

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

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APPLICATION TO CHANGE WATER RIGHT) NO. 41K 5004-00 BY BONNIE L. LARSEN &) AMANDA S. HENDRICKSON)	DRAFT PRELIMINARY DETERMINATION TO GRANT CHANGE
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On July 17, 2025, Bonnie L. Larsen and Amanda S. Hendrickson (Applicants) submitted Application to Change Water Right No. 41K 30170695 to change Statement of Claim NO. 41K 5004-00 (subject right) to the Lewistown Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the application on its website. A Preapplication Meeting was held between the Department and the Applicants on April 8, 2025, in which the Applicants designated that the Technical Analyses for this application would be completed by the Department. The Applicants returned the completed Preapplication Meeting Form on April 29, 2025. The Department delivered the technical analyses on June 13, 2025. The Application was determined to be correct and complete as of August 7, 2025. An Environmental Assessment for this application was completed on August 11, 2025.

INFORMATION

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

Application as filed:

- Application to Change a Water Right, Form 606
- Maps:
 - “Question 170” physical edited/hand-marked-up ariel imagery supplied by the Applicants during scoping session on March 3, 2025. Imagery dated February 23, 2025. The marked-up imagery was used by the Department as a reference for creating **Figure 1** below (Project Overview Map).
- Department-completed Technical Analyses (Parts A & B), based on information provided in the Preapplication Meeting Form. Completed by Matthew Shaw (Water Resource Specialist, Lewistown Regional Office) & Kimberley Bolhuis (Groundwater Hydrologist, Water Science Bureau), dated June 13, 2025.

Information Received after Application Filed

- Replacement pump invoice (Northwest Pipe Fittings, Inc. invoice No. 2385098, dated July 3, 2025) and pump specifications from Applicant, Bonnie L. Larsen. Received by DNRC on July 14, 2025.
- Letter from proposed place of use property owners, Tyrone and Mary Robinson to DNRC, Re: written permission for Application No. 41K 30170695, received by DNRC on July 22, 2025.
- Letter from proposed place of use property owners, John R. and Renae Ostle to DNRC, Re: written permission for Application No. 41K 30170695., received by DNRC on July 30, 2025.

Information within the Department's Possession/Knowledge

- Water Resources Survey aerial photos MX-4G-31 Cascade County 1950 and MX-4G-32 Cascade County, both dated August 28, 1950.
- Claim file No. 41K 5004-00.
- 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 Lewistown Regional Office at 406-538-7459 to request copies of the following documents.
 - Development of standardized methodologies to determine Historic Diverted Volume Memo dated September 13, 2012.

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, Statement of Claim No. 41K 5004-00 is synonymous with “the subject right”; the Department or DNRC means the Montana Department of Natural Resources & Conservation; ARM means Administrative Rules of Montana; WRS means Water Resource Survey; MCA means Montana Code Annotated; CFS means cubic feet per second; GPM means gallons per minute; AF means acre-feet; and AF/YR means acre-feet per year; AC means acres; IN means inches; FT means feet; hp means horsepower; IWR means Irrigation Water Requirement; LLD means legal land description; Sec. means Section; TWP means Township; RGE means Range; L&G means lawn & garden (purpose of use).

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

1. The Applicants seek to temporarily change the purpose of use (from irrigation to L&G) and place of use of Statement of Claim No. 41K 5004-00 in this Application. Statement of Claim No. 41K 5004-00 is filed for 38.40 GPM flow rate and an undefined diverted volume as decreed by the Montana Water Court. Appropriated water is sourced from the Sun River, utilizing a pump, for the purpose of irrigating a claimed maximum acres of 6.20 AC. The period of diversion and period of use is May 1 to October 31. The point of diversion is in the SESENE of Sec. 31, TWP 21N, RGE 2E, Cascade County. Water is conveyed to sprinkler heads within the places of use by means of a flexible pipeline distribution system. Statement of Claim No. 41K 5004-00 has four claimed places of use. LLDs of the places of use are listed in **Table 1** below. Note that because of subdivision the places of use may also be described as within Lots 1, 2, and 3 of Block 5 of Twin Silos Ranchettes subdivision in Cascade County. A summary of the subject right is provided in **Table 2** below.

Table 1: Places of use for statement of Claim No. 41K 5004-00

ID	Acres	LLD ¹
1	2.12	SESENE Sec. 31, TWP 21 N, RGE 2E, Cascade County
2	3.78	SWSWNW Sec. 32, TWP 21 N, RGE 2E, Cascade County
3	0.12	NWNWSW Sec. 32, TWP 21 N, RGE 2E, Cascade County
4	0.18	NENESE Sec. 31, TWP 21 N, RGE 2E, Cascade County
Total	6.20	

¹The four historic places of use are within Lots 1, 2, 3 of Block 5 of Twin Silos Ranchettes subdivision.

Table 2: Water Right Proposed for Change

Water Right Number	Flow Rate (GPM)	Volume (AF)	Purpose	Period Of Use & Diversion	Place Of Use	Point Of Diversion	Priority Date
41K 5004-00	38.40	Undefined (Total vol. shall not exceed amount put to historical and beneficial use.)	Irrigation	May 1 to October 31	(See Table 1 above)	SESENE Sec. 31, TWP 21N, RGE 2E, Cascade County	October 7, 1892

2. There are no supplemental or overlapping water rights at the documented place of use for Statement of Claim No. 41K 5004-00.

3. Statement of Claim No. 41K 5004-00 underwent a previous change authorization (Change Authorization No. 41K 500499) which changed the subject right's point of diversion. The point of diversion was changed from the NWNWNE Sec. 5, TWP 20N, RGE 2E, Cascade County to SESENE Sec. 31, TWP 21N, RGE 2E, Cascade County. This point of diversion in SESENE Sec. 31, TWP 21N, RGE 2E, Cascade County will be considered the "historical point of diversion" in Application to Change Water Right No. 41K 30170695, in accordance with ARM 36.12.1902(1)(a) and in keeping with the current water right abstract for Statement of Claim No. 41K 5004-00 (version 4, Post Decree). Change Authorization No. 41K 500499 has an Operating Authority date of May 27, 1986, and a Project Completion Notice date of August 2, 1986. Typical of the period in which Change Authorization No. 41K 500499 was authorized, the Department did not quantify historical use.

CHANGE PROPOSAL

FINDINGS OF FACT

4. The Applicants propose to temporarily change the place of use and purpose for Statement of Claim No. 41K 5004-00. The duration of the temporary change is proposed to be 10 years. The proposed place of use consists of a total of 2.88 AC in the SESENE Sec. 31 TWP 21N RGE 2E and S2SWNW Sec. 32 TWP 21N RGE 2E, Cascade County. The purpose of use is proposed to be temporarily changed from irrigation to L&G. After this change, the Applicants will appropriate up to 7.20 AF at a flow rate of 38.40 GPM. The proposed period of use is May 1 to October 31. The new use will not result in commingling with any other water rights that were not associated prior to the change. Aspects of the proposed project are portrayed in **Figure 1** below.

5. Water appropriated under this change would temporarily put water to beneficial use for the purpose of L&G, not only on the Applicants' properties, but also on that of Tyrone and Mary Robinson as well as John R. and Renae Ostle. To fully satisfy possessory interest criteria, the Applicants procured written permission from the Robinsons and the Ostles. (See Department file No. 41K 30170695.)

Project Overview Map--Application to Change a Water Right No. 41K 30170695

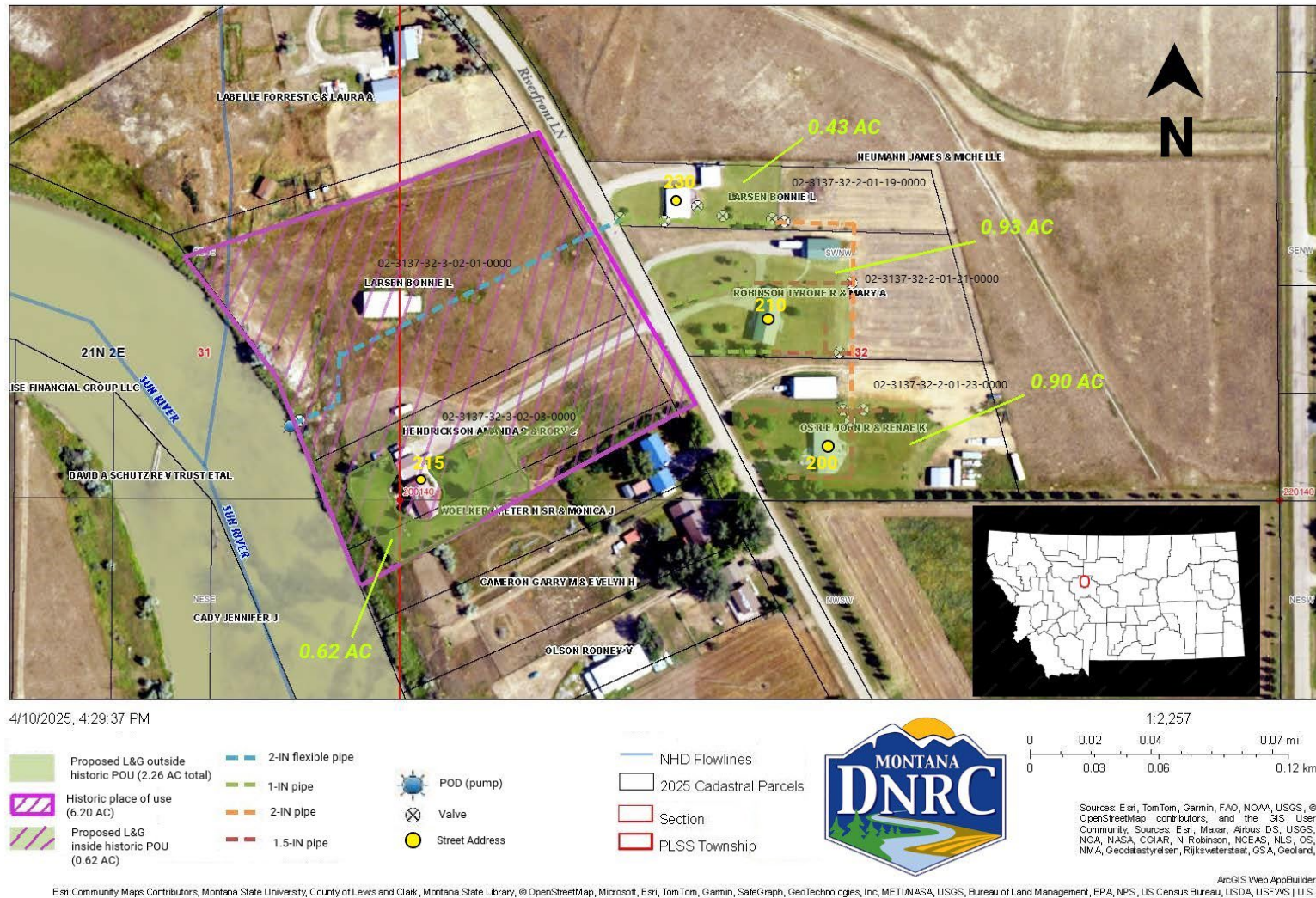


Figure 1. Project Overview Map, created by Matthew Shaw of DNRC on April 10, 2025.

CHANGE CRITERIA

6. The Department is authorized to approve a change if the Applicants 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 Applicants' 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.

7. 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).

8. The Applicants seek a temporary change in appropriation for Statement of Claim No. 41K 5004-00 through DNRC approval and in accordance with 85-2-407, MCA. The proposed duration of the temporary change is 10 years, subject to the renewal process outlined in MCA 85-2-407(3).

HISTORICAL USE AND ADVERSE EFFECT

FINDINGS OF FACT - Historical Use

9. The Department corroborated the priority date for Statement of Claim No. 41K 5004-00 utilizing Cascade County District Court Case No. 4742, dated July 28th, 1980. (See Department file No. 41K 30170695). DNRC finds the subject right's priority date to be October 7, 1892. The decree status of Statement of Claim No. 41K 5004-00 is Post Decree with Operating Authority date of January 3, 2025. The Post Decree version is version No. 4 of the subject right. No elements of Statement of Claim No. 41K 5004-00 have been changed since Change Authorization, version 2, with Operating Authority May 27, 1986. This includes a Reexamined, version 3 with Operating Authority date of January 28, 2021.

10. Historically, a total of 6.20 AC was irrigated, via sprinkler, with the source of water being the Sun River. Water was conveyed from the point of diversion (pump) to the place of use via enclosed pipeline. Four places of use, all within TWP 21N, RGE 2E, Cascade County, were claimed. The historical places of use (as summarized in Table 1 above) include 2.12 AC in the SESENE Sec. 31; 3.78 AC in the SESENE Sec. 32; 0.12 AC in the NWNWSW Sec. 32; and 0.18 AC in the NENESE Sec. 31. DNRC verified the historic place of use via WRS aerial photos MX-4G-31 Cascade County and MX-4G-32 Cascade County, both dated August 28, 1950.

11. The Department utilized ARM 36.12.1902(16) standards and methodology to calculate historic use. In accordance with ARM 36.12.1902(1)(a), Statement of Claim No. 41K 5004-00's historic use is described within Application to Change Water Right No. 41K 30170695 as conditions existed at the date of completion of previous Change Authorization No. 41K 500499 (May 27, 1986). DNRC finds the historical diverted volume and historical consumptive volume for Statement of Claim No. 41K 5004-00 to be 9.35 AF/YR and 7.48 AF/YR, respectively. Variables used by the Department to achieve the volumetric figures include the historical acres (6.20 AC); an IWR of 18.1 IN for flood irrigation/wheeline/handline near the Sun River (Cascade County) Weather Station, as per ARM 36.12.1902(16); a historic (1973-2006) management factor of 70.0% for Cascade County, as per ARM 36.12.1902(16); an irrecoverable loss rate of 10% for sprinkler systems, as per ARM 36.12.1902(17)(b); and an on-farm efficiency of 70% for sprinkler irrigation, as per ARM 36.12.115(2)(e). There is no historical conveyances loss as water was historically conveyed via enclosed pipeline from point of diversion to place of use.

Table 3. Historically consumed volume (HCV) and field application volume for the historical place of use:

Sun River Weather Station (Cascade County), handline sprinkler ET (IN)	Historical (1973-2006) Management Factor (%), Cascade County	Historically Irrigated Acres	HCV (AF) (Excluding IL)	On- Farm Efficiency (%)	Field Application Volume (AF)	Historical Irrecoverable Loss (IL) (AF): [Sprinkler, 10%]	HCV (AF) (Including IL)
18.1	70	6.20	6.55	70	9.35	0.94	7.48

12. Upon review of Department records and the Applicants' testimony, DNRC finds no supplemental relationships exist between Statement of Claim No. 41K 5004-00 and other water rights.

13. The historical point of diversion for Statement of Claim No. 41K 5004-00 is in the SESENE Sec. 31 TWP 21N RGE 2E Cascade County (Lot 1, Block 5, Twin Silos Ranchettes subdivision).

14. Historically, water is pumped from the Sun River, then conveyed via 2 IN diameter pipeline to the place of use (adjacent to the Sun River) and applied via hand-set sprinklers. DNRC recognized the claimed pump capacity of 70 GPM under Change Authorization No. 41K 500499. The Department finds that the historical conveyance system had the capacity to irrigate the historic place of use.

15. Both the historical periods of diversion and of use are May 1 to October 31. Diversion and use have historically occurred consistently throughout the entirety of this interval.

16. Per Department standard practice, the Historical Diverted Volume is the sum of the field application volume and the calculated conveyance loss. There is no conveyance loss for Statement of Claim No. 41K 5004-00 as water was historically conveyed via enclosed pipeline from point of diversion to place of use. As such the historical diverted volume will be equal to the field application volume. The Department finds the historical diverted volume to be 9.35 AF. **Table 4** below details variables in the historical diverted volume calculations.

Table 4: Historical diverted volume of Statement of Claim 41K 5004-00.

Water Right Number	Field Application Volume (AF)	Conveyance Loss Volume (AF)	Historically Diverted Volume (AF)
41K 5004-00	9.35	0	9.35

17. The Department finds the following historical use, as shown in **Table 5** below.

Table 5. Summary of historical use findings for Statement of Claim No. 41K 5004-00.

WR #	Priority Date	Diverted Volume (AF)	Flow Rate (GPM)	Purpose (Total Acres)	Consumptive Use (AF)	Place of Use	Point of Diversion
41K 5004-00	October 7, 1892	9.35	38.40	Sprinkler Irrigation (6.20)	7.48	See Table 1 above	SESENE Sec. 31, TWP 21N, RGE 2E Cascade County

ADVERSE EFFECT

FINDINGS OF FACT

18. The proposed use of water would temporarily change Statement of Claim No. 41K 5004-00's purpose of use and place of use. The purpose of use would change from irrigation to L&G. The proposed place of use consists of a total of 2.88 AC within the SESENE Sec. 31 TWP 21N RGE 2E (0.20 AC) and S2SWNW SEC 32 T 21N R 2E (2.68 AC), Cascade County. **Table 6** below summarizes the purposed place of use and LLDs. The temporary change is proposed for a duration of 10 years, subject to the renewal process outlined in MCA 85-2-407(3).

Table 6: Proposed places of use for statement of Claim No. 41K 5004-00.

ID	Acres	LLD
1	0.90	Twin Silos Ranchettes, Sec. 32, TWP 21 N, RGE 02 E, Block 004, Lot 021, Cascade County
2	0.93	Twin Silos Ranchettes, Sec. 32, TWP 21 N, RGE 02 E, Block 004, Lot 023, Cascade County
3	0.43	Twin Silos Ranchettes, Sec. 32, TWP 21 N, RGE 02 E, Block 004, Lot 025, Cascade County
4	0.62	Twin Silos Ranchettes, Sec. 32, TWP 21 N, RGE 02 E, Block 005, Lot 003, Cascade County ¹
Total	2.88	

¹Note that 0.20 AC of proposed place of use ID No. 4 is in Sec. 31. (Refer to Figure 1 above).

19. The maximum flow rate is proposed to remain the same as the claimed and historically authorized 38.40 GPM. According to pump specifications, the pump capacity for the Applicants' 5hp Berkeley LTH Series self-priming centrifugal pump is 162 GPM. Although the pump capacity exceeds the authorized flow rate, the pump can be operated at 38.40 GPM or less as historically demonstrated by the Applicants.

20. The Department calculated proposed volumes utilizing the DNRC standard of 2.5 AF/AC/YR, "for lawn, garden, shrubbery, and shelterbelts," in accordance with ARM 36.12.115(2)(b). Thus, with a proposed acreage of 2.88 AC, the Department finds the proposed diverted volume to be 7.20 AF. **Table 7** below provides a summary of the variables used in proposed volume calculations. Note that because water is proposed to be conveyed to the place of use via enclosed pipeline, conveyance loss is zero and subsequently, applied field volume

(7.20 AF) is synonymous with diverted volume (as diverted volume is equal to the applied field volume, plus conveyance loss). Regarding consumptive volume, as the L&G system is proposed to use sprinklers, a field efficiency of 70% (in accordance with ARM 36.12.115(2)) and an irrecoverable loss rate of 10% (as per ARM 36.12.1902(17)(b)) were applied.

Table 7. Summary of proposed use (L&G purpose).

Irrigation Method	Acres	Applied Field Volume (AF) ¹	Field Efficiency (%)	Crop Consumption (AF)	Irrecoverable Losses (AF)	Total Consumed Volume (AF)	Non-Consumed Volume (AF)	Conveyance Loss (AF)	Diverted Volume (AF)
Sprinkler	2.88	7.20	70	5.00	0.70	5.80	1.40	0	7.20

¹Applied Volume was calculated using the DNRC volume standard for L&G use of 2.5 AF/acre.

21. The Department finds the proposed change will result in a 2.15 AF reduction of diverted volume, while consumptive volume will be reduced by 1.68 AF. **Table 8** below provides a comparison of historic and proposed volumes. Further, the Department finds these reductions ensure no expansion of the subject right will occur.

Table 8. Historic versus proposed volumes comparison.

¹ Historically Consumed Volume (AF)	² Proposed Consumed Volume (AF)	Reduction in Consumed Volume (AF)	Historically Diverted Volume (AF)	Proposed Diverted Volume (AF)	Reduction in Diverted Volume (AF)
7.48	5.80	1.68	9.35	7.20	2.15

¹Historic purpose is irrigation.

²Proposed purpose is L&G.

22. The Applicants assert that no adverse effect will be caused by the proposed change. According to the Applicants, there are no periods of non-use for Statement of Claim No. 41K 5004-00, and water has been used as recently of the last irrigation season (2024). The Applicants attest to having no knowledge of call being made on the source of supply. The Applicants' stated plan for ensuring existing water rights will be satisfied in times of water shortage and/or responding to call being made is to turn off the pump at the point of diversion. The Department finds the Applicants' assertions accurate by a preponderance of evidence and their response to call plan to be reasonable.

23. The Department finds no change to the historical timing of diversion. The timing of diversion is proposed to remain May 1 to October 31. DNRC finds the historical pattern of diversion will change in so far as the place of use is proposed to change (as described in Tables 1 and 6 above).

24. As illustrated in **Figure 2** below, the location of 1.90 AF of historical return flows from 6.20 AC of historical irrigation is to the Sun River downstream of the eastern edge of the NESESE corner of Sec. 31, TWP 21N, RGE 2E, Cascade County. Under the proposed change, 1.40 AF of return flows from 2.88 AC of L&G would return to the Sun River at the same LLD as the historical return flows. The Department recognizes that, as Figure 2 shows, proposed return flows will accrue 200 FT downstream from the location that historic return flows accrued. The Department finds no intervening water rights between the proposed and historic return flow locations. Consequently, the Department also finds the different accrual locations within the NESESE corner of Sec. 31, TWP 21N, RGE 2E will not lead to adverse effect.

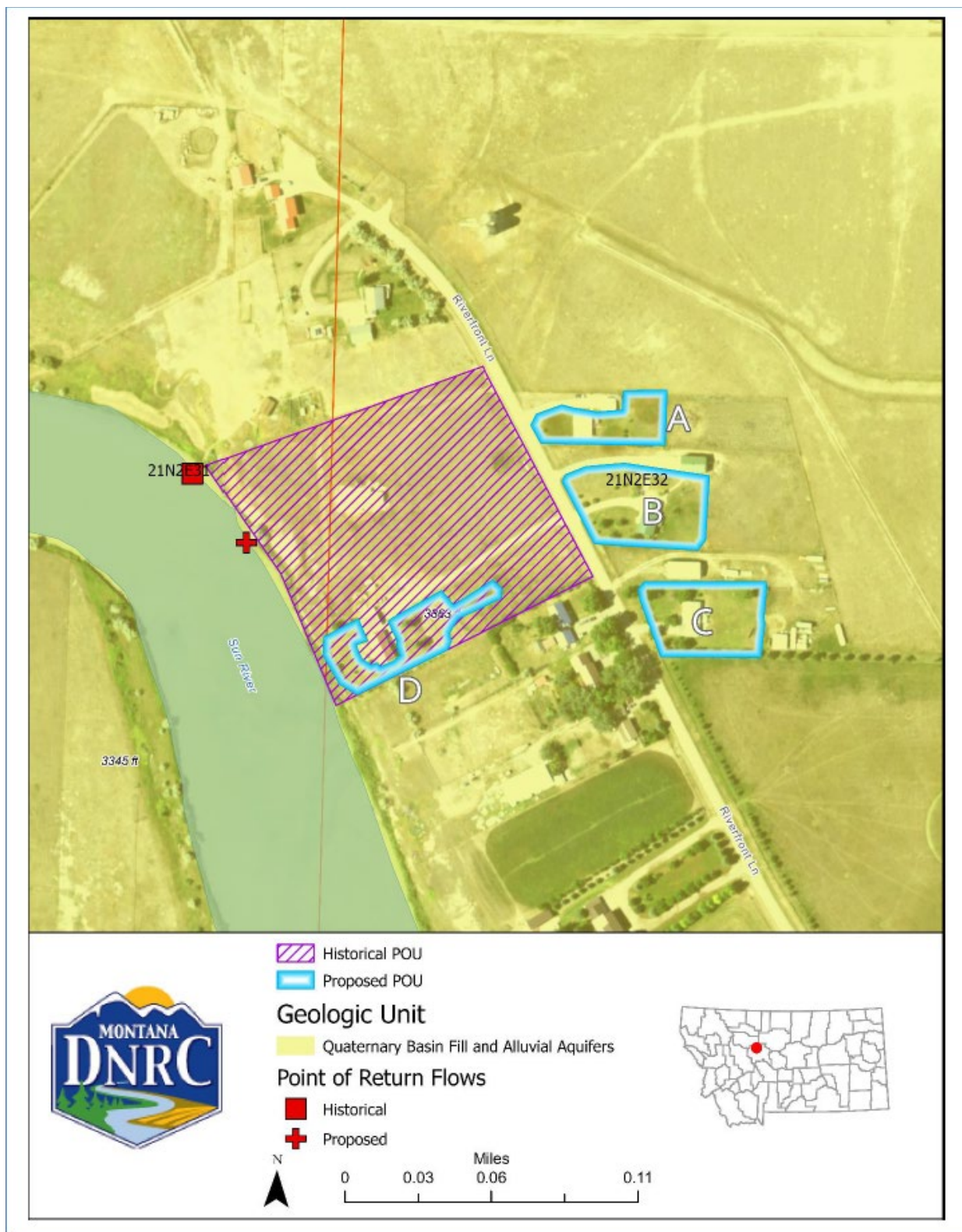


Figure 2. Location of return flows. (Individual places of use are labeled A-D.) Created by Kim Bolhuis, Groundwater Hydrologist, Water Sciences Bureau, DNRC.

25. The Applicants propose to leave 2.15 AF of historically diverted volume instream at the historical point of diversion. The Department is required to conduct a monthly rate and timing analysis of return flows when a proposed change would impact existing water rights. This proposed change would result in both return flows entering back into the Sun River upstream of the next downstream appropriator and water left instream so that historically diverted flows would be available during the historical period of diversion at the point of diversion. Therefore, the Department finds that no timing analysis is required for this proposed change.

26. The Department finds that the proposed change will not adversely affect the use of 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.

BENEFICIAL USE

FINDINGS OF FACT

27. The Applicants propose to temporarily change the purpose of Statement of Claim No. 41K 5004-00 from irrigation to L&G. The Applicants propose to appropriate 7.20 AF of water at a maximum flow of 38.40 GPM for 2.88 AC of L&G (irrigation). L&G irrigation is identified as a beneficial use in § 85-2-102(5)(a), MCA.

ADEQUATE DIVERSION

FINDINGS OF FACT

28. The Applicants propose to divert water from the Sun River with an intake valve that will funnel water through a 5hp Berkeley LTH Series self-priming centrifugal pump. The pump has a maximum capacity of 162 GPM. Water is then conveyed 700 FT through a 2 IN flexible black pipeline to the four respective places of use. Smaller pipelines, ranging from 1 to 2 IN diameter, deliver the water to sprinkler heads. Control valves are located on each of the four places of use to allow for localized water shut off. (See Figure 1 above for conveyance configuration.)

29. The Department finds that the proposed diversion is adequate for the proposed flow rate.

POSSESSORY INTEREST

FINDINGS OF FACT

30. The Applicants signed the affidavit on the Application to Change a Water Right form (Form 606) affirming they have possessory interest, or the written consent of the persons with the possessory interest, in the property where the water is to be put to beneficial use. (See Department file No. 41K 30170695.) The Applicants procured written permission from Tyrone and

Mary Robinson as well as John R. and Renae Ostle to put water to beneficial use on their respective parcels. (See Department file No. 41K 30160695.)

CONCLUSIONS OF LAW

HISTORICAL USE AND ADVERSE EFFECT

31. 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).¹

32. 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*

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

Royston, 249 Mont. at 429, 816 P.2d at 1057; *Hohenlohe*, ¶¶ 43-45.²

33. 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.³ A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. *Quigley*, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right); *Royston*, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record could not sustain a conclusion of no adverse effect because the Applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); *Hohenlohe*, ¶ 44-45; *Town of Manhattan v. DNRC*, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); *Matter of Application For Beneficial Water Use Permit By City of Bozeman*, *Memorandum*, Pgs. 8-22 (Adopted by DNRC *Final Order* January 9, 1985)(evidence of historic use must be compared to the proposed

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).

³A claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The claim does not constitute *prima facie* evidence of historical use in a change proceeding under § 85-2-402, MCA. For example, most water rights decreed for irrigation are not decreed with a volume and provide limited evidence of actual historic beneficial use. Section 85-2-234, MCA

change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).⁴

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

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.)

subsequent water users).⁵

35. 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.

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

The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the “amount historically consumed” and the water that re-enters the stream as return flow. . . .

An appropriator historically has been entitled to the greatest quantity of water he can put to use. The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. This limitation springs from a fundamental tenet of western water law-that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator “is entitled to have the water flow in the same manner as when he located,” and the appropriator may insist that prior appropriators do not affect adversely his rights.

This fundamental rule of Montana water law has dictated the Department’s determinations in numerous prior change proceedings. The Department claims that historic consumptive use, as quantified in part by return flow analysis, represents a key element of proving historic beneficial use.

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

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

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, 198 P.3d 219, (citing *Hidden Hollow Ranch v. Fields*, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

37. 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 Applicants 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.

38. The Applicants seek 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).

39. 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).

40. 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).

41. The Department has adopted a rule providing for the calculation of historic consumptive use where the Applicants prove by a preponderance of the evidence that the acreage was historically irrigated. ARM 36.12.1902(16). In the alternative the Applicants may present their own evidence of historic beneficial use. In this case the Applicants have elected to proceed under ARM 36.12.1902. (FOF No.11).

42. If the Applicants seek more than the historic consumptive use as calculated by ARM 36.12.1902(16), the Applicants bear 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").

43. Based upon the Applicants' evidence of historic use, the Applicants have proven by a preponderance of the evidence the historic use of Statement of Claim No. 5004-00 to be a diverted volume of 9.35 AF, a historically consumed volume of 7.48 AF, and flow rate of 38.40 GPM. (FOF Nos. 9—17)

44. Based upon the Applicants' comparative analysis of historic water use and return flows to water use and return flows under the proposed change, the Applicants have proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or

certificate has been issued or for which a state water reservation has been issued. Section 85-2-402(2)(a), MCA. (FOF Nos. 18—26)

BENEFICIAL USE

45. 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 Applicants’ 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).

46. The Applicants propose to use water for L&G irrigation, which is a recognized beneficial use under § 85-2-102(5)(a), MCA. The Applicants have proven by a preponderance of the evidence L&G is a beneficial use and that 7.20 AF of diverted volume and 38.40 GPM flow rate of water requested is the amount needed to sustain the beneficial use and is within the standards set by ARM 36.12.115(2)(b). Section 85-2-402(2)(c), MCA (FOF No. 27).

ADEQUATE MEANS OF DIVERSION

47. Pursuant to § 85-2-402 (2)(b), MCA, the Applicants 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).

48. Pursuant to § 85-2-402 (2)(b), MCA, the Applicants have 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. 28—29)

POSSESSORY INTEREST

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

50. The Applicants have proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person(s) with possessory interest, in the property(s) where the water is to be put to beneficial use. (FOF No. 30)

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. 41K 5004-00 should be granted subject to the following.

The Applicants are authorized to make the following temporary changes to Statement of Claim No. 41K 5004-00: The maximum volume that may be diverted is 7.20 AF. The purpose may be changed from irrigation to L&G. The maximum acreage that may be L&G irrigated is 2.88 AC. The place of use will be changed to the four locations listed in **Table 9** below. The duration of these temporary changes is 10 years, subject to the renewal process outlined in MCA 85-2-407(3).

Table 9: Authorized places of use for statement of Claim No. 41K 5004-00.

ID	Acres	LLD
1	0.90	Twin Silos Ranchettes, Sec. 32, TWP 21 N, RGE 02 E, Block 004, Lot 021, Cascade County
2	0.93	Twin Silos Ranchettes, Sec. 32, TWP 21 N, RGE 02 E, Block 004, Lot 023, Cascade County
3	0.43	Twin Silos Ranchettes, Sec. 32, TWP 21 N, RGE 02 E, Block 004, Lot 025, Cascade County
4	0.62	Twin Silos Ranchettes, Sec. 32, TWP 21 N, RGE 02 E, Block 005, Lot 003, Cascade County ¹
Total	2.88	

¹Note that 0.20 AC of proposed place of use ID No. 4 is in Sec. 31. (Refer to Figure 1 above).

NOTICE

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

Dated this 18th day of September, 2025.

Steven B., Manager
Lewistown Regional Office
Montana Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the DRAFT PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 18th day of September, 2025, by first class United States mail.

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