	$1,785
1	4" Dogleg	$682
1	Thrust Block	$215
1	Clemons 700 Filter	$2,833
1	4" Control Valve	$1,728
1	4" Gear-op Butterfly Valve	$324
1	2" Airvent	$158
1	4" Surge Relief Valve	$222
1	2" Drain at Dogleg	$140
1	4" Electronic Flowmeter w/ Cable	$2,639
1	Epoxy Paint for NRCS Spec	$750
Pump Station		
1	30 Amp Disconnect	$563
Mainline and Wire		
528	4" 125# IPS PVC Pipe - Installed	$3,295
1090	#4 AL Wire w/ 12-2 Control Wire in Conduit	$3,740
	** All Lengths are estimates to be confirmed by survey	
	** Any additional digging or pipe bedding for rock will be charged at additional rate	
	** Due to Current Volatility in the PVC Market - PVC Prices will be Confirmed at Time of Order and are Subject to Change with Notice	
	Total Ancillary Equipment	$19,073
	Pivot Total	$52,555
	Project Total	$71,628

Price good until: February 28, 2023

AquaTech
210 Arden Drive
Belgrade, MT 59714
(406)388-3315
1-800-426-4921

Huckaba Ranch
26 Highway 359
Cardwell, MT 59721
406.287.5556

February 6, 2023
Prepared by: John Gardner

West Side - South Half Circle - V2

OPTIONS

	Prices in addition to those listed above		
1	Valley 8000 series Machine	$	1,914
1	11.2 X 38" Tire on 10" Galv Rim - 6 Ply	$	126
1	11.2 X 38" ND Tire on 10" Galv Rim - 6 Ply	$	429
1	Chemigation Pigtail	$	305

We Propose hereby to furnish material and labor - complete in accordance with above specification, for the sum of:
$71,628

Payment to be made as follows:
25% Down payment, 70% Upon Pivot Delivery, 5% Upon AquaTech's Completion

All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifics involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond the seller's control. Buyer to carry fire, tornado and other necessary insurance. Seller disclaims any express or implied warranties of fitness for a particular purpose and merchantability. Seller shall not be liable for consequential damages.

Authorized Signature: _____

Acceptance of Proposal: The above prices, specification and conditions are satisfactory and are hereby accepted. Seller is authorized to do the work as specified. Payment will be made as outlined above. Buyer grants a purchase money security interest in all of the material described above including accessions and attachments now or hereafter acquired together with any proceeds thereof to secure the performance and payment of all obligation of buyer to seller under the terms of this contract. Buyer agrees that seller shall have a lien for all services provided. Buyer agrees to sign financing statements upon request of seller. Buyer acknowledges that he has read all of the terms and provisions of this contract and that it constitutes the entire agreement between the parties relative hereto and neither party shall be bound by an agreement, statement or representation not incorporated herein. All accounts not paid in accordance with the above terms are subject to a finance charge in the amount of 1.5% (18% APR) with a minimum of $1.50. Should any accounts be referred for outside collection, buyer agrees to pay all collection costs, attorney fees, & court costs. Any checks returned to seller by bank will be assessed an additional $30 charge.

Signature: _____ Date:_____

Price good until: February 28, 2023

Lower Boulder River Irrigation Infrastructure Improvement Project
Huckaba Point of Diversion Change Site

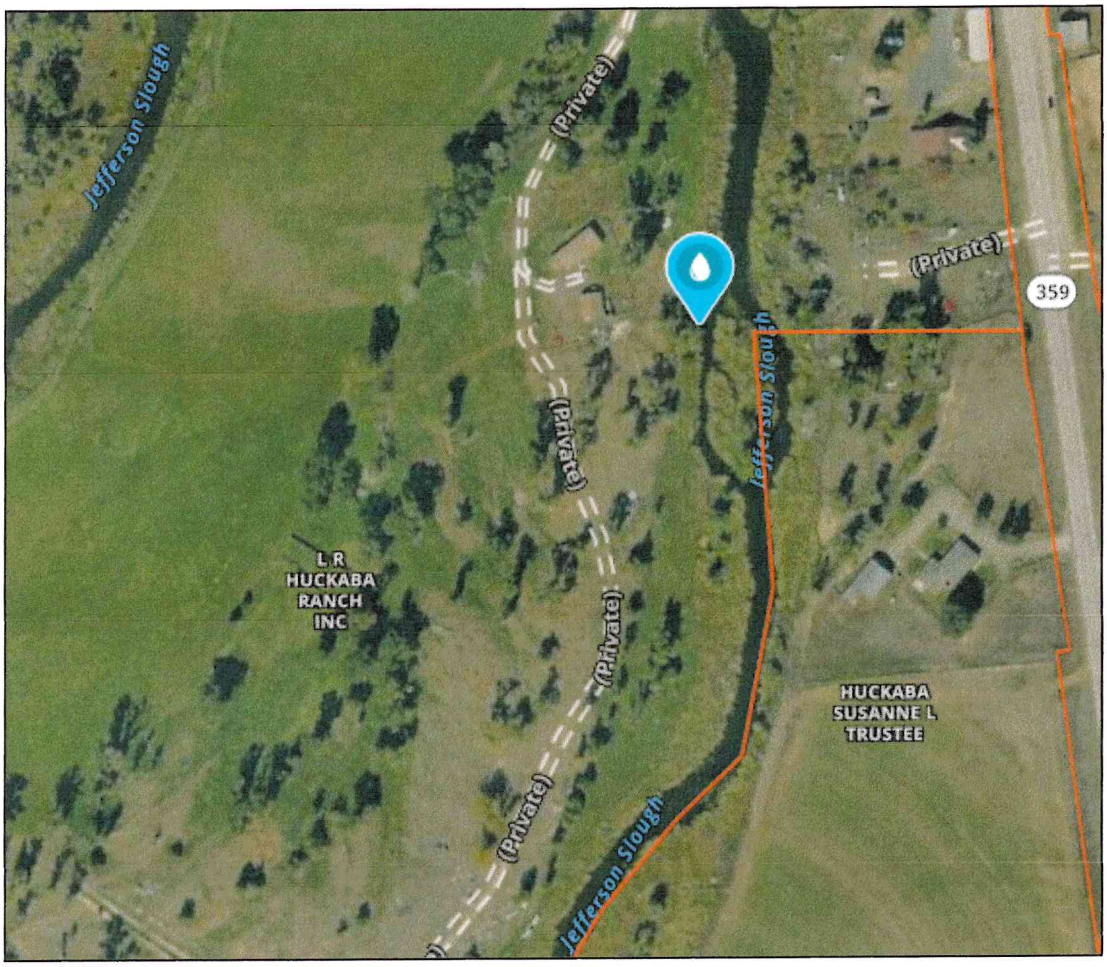
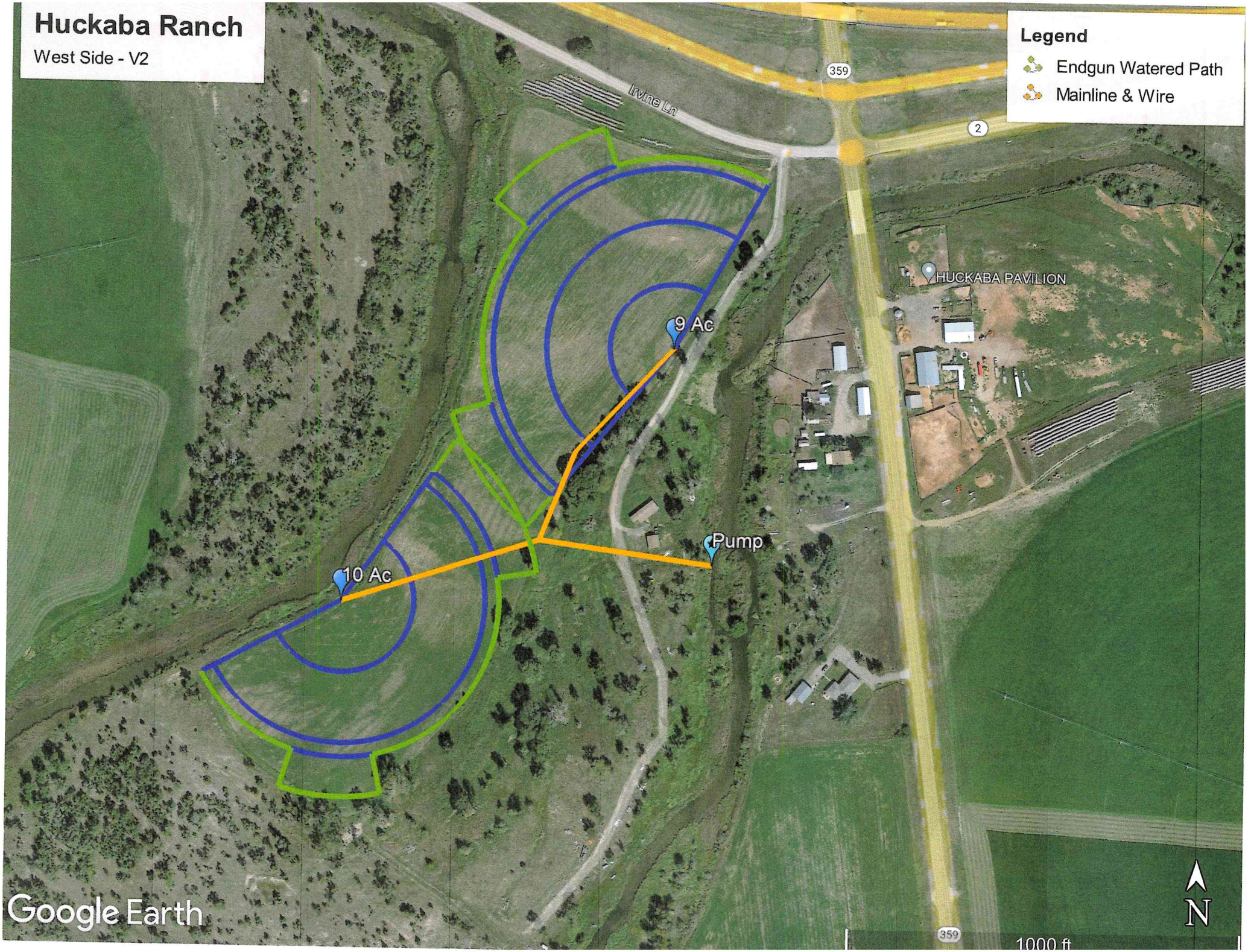


Figure 1. Location of Huckaba Point of Diverision change, 45.86594, -111.95569.

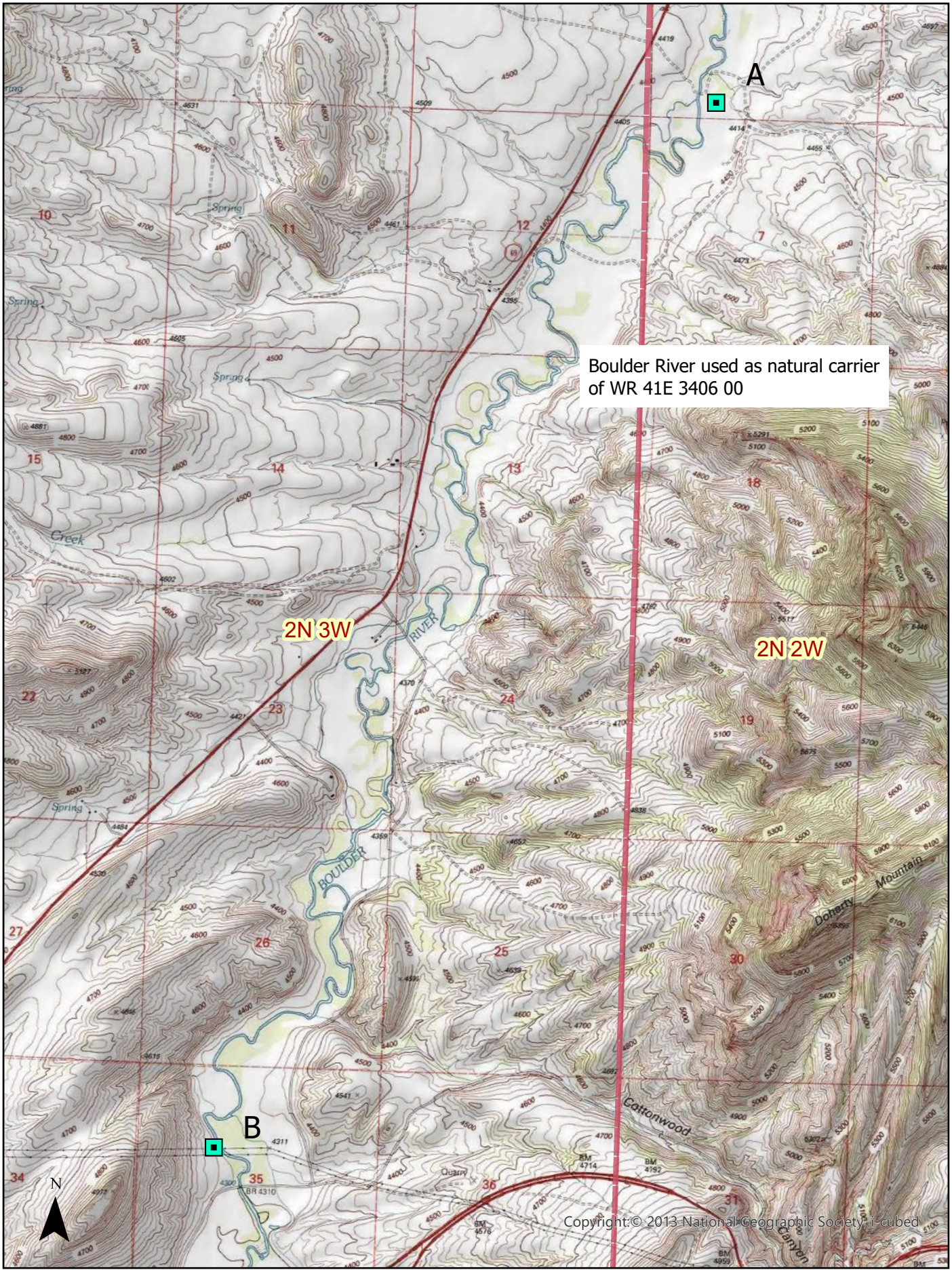
Figure 2. Looking across the Jefferson slough from the Huckaba POD change site.

Figure 3. Looking upstream on the Jefferson Slough from the Huckaba POD change site.

Figure 4. Looking downstream on the Jefferson Slough from the Huckaba POD change site.


Huckaba Ranch
West Side - V2
Legend
Endgun Watered Path
Mainline & Wire
Irvine Ln
359
2
HUCKABA PAVILION
9 Ac
Pump
10 Ac
Google Earth
N
1000 ft

Map 5A: LR Huckaba Ranch Inc Historic PODs



Reconnecting Wild Trout Habitat in the Boulder-Jefferson Watershed

Shaw Diversion Dam Removal Project

Cardwell, MT

The Shaw Diversion Dam on the lower Boulder River near Cardwell is a barrier to migrating fish from the Jefferson River for thermal refugia and spawning. The dam's small fish ladder is frequently blocked by low and high flows or debris and does not allow passage for some life stages of fish.

Rising in the mountains north of Butte, the Boulder River is the largest tributary to the Jefferson River downstream of the Beaverhead-Big Hole River confluence, providing a boost of cold water near the midpoint of the Jefferson's 83-mile length. The Boulder is a high-value coldwater fishery and provides significant agricultural production in Jefferson County. Dam removal will benefit wild trout spawning in the system. Also important for wild trout, the Boulder averages 2°-4°F colder than the Jefferson River in August, providing critical thermal refugia for coldwater species in the summer.

The Shaw Diversion fish ladder is woefully inadequate for fish access and is frequently clogged with woody debris and sediment.

CHALLENGE & PROJECT SOLUTION

Shaw Diversion Dam Removal Project

The project area is north of I-90 near Cardwell, MT. On the Candlestick Ranch, the Shaw Diversion Dam and two smaller diversions deliver water to 233 acres of cropland. An inadequate fish ladder exists on Shaw dam and frequently clogs with debris, making it inaccessible to migrating trout. In addition, the aging infrastructure is getting more difficult to operate and regulate irrigation withdrawal. This project will alleviate infrastructure concerns by removing the diversions and provide an ecological uplift to the Boulder and Jefferson Rivers through stream restoration, water savings, and wetland development, while maintaining agricultural benefits.

On the Ground Conservation

The project will remove Shaw Diversion and two smaller diversions and replace them with instream irrigation pumps that will benefit trout and agriculture. Significant data collection occured at the site over the past three years. Planning, engineering, and design for the dam removal and stream restoration is underway. The partners anticipate project implementation in the fall/winter of 2025.

Community Engagement and Partnerships

The funding and planning for this project involves the landowner, Golden Sunlight Mine, with complimentary support from Montana Fish, Wildlife & Parks (FWP), Natural Resource Conservation Service (NRCS), the Department of Natural Resource Conservation (DNRC), Trout and Salmon Foundation, the Cross Chartiable Foundation and L.R. Huckaba Ranch.

MONTANA TROUT UNLIMITED

SCAN ME

5+
PARTNER ORGANIZATIONS

WHY PHILANTHROPIC SUPPORT IS NEEDED

MTU relies on the contributions of local partners and individual donors to make up crucial matching funds for federal, state, and local grant awards. For this project, we are seeking to raise an additional $300,000 to reconnect this important area of the Boulder-Jefferson watershed. Your gift can help save wild trout in the Jefferson watershed.

"We are excited to partner with MTU in the removal of a diversion from the Boulder River. This collaborative effort will help to ensure a healthy and thriving fishery for future generations."

-- Kristine Murphy, Golden Sunlight GM

We are happy to discuss how we can best acknowledge your contribution~ through a press release, signage at the project site, or otherwise. Thank you for partnering with MTU to improve water quantity and quality, reconnect streams, protect native species, and provide economic and educational benefits to local communities, now and for future generations.

MONTANA TROUT UNLIMITED'S MISSION

Our mission is to conserve, protect, and restore Montana's coldwater fisheries and their watersheds.

To learn more about this project and how to support it, please contact:

CHRIS EDGINGTON
Project Manager
Montana Trout Unlimited
chris@montanatu.org | 406-543-0054

OUTCOMES WE CAN ACHIEVE TOGETHER

- Restore fish passage for thermal refugia and spawning
- 7 CFS of cold Boulder River water savings over the current base flow of 28 CFS
- Eliminate fish entrainment in 3 irrigation ditches
- Reduce nutrient and sediment loading through the creation of beneficial wetlands
- Improve irrigation delivery to 233 acres of valuable crop land.

HIGH-LEVERAGE INVESTMENT

This restoration project enables MTU to your contribution to secure additional dollars - 5:1 - by providing matching funds for substantial federal and state grant awards.

December 12, 2024

LR Huckaba Ranch LLC
26 MT Highway 356
Cardwell, MT 59271

Subject: Complete Preapplication Form Preapplication Form No. 41E 30164689

Dear Applicant,

The Helena Regional Office of the Department of Natural Resources and Conservation (DNRC or Department) received your Preapplication Meeting Form on 12/19/2024, and the Department deems the submitted Preapplication Meeting Form to be successfully completed per ARM 36.12.1302.

As designated on the submitted Preapplication Meeting Form per §85-2-302(3)(b), MCA, the Department will produce the technical analyses based on the parameters included in the Preapplication Meeting Form (ARM 36.12.1302(4)) within 45 days of 12/19/2024.

Please let me know if you have any questions.

Best,

Savannah Telander
Water Resources Specialist
Helena Regional Office
savannah.telander@mt.gov
406-444-6810

CC:

Patrick Byroth, patrickbyorth@TU.org
Chris Edgington, chris@montanatu.org

December 12, 2024

LR Huckaba Ranch LLC
26 MT Highway 356
Cardwell, MT 59271

Subject: Incomplete Preapplication Form No. 41E 30164689

Dear Applicant,

The Department received your Preapplication Meeting Form and preapplication fee on December 10, 2024. The Department deemed the submitted Preapplication Meeting Form to be incomplete because it lacks the following information:

- ❑ Follow-Up Page Affidavit & Certification (Page 60) was not included with the submitted Preapplication Meeting Form. The Applicant must sign this to start the Technical Analysis process. This signature signifies: "*I/we attest that this Preapplication Meeting Form, follow-up page, and amended responses page accurately portray my proposed project. I am aware that my application for this project will not qualify for a discounted filing fee and expedited timelines if upon submittal of the application to the Department, I change any element of the proposed application from the Preapplication Meeting Form and follow-up materials (ARM 36.12.1302(6)(a))*."

The 180- day deadline from the original preapplication meeting is October 17, 2024. You have 124 remaining days to successfully complete the Preapplication Meeting Form. If you do not submit the successfully completed Preapplication Meeting Form to the Helena Regional Office by April 15, 2025, you will need to request a new preapplication meeting.

Once you have signed the enclosed Follow-Up Page Affidavit & Certification (Page 60), please send everything back to the Helena Regional Office. Please let me know if you have any questions.

Best,

Savannah Telander
Water Resources Specialist
Helena Regional Office
savannah.telander@mt.gov
406-444-6810

CC:

Patrick Byroth, patrickbyorth@TU.org
Chris Edgington, chris@montanatu.org

From:	Telander, Savannah
To:	"Chris Edgington"
Cc:	Allison Pardis; Patrick Byorth; Daly, Jennifer
Subject:	RE: Preapplication Meeting Form Change Application 41E 30164689
Date:	Thursday, January 2, 2025 1:04:00 PM
Attachments:	41E 30164689_PreappForm_p60.pdf image002.png image003.png

Chris,

Attached is a copy of the last signature page (page 60) that you brought into the office. The DNRC 45-day deadline to get the Technical Analysis out is 2/2/2025, which is a Sunday. Due to this, we will be sending out the Technical Analysis out on 1/31/2025 at the latest.

Let us know if you have any further questions!

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Chris Edgington <chris@montanatu.org>
Sent: Thursday, January 2, 2025 12:03 PM
To: Telander, Savannah <Savannah.Telander@mt.gov>
Cc: Allison Pardis <allison.pardis@tu.org>; Patrick Byorth <Patrick.Byorth@tu.org>; Daly, Jennifer <JDaly2@mt.gov>
Subject: [EXTERNAL] Re: Preapplication Meeting Form Change Application 41E 30164689

Good morning, all, and HNY!

Savannah and Jen, thanks for meeting with me just before the holidays to accept the new signature page from the Huckaba's. Can you please confirm the DNRC deadline for the technical review in writing? I think you told me January 31. Also, if it's not too much trouble, can you scan the new signature page for our records, I forgot to snap a copy.

Thanks,

Chris Edgington

Jefferson Watershed Project Manager
Montana Trout Unlimited
406.451.3035
www.montanatu.org [montanatu.org]

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Thursday, December 19, 2024 8:25 AM
To: Chris Edgington <chris@montanatu.org>
Cc: Allison Pardis <allison.pardis@tu.org>; Patrick Byorth <Patrick.Byorth@tu.org>; Daly, Jennifer <JDaly2@mt.gov>
Subject: RE: Preapplication Meeting Form Change Application 41E 30164689

Good morning,

Yes, I will be in the office today and tomorrow between 8 am and 4pm. Jenn should also be in today as well.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Chris Edgington <chris@montanatu.org>
Sent: Thursday, December 19, 2024 8:12 AM
To: Telander, Savannah <Savannah.Telander@mt.gov>
Cc: Allison Pardis <allison.pardis@tu.org>; Patrick Byorth <Patrick.Byorth@tu.org>
Subject: [EXTERNAL] Re: Preapplication Meeting Form Change Application 41E 30164689

Good morning, Savannah.

The Huckaba's have received and signed the paperwork. I'd like to deliver it in person. I don't want this important step lost in the holiday mix.

Are you available if I can deliver it today?

Chris Edgington
Jefferson Watershed Project Manager
Montana Trout Unlimited
406.451.3035
www.montanatu.org [montanatu.org]

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Friday, December 13, 2024 8:50 AM
To: Allison Pardis <allison.pardis@tu.org>; Patrick Byorth <Patrick.Byorth@tu.org>; Chris Edgington <chris@montanatu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>; lenhuckaba@icloud.com <lenhuckaba@icloud.com>
Subject: RE: Preapplication Meeting Form Change Application 41E 30164689

Alli,

The Department needs more information than what is listed on the plate to determine the pump capacities. We did a little research on our end to see if we could find the pump capacities for each pump but were unsuccessful. If you can't get datasheets from the manufactures, there are a few options you can do, see listed below:

- Provide the Department with operation pressure and diameter of the pumps (and a clearer picture of the Nidec pump plate)
- Or provide information from a bucket test – how long does it take to fill a gallon bucket with water using the pump

We will keep an eye out for the signed Preapplication Meeting Form from the Huckaba's.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Chris Edgington
To: Telander, Savannah; Daly, Jennifer
Subject: [EXTERNAL] Re: Preapplication Meeting Form Change Application 41E 30164689
Date: Thursday, December 19, 2024 12:02:29 PM
Attachments: image001.png
image002.png

Thanks, I'll be there about 1.

Chris Edgington
Jefferson Watershed Project Manager

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Thursday, December 19, 2024 8:25:12 AM
To: Chris Edgington <chris@montanatu.org>
Cc: Allison Pardis <allison.pardis@tu.org>; Patrick Byorth <Patrick.Byorth@tu.org>; Daly, Jennifer <JDaly2@mt.gov>
Subject: RE: Preapplication Meeting Form Change Application 41E 30164689

Good morning,

Yes, I will be in the office today and tomorrow between 8 am and 4pm. Jenn should also be in today as well.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Chris Edgington <chris@montanatu.org>
Sent: Thursday, December 19, 2024 8:12 AM
To: Telander, Savannah <Savannah.Telander@mt.gov>
Cc: Allison Pardis <allison.pardis@tu.org>; Patrick Byorth <Patrick.Byorth@tu.org>
Subject: [EXTERNAL] Re: Preapplication Meeting Form Change Application 41E 30164689

Good morning, Savannah.

The Huckaba's have received and signed the paperwork. I'd like to deliver it in person. I don't

want this important step lost in the holiday mix.

Are you available if I can deliver it today?

Chris Edgington
Jefferson Watershed Project Manager
Montana Trout Unlimited
406.451.3035
www.montanatu.org [montanatu.org]

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Friday, December 13, 2024 8:50 AM
To: Allison Pardis <allison.pardis@tu.org>; Patrick Byorth <Patrick.Byorth@tu.org>; Chris Edgington <chris@montanatu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>; lenhuckaba@icloud.com <lenhuckaba@icloud.com>
Subject: RE: Preapplication Meeting Form Change Application 41E 30164689

Alli,

The Department needs more information than what is listed on the plate to determine the pump capacities. We did a little research on our end to see if we could find the pump capacities for each pump but were unsuccessful. If you can't get datasheets from the manufactures, there are a few options you can do, see listed below:

- Provide the Department with operation pressure and diameter of the pumps (and a clearer picture of the Nidec pump plate)
- Or provide information from a bucket test – how long does it take to fill a gallon bucket with water using the pump

We will keep an eye out for the signed Preapplication Meeting Form from the Huckaba's.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Allison Pardis <allison.pardis@tu.org>
Sent: Thursday, December 12, 2024 1:48 PM
To: Telander, Savannah <Savannah.Telander@mt.gov>; Patrick Byorth <Patrick.Byorth@tu.org>; Chris Edgington <chris@montanatu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>; lenhuckaba@icloud.com
Subject: [EXTERNAL] Re: Preapplication Meeting Form Change Application 41E 30164689

Hi Savannah,

I apologize I didn't realize a second signature was required. We will get a signature on page 60 and submit it to the department.

We briefly exchanged some emails about the pump curves. I did reach out to the manufacturers and because the pumps are older the pump curves are not readily available. Can the department use the face plate information from the pumps to determine pump capacity?

Thanks,
Alli

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Thursday, December 12, 2024 11:32 AM
To: Patrick Byorth <Patrick.Byorth@tu.org>; Chris Edgington Montana <chris@montanatu.org>
Cc: Allison Pardis <allison.pardis@tu.org>; Daly, Jennifer <JDaly2@mt.gov>; lenhuckaba@icloud.com <lenhuckaba@icloud.com>
Subject: Preapplication Meeting Form Change Application 41E 30164689

Greetings,

The DNRC Helena Regional Office received the Preapplication Meeting Form for LR Huckaba Ranch LLC's Change Application 41E 30164689. Hard copies of the follow-up information were received in the Helena Regional Office on 12/10/2024 and a digital version of the Form was received on 12/11/2024. Both files submitted to the office omit page 60 of the Preapplication Meeting Form. At this time, the Form is **not** considered complete. The Department cannot consider the Form complete or begin the Technical Analysis until the second signature page (page 60) is signed and submitted. I have sent the hard copies of the Form that were submitted on 12/10/2024 to the Huckaba's along with the second signature page for them to sign and send back to the DNRC Helena Office. I have attached the letter that was sent to the Huckaba's to this email.

Side note regarding the follow up pump information submitted. The pump information provided is not

sufficient for the Department to determine if the pumps have the capacity to pump the proposed flow rate. It is not a mandatory question for the Preapplication Meeting Form, so its fine for now. At the time of Application submittal, you will need to provide a pump curve for each pump.

Once we get the second signatures from the Huckaba's we will be able to start the Technical Analysis. Please let me know if you have any questions.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Telander, Savannah
To: "Chris Edgington"
Cc: Daly, Jennifer; Patrick Byorth; lenhuckaba@icloud.com; allison.pardis@tu.org
Subject: RE: Huckaba Preapplication Meeting Form
Date: Monday, October 28, 2024 8:42:00 AM
Attachments: 2024.10.28 P 57 Signed.pdf
image001.png
image002.png

Good morning,

The Helena Office received the signature page of the Preapplication Form. Attached is the fully signed version of the signature page.

Just another reminder, the 180 day deadline to submit the complete Preapplication Meeting Form to the Helena Office is **April 15, 2025**. Please let us know if you have any further questions.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Chris Edgington <chris@montanatu.org>
Sent: Monday, October 21, 2024 9:27 AM
To: Telander, Savannah <Savannah.Telander@mt.gov>
Cc: Daly, Jennifer <JDaly2@mt.gov>; Patrick Byorth <Patrick.Byorth@tu.org>; lenhuckaba@icloud.com; allison.pardis@tu.org
Subject: [EXTERNAL] Re: Huckaba Preapplication Meeting Form

In the mail, thanks!

Chris Edgington
Jefferson Watershed Project Manager

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Monday, October 21, 2024 8:03:35 AM
To: Chris Edgington <chris@montanatu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>; Patrick Byorth <Patrick.Byorth@tu.org>; lenhuckaba@icloud.com <lenhuckaba@icloud.com>; allison.pardis@tu.org <allison.pardis@tu.org>

Subject: RE: Huckaba Preapplication Meeting Form

Good morning Chris,

Thank you for sending the copy of the signature page. The Department needs the original wet signature page. Can you please mail or submit the signature page to the Helena Regional Office at **1424 Ninth Avenue PO Box 201601 Helena, MT 59620-1601**.

Thank you,

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Chris Edgington <chris@montanatu.org>
Sent: Friday, October 18, 2024 4:20 PM
To: Telander, Savannah <Savannah.Telander@mt.gov>; Patrick Byorth <Patrick.Byorth@tu.org>; lenhuckaba@icloud.com; allison.pardis@tu.org
Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: [EXTERNAL] Re: Huckaba Preapplication Meeting Form

All,

Attached is the pg. 57, signed by Lenny and Susan. Once there is a department signature, please return that copy.

Chris Edgington
Jefferson Watershed Project Manager
Montana Trout Unlimited
406.451.3035
www.montanatu.org [montanatu.org]

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Thursday, October 17, 2024 3:51 PM
To: Patrick Byorth <Patrick.Byorth@tu.org>; Chris Edgington <chris@montanatu.org>; lenhuckaba@icloud.com <lenhuckaba@icloud.com>; allison.pardis@tu.org <allison.pardis@tu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: Huckaba Preapplication Meeting Form

Hello All,

Attached is the Preapplication Meeting Form for LR Huckaba Ranch Inc that we went over today (Application 41E 30164689).

Please return the first signature page (page 57) back with the Applicant's signature within the next **5 business days**, which is October 24, 2024. The signature can be a certified digital signature or a wet signature.

The follow up items needed for the Preapplication Form are listed on page 58 of the form. I have a non-mandatory question listed in this area (question 171), since we discussed it in the meeting. The pump specific information provided previously and during the meeting are for just the pump in Section 3. If you have the pump specs for the two other pumps that would also be helpful.

The 180 day deadline to submit the complete Preapplication Meeting Form to the Helena Office is **April 15, 2025**.

Thank you for the meeting today. Please let us know if you have any further questions.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Telander, Savannah
To: "Allison Pardis"
Cc: Daly, Jennifer
Subject: RE: Huckaba Preapplication Meeting Form
Date: Thursday, November 7, 2024 8:03:00 AM
Attachments: image001.png
image002.png

Alli,

I would suggest researching the serial numbers of the pumps or asking the company where the pumps were purchased to find more information on the proposed pumps.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Allison Pardis <allison.pardis@tu.org>
Sent: Wednesday, November 6, 2024 4:20 PM
To: Telander, Savannah <Savannah.Telander@mt.gov>
Subject: [EXTERNAL] RE: Huckaba Preapplication Meeting Form

Hey Savannah,

I have the serial numbers for the pumps described in this change app, and you have the specs for the 15hp pump. I'm not having any luck finding performance curves for the other two pumps. Do you have any suggestions on where I might find that information to include in the application?

Thanks!
Alli

Alli Pardis
Trout Unlimited
(406) 431-5981

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Monday, October 28, 2024 8:42 AM
To: Chris Edgington Montana <chris@montanatu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>; Patrick Byorth <Patrick.Byorth@tu.org>; lenhuckaba@icloud.com; Allison Pardis <allison.pardis@tu.org>
Subject: RE: Huckaba Preapplication Meeting Form

Good morning,

The Helena Office received the signature page of the Preapplication Form. Attached is the fully signed version of the signature page.

Just another reminder, the 180 day deadline to submit the complete Preapplication Meeting Form to the Helena Office is **April 15, 2025**. Please let us know if you have any further questions.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Chris Edgington <chris@montanatu.org>
Sent: Monday, October 21, 2024 9:27 AM
To: Telander, Savannah <Savannah.Telander@mt.gov>
Cc: Daly, Jennifer <JDaly2@mt.gov>; Patrick Byorth <Patrick.Byorth@tu.org>; lenhuckaba@icloud.com; allison.pardis@tu.org
Subject: [EXTERNAL] Re: Huckaba Preapplication Meeting Form

In the mail, thanks!

Chris Edgington
Jefferson Watershed Project Manager

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Monday, October 21, 2024 8:03:35 AM
To: Chris Edgington <chris@montanatu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>; Patrick Byorth <Patrick.Byorth@tu.org>; lenhuckaba@icloud.com <lenhuckaba@icloud.com>; allison.pardis@tu.org <allison.pardis@tu.org>

Subject: RE: Huckaba Preapplication Meeting Form

Good morning Chris,

Thank you for sending the copy of the signature page. The Department needs the original wet signature page. Can you please mail or submit the signature page to the Helena Regional Office at **1424 Ninth Avenue PO Box 201601 Helena, MT 59620-1601**.

Thank you,

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
1424 Ninth Avenue P.O. Box 201601 Helena, MT 59620-1601
DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Chris Edgington <chris@montanatu.org>
Sent: Friday, October 18, 2024 4:20 PM
To: Telander, Savannah <Savannah.Telander@mt.gov>; Patrick Byorth <Patrick.Byorth@tu.org>; lenhuckaba@icloud.com; allison.pardis@tu.org
Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: [EXTERNAL] Re: Huckaba Preapplication Meeting Form

All,

Attached is the pg. 57, signed by Lenny and Susan. Once there is a department signature, please return that copy.

Chris Edgington
Jefferson Watershed Project Manager
Montana Trout Unlimited
406.451.3035
www.montanatu.org [montanatu.org]

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Thursday, October 17, 2024 3:51 PM
To: Patrick Byorth <Patrick.Byorth@tu.org>; Chris Edgington <chris@montanatu.org>; lenhuckaba@icloud.com <lenhuckaba@icloud.com>; allison.pardis@tu.org <allison.pardis@tu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: Huckaba Preapplication Meeting Form

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Savannah

Savannah Telander| Water Resources Specialist
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Montana Department of Natural Resources and Conservation
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How did we do? Let us know here: Feedback Survey [forms.office.com]

From:	Chris Edgington
To:	Telander, Savannah
Cc:	Daly, Jennifer; Patrick Byorth; lenhuckaba@icloud.com; allison.pardis@tu.org
Subject:	[EXTERNAL] Re: Huckaba Preapplication Meeting Form
Date:	Monday, October 21, 2024 9:27:13 AM
Attachments:	image002.png image003.png

In the mail, thanks!

Chris Edgington
Jefferson Watershed Project Manager

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Monday, October 21, 2024 8:03:35 AM
To: Chris Edgington <chris@montanatu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>; Patrick Byorth <Patrick.Byorth@tu.org>; lenhuckaba@icloud.com <lenhuckaba@icloud.com>; allison.pardis@tu.org <allison.pardis@tu.org>
Subject: RE: Huckaba Preapplication Meeting Form

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Thank you,

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
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How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Chris Edgington <chris@montanatu.org>
Sent: Friday, October 18, 2024 4:20 PM
To: Telander, Savannah <Savannah.Telander@mt.gov>; Patrick Byorth <Patrick.Byorth@tu.org>; lenhuckaba@icloud.com; allison.pardis@tu.org
Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: [EXTERNAL] Re: Huckaba Preapplication Meeting Form

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Chris Edgington
Jefferson Watershed Project Manager
Montana Trout Unlimited
406.451.3035
www.montanatu.org [montanatu.org]

From: Telander, Savannah <Savannah.Telander@mt.gov>
Sent: Thursday, October 17, 2024 3:51 PM
To: Patrick Byorth <Patrick.Byorth@tu.org>; Chris Edgington <chris@montanatu.org>; lenhuckaba@icloud.com <lenhuckaba@icloud.com>; allison.pardis@tu.org <allison.pardis@tu.org>
Cc: Daly, Jennifer <JDaly2@mt.gov>
Subject: Huckaba Preapplication Meeting Form

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Thank you for the meeting today. Please let us know if you have any further questions.

Savannah

Savannah Telander| Water Resources Specialist
Helena Water Resources Office
Montana Department of Natural Resources and Conservation
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DESK: 406-444-6810 **EMAIL:** savannah.telander@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]) | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From:	Patrick Byorth
To:	Chris Edgington; Daly, Jennifer; Megan Casey
Cc:	lenhuckaba@icloud.com; Telander, Savannah
Subject:	[EXTERNAL] Re: Huckaba Change in Point of Diversion, Pre-App questions
Date:	Wednesday, October 9, 2024 9:00:41 AM
Attachments:	image001.png image002.png image003.png Outlook-4b3dxa1s.png

Thursday after 1:00 pm works best for me. Thanks,
Pat

Patrick Byorth
Trout Unlimited, Inc.

From: Chris Edgington <chris@montanatu.org>
Sent: Wednesday, October 9, 2024 8:48:23 AM
To: Daly, Jennifer <JDaly2@mt.gov>; Patrick Byorth <Patrick.Byorth@tu.org>; Megan Casey <Megan.Casey@tu.org>
Cc: lenhuckaba@icloud.com <lenhuckaba@icloud.com>; Telander, Savannah <Savannah.Telander@mt.gov>
Subject: Re: Huckaba Change in Point of Diversion, Pre-App questions

I can do Wednesday morning or anytime on Thursday.

Chris Edgington
Jefferson Watershed Project Manager
Montana Trout Unlimited
406.451.3035
www.montanatu.org [montanatu.org]

From: Daly, Jennifer <JDaly2@mt.gov>
Sent: Wednesday, October 9, 2024 7:56 AM
To: Patrick Byorth <Patrick.Byorth@tu.org>; Chris Edgington <chris@montanatu.org>; Megan Casey <Megan.Casey@tu.org>
Cc: lenhuckaba@icloud.com <lenhuckaba@icloud.com>; Telander, Savannah <Savannah.Telander@mt.gov>
Subject: RE: Huckaba Change in Point of Diversion, Pre-App questions

Hello All,
Erin is out on vacation, so Savannah has gone through the preapplication form with the updated information. Next, we need to schedule a meeting to start the official timelines associated with the HB114 process. Since we have met several times, I think we can do this over a Teams meeting and work through the remaining questions. We are open most of Wednesday and Thursday next week. Let

me know what times work for you all and I will get a meeting scheduled. Thanks all!

Jennifer Daly| Regional Manager
Water Resources Helena Regional Office
Montana Department of Natural Resources and Conservation
1424 9th Ave Helena, MT 59620
DESK: 406-444-5783 **EMAIL:** jdaly2@mt.gov
Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]**)** | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Patrick Byorth <Patrick.Byorth@tu.org>
Sent: Wednesday, October 2, 2024 5:12 PM
To: Daly, Jennifer <JDaly2@mt.gov>; Chris Edgington <chris@montanatu.org>; Wall, Erin <Erin.Wall@mt.gov>; Megan Casey <Megan.Casey@tu.org>
Cc: lenhuckaba@icloud.com
Subject: [EXTERNAL] Re: Huckaba Change in Point of Diversion, Pre-App questions

Great, thanks Jen!

Patrick Byorth
Trout Unlimited, Inc.

From: Daly, Jennifer <JDaly2@mt.gov>
Sent: Wednesday, October 2, 2024 3:53:00 PM
To: Patrick Byorth <Patrick.Byorth@tu.org>; Chris Edgington Montana <chris@montanatu.org>; Wall, Erin <Erin.Wall@mt.gov>; Megan Casey <Megan.Casey@tu.org>
Cc: lenhuckaba@icloud.com <lenhuckaba@icloud.com>
Subject: RE: Huckaba Change in Point of Diversion, Pre-App questions

Hi Pat!
Yes, Erin has cleaned up the pre-app form based on the information you provided. I will give it a look tomorrow and we will send it over to you guys to review. Let's chat after that as I don't think there is much left to cover. Jenn Daly

---

From: Patrick Byorth <Patrick.Byorth@tu.org>
Sent: Wednesday, October 2, 2024 3:36 PM
To: Chris Edgington <chris@montanatu.org>; Daly, Jennifer <JDaly2@mt.gov>; Wall, Erin <Erin.Wall@mt.gov>; Megan Casey <Megan.Casey@tu.org>
Cc: lenhuckaba@icloud.com
Subject: [EXTERNAL] RE: Huckaba Change in Point of Diversion, Pre-App questions

Hi Jen and Erin,

Any chance we could get a meeting scheduled for next week? We're eager to get the application launched to prepare arrangements for the spring. Thanks!
Pat

From: Chris Edgington <chris@montanatu.org>
Sent: Friday, September 20, 2024 11:25 AM
To: Patrick Byorth <Patrick.Byorth@tu.org>; Daly, Jennifer <JDaly2@mt.gov>; Wall, Erin <Erin.Wall@mt.gov>; Megan Casey <Megan.Casey@tu.org>
Cc: lenhuckaba@icloud.com
Subject: Re: Huckaba Change in Point of Diversion, Pre-App questions

Thanks to everyone for their work on this.

Erin, when do you think you'll have the application finalized?

I will be out of service next week on a project during business hours, but I want to ensure we get the 180 days started without delay on my end because we need to get an irrigation contractor scheduled soon for the upgrade next spring.

Thanks, and have a great weekend!

Chris Edgington
Jefferson Watershed Project Manager
Montana Trout Unlimited
406.451.3035
www.montanatu.org [montanatu.org]

From: Patrick Byorth <Patrick.Byorth@tu.org>
Sent: Thursday, September 12, 2024 11:42 AM
To: Daly, Jennifer <JDaly2@mt.gov>; Wall, Erin <Erin.Wall@mt.gov>; Megan Casey <Megan.Casey@tu.org>
Cc: lenhuckaba@icloud.com <lenhuckaba@icloud.com>; Chris Edgington <chris@montanatu.org>
Subject: RE: Huckaba Change in Point of Diversion, Pre-App questions

Thanks Jen,
Sorry to hear that you were sick. We'll look forward to getting the pre-app form finished up. Is a meeting still necessary? I ask because I will be out until the first of October. If Chris and Mr. Huckaba are available, I don't want to hold things up.
Pat

From: Daly, Jennifer <JDaly2@mt.gov>
Sent: Monday, September 9, 2024 8:56 AM
To: Patrick Byorth <Patrick.Byorth@tu.org>; Wall, Erin <Erin.Wall@mt.gov>; Megan Casey <Megan.Casey@tu.org>
Cc: lenhuckaba@icloud.com; Chris Edgington Montana <chris@montanatu.org>
Subject: RE: Huckaba Change in Point of Diversion, Pre-App questions

Hi Pat and All,
Erin is going to work on incorporating this information into the preapplication form and get it up to date. Once it is dialed in, we can reschedule a finalizing meeting. Please note I am out of the office all week this week. Also, I apologize for the delay as I was out sick all last week. Thanks and we look forward to getting this moving!

Jennifer Daly| Regional Manager
Water Resources Helena Regional Office
Montana Department of Natural Resources and Conservation
1424 9th Ave Helena, MT 59620
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Website | **Facebook** [facebook.com]| **X (Twitter** [twitter.com]**)** | **Instagram** [instagram.com]
How did we do? Let us know here: Feedback Survey [forms.office.com]

From: Patrick Byorth <Patrick.Byorth@tu.org>
Sent: Tuesday, August 27, 2024 1:12 PM
To: Daly, Jennifer <JDaly2@mt.gov>; Wall, Erin <Erin.Wall@mt.gov>; Megan Casey <Megan.Casey@tu.org>
Cc: lenhuckaba@icloud.com; Chris Edgington <chris@montanatu.org>
Subject: [EXTERNAL] RE: Huckaba Change in Point of Diversion, Pre-App questions

Hi Jen,
Just had a quick note from Morgan and thought I'd confirm that the map and table describing the POU was for your information. We do not intend to change the POU from the description as amended by the Water Court. Thanks!
Pat

From: Patrick Byorth
Sent: Monday, August 26, 2024 3:39 PM
To: Daly, Jennifer <JDaly2@mt.gov>; Wall, Erin <Erin.Wall@mt.gov>; Megan Casey <Megan.Casey@tu.org>
Cc: lenhuckaba@icloud.com; Chris Edgington Montana <chris@montanatu.org>
Subject: RE: Huckaba Change in Point of Diversion, Pre-App questions

Hi Jen and Erin,

Attached are the following exhibits in response to your questions at our second pre-app meeting related to the Huckaba change in POD:

- A Map in response to question 45, corrected to geo-rectify the WRS layer with the proposed (including some existing) irrigation
- A table summarizing and comparing the historic, amended and proposed POU, showing a net reduction of 59.5 acres, and
- Spec sheets for the new pumps at the proposed POD with maps and diagrams.

Hope this helps kick the pre-app into gear. I've added Meg Casey to the discussion. I will be away the rest of this week, but Chris and Meg can likely help answer any questions. Thanks!

Pat

From: Patrick Byorth
Sent: Monday, August 19, 2024 1:57 PM
To: Daly, Jennifer <JDaly2@mt.gov>; Wall, Erin <Erin.Wall@mt.gov>
Cc: lenhuckaba@icloud.com; Chris Edgington Montana <chris@montanatu.org>
Subject: Huckaba Change in Point of Diversion, Pre-App questions

Hi Jen and Erin,
Thanks for taking the time to review the pre-application questions last week. I promised to follow up on a couple issues with Mr. Huckaba and get back to you.

First, there was a question as to whether the roughly 4 acre lobe of a pivot field in the SESENW Sect 11, as portrayed on "Map 44" would be an extension of the existing place of use, triggering a change in place of use. Mr. Huckaba confirmed that when the pivot was installed, that lobe was irrigated as portrayed in the aerial photo (c~2021) that you had on file. However, that section of ground is too irregular, swampy, and unproductive for cultivation and is not irrigated. The pivot is stored on that portion during times when the field is under cultivation or harvest, but not irrigated, which is why more current aerial photographs show wheel paths.

Therefore, a change in place of use is not warranted for this application.

Second, the question was whether claim number 41E 3406 00 should be included in the change application. The Applicant does not intend to change any elements of this claim, therefore, it need not be included in the change application pertinent to the change in POD of the other two claims: 41E 3407 00 and 3408 00.

Third, TU cannot speak for the water rights owned by Golden Sunlight Mine (GSM) and can only assume that they will continue to use their rights until the broader project to remove the Shaw diversion further develops. GSM is a partner in the overall project and will likely undertake a change application in time.

Finally, there were a few items that you requested, including revised maps, pump specifications, and a summary of post-change irrigation. I'm working on gathering that information together and will submit in the next week or so. Please let me know if you need anything further.

Pat

PATRICK BYORTH | Montana Water Director, Western Water and Habitat Project
321 E. Main Street, Suite 411, Bozeman, MT 59715
pbyorth@tu.org | 406.548.4830 | www.tu.org [tu.org]