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

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APPLICATION TO CHANGE WATER RIGHT NO. 43A 30158389 by RED DOG RANCH LLC	)))	**PRELIMINARY DETERMINATION TO GRANT CHANGE**

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On December 8, 2022, Red Dog Ranch LLC (Applicant) submitted Application to Change Water Right No. 43A 30158389 to change Statement of Claim No. 43A 190659-00 to the Bozeman 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 May 26, 2023. The Applicant responded with information dated August 9, 2023. A preapplication meeting was held between the Department and the Applicant on September 21, 2022. The Application was determined to be correct and complete as of November 6, 2023. An Environmental Assessment for this application was completed on February 27, 2024.

INFORMATION

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

Application as filed:

- Application for Change of Appropriation Water Right, Form 606-IR
- Attachments:
    - Exhibit C: Water Resources Survey, T3N, R8E, Park County
    - Exhibit E: Sage Grouse Habitat Project Review Letter
- Maps:
    - Exhibit IR.2.C: Historic Use, map produced by DMS Natural Resources LLC dated 11/21/2022, base map September 10, 1954, USGS
    - Exhibit IR.2.E: Proposed Use, map produced by DMS Natural Resources LLC dated 11/21/2022, base map August 30, 2021, NAIP
    - Exhibit A: Supplemental rights map, produced by DMS Natural Resources LLC dated 11/28/2022, base map October 25, 2017, NAIP
    - Exhibit B: Historic Imagery, produced by DMS Natural Resources dated September 14, 2022, base map September 10, 1954, USGS

- Exhibit B: Historic Imagery, produced by DMS Natural Resources dated September 14, 2022, base map August 20, 1970, USGS
- Exhibit B: Current Imagery, produced by DMS Natural Resources dated September 14, 2022, base map August 30, 2021, NAIP
- Exhibit C: WRS Map, Park County Water Resources Survey map 1951, T3N, R8E, Park County, produced by DMS Natural Resources dated September 14, 2022
- Exhibit D: Cross Section Measurement Locations, produced by DMS Natural Resources, dated November 22, 2022, base map August 30, 2021, NAIP

Information Received after Application Filed

- Email chain between Consultant (William Moore) to DNRC (Lyra Reynolds) dated August 9, 2023, RE: Red Dog Ranch Change Application 43A 30158389 – Deficiency Letter Response
- Email chain between Consultant (Deborah Stephenson) to DNRC (Lyra Reynolds) dated November 6, 2023, RE: Red Dog Ranch 43A 30158389 Correct and Complete (date on correct and complete letter correction request)
- Email chain between Consultant (Deborah Stephenson) to DNRC (Lyra Reynolds) dated November 8, 2023, RE: Red Dog Ranch 43A 30158389 Correct and Complete (return flow policy clarification)
- Email chain between Consultant (Deborah Stephenson) to DNRC (Lyra Reynolds) dated February 14, 2024, RE: Flow Rate Question – Red Dog Ranch Change Application 43A 30158389 (clarification on multiple use flow rate)

Information within the Department's Possession/Knowledge

- DNRC Irrigation Change Application Technical Report: Technical Report, dated November 6, 2023
- Surface Water Change Report dated October 20, 2023, by Jack Landers (DNRC)
- Statement of Claim 43A 190659-00 file
- Water Resources Survey, Park County, 1951
- DNRC surface water and groundwater right records and files
- 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 Bozeman Regional Office at 406-586-3136 to request copies of the following documents.

- DNRC Technical Memorandum: Calculating Return Flow (Levens et al., April 18, 2019)
- DNRC Policy Memorandum – Return Flows (Davis, April 1, 2016)
- DNRC Technical Memorandum – Assessment of new consumptive use and irrecoverable losses associated with change applications (Heffner and Roberts, April 15, 2013)

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, CFS means cubic feet per second; GPM means gallons per minute; AF means acre-feet.

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

1. Applicant seeks to change the point of diversion (POD) and place of use (POU) of Statement of Claim No. 43A 190659-00 in this Application. Claim 43A 190659-00 is filed for 1 CFS flow rate and 210.50 AF diverted volume from Muddy Creek via the Kaiser Ditch headgate for the purpose of irrigation of 49 acres. The period of diversion and period of use are April 1st to October 15th. The POD is in the SWSENW of Section 14, T3N, R8E, Park County, MT and water is conveyed to the place of use by the Kaiser Ditch.

Table 1. Water right proposed for change

WR Number	Purpose	Flow Rate	Volume	Period of Use	Point of diversion	Place of use	Priority date	Acres
43A 190659-00	Irrigation	1 CFS	Historical Use	4/1-10/15	SWSENW Section 14, T3N, R8E, Park Co, MT	S2S2NW Section 13, T3N, R8E, Park Co, MT N2SW Section 13, T3N, R8E, Park Co, MT	06/15/1895	49

2. Claim 43A 190659-00 is owned solely by the Applicant and is not part of a bigger water right. Ownership is clear, and this water right is not part of an undivided interest.

3. The POU is irrigated solely by Claim 43A 190659-00. The conveyance system, the Kaiser Ditch, conveys multiple use Claim No. 43A 30149984, which is an implied Statement of Claim based on irrigation Claim No. 43A 190659-00. An implied Claim is a Claim authorized by the

Montana Water Court that is separated and individually identified when a Statement of Claim includes multiple rights. Claim 43A 30149984 was created because water historically diverted through the Kaiser Ditch, claimed under 43A 190659-00, had multiple uses. The Applicant plans to retire the Kaiser Ditch for irrigation use and will leave the volume associated with the historical conveyance losses in the Kaiser Ditch attributed to the multiple use stock claim.

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

CHANGE PROPOSAL

FINDINGS OF FACT

5. The Applicant proposes to change the POD and POU for Claim 43A 190659-00. The proposed POD is a pump site located in Muddy Creek in the NWNWSE of Section 13, T3N, R8E, Park County. The proposed pump is located approximately 1.6 miles downstream of the historical headgate on Muddy Creek. Water will be diverted through the proposed pump site to the proposed place of use by a pipeline for irrigation of 160 acres in Section 13, T3N, R8E, Park County. All the proposed place of use lies outside the historical place of use. The historical point of diversion and place of use will no longer be used on this water right as a result of this change. All historical acres will no longer be irrigated as a result of this change. The period of diversion and use will remain April 1st to October 15th. No changes to places of storage or purpose are proposed in this Change Application.

6. The Applicant proposes to leave the volume associated with historical return flows associated with irrigation of 49 acres in Muddy Creek at the historical Kaiser Ditch headgate. This volume was identified in the Surface Water Change Report dated October 20, 2023, to be 22.3 AF. The volume of water associated with historical conveyance losses, 154.74 AF, is proposed to be left in the Kaiser Ditch. The proposed diverted volume at the proposed POD will be limited to the historical consumed volume associated with irrigation of 49 acres, equal to 33.46 AF. As a result of the proposed change, Claim 43A 190659-00 will be supplemental to Flathead Creek Claims 43A 190660-00, 43A 190661-00, 43A 190662-00, 43A 190663-00, 43A 190664-00, 43A 190666-00, 43A 190667-00, 43A 190668-00, and 43A 190669-00 on the 160-acre POU.

7. This Change Application will be subject to the following conditions to fulfill the adverse effect criteria:

WATER MEASUREMENT INFORMATION

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED WATER USE MEASURING DEVICE AT A POINT 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 AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE BOZEMAN DNRC WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

IMPORTANT INFORMATION

WATER MAY NOT BE DIVERTED INTO THE KAISER DITCH FOR MULTIPLE USE STOCK CLAIM 43A 30149984 WHEN WATER IS BEING DIVERTED BY 43A 190659-00 FOR IRRIGATION THROUGH THE PUMP SITE LOCATED IN THE NWNWSE OF SECTION 13, T3N, R8E, PARK COUNTY.

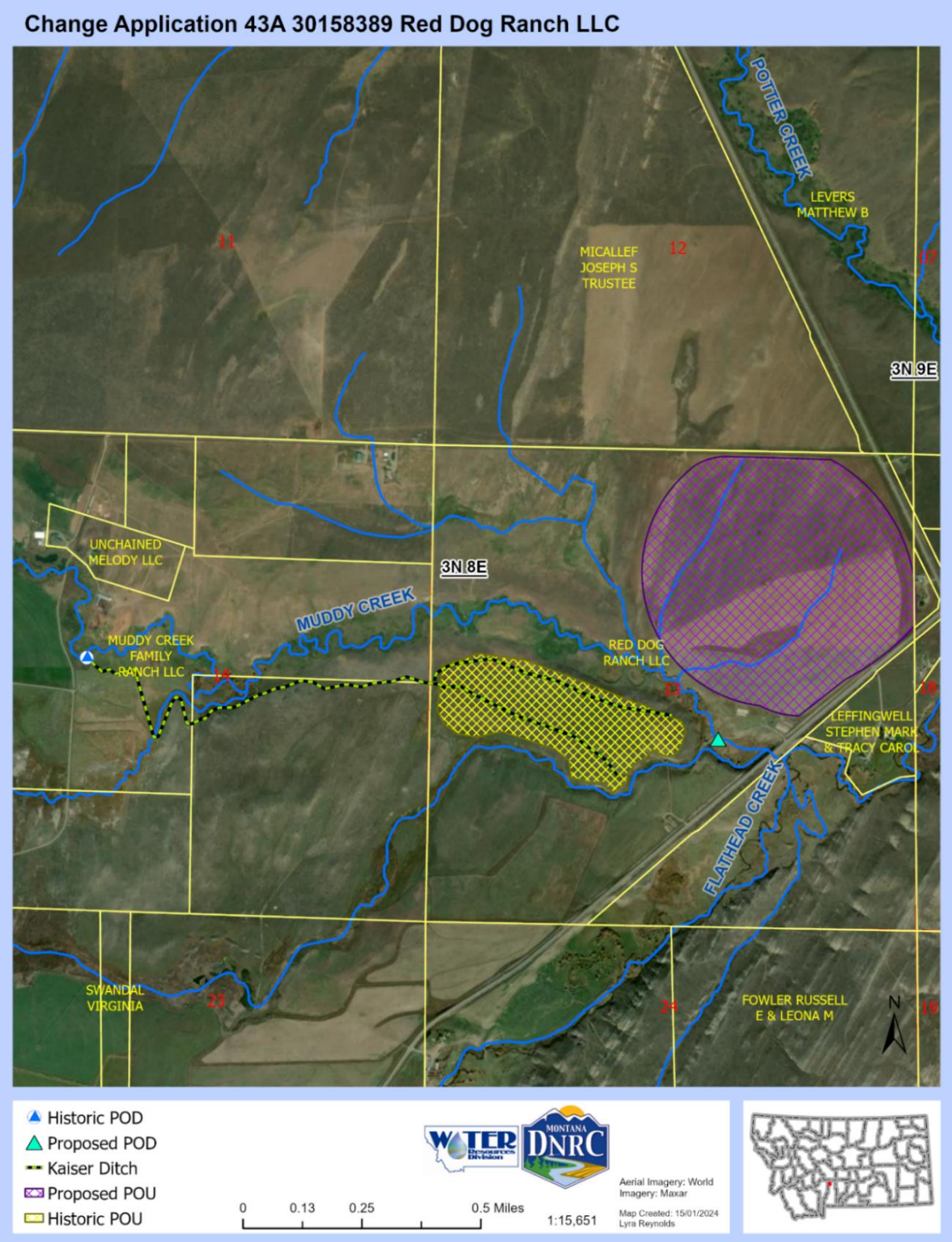

Figure 1. Change Application 43A 30158389 historical and proposed use for Statement of Claim 43A 190659-00

CHANGE CRITERIA

8. 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.

9. 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 Company* (DNRC Final Order 1991).

HISTORICAL USE AND ADVERSE EFFECT

FINDINGS OF FACT - Historical Use

10. Statement of Claim No. 43A 190659-00 is a decreed right for irrigation of 49 acres with a priority date of June 15, 1895. This water right was included in the Montana Water Court Shields River Temporary Preliminary Decree for Basin 43A and the Shields River Preliminary Decree for Basin 43A.

11. Claim 43A 190659-00 is claimed for irrigation of 49 acres in the S2S2NW and N2SW of Section 13, T3N, R8E, Park County. The historical irrigation of 49 acres is supported by the Water Resources Survey (Park County, 1951) and 1979 USDA photo 179-171. The Department finds the maximum number of acres irrigated by Claim 43A 190659-00 is 49 acres.

12. The maximum flow rate for the water right is 1 CFS. This flow rate is shared between multiple use rights 43A 190659-00 and 43A 30149984. Claim 43A 190659-00 is diverted from Muddy Creek through the Kaiser Ditch headgate in the SWSENW of Section 14, T3N, R8E, Park County and conveyed to the POU by the Kaiser Ditch. The Kaiser Ditch conveys only Claims 43A 190659-00 and 43A 30149984.

13. The Department used Applicant-provided ditch measurements and information to calculate the capacity of the Kaiser Ditch at culverts and down-ditch locations using Manning's "n" equation. The capacity of the ditch was calculated to be 24.82 CFS along the ditch and 2.86 CFS at the culvert. The Department determined the Kaiser Ditch capacity is limited at the culvert, and the capacity of the ditch (2.86 CFS) is sufficient to carry the maximum 1 CFS flow rate in the ditch. Ditch measurements at the down-ditch locations and culvert are summarized in Table 2 below. Measurement locations can be seen in Figure 2.

Table 2. Kaiser Ditch measurements

Provided by Applicant						Calculated		
Measurement Location	**Top Width (ft)**	**Bottom Width/Headgate Size**	**Depth (ft)**	**Channel Slope (ft/ft)**	**Manning's N**	**Side Slope**	**Wetted Perimeter (ft)**	**Capacity (CFS)**
Culvert	N/A	20 in	1.57	0.001	0.022	(Circular Channel)	4.41	2.86
1	13	4 ft	2.4	0.002	0.035	1.88	14.20	49.32
2	10	3 ft	1.83	0.002	0.035	1.91	10.90	23.94
3	8.5	4 ft	1	0.001	0.035	2.25	8.92	6.62
AVG (1-3)	10.5	3.67 ft	1.74	0.002	0.035	1.96	11.34	24.82[1]

[1] Capacity, side slope, and wetted perimeter were calculated using the average top width, bottom width, depth, channel slope, and Manning's n of measurement locations 1-3. This capacity value is not the average of the capacities.

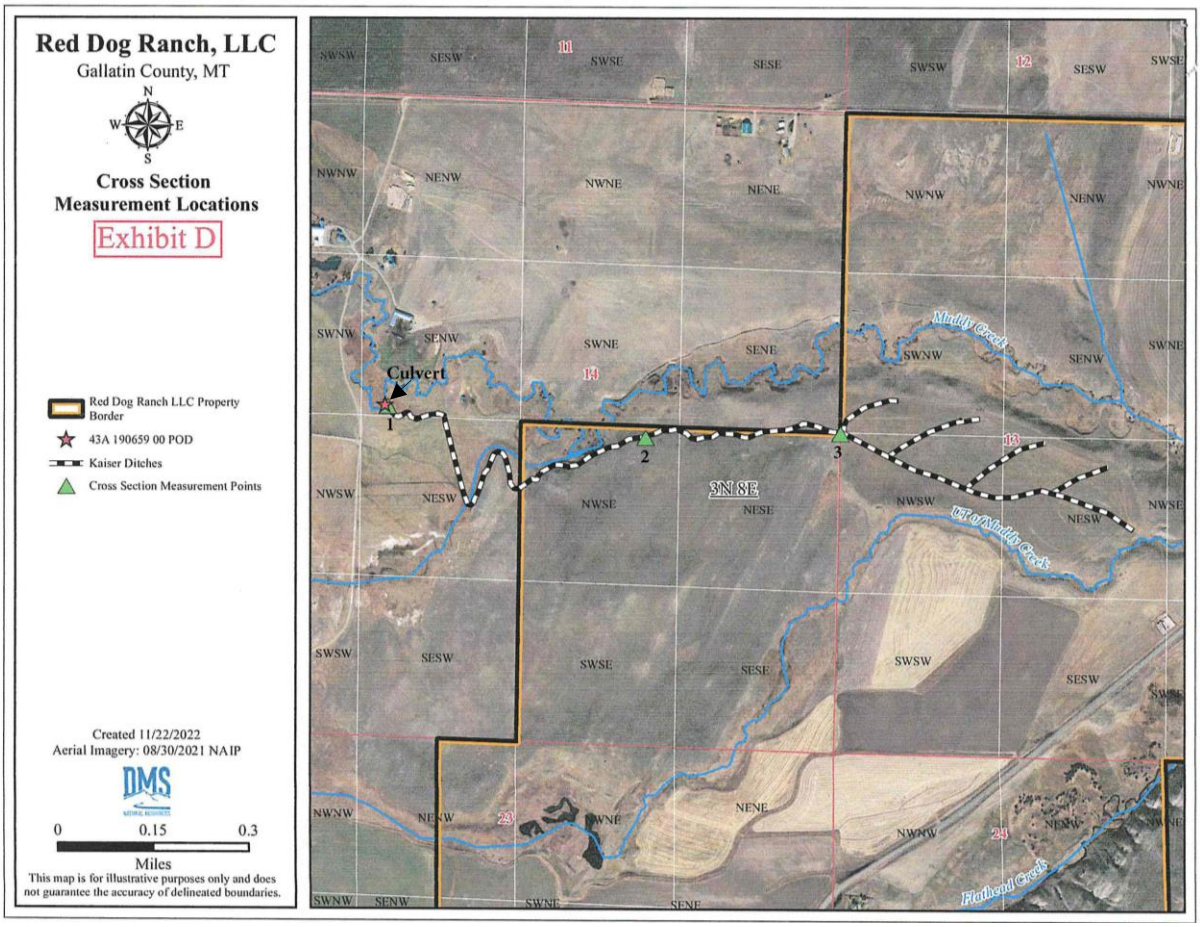

Figure 2. Kaiser Ditch measurement locations, provided as Exhibit D in Application, produced by DMS Natural Resources, annotated by DNRC

14. The water right proposed for change is a Statement of Claim, and the historical use was evaluated as the right existed prior to July 1, 1973. No prior Change Authorizations for the water right have occurred, and no documented history of calls on 43A 190659-00 exists. The Department calculated the historical use using the Department's standard methodology pursuant to ARM 36.12.1902.

15. The Applicant stated water was diverted through the Kaiser Ditch headgate to irrigate the full 49 acres in the historical POU. Water was typically diverted beginning in early April (4/1) to mid-October (10/15), with a two-week pause in diversions for haying in the beginning of July for a total 184 days irrigated. The historical POU was flood irrigated through a system of small lateral ditches for cultivation of natural pasture grass and hay. No improvements, such as field leveling, occurred prior to or after July 1, 1973. There are no supplemental rights on the historical POU; Claim 43A 190659-00 provides sole irrigation to the 49 acres.

16. Using Applicant provided information historical irrigation practices, as well as Department knowledge of the project area, the historical consumptive volume (HCV) for Claim 43A 190659-00 was calculated to be 33.46 AF. The following equations were used to find the HCV; these calculations are summarized in Table 3.

$$HCV = Historic\ Consumptive\ Volume_{minus\ IL} + Historic\ Irrecoverable\ Losses$$

$$HCV_{minus\ IL} = Bozeman\ MT\ State\ ET * \frac{1ft}{12inches} * Gallatin\ County\ Management\ Factor * Historic\ Acres$$

$$Historic\ Irrecoverable\ Losses = Field\ Application * IL\%$$

$$Field\ Application = \frac{HCV_{minus\ IL}}{Field\ Efficiency}$$

Table 3. Historical consumptive volume of Claim 43A 190659-00

Water Right	Wilsall ET (in)	Park County Management Factor	Historical Acres	HCV minus IL (AF)	Field Efficiency	Field Application (AF)	Irrecoverable Losses "IL" * 0.05 (AF)	HCV (AF)
43A 190659-00	13.20	0.569	49.00	30.67	0.55	55.76	2.79	33.46

17. The historical diverted volume (HDV) is the sum of the volume of 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 Kaiser Ditch. Kaiser Ditch is used to convey Claims 43A 190659-00 and 43A 30149984. Historical conveyance losses for the Kaiser Ditch are shared between Claims 43A 190659-00 and 43A 30149984, as the rights are multiple use of the same appropriation of water. The maximum historical diverted volume of Claim 43A 190659-00 was determined by including the full conveyance losses of the Kaiser Ditch during irrigation season. The Department used the following equations to calculate historical diverted volume. These calculations are summarized in Table 4.

$$Historic\ Diverted\ Volume = \frac{Historic\ Consumptive\ Volume_{minus\ IL}}{Field\ Efficiency} + Seasonal\ Conveyance\ Losses$$

Table 4. Historical diverted volume of Claim 43A 190659-00

Water Right	HCV minus IL (AF)	Field Efficiency (percent)	Seasonal Conveyance Loss (AF)	HDV (AF)
43A 190659-00	30.67	0.55	154.74	210.50

18. Seasonal conveyance losses are the sum of seepage loss, vegetation loss, and losses due to ditch evaporation. Using average ditch measurements, the Department calculated seasonal conveyance losses for the Kaiser Ditch. The Applicant stated the full 1 CFS flow rate was diverted from April 1st to October 15th each year from Muddy Creek through the Kaiser Ditch for irrigation and stock use. A two-week pause in irrigation for cutting occurred each year. Claim 43A 190659-00 is only conveyed through the Kaiser Ditch. The Department used ArcGIS Pro 2.7.1 to georeference historical use maps to determine ditch length from the historical POD to the start of the historical POU. Applicant provided information and Department knowledge of the historical area were utilized to find the conveyance losses associated with the historical use of the Kaiser Ditch using the following equations. The conveyance losses were added to the field applied volume to find the HDV for irrigation use. Conveyance loss calculations are summarized in Table 5.

$$Seasonal\ Conveyance\ Loss = Seepage\ Loss + Vegetation\ Loss + \ Ditch\ Evaporation$$

$$Seepage\ Loss = (wetted\ perimeter * ditch\ length * loss\ rate * days) * \frac{1\ acre}{43560 ft^2}$$

$$Vegetation\ Loss = (0.075\%\ loss\ per\ mile) * (flow\ rate)(ditch\ length) * (days) * 2$$

$$Ditch\ Evaporation\ = \frac{ditch\ width * \ ditch\ length * \ adjusted\ net\ evaporation}{43560 ft^2}$$

Table 5. Historical Kaiser Ditch conveyance losses

Ditch Length (ft)	Flow Rate (CFS)	Ditch Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate (ft3/ft2/day)	Days Diverted	Adj. Net Evaporation (in)	Seepage Loss (AF)	Vegetation Loss (AF)	Evaporative Loss (AF)	Total Conveyance Loss (AF)
5171	1	10.50	11.34	0.6	184.00	2.76	148.59	2.70	3.44	154.74

19. The Department finds the following historical use for Claim 43A 190659-00, as shown in Table 6.

Table 6. Historical use of Claim 43A 190659-00

Water Right #	Priority date	Purpose (Total Acres)	Flow Rate	Diverted Volume (AF)	Consumptive Use (AF)	Period of Use	Point of diversion	Place of use
43A 190659-00	06/15/1895	49	1 CFS	210.5	33.46	4/1-10/15	SWSENW Sec 14, T3N, R8E, Park Co, MT	S2S2NW Sec 13, T3N, R8E, Park Co, MT N2SW Sec 13, T3N, R8E, Park Co, MT

ADVERSE EFFECT

FINDINGS OF FACT

20. The Applicant proposes to change the POD and POU for Claim 43A 190659-00. No changes to the period of use or purpose are proposed, and this water right does not involve a place of storage. The historical POD and POU will no longer be used by this water right as a result of this change.

21. The proposed POD is a pump site located about 1.6 miles downstream of the historical Kaiser Ditch headgate on Muddy Creek. The Applicant proposes to divert the full 1 CFS historical flow rate via the proposed pump site to irrigate the proposed 160-acre POU. When irrigation water is being diverted, no water will be diverted by multiple use right 43A 30149984. The proposed place of use is entirely outside the historical place of use, so the Department will evaluate consumptive and diverted volume associated with sprinkler irrigation on all new acres.

22. The consumptive use for center pivot irrigation of 160 acres in the proposed place of use is 164.67 AF, which is about 130 AF more than the historical consumptive use of 49 acres. To prevent expansion of consumptive use, the Applicant proposes to limit the proposed diverted volume to the historical consumptive use of 33.46 AF. Diversions will continue to occur for a period of April 1st to October 15th until a maximum volume of 33.46 AF is reached. Claim 43A 190659-00 will not provide full-service irrigation and will be supplemental to water rights out of Flathead Creek that irrigated the 160-acre POU.

23. Since diversions will be limited to the historical consumptive volume associated with the flood irrigation of 49 acres, the proposed diverted volume is 33.46 AF. To find the proposed consumptive volume, the Department back calculated from the proposed diverted volume. The Kaiser Ditch will be retired for irrigation use, and the proposed POD is a pump site in Muddy Creek that conveys water via a pipeline to the center pivot system. No conveyance losses are associated with the proposed change. The historical Kaiser Ditch conveyance losses that were shared between the multiple use rights during irrigation season are proposed to be attributed to multiple use right 43A 30149984. An irrecoverable loss of 10% and field efficiency of 70% were attributed to the calculations for sprinkler irrigation. The following equations were used to find the proposed consumptive use and are summarized in Tables 7 and 8.

$$Proposed\ Consumptive\ Volume_{minus\ IL} = Proposed\ Diverted\ Volume * Field\ Efficiency$$

$$Proposed\ Consumptive\ Volume = Proposed\ Consumptive\ Volume_{minus\ IL} + Irrecoverable\ Losses$$

$$Proposed\ Irrecoverable\ Losses = Field\ Application * IL\%$$

$$Field\ Application = \frac{Proposed\ Consumptive\ Volume_{minus\ IL}}{Field\ Efficiency}$$

Table 7. Proposed diverted volume of Change 43A 30158389

Proposed Diverted Volume (AF)	Conveyance Loss	Field Efficiency	Proposed Consumptive Volume minus IL (AF)
33.46	0	0.7	23.422

Table 8. Proposed consumptive volume of Change 43A 30158389

Proposed Consumptive Volume minus IL (AF)	Field Efficiency (Percent)	Field Application (AF)	Proposed Irrecoverable Losses "IL" 10% (AF)	Proposed Consumptive Volume (AF)
23.422	0.7	33.46	3.346	26.77

24. The proposed diverted volume of 33.46 AF is 177.04 AF less than historical diverted volume of 210.5 AF. Of the 177.04 AF historical diverted volume not included in proposed diverted use, 154.74 AF is the historical conveyance losses in Kaiser Ditch and 22.3 AF is the return flows from irrigation of 49 acres. The Applicant proposes to attribute the full historical Kaiser Ditch conveyance losses to multiple use right 43A 30149984, therefore 154.74 AF will be left in the Kaiser Ditch after the proposed change. The 22.3 AF historical return flow volume is proposed to be left in stream at the historical Kaiser Ditch headgate to offset the loss of return flows from irrigation of 49 acres.

25. The Surface Water Change Report, dated October 20, 2023, identified 22.3 AF of non-consumed water composed the historical return flows from 49 acres of historical irrigation. Muddy Creek and Flathead Creek were identified as the hydraulically connected surface waters, but less than 10% of return flows historically went to Flathead Creek, so the full historical return flow volume was assigned to Muddy Creek. The return flows associated with the proposed irrigation of 160-acres were identified to accrue in Muddy Creek (71%) and Potter Creek (29%). A total 6.7 AF of return flows under the proposed change would return to the two surface waters – 4.8 AF in Muddy Creek and 1.9 AF in Potter Creek. Under the proposed irrigation, return flows to Muddy Creek would decrease by 17.5 AF. To offset the loss of return flows from the change in place of use, the Applicant is proposing to leave the entire return flow volume associated with irrigation of 49 acres in Muddy Creek at the Kaiser Ditch headgate.

26. No third-party irrigation water rights are conveyed in the Kaiser Ditch, so retirement of the ditch for irrigation purposes will not adversely affect any water rights. No supplemental rights

irrigate the historical place of use, so retirement of the historical POU will not increase the burden on any water rights.

27. To ensure the proposed diverted volume does not exceed the historical consumptive use for irrigation, the Department will require the Applicant to report measurements of use of Claim 43A 190659-00 from Muddy Creek at the proposed pump site. The Applicant will need to report Muddy Creek measurements in a manner that differentiates Flathead Creek use from Muddy Creek use at the proposed pump site. The Application will be subject to the following measurement condition:

WATER MEASUREMENT INFORMATION

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED WATER USE MEASURING DEVICE AT A POINT 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 AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE BOZEMAN DNRC WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

28. Water will not be diverted through Kaiser Ditch for multiple use right 43A 30149984 when the proposed pump is in use for irrigation. To ensure the flow rate shared between the multiple use irrigation (43A 190659-00) and stock (43A 30148894) rights does not exceed 1 CFS, the Applicant will be required to meet the following condition:

IMPORTANT INFORMATION

WATER MAY NOT BE DIVERTED INTO THE KAISER DITCH FOR MULTIPLE USE STOCK CLAIM 43A 30149984 WHEN WATER IS BEING DIVERTED BY 43A 190659-00 FOR IRRIGATION THROUGH THE PUMP SITE LOCATED IN THE NWNWSE OF SECTION 13, T3N, R8E, PARK COUNTY.

29. The maximum proposed diverted volume is 33.46 AF and the maximum proposed consumed volume is 26.77 AF. The Department finds the proposed use is less than historical use and finds leaving 22.3 AF, equal to historical return flows, is sufficient to offset loss of return flows from irrigation of 49 acres.

30. The Department finds attributing Kaiser Ditch conveyance losses multiple use right 43A 30149984, will not create adverse effect. The Department further finds requiring a condition that multiple use right 43A 30149984 cannot be diverted while the proposed POD for Claim 43A 190659-00 is diverting water for irrigation use will result in no expansion of the historical flow rate.

31. The Department finds the proposed change in POD and POU for Claim 43A 190659-00 will not cause adverse effect.

BENEFICIAL USE

FINDINGS OF FACT

32. The Applicant proposes to use water for irrigation, which is a recognized beneficial use of water in the State of Montana. Through the proposed change, the method of irrigation will change from flood irrigation to sprinkler irrigation on a field outside the historical place of use.

33. The Applicant proposes to use 33.46 AF diverted volume and 1 CFS flow rate on the proposed 160-acre place of use. This amount is equal to the historically consumed volume from flood irrigation of 49 acres and is not enough to provide full-service irrigation to the proposed field.

34. The remaining irrigation requirements for the proposed POU are to be met with supplemental irrigation water rights that are not part of this Change Application. Statements of Claim 43A 190660-00, 43A 190661-00, 43A 190662-00, 43A 190663-00, 43A 190664-00, 43A 190666-00, 43A 190667-00, 43A 190668-00, and 43A 190669-00 were part of Change Authorization 43A 19066000 to provide irrigation to the Section 13 160-acre POU. These water rights provide up to 34.69 CFS total to the pivot system, diverted from Flathead Creek. The supplemental irrigation rights can provide full coverage irrigation to the 160-acre POU when sufficient Flathead Creek water is available. The Applicant proposes to use Claim 43A 190659-00 as a redundant supply of water from a different source to the 160-acre POU when the rights diverted from Flathead Creek are not able to provide enough flow rate for full irrigation on their own.

35. Claim 43A 190659-00 is proposed to be supplemental to water rights diverted from Flathead Creek that currently irrigate the proposed place of use. The Applicant states the water rights from Flathead Creek do not provide optimal water supply or flexibility for irrigation and there are substantial losses from the conveyance systems. The Applicant asserts the proposed change to Claim 43A 190659-00 will provide more flexibility and water reliability for irrigation of the 160-acre place of use. Full-service irrigation cannot occur by only diverting water from Muddy Creek, but can occur if Muddy Creek water is used along with Flathead Creek water to irrigate the

proposed 160-acre place of use The Department finds water diverted from Muddy Creek through Claim 43A 190569-00 will provide supplemental irrigation water to the existing Flathead Creek water rights.

36. The Department finds the proposed 1 CFS flow rate and 33.46 AF diverted volume for irrigation purpose to be a beneficial use of water when used as a redundant source of supply to supplement the Claims diverted from Flathead Creek.

ADEQUATE DIVERSION

FINDINGS OF FACT

37. The Applicant proposes to use a pump site to divert and convey water directly from Muddy Creek to a center-pivot sprinkler system. The proposed pump is a Cornell Pump Company pump powered by a diesel motor set at a constant pump rate of 2.17 CFS. The constant flow rate is greater than the 1 CFS flow rate of Claim 43A 190659-00, and the pump to pipeline system has an adequate capacity to divert and convey water to the proposed place of use.

38. The proposed pump will divert at a constant rate of 2.17 CFS, which is greater than the flow rate of Claim 43A 190659-00. To operate the proposed diversion, the Applicant will divert Claim 43A 190659-00 along with supplemental water rights already diverted to the pump site. The Applicant states water is already diverted by Claims 43A 190660-00, 43A 190661-00, 43A 190662-00, 43A 190663-00, 43A 190664-00, 43A 190666-00, 43A 190667-00, 43A 190668-00, and 43A 190669-00 from Flathead Creek to Muddy Creek through a secondary POD and then to the pump site under Change Authorization 43A 19066000. The maximum flow rate diverted to the pump by the supplemental water rights from Flathead Creek is 34.69 CFS, which is enough to operate the proposed pump site alone or along with Claim 43A 190659-00. When Flathead Creek water is not available, the proposed pump site will be turned off and no water will be diverted from Muddy Creek.

39. Since the proposed pump can divert at a higher flow rate than appropriated by Claim 43A 190659-00, the Applicant will be required to provide water measurements as a condition of this change to ensure no expansion as a result of the change.

40. The Department finds the proposed means of diversion and operation of the diversion works to be adequate.

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 the possessory interest, in the property where the water is to be put to beneficial use. (Change Application 43A 30158389 File)

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).[2]

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

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

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.[3]

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.[4] 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

[3] *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).

[4] 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

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).[5]

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

[5] 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.)

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).[6]

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.

[6] 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).

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

48. The Department's rules reflect the above fundamental principles of Montana water law and are designed to itemize the type of 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. 14).

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 Claim 43A 190659-00 to be a diverted volume of 210.5 AF, a historically consumed volume of 33.46 AF, and flow rate of 1 CFS. (FOF Nos. 10—19)

55. Based upon the Applicant’s comparative analysis of historical 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)(b), MCA. (FOF Nos. 20—31)

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. In *Sitz Ranch v. DNRC*, the applicant could only demonstrate need for 200 to 300 acre-feet of water but requested 800 acre-feet. *Sitz Ranch v. DNRC*, DV-10-13390, 2-3, Fifth Judicial District Court, Order Affirming DNRC Decision (2011). The court upheld DNRC's decision that the applicant requested more water than could be beneficially used and thus did not prove beneficial use.

58. 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 33.46 AF of diverted volume and 1 CFS flow rate of water requested is the amount needed to sustain the beneficial use. Section 85-2-402(2)(c), MCA (FOF Nos. 32—36).

ADEQUATE MEANS OF DIVERSION

59. 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).

60. 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. 37—40)

POSSESSORY INTEREST

61. 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.

62. 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 No. 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. 43A 30158389 should be GRANTED subject to the following.

The Applicant is authorized to change the point of diversion and place of use for Statement of Claim 43A 190659-00. The authorized point of diversion is a pump site located in Muddy Creek in the NWNWSE of Section 13, T3N, R8E, Park County. The authorized place of use is 160 acres in the NE, E2E2NW, and N2N2SE of Section 13, T3N, R8E, Park County. Irrigation of 160 acres

is authorized with a total flow rate of 1 CFS, diverted volume of 33.46 AF, and consumed volume of 26.77 AF with a period of diversion and period of use from April 1st to October 15th.

The application will be subject to the following conditions, limitations, or restrictions:

WATER MEASUREMENT INFORMATION

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED WATER USE MEASURING DEVICE AT A POINT 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 AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE BOZEMAN DNRC WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

IMPORTANT INFORMATION

WATER MAY NOT BE DIVERTED INTO THE KAISER DITCH FOR MULTIPLE USE STOCK CLAIM 43A 30149984 WHEN WATER IS BEING DIVERTED BY 43A 190659-00 FOR IRRIGATION THROUGH THE PUMP SITE LOCATED IN THE NWNWSE OF SECTION 13, T3N, R8E, PARK COUNTY.

NOTICE

The Department will provide public 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 decides necessary to satisfy the applicable criteria. E.g., §§ 85-2-310, -312, MCA.

DATED this 1st day of March 2024.

/Original Signed by Kerri Strasheim/
Kerri Strasheim, Manager
Bozeman 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 1st day of March, 2024, by first class United States mail.

RED DOG RANCH LLC
396 NE OATS AVE
MADISON, FL 32340

DEBORAH STEPHENSON (CONSULTANT)
DMS NATURAL RESOURCES
(VIA EMAIL: STEPHENSON@DMSNATURALRESOURCES.COM)

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BOZEMAN Regional Office, (406) 586-3136