BEFORE THE DEPARTMENT OF8
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

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APPLICATION TO CHANGE WATER RIGHT NO. 41G 30159310 BY MELISSA AND JAMES MILLER	**PRELIMINARY DETERMINATION TO GRANT CHANGE**

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On January 9, 2023, Waterloo Land and Cattle LLC (Original Applicant) submitted an Application to Change Water Right No. 41G 30159310 to change Statement of Claim No. 41G 30109772 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 Applicant a deficiency letter under §85-2-302, Montana Code Annotated (MCA), dated May 12, 2023. The Applicant responded with information dated July 13, 2023, and September 8, 2023. Through four separate transactions, the ownership of the place of use of Statement of Claim No. 41G 30109772 changed to John and Joanna Hostetler then to Melissa and James Miller; and TFES 1067 then to LLC and M and A Buildings LLC between the time this Application was submitted and the date of this document. The Application was determined to be correct and complete as of November 30, 2023. An Environmental Assessment for this Application was Completed on 3/8/2024.

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 Water Right, Form 606-IR
- Attachments:
    - Creeklyn Ditch Summary From WRS
    - August 31, 1993, DNRC Field Investigation of Creeklyn Ditch, by Jim Beck
    - Water and Environmental Technologies Photo Journal, Summer 2022
    - Site Features Map, December 30, 2022
    - Creeklyn Ditch Water Right List
    - Historical Water Use Calculations
    - Holter v. Jones Cause No. 3437, March 22, 1945

- Irrigation Water Requirements Calculations, December 30, 2022
- Business Entity Search Waterloo Land and Cattle LLC, December 16, 2022

- Maps:
  - Historic and Proposed Irrigation Area
  - Change Vicinity Map
  - Historic Survey Books Site Map
  - Aerial Photography Site Map
  - 1977 Aerial Photograph Site Map
  - 1960 Aerial Photograph Site Map
  - 1956 Aerial Photograph Site Map
  - 1954 Aerial Photograph Site Map

Information Received after Application Filed

- Deficiency Response dated July 13, 2023: Acknowledgement of Possessory Interest Change,
- Deficiency Response dated September 8, 2023: Details on Historic Diversion Measurements,
- Deed 727721 dated January 17, 2023: Waterloo Land and Cattle LLC to John and Joanna Hostetler
- Deed 208237 dated January 17, 2023: Waterloo Land and Cattle LLC to TFES 1067 LLC
- Deed 210311 dated July 3, 2023: TFES 1067 LLC to M and A Buildings
- Deed 733256 dated November 22, 2023: John and Joanna Hostetler to Melissa and James Miller

Information within the Department's Possession/Knowledge

- Jefferson County Water Resources Survey, June 1956
- Madison County Water Resources Survey, July 1954
- Silver Bow County Water Resources Survey, June 1955
- Historical Aerial Photographs CXJ-CXL-CXK-1B-26, August 2, 1942
- Historical Aerial Photographs 40 30093, September 1979
- USDA Web Soil Survey
- Montana Cadastral
- USGS Topographic Maps

- DNRC Surface Water Change Report, November 14, 2023
- DNRC Technical Report, November 30, 2023
- Environmental Assessment, 3/8/2024

- 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.
  - DNRC Policy Memo - Return flows, April 1, 2016
  - DNRC Policy Memo - Change in Method of Irrigation, December 2, 2015
  - Technical Memorandum: Distributing Conveyance Loss on Multiple User Ditches, February 14, 2020
  - RE: Development of standardized methodologies to determine Historic Diverted Volume, September 13, 2012
  - RE: Assessment of New Consumptive use and Irrecoverable Losses Associated with Change Applications, 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, Department of DNRC means the Department of Natural Resources & Conservation; CFS means cubic feet per second; GPM means gallons per minute; AF means acre-feet; AC means acres; and AF/YR means acre-feet per year.

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

1. The Applicant proposes to change a portion of the place of use on Statement of Claim 41G 30109772 to allow for the operation of a pivot irrigation system. This change will retire 22.6 acres of flood irrigation in E2 Sec 15 1S 5W and proposes to add 15.2 acres of sprinkler irrigation in the same section. All other aspects of the water right will remain the same, including the point of diversion (POD), flow rate, purpose, period of use, etc. With this change, the consumed volume is not changing (FOF 22) and the diverted volume will be reduced from 425.6 AF to 412.9 AF (FOF 26). The point of diversion is now, and will remain at NWSWNW Sec 26 2S 6W, and water is conveyed 11 miles through the Creeklyn 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
41G 30109772	Irrigation, Flood/ Sprinkler	2 CFS	N/A	3/1-11/30	NWSWNW Sec 26, 2S, 6W, Madison Co	SENE Sec 15 1S 5W, NESE Sec 15 1S 5W, SWNE Sec 15 1S 5W, NWSE Sec 15 1S 5W, SWSE Sec 15 1S 5W, SILVER BOW Co	10/3/1897	62

2. Shortly after submitting the Application, the Claim owners at the time, Waterloo Land & Cattle LLC sold the historic place of use to two separate parties. The current Applicants, Miller, Melissa & James do not own the entirety of the historic place of use but do own the entire proposed place of use. The owner of the remaining historic place of use, currently M and A Buildings LLC, have acknowledged that Claim No. 41G 30109772 will lose appurtenance to their property and they will be removed from the water right upon perfection of the proposed change. (FOF 38)

CHANGE PROPOSAL

FINDINGS OF FACT

3. The Applicant proposes to change the place of use (POU) to allow for the operation of a center pivot irrigation system. The historic POU is 4.2 acres in SWNE Sec 15 1S 5W, 16.2 acres in SENE Sec 15 1S 5W, 27.3 acres in NWSE Sec 15 1S 5W, 10.3 acres in NESE Sec 15 1S 5W, and 1.4 acres in SWSE Sec 15 1S 5W. The proposed place of use is 13.2 acres in SWNE Sec 15 1S 5W, 10.7 acres in SENE Sec 15 1S 5W, 21.0 acres in NWSE Sec 15 1S 5W, 7.1 acres in NESE Sec 15 1S 5W, and 0 acres in SWSE Sec 15 1S 5W. See Figure 1. After the proposed change, the Applicant will continue to appropriate 2.0 CFS of water from March 1 to November 30.

4. The proposed center pivot system has an hour-meter that allows for the volume of water diverted to be calculated based on the designed yield of the sprinkler system. The hour-meter will be recorded and made available to the DNRC upon request.

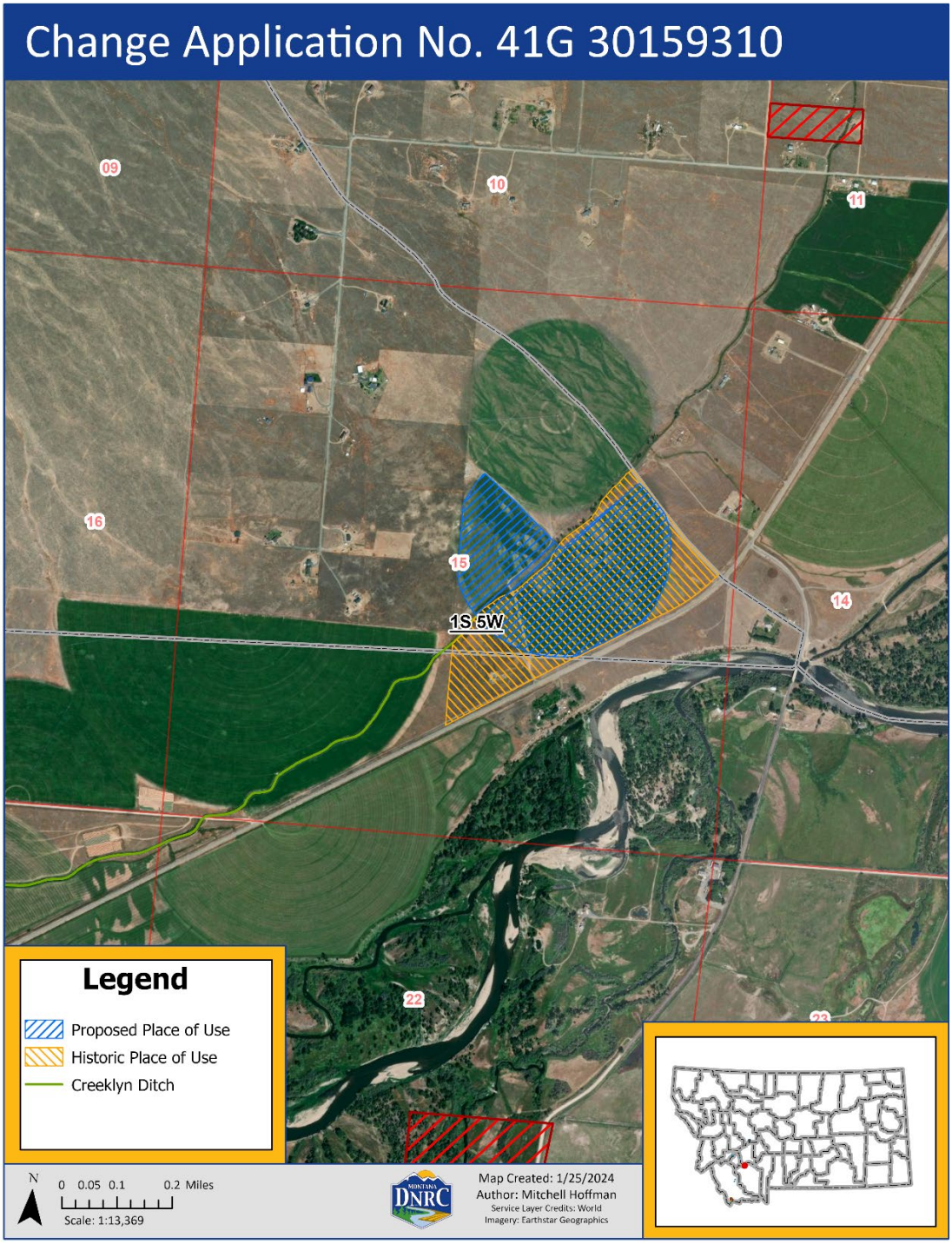

Figure 1. Map Overview

CHANGE CRITERIA

5. 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.

6. 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, at ¶¶ 29-31; Town of Manhattan, at ¶8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

HISTORIC USE

FINDINGS OF FACT

7. ARM 36.12.1902 was used in conjunction with the Applicant's submitted management description to assess the historic use of Claim 41G 30109772.

8. The parent Statement of Claim 41G 206713-00 was decreed in the Madison County Case No. 3437, March 22, 1945. The priority date is October 3, 1897, and was included in the Basin 41G Preliminary Decree. Claim 41G 206713 was split into 6 total claims on March 23, 2017, by the Water Court. 41G 30109772 was among the child rights.

9. The following sources were used as evidence to support the claimed historic use: the 1965 Madison County and 1955 Silver Bow County Water Resource Surveys; claimant provided maps; and historical aerial photographs CXJ-CXL-CXK-1B-26 dated August 2, 1942; and 40 30093 dated September 1979. After review of the evidence, the Department finds the historic POU is 4.2 acres in SWNE Sec 15 1S 5W, 16.2 acres in SENE Sec 15 1S 5W, 27.3 acres in NWSE Sec 15 1S 5W, 10.3 acres in NESE Sec 15 1S 5W, and 1.4 acres in SWSE Sec 15 1S 5W, resulting in a total historically flood irrigated footprint of 59.44 acres.

10. The historic consumptive volume is calculated below using ARM 36.12.1902(10). Although the majority of the place of use is located in Silver Bow County, the Madison County Twin Bridges Climate station and Madison County Management factor were used to calculate the historic consumptive use as they have an elevation profile and climate zone that more closely aligns with the POU. An on-farm efficiency of 55% was used due to the roughly 2% slope and contour ditches at the place of use. There are no water rights supplemental to the historic place of use.

Table 1 Historic Consumptive Volume (HCV) Calculations

Historic Consumptive Volume (HCV) Flood/Sprinkler	Madison County Flood/Sprinkler ET (Inches)	Madison County 1964-1973 Management Factor (Percent)	Historic Acres	HCV AF (minus IL)	On-farm Efficiency	Field Application AF	Historic Irrecoverable Losses (IL) Flood 5%:	HCV AF (Including IL)
	16.98	65.2%	59.44	54.84	55%	99.71	5.0	59.82

11. Statement of Claim No. 41G 30109772 conveys water from the Jefferson River at the historical point of diversion in the NWSWNW SEC 26 2S 6W through 57,280 feet of the Creeklyn Ditch to the historical Place of Use. This ditch is also used to convey water for 21 other water rights (5 of which, including the Claim being changed have been split from Statement of Claim No. 41G 206713-00). 41G 30109772 was decreed with the following remark:

80 MINERS INCH (2.00 CFS) FLOW RATE FOR THIS RIGHT IS MEASURED AT A POINT IN THE CREEKLYN DITCH DOWNSTREAM FROM THE HEADGATE, IN THE SWNWNE, SEC 31, T01S, R05W, MADISON COUNTY, PURSUANT TO THE HOLTER COMPANY V. JONES DECREE, CAUSE NO. 3437, MADISON COUNTY.

This remark was addressed in the deficiency response, received September 8, 2023. In it, the Applicant states that this remark is correct and that the flow rate has historically been measured at the location SWNWNE SEC 31 1S 5W, roughly 6.5 miles down-ditch from the headgate at NWSWNW 26 SEC 2S 6W. Based on this remark the conveyance losses have been calculated starting at this location, rather than from the primary POD. Only 18 of the total 21 water rights using Creeklyn Ditch carry water past this point. The other 3 water rights are therefore not applicable to the proportional conveyance loss calculations.

12. To assess the proportional conveyance loss attributed to Statement of Claim No. 41G 30109772 the procedure outlined in the DNRC's Distributing Conveyance Loss on Multiple User Ditches Memorandum dated February 14, 2020, was used. Starting from the point SWNWNE SEC 31 1S 5W, there are 6 ditch segments, each with a water right, or a group of water rights, diverted at the end of the segment. As described in the Memo, in order to find the overall proportional conveyance loss for 41G 30109772, the proportional conveyance loss must first be calculated for each of the 6 segments. Table 2 lists each water right on Creeklyn Ditch and the ditch segments they flow through. Table 3 calculates 41G 30109772's proportional conveyance loss for each segment, then normalizes this data based on reach length. Finally, these normalized percentages were summed to estimate the total proportional conveyance loss, 13.0%.

Table 2 Segmented Creeklyn Ditch and the Water Rights Using Each Segment

		Ditch Segment					
Water Right Number	Flow Rate (cfs)	1	2	3	4	5	6
41G 195652 00	1.25		n	n	n	n	n
41G 195653 00	3.50		n	n	n	n	n
41G 197150 00	4.50			n	n	n	n
41G 143060 00	8.13				n	n	n
41G 143061 00	11.23				n	n	n
41G 143062 00	3.00				n	n	n
41G 143066 00	5.00				n	n	n
41G 143067 00	6.93				n	n	n
41G 197126 00	1.68					n	n
41G 197127 00	0.72					n	n
41G 30109772	2.00						n
41G 206713 00	0.63						n
41G 30109771	0.25						n
41G 30149974	0.76						n
41G 30149975	0.72						n
41G 30149976	0.63						n
41G 44344 00	0.63						
41G 95603 00	5.63						
Flow Rate Through Each Section (cfs)		57.19	52.44	47.94	13.65	11.25	6.26

Table 3 Claim 41G 30109772's Calculated Proportional Conveyance Loss

Ditch Segment	41G 30109772 Proportional Loss (%)	Segment Length (ft)	Proportional Segment Length (Segment Length/Total Length)	Normalized Proportional Loss (% x Proportional Segment Length)
1	3.5	1464	0.06	0.22
2	3.8	1594	0.07	0.26
3	4.2	2477	0.10	0.43
4	14.7	9818	0.41	6.04
5	17.8	8112	0.34	6.06
6	0.0	NA	NA	0.00
Total Proportional Loss (%):				**13.0**

13. To calculate conveyance loss the following equations were used per ARM 36.12.1902(10):

i. $\text{Seepage Loss} = \frac{\text{wetted perimeter} \times \text{ditch length} \times \text{ditch loss rate} \times \text{days}}{43{,}560\ \text{ft}^2/\text{acre}}$,

ii. $\text{Vegetation Loss} = \left(\% \frac{\text{loss}}{\text{mile}}\right) \times \text{flow rate} \times \text{days} \times \text{ditch length} \times 2\ (\text{unit conversion constant})$,

iii. $\text{Ditch Evaporation} = \frac{\text{ditch surface area} \times \text{evaporation rate}}{43{,}560\ \text{ft}^2/\text{acre}}$.

14. The ditch wetted perimeter and ditch width were submitted by the Applicant and originated from a field visit by DNRC representative Jim Beck dated August 31, 1993. Only Beck's lower measurements were used as it appears from the documentation that these were taken at or near the identified measurement location in Case No. 3437 (SWNWNE SEC 31 1S 5W).

15. Based on the USDA Soil Seepage Loss estimations and Web Soil Survey, the Applicant provided .77 seepage loss is reasonable. The Department's estimation ranges from .7 to .9 based on the mix of silt and sandy loam.

16. Potts (1988) was used to calculate ditch evaporation. As no single station is in close proximity or climatic region to the ditch, the two closest weather stations, Bozeman and Butte were averaged.

Table 4 Historically Consumed Volume (HCV) and Field Application Volume for the Historical Place of Use

Historic Diverted Volume (HDV)	HCV AF *(minus IL)*	On-farm Efficiency	Seasonal Conveyance Loss Volume (seepage loss + vegetation loss + ditch evaporation)	Proportional Conveyance Loss (%)	**Total HDV AF**
	54.84	55%	2506.59	13.0	**425.61**
Seepage Loss:	Ditch Wetted Perimeter (Feet)	Ditch Length *(Feet)*	Ditch Loss Rate (ft3/ft2/day)	Days Irrigated	Seepage Loss *(/43560)*
	16.7	23465	0.77	230	1593.2
Vegetation Loss:	% loss/mile	Est. Flow Rate *(CFS)*	Days Irrigated	ditch length *(miles)*	Vegetation Loss (*2)
	0.75	57.19	230	4.44	876.9
Ditch Evaporation:	Ditch Width *(Feet)*	Ditch Length *(Feet)*	Annual Evaporation *(Potts)* (Feet)		Ditch Evaporation *(/43560)*
	16	23465	4.24		36.5

17. The point of diversion is located at NWSWNW Sec 26, 2S, 6W on the Jefferson River. Water has historically been diverted at the point of diversion and conveyed 11 miles though Creeklyn Ditch to the historic place of use. The 1954 Madison Water Resource Survey identified 752 acres of irrigation from Creeklyn Ditch, decreed in Case 3437, March 23, 1945, at 1300 miner inches (32.5 CFS) of water. Beck's report dated August 31, 1993, identified a maximum recorded flow of 71.6 CFS on the Ditch. This is closer to the DNRC Water Right Database, where all Statements of Claim utilizing Creeklyn Ditch have a combined flow rate of 63.6 CFS. As stated above, 3 of the water rights associated with Creeklyn Ditch remove their water before the identified measurement point. Because of this, the Department finds that 57.19 CFS (63.6 CFS - 6.41 CFS) is an appropriate estimation of the flow rate to be used to assess Creeklyn Ditch loss.

18. According to the historic use description submitted by the Applicant, the maximum period of diversion and period of use has been roughly March 15 through October 31. This period was used in historical use calculations because it is reasonable and typical for this area, but it should be noted that it's less than the decreed period of use for Claim No. 41G 30109772, March 1 to November 30.

19. The Department finds the following historic use, as shown in Table 5.

Table 5 Summary of Historic Use Findings for Claim 41G 30109772

WR #	Priority Date	Diverted Volume	Flow Rate	Purpose (Total Acres)	Consumptive Use	Place of Use	Point of Diversion
41G 30109772	10/3/1897	425.6 AF	2.0 CFS	59.4 acres	59.8 AF	SENE Sec 15 1S 5W, NESE Sec 15 1S 5W, SWNE Sec 15 1S 5W, NWSE Sec 15 1S 5W, SWSE Sec 15 1S 5W	NWSWNW Sec 26, 2S, 6W

ADVERSE EFFECT

FINDINGS OF FACT

20. The Applicant is proposing in to retire 22.6 acres from the historic place of use and irrigate 15.2 new acres using Statement of Claim No. 41G 30109772 to allow for the operation of a center pivot sprinkler irrigation system (see Figure 1). The flow rate and period of diversion are being left

unchanged, and the change in volume is detailed below. No other elements of the Claim are proposed to be changed.

21. Per the 85-2-102(7)(a) and DNRC Efficiency Policy Memo dated December 2, 2015, this Change Application will only address the change in place of use of the Statement of Claim No. 41G 30109772, as well as any changes in conveyance loss, return flow, etc. associated with this change in place of use. For the proposed 36.8 acres that lie within the footprint of the historically irrigated acreage, the Department finds that the proposed consumed and field applied volumes are equal to the historically consumed and field applied volumes.

22. The Applicant claims there is no period of non-use on Statement of Claim No. 41G 30109772 or with the Parent Claim No. 41G 206713-00.

23. The Applicant is proposing to retire 22.6 acres of irrigation in the E2 Sec 15 1S 5W. Using the standards and figures outlined in the historic use analysis (FOF 7-19), the total consumed volume associated with the retired acres (RCV) is 22.8 AF.

Table 6 Retired Consumptive Volume

Retired Consumptive Volume (RCV) Flood Sprinkler	Madison County Flood/Sprinkler ET *(Inches)*	Madison County 1964-1973 Management Factor *(Percent)*	Retired Acres	RCV AF *(minus IL)*	On-farm Efficiency	Field Application AF	Irrecoverable Losses *(IL) Flood 5%:*	**RCV AF *(Including IL)***
	16.98	65.2%	22.63	20.88	55%	37.96	1.9	**22.78**

24. An On-Farm Efficiency of 80% was submitted by the Applicant for the proposed use outside of the historically irrigated acreage. This is slightly outside of typical DNRC standards for sprinkler use (70%) but is a reasonable figure because of the mild slope of the field, and the variance in types of sprinkler irrigation. The Department has opted to use this figure in its calculations. As stated above (FOF 10), the Madison County Twin Bridges Climate station and Madison County Management factor were used to calculate the historic and proposed consumptive use as they have an elevation profile and climate zone that more closely aligns with the POU of interest. The Applicant is proposing to irrigate 15.2 new acres in the E2 Sec 15 1S 5W.

Table 7 Proposed New Consumptive Volume

Proposed New Consumptive Volume (PNCV) Center Pivot	Madison County Center Pivot ET *(Inches)*	Madison County 1997- 2006 Management Factor *(Percent)*	Proposed New Acres	PNCV AF *(minus IL)*	On-farm Efficiency	Field Application AF	Irrecoverable Losses *(IL) Sprinkler 10%:*	**PNCV AF *(Including IL)***
	19.22	83.3%	15.15	20.21	80%	25.27	2.5	**22.74**

22. Per the §85-2-102(7)(a), MCA and DNRC Efficiency Policy Memo dated December 2, 2015, the Total Proposed Consumptive Volume (TPCV) has been calculated based on the Historic Consumed Volume minus the Retired Consumed Volume, plus the Proposed New Consumptive Volume. The TPCV is 59.8 AF. This historic consumptive volume was calculated to be 59.82 AF (rounded to 59.8 AF).

Table 8 Total Proposed Consumptive Volume

HCV AF *(Including IL)*	RCV AF *(Including IL)*	PNCV AF *(Including IL)*	Total Proposed Consumptive Volume AF (HCV-RCV+PNCV)
59.82	22.78	22.74	59.79

25. Neither the point of diversion nor the means of conveyance are changing. As such the Proposed Diverted Volume was calculated using the same conveyance loss figures as FOF 16 and the same proportional conveyance loss as calculated in FOF 12.

Table 9 Total Proposed Diverted Volume

Proposed Diverted Volume (PDV)	Total Proposed Consumptive Volume (HCV-RCV+PNCV)	Field Application (AF)	Seasonal Conveyance Loss Volume (seepage loss + vegetation loss + ditch evaporation)	Proportional Conveyance Loss (%)	**Total PDV AF**
	59.79	87.01	2506.59	13.0	**412.91**
Seepage Loss:	Ditch Wetted Perimeter (Feet)	Ditch Length *(Feet)*	Ditch Loss Rate (ft3/ft2/day)	Days Irrigated	Seepage Loss *(/43560)*
	16.7	23465	0.77	230	1593.2
Vegetation Loss:	% loss/mile	Est. Flow Rate *(CFS)*=	Days Irrigated	ditch length *(miles)*	Vegetation Loss (*2)
	0.75	57.19	230	4.4	876.9
Ditch Evaporation:	Ditch Width *(Feet)*	Ditch Length *(Feet)*	Annual Evaporation *(Potts)* (Feet)		Ditch Evaporation *(/43560)*
	16	23465	4.24		36.5

26. In the Surface Water Change Report by Jack Landers, DNRC Groundwater Hydrologist, Water Sciences Bureau pg 3-4, the return flows were evaluated by determining the volume of water that infiltrates past the root zone and identifying the likely receiving stream(s). The assumption is made that water applied for irrigation that is not consumed by a crop infiltrates to groundwater becoming return flow and does not run off. The amount of water not consumed is the difference between the amount of water consumed and the amount of water applied to a field. Using this calculation, the historic return flows into the Jefferson River, also identified by Landers as the non-consumed volume is 39.9 AF (99.7 AF-59.8 AF). This is higher than the proposed return flows of 27.2 AF (87.0 AF- 59.8 AF), meaning that there is a reduction in return flows with the proposed project. However, this difference, 12.7 AF less return flows, is roughly equal to the reduction in the total diverted volume 12.7 AF (425.6 AF- 412.9 AF). The Department finds that the water withdrawn from Jefferson River will decrease enough to offset any adverse effects caused by the reductions of return flows.

27. The Department finds that the project proposed in Change Application No. 41G 30159310 will not increase Claim No. 41G 30109772's diverted volume, consumed volume, or flow rate associated with the Claim.

28. The Department finds that Change Application No. 41G 30159310 is not an expansion of the historic use of Claim No. 41G 30109772 and will not cause an adverse effect to other water right users.

BENEFICIAL USE

FINDINGS OF FACT

29. The Applicant is proposing to use water for irrigation, which is a recognized beneficial use of water in the State of Montana. Additionally, the increased efficiency of the upgraded irrigation systems will cut down on the use of water that does not directly contribute to the production of crops.

30. The Applicant is not proposing any change to 36.8 acres of irrigation historical use. This was deemed a beneficial use historically and continues to provide benefit to the Applicants.

31. The Applicant, through retiring 22.6 acres, will be irrigating a new place of use of 15.2 acres. The method of irrigation will be a center pivot on all 52.0 acres. The new consumed volume for this use will be 59.8 AF, which due the retired acres, is the same as the historic consumed volume. The new diverted volume for this use will be 412.9 AF, less than the historic volume 425.6 AF. The difference in diverted volume between the historical use and proposed use is being left in stream to meet the conditions of the Department's policy regarding return flows. The means of conveyance isn't changing through this Application, and thus the volume associated with the proposed conveyance loss is the same as historical conveyance loss.

32. The total beneficial use for Claim 41G 30109772 will be 412.9 AF of diverted volume and 2.0 CFS flow rate for use on 52.0 acres for irrigation.

33. The Department finds that the Applicant has shown a beneficial use for the proposed project.

ADEQUATE DIVERSION

FINDINGS OF FACT

34. Historically, the point of diversion was a headgate on Jefferson River at the NWSWNW Sec 26, 2S, 6W. The water was then conveyed 11 miles down Creeklyn Ditch to the historic POU. The diversion and means of conveyance will remain unchanged in the proposed application. Per Beck's August 31, 1993, field visit, Creeklyn Ditch is an adequate means of conveyance for the historic flow rate. This flow rate, 2.0 CFS, will not change in the proposed project. The proposed diverted volume is less than the historic diverted volume due to the increased efficiency of a pivot

irrigation system. The Applicant has shown that the diversion structure is sufficient for the unchanging flow rate.

35. The Department finds that the continued use of the existing diversion structure, as is proposed in the submitted Change Application No. 41G 30159310 is adequate to meet the Applicant's needs for beneficial use.

POSSESSORY INTEREST

FINDINGS OF FACT

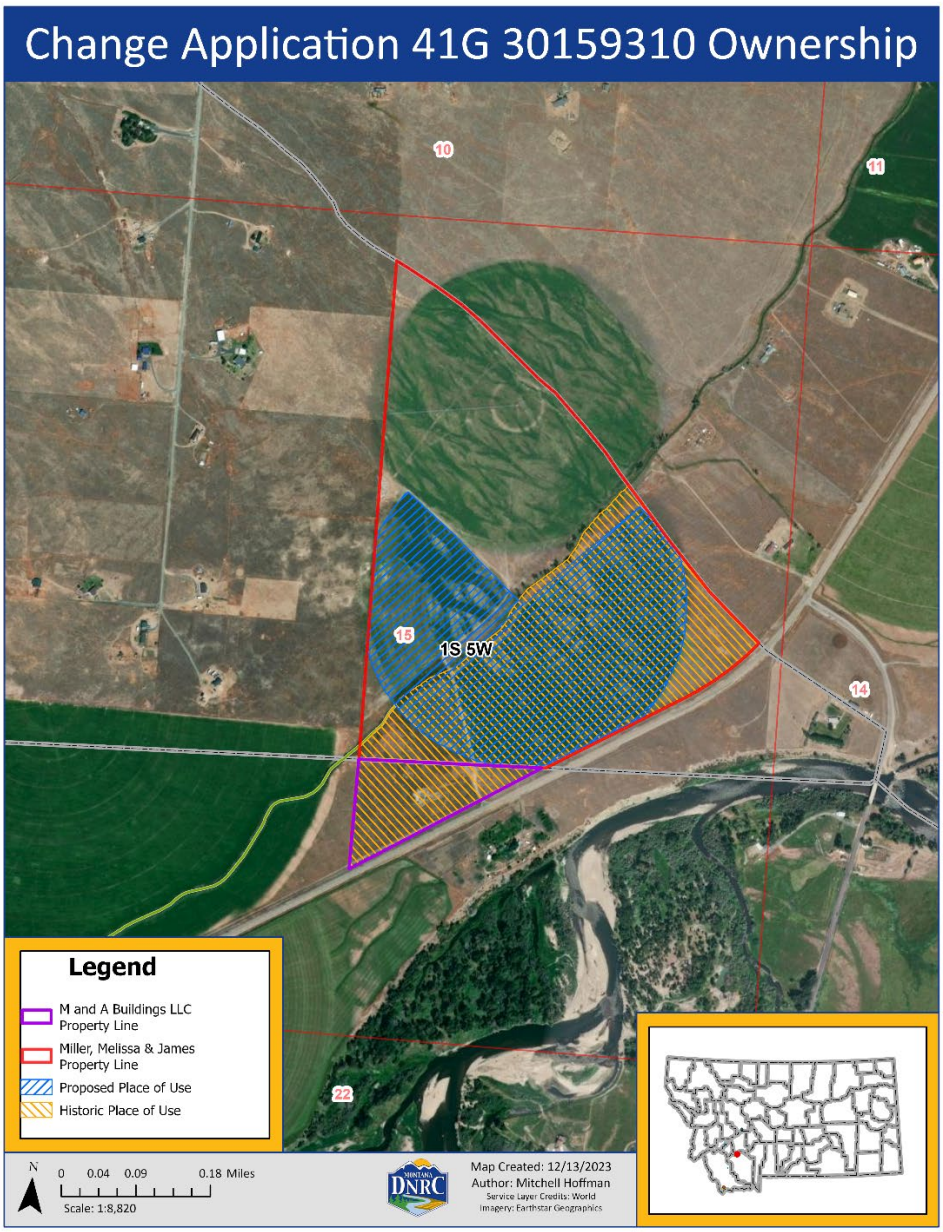

Figure 2

36. The historic place of use spans two parcels, both were owned by Waterloo Land & Cattle at the time the Change Application was submitted but have since been sold. On January 17, 2023, the Sliver Bow County and Madison County parcels were sold to two separate parties, Hostetler Joanna & John and TFES 1067 LLC respectively. On November 22, 2023, Hostetler Joanna & John sold their parcel to Miller, Melissa & James who are the current owners. TFES 1067 LLC sold to M and A Buildings LLC on July 3rd, 2023. See Figure 2 for the current ownership at the time of writing.

37. M and A Buildings LLC owns land in W2SE Sec 22 1S 5W also referred to as the Madison County parcel. This parcel is appurtenant to the historic place of use, but not the proposed place of use. All irrigated acres on M and A Buildings LLC's property are proposed to be retired in this change. They will no longer own appurtenant property if this change is authorized and will no longer have an ownership interest in the Claim 41G 30109772. On June 11th, 2023, predecessors of the Madison County parcel, TFES 1067 LLC, signed a letter acknowledging the proposed change. After buying the parcel, M and A Buildings LLC verbally confirmed their understanding of TFES's signature and opted not to update the ownership on the Statement of Claim 41G 30109772 into their name.

38. The Department find that the Applicants Miller, Melissa & James have shown adequate possessory interest over the proposed place of use. Furthermore, the Department finds that M and A Buildings LLC have no possessory interest in the proposed place of use, and the owners of their above-stated Madison County parcel will be removed from the Claim 41G 30109772 at the time of perfection.

CONCLUSIONS OF LAW

HISTORIC USE AND ADVERSE EFFECT

39. 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, at ¶ 10 (an appropriator's right only attaches to the amount of water actually taken and beneficially applied); Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* Pg. 9 (2011)(the rule that one may change only that to which it has a right is a fundamental tenet of Montana water law and imperative to MWUA change provisions); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004).[1]

40. 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, at ¶¶43-45.[2]

41. 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, at ¶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.[3] A comparative analysis of the historic use of the water right to the

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

[2] 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).

[3] 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. §85-2-234, MCA

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, at ¶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).[4]

42. 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.

[4] 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.)

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, at ¶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; In the Matter of Application for Change Authorization No. G (W)028708-411 by Hedrich/Straugh/Ringer, DNRC Final Order (Dec. 13, 1991); In the Matter of Application for Change Authorization No. G(W)008323-G76l By Starkel/Koester, DNRC Final Order (Apr. 1, 1992); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004); Admin. R.M. 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).[5]

43. 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 ¶¶ 45-6 and 55-6; Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 731. Noted Montana Water Law scholar Al Stone explained that the water right holder who seeks to change a water right is unlikely to receive the full amount claimed or historically used at the original place of use due to reliance upon return flows by other water users. Montana Water Law, Albert W. Stone, Pgs. 112-17 (State Bar of Montana 1994).

44. 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

[5] 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, ¶¶ 22, 31,43, 198 P.3d 219, ¶¶ 22, 31,43(*citing* Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

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).

45. 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. A.R.M. 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. A.R.M. 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. A.R.M. 36.12.1901 and 1903.

46. 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).

47. 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).

48. 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).

49. 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. Admin. R. M. 36.12.1902 (16). In the alternative an Applicant may present its own evidence of historic beneficial use. In this case Applicant has/has not elected to proceed under Admin. R.M. 36.12.1902. (FOF 7).

50. If an Applicant seeks more than the historic consumptive use as calculated by A.R.M .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., supra; 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").

51. Based upon the Applicant's evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of Claim No. 41G 30109772 to be a diverted volume of 425.6 AF, a historically consumed volume of 59.8 AF, and flow rate of 2 CFS. (FOF 7-19)

52. 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. §85-2-402(2)(b), MCA. (FOF 20-28)

BENEFICIAL USE

53. A change Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. §§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. Admin.R.M. 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, Montana First Judicial District Court (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, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, Pg. 3 (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).

54. The Department can also consider waste in a change proceeding. Hohenlohe at ¶ 71. Waste is defined to include the "application of water to anything but a beneficial use." §85-2-102(23), MCA. An absence of evidence of waste does not prove the amount requested is for a beneficial use. E.g., *Stellick*, supra.

55. Applicant proposes to use water for irrigation which is a recognized beneficial use. §85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence irrigation is a beneficial use and that 412.9 AF of diverted volume and 2CFS flow rate of water requested is the amount needed to sustain the beneficial and is within the standards set by ARM 36.12.1901-1904 §85-2-402(2)(c), MCA (FOF 29-33)

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. In the Matter of Application to Change a Water Right No. G129039-76D by Keim/Krueger (DNRC Final Order 1989)(whether party presently has easement not relevant to determination of adequate means of diversion);

58. In the Matter for Application to Change a Water Right No. 101960-41S by Royston (DNRC Final Order 1989)(means of diversion and conveyance found to be inadequate where the irrigation

system was designed for flow rates of 750 gpm, the maximum usage allowed during non-high water periods was 144-247 gpm, and the evidence failed to demonstrate that the system could be operated at the lower flow rates)(*affirmed*, Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston, 249 Mont. 425, 816 P.2d 1054(1991))

59. In the Matter of Application for Beneficial Water Use Permit No. 43B-30002710 by USDA (DNRC Final Order 2005) (specific ditch segments would be adequate after completion of maintenance and rehabilitation work).

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 34-35)

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 A.R.M. 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 36-38)

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. 41G 30159310 should be GRANTED subject to the following:

The Applicant retires the historic 22.6 acres in E2 Sec 15 1S 5W and irrigates the proposed 15.2 acres in E2 Sec 15 1S 5W. The authorized change in place of use is 13.2 acres in SWNE Sec 15 1S 5W, 10.7 acres in SENE Sec 15 1S 5W, 21.0 acres in NWSE Sec 15 1S 5W, 7.1 acres in NESE Sec 15 1S 5W, and 0 acres in SWSE Sec 15 1S 5W. All other elements of Claim No. 41G 30109772 will remain unchanged.

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 21st day of March 2024

/Original Signed by Jennifer Daly/

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 21st day of March 2024, by first class United States mail.

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_____

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