

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

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APPLICATION TO CHANGE WATER RIGHT) NO. 41G 30165036 by TREASURED) MOUNTAINS HOLDINGS LLC)	DRAFT PRELIMINARY DETERMINATION TO GRANT CHANGE
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On April 25, 2025, Treasured Mountains Holdings LLC (Applicant) submitted Application to Change Water Right No. 41G 30165036 to change Statement of Claim 41G 197111-00 to the Bozeman Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the application on its website. A preapplication meeting was held between the Department and the Applicant's consultant (Andy Brummond) on December 17, 2024, in which the Applicant designated that the technical analyses for this application would be completed by the Department. The Applicant returned the completed Preapplication Meeting Form on January 29, 2025. The Department delivered the Department-Completed Technical Analyses on March 21, 2025. The Department sent the Applicant a deficiency letter for the application under §85-2-302, Montana Code Annotated (MCA), dated May 15, 2025. The Applicant responded with information dated June 24, 2025. The Application was determined to be correct and complete as of July 23, 2025. An Environmental Assessment for this application was completed on September 18, 2025.

INFORMATION

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

Application as filed:

- Application for Change of Appropriation Water Right, Form 606
- Attachments:
 - Notice of Filing of Application to Change an Appropriation Right letter from Applicant's Consultant to Shared Ditch Users, dated March 20, 2025
 - Narrative responses for questions 25, 30.A, 31.A, 31.B.I, 40
 - Page 79 of Montana Water Law Handbook by Ted J. Doney, October 1981
 - General Abstracts of Claims 41G 30123892 and 41G 30124720
- Maps:
 - Application #17 Historic Use, map produced by Andy Brummond (undated)

- Application #17 Historic Use by Irrigation Method, map produced by Andy Brummond (undated)
- Application #18 Proposed Use, map produced by Andy Brummond (undated)
- Application #32 System Diagrams: System under normal operation, map produced by Andy Brummond (undated)
- Application #32 System Diagrams: System if Jefferson pump site not operational, map produced by Andy Brummond (undated)
- Application #32 System Diagrams: Sample set up for 100 GPM impact sprinkler shown pumping from Jefferson River, map produced by Andy Brummond (undated)
- Department - completed technical analyses based on information provided in the Preapplication Meeting Form, dated March 21, 2025.

Information Received after Application Filed

- Application 41G 30165036 Deficiency Response, dated June 24, 2025
- Email chain from Andy Brummond to DNRC dated May 20 – June 24, 2025, RE: Deficiency letter for Change Application No. 41G 30165036.

Information within the Department's Possession/Knowledge

- Surface Water Change Technical Analyses Report – Part A, dated March 21, 2025
- Surface Water Change Technical Analyses Report – Part B, dated March 21, 2025
- Surface Water Change Technical Analyses Report – Part A Notice of Errata
- Water Resources Survey, Madison County, 1965
- Statement of Claim 41G 197111-00 file
- The Department also routinely considers the following information. The following information is not included in the administrative file for this Application but is available upon request. Please contact the Bozeman Regional Office at 406-586-3136 to request copies of the following documents.
 - “Development of Standardized Methodologies to Determine Historic Diverted Volume” (2012)
 - “Technical Memorandum - Assessment of new consumptive use and irrecoverable losses associated with change applications” (2013)
 - “Technical Memorandum: Calculating Return Flows” (2019)
 - “Technical Memorandum: Physical Availability of Surface Water with Gage Data” (2019)

- “Technical Memorandum: Distributing Conveyance Loss on Multiple User Ditches” (2020)

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

For the purposes of this document, Department or DNRC means the Department of Natural Resources & Conservation; CFS means cubic feet per second; GPM means gallons per minute; AF means acre-feet; AC means acres; and AF/YR means acre-feet per year. Values presented in this document may differ up to 0.1 due to rounding.

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

1. The Applicant seeks to change the place of use (POU) and point of diversion (POD) of Statement of Claim 41G 197111-00 in this application. Claim 41G 197111-00 is diverted from Parsons Slough at a flow rate of 9.48 CFS from May 1 to October 15 through a headgate in the SESESW Section 14, T1S, R5W, Madison County for irrigation of 250 acres. The claim is conveyed to the place of use generally located in Sections 13 and 14, T1S, R5W, Madison County by the Curtis Ditch. The water right proposed for change is seen in Table 1.

Table 1. Water right proposed for change

Water Right No.	Purpose	Flow Rate (CFS)	Maximum Volume	Period of Use	Point of Diversion	Place of Use	Priority Date	Acres
41G 197111-00	Irrigation	9.48	Historical Use Statement	5/1- 10/15	SESESW Section 14 T1S, R5W, Madison County	SESE & NESE Section 14, and NWSW, NESW, SWNE, NESE, NWSE, SWSE, & SESE Section 13 all in T1S, R5W, Madison County	9/19/1876	250

2. No other water rights historically irrigated the historical POU of Claim 41G 197111-00. Claim 41G 197111-00 is not supplemental to any other water rights.

3. The water right is owned solely by the Applicant and is not part of a bigger water right.

4. No previous change authorizations are associated with the water right proposed for change.

CHANGE PROPOSAL

FINDINGS OF FACT

5. The Applicant proposes to change the POD and POU of Statement of Claim 41G 197111-00. The Applicant proposes to add two new PODs: a permanent pump site in the Jefferson River and a moveable pump in the Jefferson River. The Applicant will continue using the historical POD following the change. The permanent pump will be located in NENESE Section 14, T1S, R5W, Madison County. The moveable pump will be located along a reach beginning in SENWNE Section 13 and ending in SENWNE Section 13, all in T1S, R5W, Madison County. The Applicant also proposes to add 52.9 acres to the POU and retire 91 acres from the historical POU, for a total 199.5 acres irrigated. The proposed POU is generally located in Sections 13 and 14, T1S, R5W, Madison County. Water will continue to be diverted from Parsons Slough from May 1 to October 15 for irrigation use. Water will be conveyed to the POU via pipelines or through the Curtis Ditch and Willow Spring Creek, which will act as a natural carrier when the ditch is in use. The proposed change is seen in Figure 1. No change in purpose or place of storage are proposed in this application.

6. Following the change, the new acres in the S2 Section 13, T1S, R5W, Madison County will overlap with the claimed POU of Claim 41G 212596-00. Claim 41G 212596-00 is owned by the Applicant. The Applicant stated all irrigation under Claim 41G 212596-00 will cease if this change is authorized. Claims 41G 212596-00 and 41G 197111-00 will not be supplemental following the change. The Applicant plans to address Claim 41G 212596-00 in a future change. This change, Change Application No. 41G 30165036, is the first change in a series of changes the Applicant has planned.

7. The following conditions will be required for this change to meet the adverse effect criteria:

WATER MEASUREMENT INFORMATION

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED MEASURING DEVICE IN PARSONS SLOUGH AT A POINT APPROVED BY THE DEPARTMENT. THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE FLOW IN PARSONS SLOUGH WHEN THEY ARE IRRIGATING THE PLACE OF USE FROM THE JEFFERSON RIVER PUMP SITES. THE ABILITY TO DIVERT PARSONS SLOUGH WATER OUT OF THE JEFFERSON RIVER AS GRANTED BY THIS CHANGE AUTHORIZATION SHALL BE BASED UPON MEASUREMENTS, AND DIVERSIONS CANNOT EXCEED THE AMOUNT MEASURED IN PARSONS SLOUGH. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO THAT THE MEASURING DEVICE ALWAYS OPERATES PROPERLY AND MEASURES FLOW ACCURATELY. ON A FORM PROVIDED BY THE DEPARTMENT, THE

APPROPRIATOR SHALL KEEP A MONTHLY WRITTEN RECORD OF FLOW. RECORDS SHALL BE SUBMITTED TO THE DEPARTMENT BY NOVEMBER 30TH OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR.

IMPORTANT INFORMATION

THE HISTORICAL DITCH DIVERSION MAY ONLY DIVERT WATER FROM PARSONS SLOUGH WHEN THE PUMP SITES IN THE JEFFERSON RIVER ARE NOT IN OPERATION.

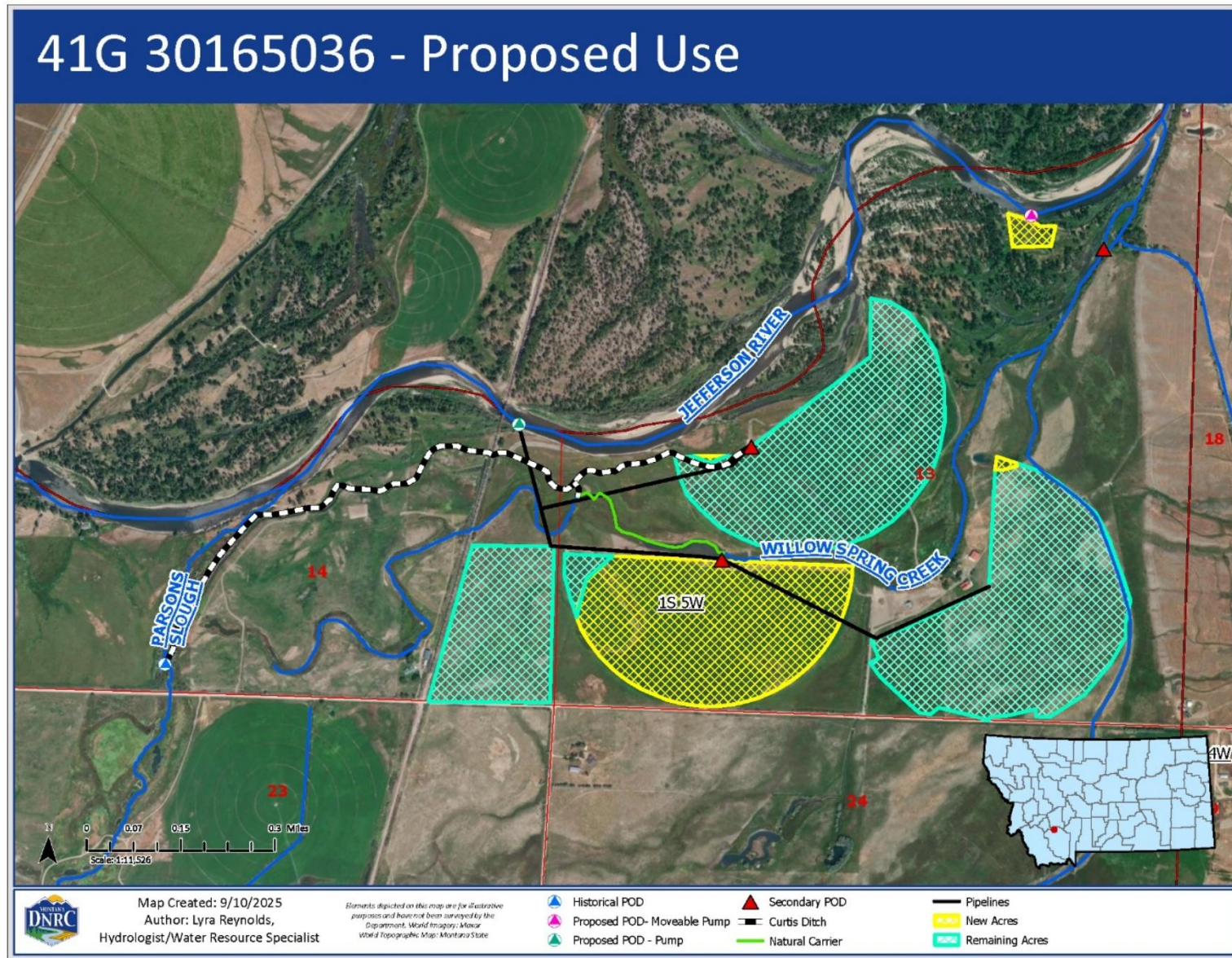


Figure 1. Proposed use for Change Application No. 41G 30165036

CHANGE CRITERIA

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

(2) Except as provided in subsections (4) through (6), (15), (16), and (18) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:

(a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.

(b) The proposed means of diversion, construction, and operation of the appropriation works are adequate, except for: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

(c) The proposed use of water is a beneficial use.

(d) The Applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the Applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water. This subsection (2)(d) does not apply to: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

9. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. *E.g.*, *Hohenlohe*, ¶¶ 29-31; *Town of Manhattan*, ¶ 8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

HISTORICAL USE AND ADVERSE EFFECT

FINDINGS OF FACT - Historical Use

10. Claim 41G 197111-00 is a filed right with a priority date of September 19, 1876. Claim 41G 197111-00 was part of the Temporary Preliminary Decree and Preliminary Decree for Basin 41G.

11. Claim 41G 197111-00 was originally claimed for irrigation of 250 acres in SESE and NESE Section 14, NWSW, NESW, SWNE, NESE, NWSE, SWSE, and SESE Section 13, all in T1S, R5W, Madison County. The Water Resources Survey (WRS) for Madison County does not corroborate the claimed 250-acre POU. The Applicant provided historical imagery and information about historical irrigated acres with the Preapplication Meeting Form supporting irrigation of 237.6 acres. The historical irrigation of 237.6 acres is supported by Army Map Service Image A001210366148, dated September 9, 1954, NASA AMES Research Center Image 5720005521774, dated July 26, 1972, and Photo 378-61, dated September 7, 1979. The Department finds the maximum acres irrigated by Claim 41G 197111-00 is 237.6. The historical POU can be seen in Figure 2. The Department conducted the historical use analysis based on 237.6 acres.

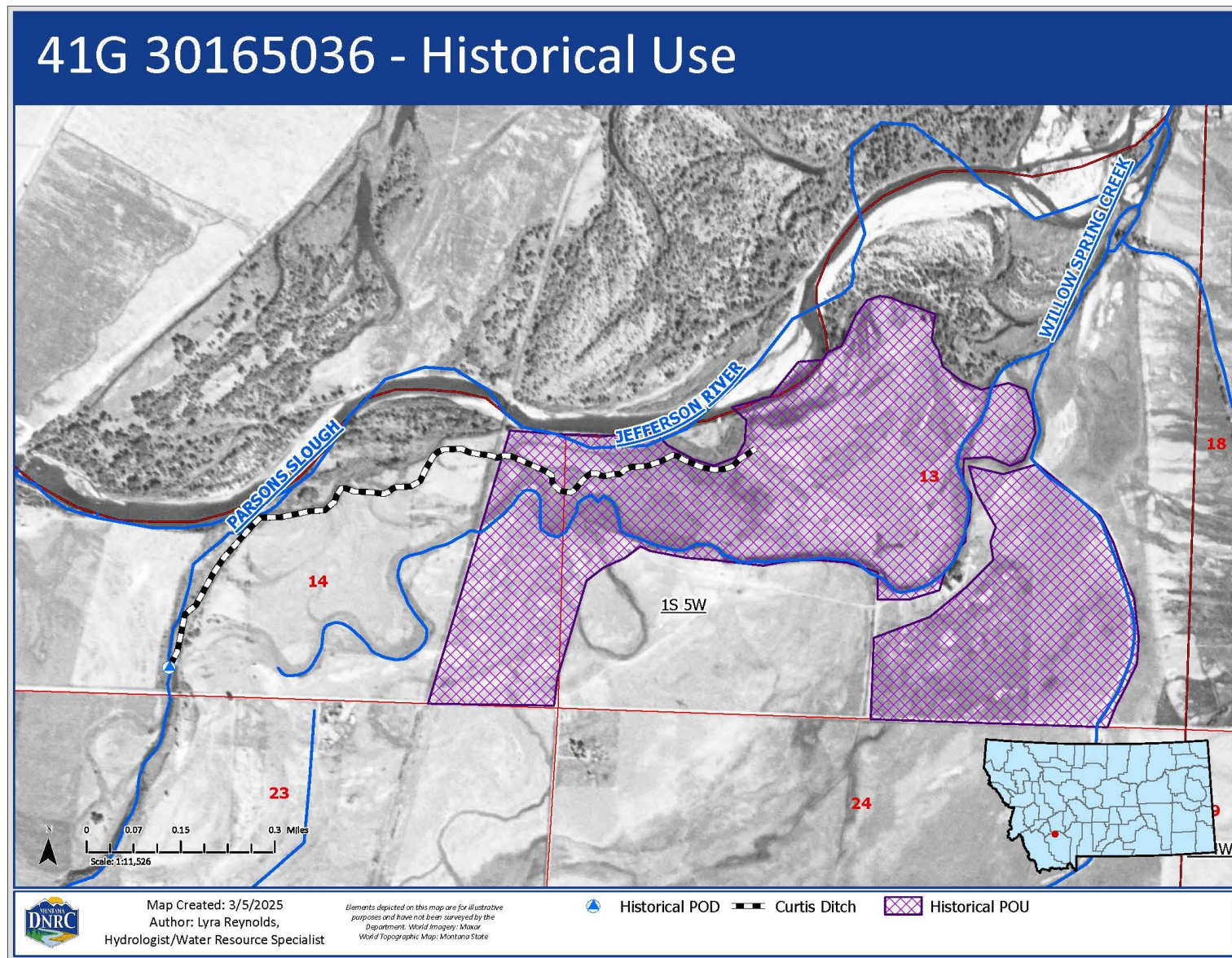


Figure 2. Historical use of Claim 41G 197111-00

12. Claim 41G 197111-00 has a claimed flow rate of 9.48 CFS. Claim 41G 197111-00 was historically diverted from Parsons Slough via a headgate at the Curtis Ditch in Section 14, T1S, R5W, Madison County for irrigation use. The Curtis Ditch conveys two water rights: Claim 41G 197111-00 and Provisional Permit 41G 2262-00. The maximum flow rate in the ditch is 11.04 CFS. The Applicant provided measurements and capacity calculations of the Curtis Ditch at the headgate and at a location along the ditch. The Applicant also provided a flow measurement at the down-ditch location, which measured 8.3 CFS. Based on measurements provided by the Applicant, the ditch capacity at the headgate is 16 CFS. The ditch profile provided with the flow measurement had a wetted width of 14 feet, an average depth of 2 feet, and a channel slope of 0.12%. Using ditch measurements collected by the Applicant's consultant and provided in the Preapplication Meeting Form materials, the capacity of the down-ditch location is 12.09 CFS. The Department finds the capacities at the headgate and the down-ditch location are sufficient to carry the maximum 11.04 CFS flow rate. The Department finds the maximum flow rate of Claim 41G 197111-00 is 9.48 CFS.

13. Water was historically diverted from May 1 to October 15 for irrigation under Claim 197111-00. The end of the period of diversion and use falls outside the standard in ARM 36.12.112 for irrigation in Climatic Area IV. The Applicant stated water has been diverted and used for irrigation until mid-October each year. Water rights that share the historical point of diversion also have a claimed period of diversion and use of May 1 to October 15. The Department finds the historical period of diversion and use for Claim 41G 197111-00 is May 1 to October 15.

14. The water right proposed for change is a Statement of Claim, and the historical use was evaluated as the right existed prior to July 1, 1973. No prior change authorizations for the water right have occurred, and no documented history of calls on Claim 41G 197111-00 exists. The Department calculated the historical volume using the Department's standard methodology, pursuant to ARM 36.12.1902.

15. Water was historically diverted from Parsons Slough at a headgate in the SESESW Section 14, T1S, R5W, Madison County and conveyed via the Curtis Ditch to irrigate a total of 237.6 acres in the historical POU. The Applicant stated 116.9 acres were historically irrigated by flood and 120.7 acres were historically irrigated by wheeline sprinklers. The Department categorized the historical irrigation methods as wild flood and sprinkler irrigation based on aerial photographs and the Applicant's description of historical practices. Water was typically diverted and used from May 1 to October 15 each year for cultivation of grass, alfalfa, and small grains. No improvements, such as field leveling, occurred prior to July 1, 1973. No other water rights

irrigate the historical POU of 41G 197111-00. Using the information about historical irrigation practices, the Department calculated historical consumptive use, summarized in Table 2 and 3, according to the rules set forth in ARM 36.12.1902 using the following equations:

$$HCV = \text{Crop Consumption} + \text{Historic Irrecoverable Losses}$$

Crop Consumption

$$= \text{Twain Bridges} * \frac{1\text{ft}}{12\text{inches}} * \text{Madison County Management Factor} \\ * \text{Historic Acres}$$

$$\text{Historic Irrecoverable Losses} = \text{Field Applied} * \text{IL}\%$$

$$\text{Field Applied} = \frac{\text{Crop Consumption}}{\text{Field Efficiency}}$$

Table 2. Historical consumptive use of historical place of use

Field ID	Irrigation Method	Acres	NIR (in)	Management Factor	Field Efficiency	Crop Consumption (AF)	Applied Volume (AF)	IL (AF)	Total Consumed Volume (AF)
North Flood	Wild Flood	116.9	16.98	0.65	0.25	107.85	431.4	21.57	129.4
South Sprinkler	Wheeline	120.7	16.98	0.65	0.7	111.36	159.08	15.91	127.3

Table 3. Historical consumptive volume of Claim 41G 197111-00

Water Right No.	Crop Consumption (AF)	Applied Volume (AF)	Consumed Volume (AF)
41G 197111-00	219.2	590.5	256.7

16. Historical diverted volume is the sum of historical field applied volume and the seasonal conveyance losses attributed to a water right. The historical conveyance loss volume is equal to the sum of the historical seepage loss, vegetation loss, and ditch evaporation volumes. The Curtis Ditch historically conveyed 2 water rights: Permit 41G 2262-00 & Claim 41G 197111-00. The seasonal conveyance losses in the Curtis Ditch were calculated using ditch measurements provided by the Applicant and the equations below. The Applicant stated water was diverted from the Parsons Slough from May 1 to October 15 for all water rights in the ditch. Permit 41G 2262-00 has a POU up-ditch of the POU of Claim 41G 197111-00. To account for the differences in distance conveyed to POUs, the ditch was divided into 2 down-ditch combinations as seen in Table 3. Conveyance losses were found for each down-ditch combination and distributed to the water rights in the combination based on a flow rate proportion. The conveyance losses attributed to the water right proposed for change were found using the following equations and are summarized in Tables 4-6.

$$\text{Water Right Conveyance Loss} = \sum \text{Ditch Combo Conveyance Losses}_{WR}$$

$$\begin{aligned} \text{Ditch Combo Conveyance Losses}_{Total} \\ = \text{Seepage Loss}_{combo} + \text{Vegetation Loss}_{combo} + \text{Evaporation Loss}_{combo} \end{aligned}$$

$$\begin{aligned} \text{Seepage Loss}_{combo} \\ = (\text{Wetted Perimeter}_{combo} * \text{Ditch Length}_{combo} * \text{Ditch Loss Rate} \\ * \text{Days Diverted}_{combo}) * \frac{1 \text{ acre}}{43560 \text{ ft}^2} \end{aligned}$$

$$\begin{aligned} \text{Vegetation Loss}_{combo} \\ = 0.75\% \text{ loss per mile} * \frac{\text{Ditch Length}_{combo}}{5280 \text{ miles}} * \text{Flow Rate}_{combo} \\ * \text{Days Diverted}_{combo} * 2 \end{aligned}$$

$$\text{Ditch Evaporation Loss}_{combo} = (\text{Surface Area} * \text{Adjusted Net Evaporation}_{combo}) * \frac{1 \text{ acre}}{43560 \text{ ft}^2}$$

$$\text{Surface Area} = (\text{Wetted Width ft}) * \text{Ditch Length}_{combo}$$

$$\begin{aligned} \text{Ditch Combo Conveyance Losses}_{WR} \\ = \text{Ditch Combo Conveyance Losses}_{Total} * \text{Combo Flow Proportion}_{WR} \end{aligned}$$

$$\text{Combo Flow Proportion}_{WR} = \text{WR Flow Rate}_{ditch} * \text{Ditch Combo Total Flow Rate}$$

Table 4. Curtis Ditch down-ditch combinations

Down-Ditch Combo	Water rights in Combo	Period of Diversion Start	Period of Diversion End	Total Days in Period	Combo Flow Rate (CFS)	Combo Length (ft)
Curtis A	41G 197111-00 & 41G 2262-00	1-May	15-Oct	168	11.04	3215
Curtis B	41G 197111-00	1-May	15-Oct	168	9.48	2015

Table 5. Curtis Ditch historical conveyance losses for down-ditch combinations

Down-Ditch Combo	Length (ft)	Flow Rate (CFS)	Wetted Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate (ft ³ /ft ² /day)	No. of Days Diverted	Adj. Net Evaporation (in)	Seepage Loss (AF)	Vegetation Loss (AF)	Evaporative Loss (AF)	Total Conveyance Loss (AF)
Curtis A	3215	11.04	14	15.21	1	168	21.21	188.6	16.94	1.83	207.36
Curtis B	2015	9.48	14	15.21	1	168	21.21	118.2	9.12	1.14	128.46

Table 6. Curtis Ditch historical conveyance losses per water right

Water Right No.	Down-Ditch Combo	Water Right Flow Rate (CFS)	Water Right Conveyance Loss (AF)
41G 2262-00	Curtis A	1.56	29.3
41G 197111-00	Curtis A & B	9.48	306.5

17. The Department calculated the historical diverted volume pursuant to ARM 36.12.1902 and the Department's standard methodology (Roberts and Heffner, 2012). Conveyance losses

from the Curtis Ditch attributed to Claim 41G 197111-00, described above and seen in Table 6, were added to the historical field applied volume to find the historical diverted volume for the water right proposed for change. Water was historically diverted for irrigation of 237.6 acres from May 1 to October 15 under Claim 41G 197111-00. Water was conveyed from the headgate diversion to the POU via the Curtis Ditch. The historical diverted volume is summarized in Table 7.

Table 7. Historical diverted volume of Claim 41G 197111-00

Water Right No.	Historical Consumptive Volume (AF)	Historical Field Applied Volume (AF)	Historical Conveyance Losses (AF)	Historical Diverted Volume (AF)
41G 197111-00	256.7	590.5	306.5	897

18. The Department finds the following historical use for Claim 41G 197111-00, shown in Table 8.

Table 8. Historical use of Claim 41G 197111-00

Water Right No.	Historical Purpose	Maximum Historical Acres	Historical Place of Use	Historical Point of Diversion	Maximum Historical Flow Rate	Historically Consumed Volume	Historically Diverted Volume
41G 197111-00	Irrigation	237.6 acres	SESE, NESE Section 14, and NWSW, NESW, SWNE, NESE, NWSE, SWSE, SESE Section 13, all in T1S, R5W, Madison County	SESESW Section 14, T1S, R5W, Madison County	9.48 CFS	256.7 AF	897 AF

ADVERSE EFFECT

FINDINGS OF FACT

19. The Applicant proposes to change the POD and POU of Claim 41G 197111-00. Through the proposed change the Applicant will add two points of diversion: a permanent pump in the NENESE Section 14 and a moveable pump along a reach beginning and ending in SENWNE Section 13, all in T1S, R5W, Madison County. The Applicant will continue to use the historical POD following the change when the proposed PODs are not operational. The Applicant also proposes to add 52.9 acres outside the historical POU and retire 91 historically irrigated acres, as seen in Figure 3. The acres will be added in SWSW & SESW of Section 13, T1S, R5W, Madison County. After the proposed change, Claim 41G 197111-00 will have three authorized PODs and will be used to irrigate 199.5 acres. No change in purpose or place of storage is proposed.

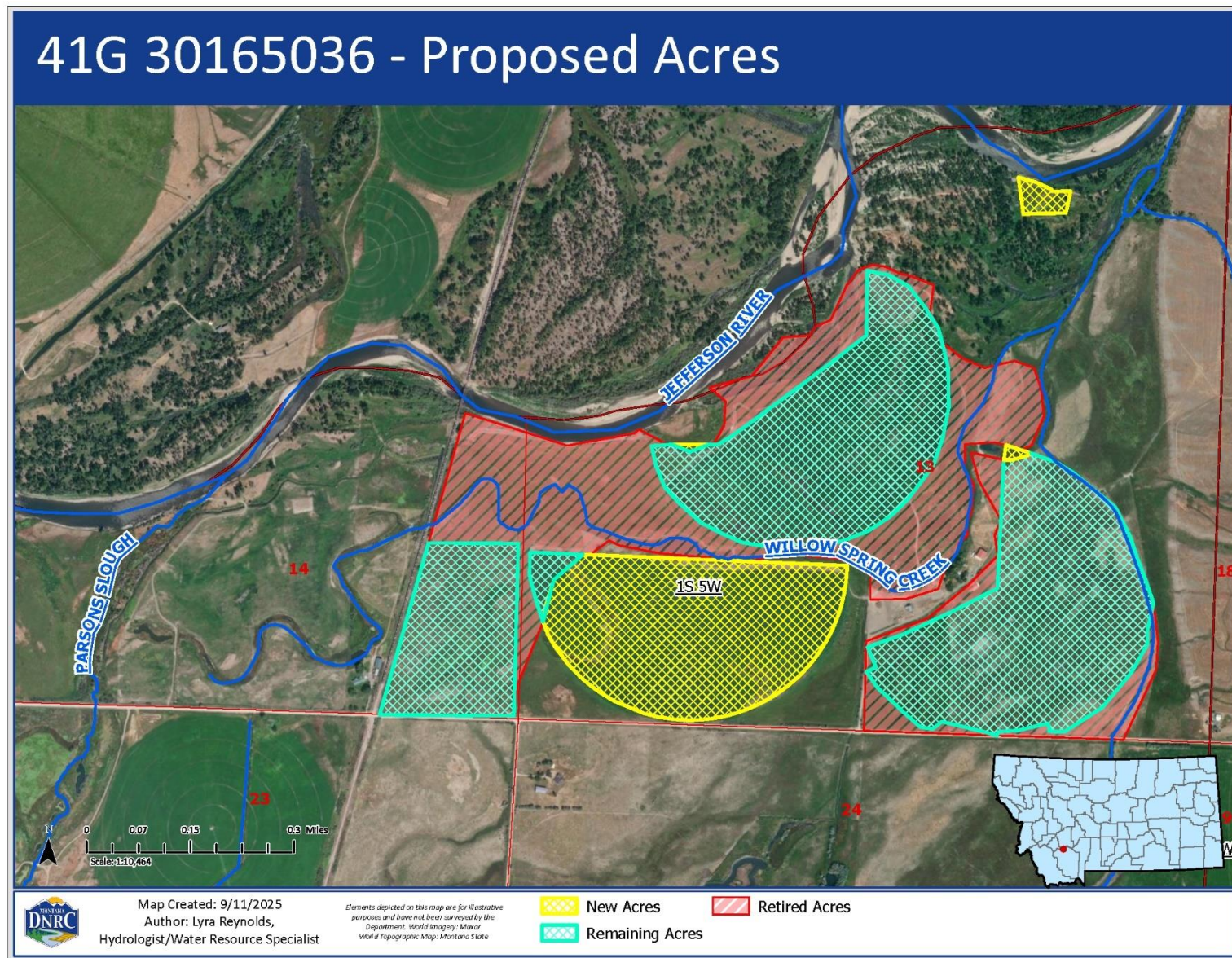


Figure 3. Proposed change in irrigated acres for Claim 41G 197111-00

20. Following the change, the Applicant will divert water from Parsons Slough at a maximum flow rate of 4.26 CFS for continued irrigation use. When the proposed PODs are in use and the system is fully operational, water will be diverted from the Jefferson River pump sites into pipelines. The pipelines will convey water to the irrigation systems on each field in the proposed POU. The proposed POU includes historical and new acres. Following the proposed change, 142.2 acres will be sprinkler irrigated, and 57.3 acres will remain flood irrigated. Irrigation use will continue from May 1 to October 15 for a total 199.5 irrigated acres. No other water rights will be used to irrigate the proposed POU after the change. Claim 41G 212596-00 is currently claimed with an irrigation POU that overlaps with the new acres in the S2 Section 13, but the Applicant stated this water right will not be used to supplement Claim 41G 197111-00 as all irrigation under this claim will be ceased if Change Application 41G 30165036 is granted. The Applicant stated Claim 41G 212595-00 will be addressed in a future change.

21. The consumptive use associated with the proposed place of use will change from the historical consumptive use. The Applicant proposes to irrigate the new 52.9 acres using sprinkler irrigation from May 1 to October 15. Water will continue to be used from May 1 to October 15 for the remaining historical acres, as done historically. The consumptive volume associated with the new 52.9 acres was found using the Department's standard outlined in ARM 36.12.1902 for proposed use, with values seen in Table 9. Consumptive use for new acres was added to the consumptive volume associated with the remaining 146.6 historical acres to find the total proposed consumptive use following the proposed change. The proposed consumptive volume of Claim 41G 197111-00 is summarized in Tables 9-11.

Table 9. Proposed consumptive volume of new acres

Field ID	Acres	Weather Station	NIR (in)	Management Factor	Field Efficiency	Crop Consumption (AF)	Applied Volume (AF)	IL (AF)	Total Consumed Volume - New Acres (AF)
New Acres	52.9	Twin Bridges	19.22	0.83	0.7	70.6	100.8	10.1	80.7

Table 10. Historical consumptive volume of remaining acres

Field ID	Acres	Weather Station	NIR (in)	Management Factor	Field Efficiency	Crop Consumption (AF)	Applied Volume (AF)	IL (AF)	Total Consumed Volume - Remaining Acres (AF)
Historical Flood	57.3	Twin Bridges	16.98	0.65	0.25	52.9	211.5	10.5	63.4
Historical Sprinkler	89.3	Twin Bridges	16.98	0.65	0.7	82.4	117.7	11.8	94.2

Table 11. Proposed consumptive volume of Claim 41G 197111-00

Water Right No.	Crop Consumption - All Proposed Acres (AF)	Applied Volume - All Proposed Acres (AF)	Consumed Volume - All Proposed Acres (AF)
41G 197111-00	205.9	430	238.3

22. The Applicant proposes to retire 91 historically irrigated acres and add 52.9 new acres, so Claim 41G 197111-00 is used to irrigate a total 199.5 acres after the proposed change. As a result, the proposed consumed volume of Claim 41G 197111-00 is 238.3 AF. The proposed consumptive use is 18.4 AF less than the historical consumed volume of 256.7 AF. The Department finds the proposed change in point of diversion and place of use will not increase the consumed volume of Claim 41G 197111-00.

23. The Applicant proposes to use pipelines to convey water from the proposed PODs when the system is fully operational. When the system is not fully operational, the Applicant will utilize the historical POD and Curtis Ditch. Water will be diverted using the historical POD and conveyed via the Curtis Ditch when the Jefferson River pump sites are not in use. The Applicant will use pipelines, Willow Spring Creek as a natural carrier following Curtis Ditch, and secondary PODs to convey and apply water onto three of the fields in the proposed POU; these are labeled as Fields B, D, and E on Figure 4. The Applicant will only use the secondary diversion in Willow Spring Creek when the historical ditch diversion is in use.

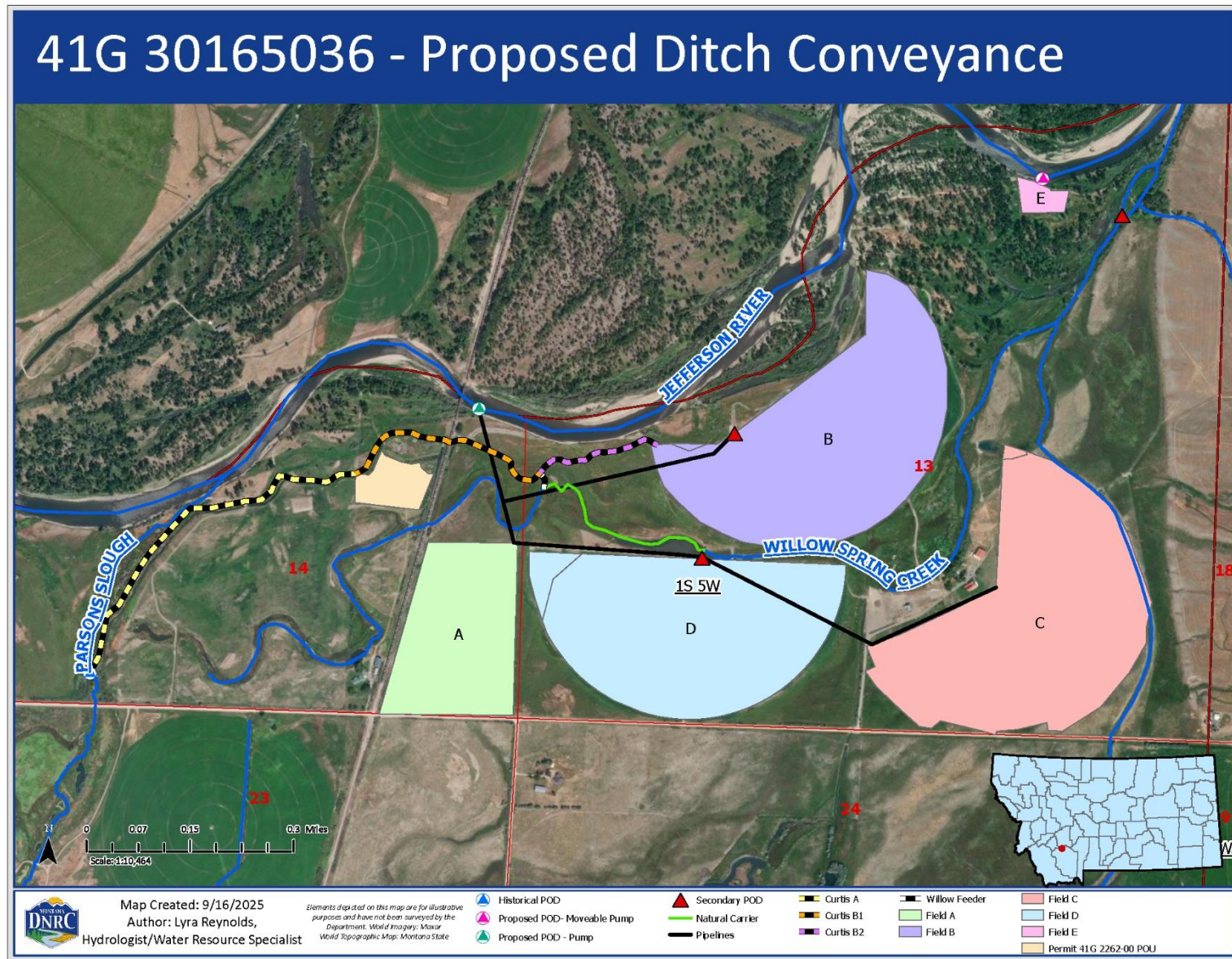


Figure 4. Claim 41G 197111-00 proposed ditch conveyance system

24. The Applicant estimated the total amount of time to deliver the field applied volume to the proposed POUs using the Curtis Ditch is 50.7 days. The time to deliver the field applied volume varies depending on the size of the field. Water will be delivered to all three fields for 6.8 days. Once the full field applied volume for Field E is delivered, water will be delivered for an additional 40.2 days only to the remaining fields. Once the full field applied volume for Field D is delivered, water will be delivered only to Field B for an additional 3.7 days. The total flow rate diverted at the POD is the amount needed to convey the field applied volume to each field. When water is diverted at a secondary diversion or delivered to a field, a portion of the flow rate is no longer being conveyed through the ditch. The differences in flow rates were also considered in calculating conveyance losses. To account for differences in distances between the headgate and the proposed fields and operational needs at the fields, the Curtis Ditch was divided into the following groups and down-ditch combinations:

Table 12. Curtis Ditch groups and down-ditch combinations

Group	Down-Ditch Combo	Water Rights Conveyed	Days	Maximum Total Flow Rate (CFS)
G1: Water being delivered to Fields B, D, and E	Curtis A	41G 197111-00 & 41G 2262-00	6.8	4.95
	Curtis B1	41G 197111-00	6.8	3.39
	Curtis B2	41G 197111-00	6.8	1.51
	Willow Feeder	41G 197111-00	6.8	1.34
G2: Water being delivered to Fields B & D	Curtis A	41G 197111-00 & 41G 2262-00	40.2	4.22
	Curtis B1	41G 197111-00	40.2	2.66
	Curtis B2	41G 197111-00	40.2	1.45
	Willow Feeder	41G 197111-00	40.2	1.11
G3: Water being delivered to Field B	Curtis A	41G 197111-00 & 41G 2262-00	3.7	3.77
	Curtis B1 & B2	41G 197111-00	3.7	2.21

25. The conveyance losses associated with Claim 41G 197111-00 were calculated for the proposed use using a similar methodology as the historical conveyance losses. The Department utilized the evaporation rate for the entire period of diversion, as the ditch may be used during the May 1 to October 15 period. Conveyance losses were distributed to Claim 41G 197111-00 using the Department's Multi-User Ditch Memo. The proposed conveyance losses are summarized in Tables 13 and 14.

Table 13. Curtis Ditch proposed conveyance losses for down-ditch combinations

Ditch ID	Length (ft)	Flow Rate (CFS)	Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate (ft ³ /ft/day)	Number of Days Irrigated	Adj. Net Evap (in)	Seepage Loss (AF)	Vegetation Loss (AF)	Evaporative Loss (AF)	Total Conveyance Loss (AF)
G1 Curtis A	3215	4.95	14	15.2	1.1	6.8	21.21	8.39	0.31	1.83	10.53
G1 Curtis B1	2305	3.39	14	15.2	1.1	6.8	21.21	6.02	0.15	1.31	7.48
G1 Curtis B2	1800	1.51	14	15.2	1.1	6.8	21.21	4.7	0.05	1.02	5.77
G1 Willow Feeder	120	1.34	14	15.2	1.1	6.8	21.21	0.31	0	0.07	0.38
G2 Curtis A	3215	4.22	14	15.2	1.1	40.2	21.21	49.61	1.55	1.83	52.98
G2 Curtis B1	2305	2.66	14	15.2	1.1	40.2	21.21	35.57	0.7	1.31	37.58
G2 Curtis B2	1800	1.45	14	15.2	1.1	40.2	21.21	27.77	0.3	1.02	29.1
G2 Willow Feeder	120	1.11	14	15.2	1.1	40.2	21.21	1.85	0.02	0.07	1.94
G3 Curtis A	3215	3.77	14	15.2	1.1	3.7	21.21	4.57	0.13	1.83	6.52
G3 Curtis B1 & B2	4105	2.21	14	15.2	1.1	3.7	21.21	5.83	0.1	2.33	8.26

Table 14. Ditch proposed conveyance losses per water right

Water Right No.	Ditch ID	WR Flow Rate (CFS)	Required Diverted Flow Rate (CFS)	Combo Total Flow Rate (CFS)	Proportion	Combo Conveyance Loss (AF)	Water Right Conveyance Loss (AF)
41G 2262-00	S1 Curtis A	1.56	1.56	4.95	0.3	10.53	3.32
	S2 Curtis A	1.56	1.56	4.22	0.4	52.98	19.59
	S3 Curtis A	1.56	1.56	3.77	0.4	6.52	2.70
41G 197111-00	S1 Curtis A	9.48	3.39	4.95	0.7	10.53	7.21
	S1 Curtis B1	9.48	3.39	3.39	1.0	7.48	7.48
	S1 Curtis B2	9.48	1.51	1.51	1.0	5.77	5.77
	S1 Willow Feeder	9.48	1.34	1.34	1.0	0.38	0.38
	S2 Curtis A	9.48	2.66	4.22	0.6	52.98	33.39
	S2 Curtis B1	9.48	2.66	2.66	1.0	37.58	37.58
	S2 Curtis B2	9.48	1.45	1.45	1.0	29.1	29.10
	S2 Willow Feeder	9.48	1.11	1.11	1.0	1.94	1.94
	S3 Curtis A	9.48	2.21	3.77	0.6	6.52	3.82
	S3 Curtis B1 & B2	9.48	2.21	2.21	1.0	8.26	8.26

26. The total proposed field applied volume was added to the proposed conveyance losses attributed to Claim 41G 197111-00 to obtain the total proposed diverted volume. The total proposed diverted volume, seen in Table 15, reflects the maximum water usage given the Applicant's proposed operational plan.

Table 15. Proposed diverted volume

Water Right No.	Consumed Volume (AF)	Applied Volume (AF)	Conveyance Losses (AF)	Total Diverted Volume (AF)
41G 197111-00	238.3	430	134.9	564.9

Table 17. Comparison of volumes associated with historical and proposed use.

Water Right No.	Historically Consumed Volume (AF)	Proposed Consumptive Volume (AF)	Historically Diverted Volume (AF)	Proposed Diverted Volume (AF)
41G 197111-00	256.7	238.3	897	564.9

27. The proposed diverted volume of Claim 41G 197111-00 is 564.9 AF, which is 332.1 AF less than the historical diverted volume of 897 AF. The Applicant proposes to leave the difference in diverted volume, equal to 332.1 AF, in Parsons Slough at the historical POD. Water left in Parsons Slough will flow downstream to the Jefferson River. The Department finds the change in point of diversion and place of use will not increase the diverted volume of Claim 41G 197111-00.

28. The Department identified an area of potential adverse effect on Parsons Slough and the Jefferson River. This reach was determined to be the area from the historical POD downstream to where Willow Spring Creek meets the Jefferson River. This reach extends from SESESW Section 14, T1S, R5W, Madison County downstream to NENENE Section 13, T1S, R5W, Madison County. Water rights that share the POD with Claim 41G 197111-00 were also considered for adverse effect. Two water rights exist in the area of potential adverse effect: Claim 41G 30143701 and Permit 41G 2262-00. The Applicant proposes to add two points of diversion to Claim 41G 197111-00 and will continue to use the historical POD following the proposed change. The proposed pump diversions will be downstream of the historical POD, and the Applicant will leave 332.1 AF in Parsons Slough at the historical POD. Water users in the area of potential adverse effect will have equal or greater access to water during the period of diversion as compared to historical conditions. The Applicant will not increase the diverted or consumed volume, nor change the timing of diversions for the water right proposed for change. The Applicant proposes to divert at flow rate of 4.26 CFS when using the pump sites in the Jefferson River. The Applicant will be required to measure Parsons Slough when the pump sites are in use. The Applicant will be able to divert from the Jefferson River pump sites at the authorized flow rate when measurements in Parsons Slough show the water is available. The amount of water diverted from the Jefferson River pump sites cannot exceed the amount measured in Parsons Slough. Water will be left instream at the historical POD, and diversions from the proposed pump sites will

occur when adequate water is measured in Parsons Slough. Water rights in the area of potential adverse effect will not be adversely affected.

29. When using the ditch, the Applicant proposes to limit diversions to 3.39 CFS. The historical ditch will only be used when the Jefferson River pump sites are inoperable. Water diverted through the historical diversion will be conveyed through the Curtis Ditch and Willow Spring Creek to secondary PODs. The secondary POD in Willow Spring Creek will operate at a maximum 100 GPM flow rate. The Applicant will decrease total diversions through the historical ditch, so no expansion will occur.

30. The Applicant stated pump diversions will be able to be controlled to limit diversions to a total 4.26 CFS flow rate, the ditch diversion can be controlled to limit flow to 3.39 CFS, and all diversions may be shut off in response to call.

31. The Department will require the Applicant to provide measurements to ensure adequate flow exists in Parsons Slough for the Jefferson River pump sites to operate. The Applicant will also only be able to operate the historical ditch diversion when the Jefferson River pump sites are inoperable. The following conditions will be placed on the water right if this change is authorized:

WATER MEASUREMENT INFORMATION

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED MEASURING DEVICE IN PARSONS SLOUGH AT A POINT APPROVED BY THE DEPARTMENT. THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE FLOW IN PARSONS SLOUGH WHEN THEY ARE IRRIGATING THE PLACE OF USE FROM THE JEFFERSON RIVER PUMP SITES. THE ABILITY TO DIVERT PARSONS SLOUGH WATER OUT OF THE JEFFERSON RIVER AS GRANTED BY THIS CHANGE AUTHORIZATION SHALL BE BASED UPON MEASUREMENTS, AND DIVERSIONS CANNOT EXCEED THE AMOUNT MEASURED IN PARSONS SLOUGH. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO THAT THE MEASURING DEVICE ALWAYS OPERATES PROPERLY AND MEASURES FLOW ACCURATELY. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A MONTHLY WRITTEN RECORD OF FLOW. RECORDS SHALL BE SUBMITTED TO THE DEPARTMENT BY NOVEMBER 30TH OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR.

IMPORTANT INFORMATION

THE HISTORICAL DITCH DIVERSION MAY ONLY DIVERT WATER FROM PARSONS SLOUGH WHEN THE PUMP SITES IN THE JEFFERSON RIVER ARE NOT IN OPERATION.

Return flow analysis

32. The proposed change to Claim 41G 197111-00 will result in a change in return flow locations and volumes. The Department modeled return flows for the proposed change in the Surface Water Change Technical Analysis Report – Part B, dated March 21, 2025. Historically, 105.7 AF of return flow volume returned to the Jefferson River downstream of the NENESE Section 14, T1S, R5W, Madison County and 228.1 AF returned to Willow Spring Creek downstream of the SWNESE Section 14, T1S, R5W, Madison County. Under the proposed change, 51.8 AF of return flow volume will accrue to the Jefferson River downstream of NENWSW Section 13, T1S, R5W, Madison County and 139.9 AF will accrue to Willow Spring Creek downstream of the SWNESE Section 14, T1S, R5W, Madison County. The Applicant proposes to leave water instream, equal to 332.1 AF, in Parsons Slough at the historical POD that will flow into the Jefferson River. Water will not be left instream in Willow Spring Creek following the proposed change..

33. The timing of return flows for Willow Spring Creek is seen in Table 18 below.

Table 18. Return flows to Willow Spring Creek and the net effect of the proposed change

Months	Net Irrigation Requirement (NIR) (in)	Total Non-Consumed Volume (AF)	Total Historical Return Flows		Total Proposed Return Flows		Net Effect to Willow Spring Creek (AF)	Net Effect to Willow Spring Creek (GPM)
			Willow Spring Creek (AF)	Willow Spring Creek (GPM)	Willow Spring Creek (AF)	Willow Spring Creek (GPM)		
January	0	0.3	0.4	2.6	0.3	2.2	-0.1	-0.4
February	0	0.2	0.3	2	0.2	1.6	-0.1	-0.4
March	0	0.2	0.3	2	0.2	1.6	-0.1	-0.4
April	0	0.2	0.2	1.7	0.2	1.4	0	-0.3
May	1.48	5.6	7.9	57.4	5.6	40.9	-2.3	-16.5
June	4.93	35.8	60.1	439.2	35.8	261.8	-24.3	-177.4
July	6.44	49	81.9	598.8	49	357.9	-32.9	-240.9
August	5.31	41.4	68.8	503	41.4	302.4	-27.4	-200.6
September	1.06	5.1	6.3	46.2	5.1	37.4	-1.2	-8.8
October	0	0.8	1	7.3	0.8	6	-0.2	-1.3
November	0	0.5	0.6	4.2	0.5	3.4	-0.1	-0.8
December	0	0.4	0.5	3.3	0.4	2.6	-0.1	-0.7
TOTAL	19.22	139.9	228.1		139.9		-88.2	

Area of Potential Impact Analysis

34. The Department identified an area of potential impact (AOPI) on Willow Spring Creek, beginning at the historical location of return flows to the confluence of the Jefferson River and Willow Spring Creek. This reach extends downstream of the SWNESE Section 14, T1S, R5W, Madison County to NENENE Section 13, T1S, R5W, Madison County, as seen in Figure 5. A total of 4 water rights exist within this reach. These water rights include one Fish, Wildlife, and Parks (FWP) Water Reservation for instream fisheries use (Reservation No. 41G 30017621), and three Statements of Claim owned by the Applicant (Claims 41G 30123892, 41G 30124720, and 41G 212596-00), seen in Table 19. Claim 41G 30123892 has a priority date senior to the water right proposed for change. As such, this water right is not considered a potentially impacted water right and will not be included in the downstream legal demands for the extended return flow analysis.

Table 19. Water rights in Area of Potential Impact

Water Right No.	All Owners	Purpose	Flow Rate (GPM)	Flow Rate (CFS)	Volume (AF)	Acres	Animal Units	Priority Date
41G 30123892**	TREASURED MOUNTAINS HOLDINGS LLC	STOCK	42.30	0.09	11.76	0	350	3/20/1876
41G 30124720**	TREASURED MOUNTAINS HOLDINGS LLC	STOCK	39.80	0.09	7.73	0	230	12/31/1885
41G 30017621	MONTANA, STATE OF DEPT OF FISH WILDLIFE & PARKS	FISHERY	4128.96	9.20	6660.04	0	0	7/1/1985
41G 212596-00*	TREASURED MOUNTAINS HOLDINGS LLC	IRRIGATION	920.04	2.05	150.38	73.00	0	6/30/1973

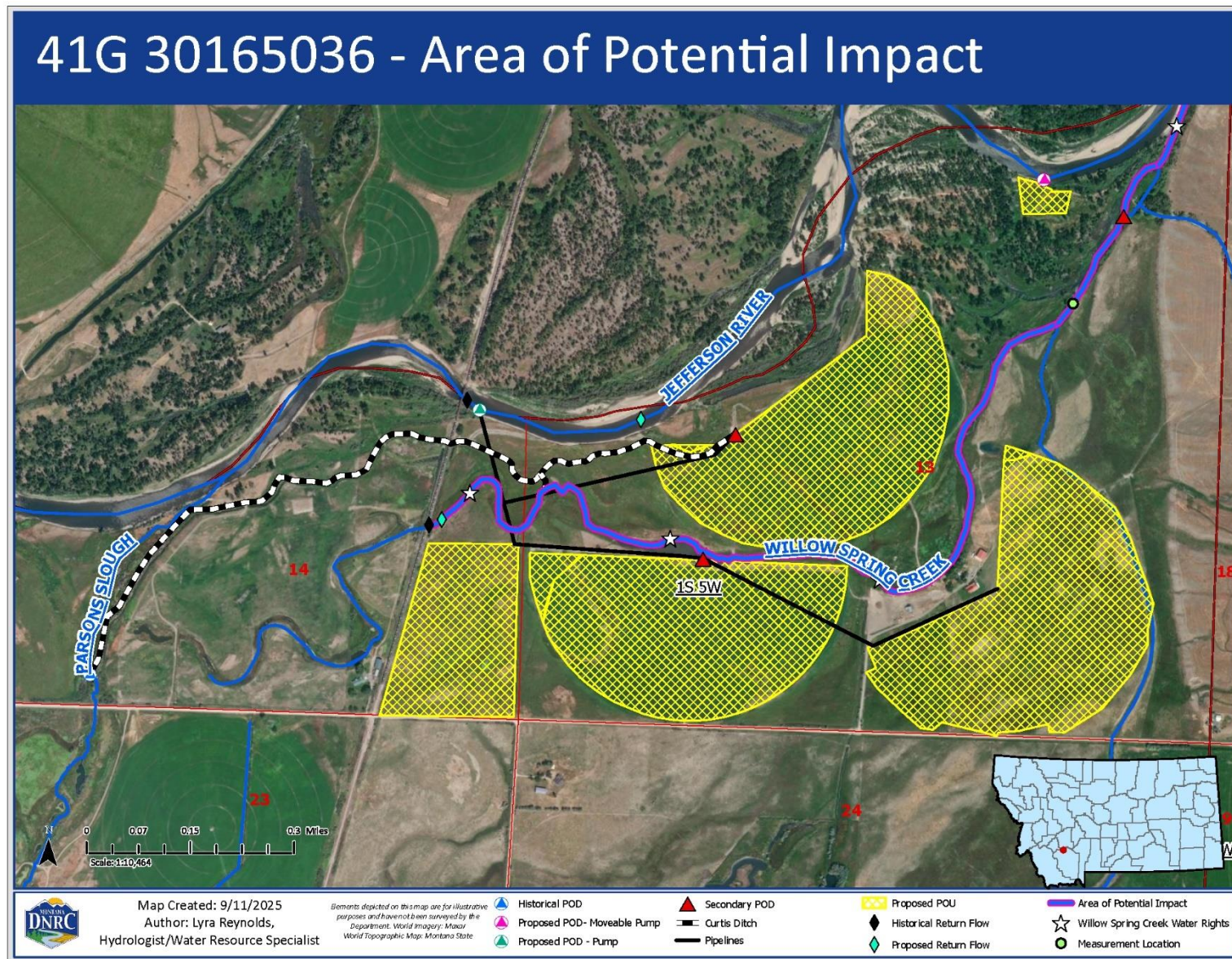


Figure 5. Area of potential impact for Change Application No. 41G 30165036

35. As water rights have been identified to be potentially impacted, the Department conducted an extended analysis of physical availability and downstream legal demands within the AOPI to analyze potential adverse effect of the proposed change. The Department utilized instantaneous streamflow measurements and linear interpolation to determine the availability of water in Willow Spring Creek. The streamflow measurements were collected by the Montana Bureau of Mines and Geology (MBMG) between 2020 and 2024. The streamflow measurements are from GWIC stream site ID 277126, Long/Lat -112.155823904°, 45.7526167° (SRID: NAD83). Using the methodology described in the Surface Water Change Report – Part A, dated March 21, 2025, and Surface Water Change Report – Part A Notice of Errata, the monthly streamflow for Willow Spring Creek was found. The Department multiplied the monthly flow rate in CFS by 1.983¹ and the number of days in the month to determine the monthly available volume in AF for each month. The monthly flow and volume based on the measurements and estimation technique for Willow Spring Creek is shown in Table 20.

Table 20. Monthly flow and volume for Willow Spring Creek

Month	Monthly Flow (CFS)	Monthly Volume (AF)
January	10.93	670.88
February	10.02	555.51
March	9.21	565.31
April	10.6	629.64
May	11.97	734.72
June	13.38	794.77
July	14.75	905.36
August	15.69	963.05
September	17.82	1058.51
October	17.95	1101.77
November	14.84	881.50
December	11.84	703.30

36. The location of return flows on Willow Spring Creek is located upstream of the location where streamflow was estimated. To estimate physical availability on the source, the flow rates and volumes of diversionary water rights between the measurement location and the return flow location were added to the monthly flow and volume. Two diversionary water rights, which are rights that do not remain instream for their beneficial use, exist between the measurement location and return flow location: Claims 41G 30123892 and 41G 212596-00. The flow rate and volume of the water rights were taken from the face value on the abstract. Water rights without an assigned flow rate or volume were quantified. Water rights requiring a volume quantification

¹ Conversion factor for CFS to AF.

are denoted with an asterisk and rights with a flow rate quantification are denoted with a plus in Table 19. The adjudication standard of 30 gallons per day per animal unit was used for stock water right volumes. Stock direct from source/ditch water rights were assigned a flow rate using 30 gallons per day per animal unit and adding 35 gallons per minute to the result. Irrigation rights were assigned a volume of 2.06 AF per acre, which is the low range of the Department's standard for applied volume at 60% efficiency in Climatic Area IV, per ARM 36.12.115. The physical availability at the return flow location on Willow Spring Creek is shown in Table 21.

Table 21. Physical availability of Willow Spring Creek

	Willow Spring Creek		Intervening Water Rights		Physical Availability	
Month	Monthly Flow (CFS)	Monthly Volume (AF)	Monthly Flow (CFS)	Monthly Volume (AF)	Flow (CFS)	Volume (AF)
January	10.93	671.90	0.1	1.0	11.0	672.9
February	10.02	556.35	0.1	0.9	10.1	557.3
March	9.21	566.17	0.1	1.0	9.3	567.2
April	10.60	630.59	0.1	1.0	10.7	631.6
May	11.97	735.83	2.1	28.7	14.1	764.6
June	13.38	795.98	2.1	27.8	15.5	823.8
July	14.75	906.73	2.1	28.7	16.9	935.5
August	15.69	964.51	2.1	28.7	17.8	993.3
September	17.82	1060.11	2.1	27.8	20.0	1087.9
October	17.95	1103.44	2.1	14.4	20.1	1117.9
November	14.84	882.83	0.1	1.0	14.9	883.8
December	11.84	704.36	0.1	1.0	11.9	705.4

37. The physical availability at the location of return flows was then compared to downstream legal demands in the AOPI and the change in return flows to assess potential adverse effect from the proposed change. The Department quantified the flow rate and volume of the downstream legal demands using the same methodology described above in FOF 31. Downstream legal demands are seen in Table 22 below.

Table 22. Downstream legal demands

Water Right No.	Flow Rate (CFS)	Volume (AF)
41G 30124720**	0.09	7.73
41G 30017621	9.20	6660.04
41G 212596-00*	2.05	150.38

38. The legal demands and loss of return flows were subtracted from the physical availability in Willow Spring Creek. The comparison of physical availability, legal demands, and net effect of return flows can be seen in Table 23 below.

Table 23. Comparison of physical availability and legal demands

Month	<u>Physical Availability</u>		<u>Intervening Water Rights</u>		<u>Loss of Return Flows</u>		<u>Net Effect</u>	
	Flow (CFS)	Volume (AF)	Monthly Flow (CFS)	Monthly Volume (AF)	Monthly Flow (CFS) ¹	Monthly Volume (AF)	Flow (CFS)	Volume (AF)
January	11.0	672.9	9.3	566.3	0.001	0.100	1.7	106.5
February	10.1	557.3	9.3	511.5	0.001	0.100	0.8	45.7
March	9.3	567.2	9.3	566.3	0.001	0.100	0.0	0.8
April	10.7	631.6	9.3	548.0	0.001	0.000	1.4	83.5
May	14.1	764.6	11.3	594.1	0.037	2.300	2.7	168.2
June	15.5	823.8	11.3	574.9	0.395	24.300	3.8	224.6
July	16.9	935.5	11.3	594.1	0.537	32.900	5.0	308.5
August	17.8	993.3	11.3	594.1	0.447	27.400	6.0	371.8
September	20.0	1087.9	11.3	574.9	0.020	1.200	8.6	511.8
October	20.1	1117.9	11.3	579.7	0.003	0.200	8.8	537.9
November	14.9	883.8	9.3	548.0	0.002	0.100	5.6	335.7
December	11.9	705.4	9.3	566.3	0.002	0.100	2.6	139.0
¹ Flow rate converted from GPM to CFS using 1 CFS = 448.8 GPM								

39. The physical availability of water exceeds or is equal to the legal demands and loss of return flows in the AOPI for all months. The Department finds the change in return flows will not adversely affect water rights in the AOPI.

40. The Applicant proposes to leave water instream at the historical POD. Water left instream will be left in Parsons Slough, which flows into the Jefferson River. Any diversions from the Jefferson River pump sites cannot exceed the measured amount of water available in Parsons Slough. Water diverted through the historical headgate will be diverted at a lower flow rate than historically. Other water rights in Parsons Slough, the Jefferson River, and Willow Spring Creek will not be adversely affected, as all diversions under Claim 41G 197111-00 will be less than historically. No adverse effect will occur in the identified areas, which includes all flow paths from the historical POD to the confluence of Willow Spring Creek and the Jefferson River.

41. The Department finds the proposed change to Claim 41G 197111-00 will not create an adverse effect.

BENEFICIAL USE

FINDINGS OF FACT

42. The Applicant is not changing the purpose of the water right proposed for change, which is remaining irrigation, a recognized beneficial use of water in the state of Montana.

43. The Applicant proposes to divert 564.9 AF at a maximum flow rate of 4.26 CFS and consume 238.3 AF for continued irrigation use. A total of 199.5 acres will be irrigated following the proposed change. The Department used the Department's standards outlined in ARM 36.12.1902 to determine the proposed use of Claim 41G 197111-00.

44. The Department finds the continued use of Claim 41G 197111-00 for irrigation of 199.5 acres is a beneficial use of water.

ADEQUATE DIVERSION

FINDINGS OF FACT

45. The Applicant proposes to add a permanent pump site and a moveable pump site to divert water under Claim 41G 197111-00. The permanent pump site in the Jefferson River is a 60 HP variable speed turbine pump that will be limited to a maximum flow rate of 4.04 CFS. Water conveyed through 10-inch and 8-inch PVC buried mainlines to either pivot sprinklers or wheeline sprinkler systems. The center pivot sprinkler systems will use low pressure drop nozzles with a 2 HP pump supplying the Nelson end guns. The wheel line sprinkler system will consist of self-leveling impulse type sprinklers spaced at the standard 40 feet apart, each supplying approximately 8.5 GPM. The moveable pump site in the Jefferson River is a 14 HP gasoline powered pump, capable of diverting up to 100 GPM, that supplies a sprinkler gun fitted with a 16mm nozzle. Water diverted at the moveable pump site is conveyed through a 2-inch flexible plastic hose to the sprinkler gun, which applies water to the 1.6-field in the NE Section 13, T1S, R5W, Madison County.

46. When the system is fully operational, only the permanent pump and moveable pump sites will be operated. Water will flow from Parsons Slough to the pump sites in the Jefferson River for diversions. Together, the new diversions have a maximum capacity of 4.26 CFS. The permanent pump site will be installed in a manner that limits its operations if the Jefferson River has a flow rate less than 100 CFS. In the event the Jefferson River is below 100 CFS and the pump sites are not operational, the Applicant will divert water through the historical point of diversion. Water will be conveyed from the historical headgate through the Curtis Ditch to secondary diversions. Some water from the Curtis Ditch will also be conveyed through Willow Spring Creek, which will act as a natural carrier, to secondary points of diversion. The secondary diversions will convey water to the sprinkler systems on three fields (Fields B, D, and E in Figure 4) for field application. Only 3.39 CFS is proposed for diversion through the historical diversion when in use because of decreased operational needs. The historical diversion can be controlled to limit flow to 3.39 CFS.

47. The Applicant proposes to limit total diversions to 4.26 CFS based on the irrigation system supply needs. The irrigation system requirements were determined by a professional sprinkler system designer. The proposed diversion structures can be adjusted to limit the flow rate that is diverted at any time. The Applicant will be required to provide measurements if this change is authorized.

48. The proposed diversion and conveyance systems have capacities capable of diverting the proposed flow rate of 4.26 CFS. The historical diversion structure can be controlled to limit flow to the proposed 3.39 CFS flow rate. The Department finds the proposed means of diversion and conveyance to be adequate.

POSSESSORY INTEREST

FINDINGS OF FACT

49. The Applicant signed the affidavit on the application form affirming the Applicant has possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. (Change Application No. 41G 30165036 file).

CONCLUSIONS OF LAW

HISTORICAL USE AND ADVERSE EFFECT

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

quantity within the amount claimed which the appropriator has needed, and which within a reasonable time he has actually and economically applied to a beneficial use. . . . it may be said that the principle of beneficial use is the one of paramount importance . . . The appropriator does not own the water. He has a right of ownership in its use only”); *Town of Manhattan*, ¶ 10 (an appropriator’s right only attaches to the amount of water actually taken and beneficially applied).²

51. Sections 85-2-401(1) and -402(2)(a), MCA, codify the prior appropriation principles that Montana appropriators have a vested right to maintain surface and ground water conditions substantially as they existed at the time of their appropriation; subsequent appropriators may insist that prior appropriators confine their use to what was actually appropriated or necessary for their originally intended purpose of use; and, an appropriator may not change or alter its use in a manner that adversely affects another water user. *Spokane Ranch & Water Co. v. Beatty*, 37 Mont. 342, 96 P. 727, 731 (1908); *Quigley*, 110 Mont. at 505-11, 103 P.2d at 1072-74; *Matter of Royston*, 249 Mont. at 429, 816 P.2d at 1057; *Hohenlohe*, ¶¶ 43-45.³

52. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the “historic use” of the water right being changed. *Town of Manhattan*, ¶10 (recognizing that the Department’s obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change Applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a statement of claim, permit, or decree may not include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.⁴ A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of

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

³ See also *Holmstrom Land Co., Inc., v. Newlan Creek Water District*, 185 Mont. 409, 605 P.2d 1060 (1979); *Lokowich v. Helena*, 46 Mont. 575, 129 P. 1063 (1913); *Thompson v. Harvey*, 164 Mont. 133, 519 P.2d 963 (1974) (plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); *McIntosh v. Graveley*, 159 Mont. 72, 495 P.2d 186 (1972) (appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); *Head v. Hale*, 38 Mont. 302, 100 P. 222 (1909) (successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); and, *Gassett 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).

⁴A 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

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 change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).⁵

53. 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.

⁵ Other western states likewise rely upon the doctrine of historic use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: *Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District*, 717 P.2d 955, 959 (Colo. 1986)("[O]nce an appropriator exercises his or her privilege to change a water right ... the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right ... which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right."); *Santa Fe Trail Ranches Property Owners Ass'n v. Simpson*, 990 P.2d 46, 55 -57 (Colo., 1999); *Farmers Reservoir and Irr. Co. v. City of Golden*, 44 P.3d 241, 245 (Colo. 2002)("We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation"); *Application for Water Rights in Rio Grande County*, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (When an owner of a water right wishes to change a water right ... he shall file a petition requesting permission to make such a change The change ... may be allowed provided that the quantity of water transferred ... shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.); *Basin Elec. Power Co-op. v. State Bd. of Control*, 578 P.2d 557, 564 -566 (Wyo, 1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.)

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 subsequent water users).⁶

54. 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.

55. 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

⁶ The Montana Supreme Court recently recognized the fundamental nature of return flows to Montana’s water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell’s flows are fed by irrigation return flows available for appropriation. *Bitterroot River Protective Ass’n, Inc. v. Bitterroot Conservation Dist.*, 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, 198 P.3d 219, (citing *Hidden Hollow Ranch v. Fields*, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

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).

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

57. 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).

58. 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).

59. 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).

60. The Department has adopted a rule providing for the calculation of historic consumptive use where the Applicant proves by a preponderance of the evidence that the acreage was historically irrigated. ARM 36.12.1902(16). In the alternative an Applicant may present its own evidence of historic beneficial use. In this case Applicant has elected to proceed under ARM 36.12.1902. (FOF No. 14).

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

62. Based upon the Applicant's evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of Claim 41G 197111-00 to be a diverted volume of 897 AF, a historically consumed volume of 256.7 AF, and flow rate of 9.48 CFS. (FOF Nos. 10 - 18)

63. Based upon the Applicant's comparative analysis of historic water use and return flows to water use and return flows under the proposed change, the Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. Section 85-2-402(2)(a), MCA. (FOF Nos. 19 - 41)

BENEFICIAL USE

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

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

beneficial use and that 564.9 acre-feet of diverted volume and 4.26 CFS flow rate of water requested is the amount needed to sustain the beneficial use and is within the standards set by DNRC Rule. Section 85-2-402(2)(c), MCA (FOF Nos. 42 - 44).

ADEQUATE MEANS OF DIVERSION

66. 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).

67. Pursuant to § 85-2-402 (2)(b), MCA, Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. (FOF Nos. 45 - 48)

POSSESSORY INTEREST

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

69. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. (FOF No. 49).

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 30165036 should be GRANTED subject to the following.

The Applicant is authorized to change the point of diversion and place of use of Statement of Claim 41G 197111-00. The Applicant is authorized to divert from Parsons Slough from May 1 to October 15 at three primary points of diversion, seen in Table 24. Under Claim 41G 197111-00, the Applicant may divert a maximum volume of 564.7 AF and consume a volume of 238.3 AF at a flow rate of 4.26 CFS for irrigation of 199.5 acres from May 1 to October 15. The authorized

place of use for irrigation is seen in Table 25 below. The maximum flow rate and volume that will be diverted from Parsons Slough by the water right proposed for change cannot exceed 4.26 CFS and 564.7 AF.

Table 24. Legal land descriptions for the authorized points of diversion

Diversion Means	QTR	Section	Township	Range	County	Authorized Flow Rate
Headgate	SESESW	14	1S	5W	Madison	3.39 CFS
Permanent Pump	NENESE	14	1S	5W	Madison	4.03 CFS
Moveable Pump	SEWNNE	13	1S	5W	Madison	0.23 CFS

Table 25. Legal land descriptions for the authorized place of use

Acres	QTR	Section	Township	Range	County
25.7	SESE	14	1S	5W	Madison
160.9	S2	13	1S	5W	Madison
8.1	SWNE	13	1S	5W	Madison
3.2	SEWN	13	1S	5W	Madison
0.3	SWNNE	13	1S	5W	Madison
1.3	SEWNNE	13	1S	5W	Madison

The following conditions will be placed on this authorization:

WATER MEASUREMENT INFORMATION

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED MEASURING DEVICE IN PARSONS SLOUGH AT A POINT APPROVED BY THE DEPARTMENT. THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE FLOW IN PARSONS SLOUGH WHEN THEY ARE IRRIGATING THE PLACE OF USE FROM THE JEFFERSON RIVER PUMP SITES. THE ABILITY TO DIVERT PARSONS SLOUGH WATER OUT OF THE JEFFERSON RIVER AS GRANTED BY THIS CHANGE AUTHORIZATION SHALL BE BASED UPON MEASUREMENTS, AND DIVERSIONS CANNOT EXCEED THE AMOUNT MEASURED IN PARSONS SLOUGH. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO THAT THE MEASURING DEVICE ALWAYS OPERATES PROPERLY AND MEASURES FLOW ACCURATELY. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A MONTHLY WRITTEN RECORD OF FLOW. RECORDS SHALL BE SUBMITTED TO THE DEPARTMENT BY NOVEMBER 30TH OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR.

IMPORTANT INFORMATION

THE HISTORICAL DITCH DIVERSION MAY ONLY DIVERT WATER FROM PARSONS SLOUGH WHEN THE PUMP SITES IN THE JEFFERSON RIVER ARE NOT IN OPERATION.

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 19th day of September, 2025.

/Original signed by Kerri Strasheim/

Kerri Strasheim, Manager
Bozeman Regional Office
Montana Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the DRAFT PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 19th day of September, 2025, by first class United States mail.

TREASURED MOUNTAINS HOLDINGS, LLC

ATTN: BILL GOULDD

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FRISCO, TX 75034-4076

CC, VIA EMAIL: ANDY BRUMMOND, ABRUMMOND@MT.GOV

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