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

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APPLICATION TO CHANGE WATER RIGHT NO. 76M 30165370 by CITY OF MISSOULA	)))	**DRAFT PRELIMINARY DETERMINATION TO GRANT CHANGE WITH MODIFICATIONS**

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On November 18, 2025 the City of Missoula (Applicant) submitted Application to Change Water Right No. 76M 30165370 to change Statement of Claim Nos. 76M 123868-00, 76M 123869-00, 76M 118513-00 and 76M 123870-00 to the Missoula 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, the Applicant, and their consultant (WGM Group) on February 25, 2025, in which the Applicant designated that the technical analyses for this application would be completed by the Department. Staff members Jim Nave, Alex Dalgleish, Benjamin Thomas and Evan Norman were all present on behalf of the Department. The Applicant returned the completed preapplication documents on August 18, 2025. The Department delivered the completed Technical Analysis to the Applicant on October 9, 2025. This Technical Analyses contained calculation errors made by the Department, and upon receiving the document, the Applicant also understood that several overlapping water rights had not been included in the preapplication materials. As a result, on November 18, 2025, the Applicant submitted Form 606-TAA (Technical Analyses Addendum) with their Application. The Technical Analyses used for the criteria analysis for this application have been delivered with this Draft Preliminary Determination. Since the submitted Technical Analyses Addendum deviated from the completed Preapplication Meeting Form, this Application no longer qualified for the expedited processing timelines or discounted filing fee. The Application was determined to be correct and complete as of December 19, 2025. An Environmental Assessment for this application was completed on January 30, 2026.

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
- Addenda:

- Technical Analyses Addendum, Form 606-TAA
- Reasonable Use Addendum, Form 606-B
- Mitigation Addendum, Form 606-MIT

- Attachments:
  - Department-completed technical analyses based on information provided in the Preapplication Meeting Form, dated October 9, 2025.
- Maps:
  - City of Missoula Application Form 606 Q 17 Historical Use Map 1 POD, Conveyance & Irrigation Type, dated November 10, 2025
  - City of Missoula Application Form 606 Q 17 Historical Use Map 2 Overlapping Water Rights, dated November 10, 2025
  - City of Missoula Application Form 606 Q 18 Proposed Use Map, Mitigation, Marketing for Mitigation, dated November 10, 2025

<u>Information Received after Application Filed</u>

- Email correspondece between Consultant (Julie Merritt) and Department (Alex Dalgleish) dated November 24, 2025, RE:GIS files for HVIC Change Application
  - City of Missoula Application Form 606 Q 17. Historical Use Map 2 Overlapping Water Rights, dated November 24, 2025

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

- Change Application 76M 30165370 Preapplication Meeting Follow Up Responses, dated May 27, 2025
- Change Application 76M 30165370 Preapplication Meeting Revised and Amended Follow Up Responses, dated August 13, 2025
- Email correspondece between Consultant (Julie Merritt) and Department (Alex Dalgleish) dated September 11, 2025, RE: City of Missoula 76M 30165370 Preapplication Meeting Form Accepted Letter
- Email correspondece between Consultant (Julie Merritt) and Department (Alex Dalgleish) dated November 7, 2025, RE: 76M 30165370 TA
- Email correspondece between Consultant (Julie Merritt) and Department (Alex Dalgleish, Jim Nave, Shannon Baumgardner, Maeve Holman, Anna Pakenham Stevenson, Nathaniel Ward) dated November 14, 2025, RE: Change Application 76M 30165370 – Hellgate Valley Irrigation Co.

- Department Surface Water Change Technical Analyses Report – Parts A and B, dated April 17, 2026
- Water Resources Survey, Missoula County, 1960
- Statement of Claim 76M 123868-00 file
- Statement of Claim 76M 123869-00 file
- Statement of Claim 76M 118513-00 file
- Statement of Claim 76M 123870-00 file
- 1976 Aerial Imagery
- Natural Resource Conservation Service Web Soil Survey, Physical Soil Properties and Map Unit Description Reports
- 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 Missoula Regional Office at 406-721-4284 to request copies of the following documents.
    - Department Memorandum, dated September 13, 2012, Development of standardized methodologies to determine Historic Diverted Volume
    - Department Memorandum updated March 17, 2010, Consumptive Use Methodology
    - DNRC Change Manual, updated February 14, 2025
    - Department Technical Memorandum, dated November 1, 2019, Physical Availability of Surface Water with Gage Data
    - DNRC's Use of the Irrigation Water Requirements (IWR) Program, dated February 4, 2013
    - Assessment of new consumptive use and irrecoverable losses associated with change applications, dated April 15, 2013
    - Department Technical Memorandum, dated 2019, Calculating Return Flows

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; AF/YR means acre-feet per year; AU's means animal

units, FLD means Flynn-Lowney Ditch, and HVIC means Hellgate Valley Irrigation Company. Values seen in tables pertaining to the historic consumptive and diverted volumes were calculated using the Department standard Irrigation and Conveyance Loss Calculator and the volumes may differ up to 0.1 AF due to rounding.

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

1. The Applicant proposes to change the place of use (POU), point of diversion (POD), and purpose of use of irrigation Statement of Claims (Claims) 76M 123868-00, 76M 123869-00, 76M 118513-00 and stock Statement of Claim 76M 123870-00. These Claims all diverted water from the Clark Fork River via the Flynn-Lowney Ditch (FLD) for volumes not to exceed the amount put to historical and beneficial use. The claimed period of diversion and period of use is 4/1 – 11/1 for the irrigation claims and 1/1 -12/31 for the stock claim.

2. Water was historically diverted from the Clark Fork River into a side channel with a point of diversion in the SWNWNE Section 21, Township 13 North, Range 19 West, Missoula County. Water flowed towards a headgate on the north side of the river, and was conveyed into the FLD for flood and sprinkler irrigation. The Hellgate Valley Irrigation Company (HVIC) provided shareholders (private landowners) with irrigation water across the POU/service area. The claimed POU for irrigation is 2,399 acres in Sections 17, 18 and 19, T13N, R19W and Sections 1, 11, 12, 13, 14 and 23, T13N, R20W. Under the stock right, 1,800 cattle, 300 horses, 200 sheep and 20 goats (total of 2,249 AU's) were claimed to have drank directly from FLD and it's lateral ditches. The Claim file for 76M 123870-00 did not specify if the cattle were beef or dairy cows. However, the Applicant listed 1,800 AU's for 1,800 cattle, or a 1:1 ratio which is equivalent to beef cattle (1 beef cow = 1 AU).

3. Table 1 reflects the rights as they exist currently, and the rights are the result of the Department's examination during the Basin 76M Temporary Decree in 1984.

Table 1: Water Rights Proposed for Change

Water Right Number	Priority Date	Acres/ Animal Units (AU)	Flow Rate (CFS)	Volume (AF)	Purpose	Period of Use	Place of Use[1]	Point of Diversion
76M 123868-00	12/1/1902	2,399 Acres	40	Historical Use Statement	Irrigation	4/1 – 11/1	NW, N2SW, S2SW, N2SE, S2SE, NE Sec. 18, NESWSE, NWNESW, NENESW, SENESW, SWNWSE,	

76M 123869-00	5/31/1903	2,399 Acres	40	Historical Use Statement	Irrigation	4/1 – 11/1	NENW Sec. 19, T13N, R19W, W2, W2E2, E2NE, E2SE Sec. 13, W2, W2E2, SESE Sec. 12, SE, S2NE, S2NW, N2SW, NESESW Sec. 11, NE, E2W2, W2SE, E2SE Sec. 14, SENWSE Sec. 17, SESESW Sec. 1, NENW Sec. 23, T13N, R20W, Missoula County	SWNWNE Section 21, Township 13N, Range 19W
76M 118513-00	7/28/1919	2,399 Acres	62.5	Historical Use Statement	Irrigation	4/1 – 11/1		
76M 123870-00	5/31/1903	2,294 AU	-	Historical Use Statement	Stock	1/1 – 12/31	All Sec. 18, SWSENW, NESW, W2NWSE Sec. 17, NENW Sec 19, T13N, R20W, All Sec. 13, W2, W2E2,SESE Sec. 12, SE, S2NE, S2NW, N2SW, N2SESW Sec. 11, NE,E2W2,W2SE Sec. 14, T13N, R20W, Missoula County	

[1] The Applicant filed Notices of Objections for the irrigation claims to the Montana Water Court, objecting to the places of use under irrigation rights 76M 118513-00, 76M 123868-00 and 76M 123869-00. During the preapplication meeting with the Department and the Applicant, legal land description errors were identified regarding 8 acres in the SENWSE Sec. 17, T13N, R20W, where these acres appear to be in the SENWSE Sec. 17, T13N, *R19W* for all three irrigation claims. Additionally, there were errors with the 135 acres described in the SESE Sec. 11, T13N, R20W on Claims 76M 123869-00 and 76M 118513-00. These 135 acres should be described in the *SE* Sec. 11, T13N, R20W. When the irrigation change rights were examined by the Department as part of the 1984 Temporary Decree of Basin 76M, the claimed place of use legal land descriptions did not match the map provided with the claim filing documents. The result was a generalized and unclear place of use being listed on the current 76M 123868-00, 76M 123869-00 and 76M 118513-00 abstracts.

4. Several privately owned irrigation rights overlapped with the historic HVIC POU, and they are summarized in Table 2 below. None are proposed for change through this application. These supplemental rights are not owned by the Applicant or conveyed through the FLD, but are located within the POU for irrigation Statement of Claims 76M 123868-00, 76M 123869-00 and 76M 118513-00. All supplemental water rights overlapped entirely with the historical POU, except for Claim 76M 109004-00 and 76M 149678-00, in which a total of 326.7 and 52 acres overlapped

with the HVIC POU, respectively. According to the Applicant, the overlapping rights provided supplemental irrigation to a total of 918.7 acres within the historical HVIC POU.

Table 2. Supplemental Water Rights to 76M 123868-00, 76M 123869-00 and 76M 118513-00

Water Right	Priority Date	Acres	Flow Rate (CFS)	Period of Diversion	Place of Use	Source[1]
76M 109001-00	5/1/1895	65.7	0.83	4/15 – 10/15	SW, Sec. 11, T13N, R20W	Grant Creek
76M 109002-00	7/1/1931	65.7	1.63	4/15 – 10/15	SW, Sec. 11, T13N, R20W	W&S, UT of Clark Fork River
76M 109003-00	12/31/1965	60	1.5	4/15 – 10/15	E2NWSE, Sec. 11, T13N, R20W	Grant Creek
76M 109004-00	6/1/1965	495.7	1.11	4/15 – 7/15	W2NW, NWSW Sec. 12, S2NE, NW, SW Sec. 11, all in T13N, R20W	Grant Creek
76M 123893-00	5/15/1928	73	1.83	5/15 – 10/1	SWSESW, SESESW, SWSWSE, NWSWSE, NESESW,NESWSE, SENWSE, SWNWSE, NWNWSE, E2E2NE, SENWSE, NWSESW, Sec. 13, T13N, R20W	UT of Clark Fork River
76M 149678-00	12/31/1958	55	0.36	4/15 – 10/15	SWSWNE, W2NWSE, W2SWSE, NWSWNE Sec. 14, NWNWNE Sec. 23, all in T13N, R20W	UT of Clark Fork River
76M 125124-00	5/15/1928	56	1.4	5/15 – 10/1	NWNWSW, SWNWSW, NENWSW, SENWSW, NWNESW, SWNESW, NENESW, SENESW, S2SENW, Sec. 12, T13N, R20W	UT of Clark Fork River
76M 30374-00	3/8/1948	67	5.08	5/1 – 10/19	SENESW, SESW Sec. 14, NENW Sec. 23, all in T13N, R20W	UT of Grant Creek
76M 29120-00[2]/ 76M 30159900	7/15/1867	277	1.63	4/15 – 7/19	S2SE Sec. 11, W2NE, NWSE, NESW, S2SENW,	Grant Creek

					E2SWSE Sec. 12, all in T13N, R20W	
76M 29121-00[2]/ 76M 30159898	5/1/1875	277	4.0	4/1 – 9/30	S2SE Sec. 11, W2NE, NWSE, NESW, S2SENW, E2SWSE Sec. 12, T13N, R20W	Grant Creek
76M 29122-00[2]/ 76M 30159901	5/1/1866	277	4.0	4/1 – 9/30	S2SE Sec. 11, W2NE, NWSE, NESW, S2SENW, E2SWSE Sec. 12, T13N, R20W	Grant Creek

[1] UT stands for Unnamed Tributary
[2] In 2022, a portion of parent rights 76M 29120-00, 76M 29121-00 and 76M 29122-00 were severed from their historical POU, creating the associated child rights listed next to the parent rights in the table.

CHANGE PROPOSAL

FINDINGS OF FACT

5. The Applicant proposes to change the POU, POD and purpose of use of irrigation Statement of Claim Nos. 76M 123868-00, 76M 123869-00, 76M 118513-00 and stock water Claim 76M 123870-00. The Application requests to change the purpose of use to mitigation and marketing for mitigation. The proposed POU and POD for marketing for mitigation would extend along a reach of the Clark Fork River from the historic POD in the SWNWNE Section 21, T13N, R19W, Missoula County, to the S2S2 Section 33, T26N, R32W, Sanders County (at the Noxon Rapids Dam Powerhouse). The proposed mitigation and marketing for mitigation period of use is during the irrigation season when water was historically diverted (April 15 – October 15).

6. The Department held a preapplication meeting with the Applicant and issued its Technical Analyses (on October 9, 2025) before the Application Form was received (on November 25, 2025). The Applicant identified calculation errors made by the Department in the Technical Analyses on behalf of the historic consumptive volume attributed to both the change rights and the overlapping supplemental rights identified by the Applicant in their preapplication materials. Additionally, the Analyses contained inconsistent figures of the historical apportioned field applied and historical diverted volumes between the change rights and supplemental rights. In addition to the Department's errors, the Applicant failed to include or mention three overlapping supplemental water rights (76M 29120-00, 76M 29121-00, 76M 29122-00) in their preapplication materials, and they did not agree with the Department's findings of the maximum historically (1,977) irrigated acres. To address both the Department's errors and Applicant's new information, the Applicant submitted Form 606-TAA Technical Analyses Addendum (TAA) with their Application. The TAA included supplemental rights 76M 29120-00, 76M 29121-00, 76M 29122-00, resulting in a larger

historic irrigation figure (maximum of 2,287.5 acres) and larger historic consumed and diverted volumes associated with the irrigation change rights. The Applicant restated that the volume attributed to the supplemental water rights was calculated based on their availability and the monthly net irrigation requirement from the Irrigation Water Rights program.

7. The Department found a total historical consumptive volume of 2,676.5 AF that was attributed to irrigation Claims 76M 123868-00, 76M 123869-00 and stock Claim 76M 123870-00. No historical use was found under junior irrigation Claim 76M 118513-00. Of the total consumptive volume, 383.1 AF will be used for mitigation purpose to offset consumptive use depletions to the Clark Fork River from three separate groundwater irrigation permit applications (76M 30165615, 76M 30163329 and 76M 30164554).

8. The marketing for mitigation purpose will allow the Applicant to sell or lease shares to other future water developments within the proposed POU reach. The remaining historical consumptive volume of 2,293.4 AF (2,676.5 AF – 383.1 AF) will stay in the Clark Fork River, providing the opportunity to mitigate adverse effects from new appropriations of water. The proposed period of use for the marketing for mitigation purpose is the historical irrigation season, from April 15 - October 15.

9. Through this proposal, the historical FLD will no longer be used. The Applicant states that they have physically filled in the culverts at the historical POD to prevent diversion of water into the ditch and the conveyance infrastructure has been retired. The Applicant also states that the 2.399 acres will be retired from the historical POU. Due to the nature of several overlapping water rights, the Department recognizes that the change rights will be retired and the historic (irrigation and stock) uses under the change rights will no longer occur. Those overlapping acres served by the privately owned irrigation rights may still be irrigated with those respective private rights.

10. Since the historical POD has been rendered unusable, no measurement of continued historical use is required at the historical POD. As water is leased or sold for the proposed marketing for mitigation use, measurement reporting will be required. The Applicant must notify the Department within 30 days each time a portion of the change is completed, pursuant to § 85-2-420(4)(b), MCA.

11. The Applicant requested a period of 20 years to complete this change.

12. Pursuant to § 85-2-420, MCA, the appropriator must notify the Department within 30 days each time a portion of the change is completed (leasing or selling), and will be required to submit progress reports every 5 years to show diligence in marketing the water. Therefore, if this

Preliminary Determination is granted, the following conditions would be added to the Authorization:

IMPORTANT INFORMATION
PURSUANT TO § 85-2-420, MCA, THE APPROPRIATOR SHALL HAVE A 20-YEAR PERIOD FOR COMPLETION OF THIS CHANGE AUTHORIZATION. IF THE FULL AMOUNT OF WATER AUTHORIZED FOR CHANGE TO MARKETING FOR MITIGATION IS NOT SOLD OR LEASED FOR THESE PURPOSES PRIOR TO THE 20-YEAR COMPLETION DATE, THE WATER RIGHT RETAINS THE BENEFICIAL USE IN PROPORTIONATE AMOUNTS NOT PERFECTED FOR MARKETING FOR MITIGATION AND AS AUTHORIZED PRIOR TO THIS CHANGE AUTHORIZATION. IF THE CHANGE IS NOT FULLY PERFECTED BY THE COMPLETION DEADLINE AND NO EXTENSION IS REQUESTED THE APPROPRIATOR SHALL FILE A PROJECT COMPLETION FORM FOR THE AMOUNT COMPLETED. THE REMAINING WATER NOT CHANGED REVERTS TO ITS HISTORICAL USE ON A PRO RATA BASIS AS AUTHORIZED BY THE DEPARTMENT AND CAN BE USED AS SUCH IF PRACTICAL.

IMPORTANT INFORMATION
WATER MARKET REPORT: THE APPROPRIATOR SHALL SUBMIT TO THE DEPARTMENT FORM WM09 WITHIN 30 DAYS OF LEASING OR SELLING ANY PORTION OF WATER UNDER THIS AUTHORIZATION. THE FORM SHALL BE ACCOMPANIED BY A COPY OF THE WATER LEASE AGREEMENT OR DEED EVIDENCING THE SALE OF A PORTION OF THE WATER RIGHT FOR MITIGATION PURPOSE.

WATER MARKETING INFORMATION
WATER MARKET REPORT: THE APPROPRIATOR SHALL SUBMIT TO THE DEPARTMENT FORM WM09 WITHIN 30 DAYS OF LEASING OR SELLING ANY PORTION OF WATER UNDER THIS AUTHORIZATION. THE FORM SHALL BE ACCOMPANIED BY A COPY OF THE WATER LEASE AGREEMENT OR DEED EVIDENCING THE SALE OF A PORTION OF THE WATER RIGHT FOR MITIGATION/AQUIFER RECHARGE PURPOSE.

WATER MARKETING PROGRESS REPORT
PROGRESS REPORT ON MARKETING: THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT EVERY 5 YEARS FROM THE DATE OF ISSUANCE OF THIS AUTHORIZATION OF THE ACTIVITIES TO DATE TOWARDS DILIGENCE IN MARKETING THE WATER. THE REPORTS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE.

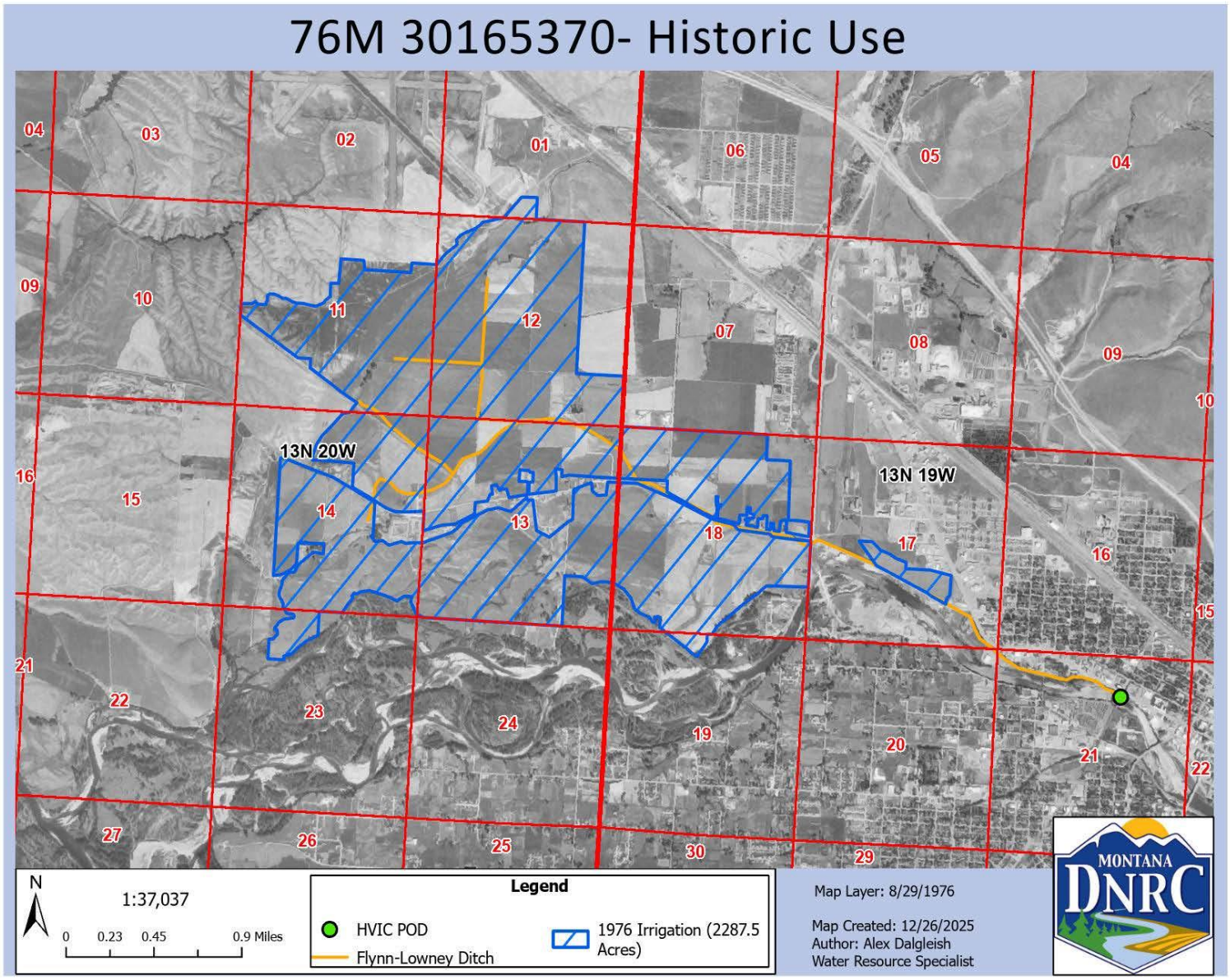

Figure 1. Historical Use for Change Application 76M 30165370

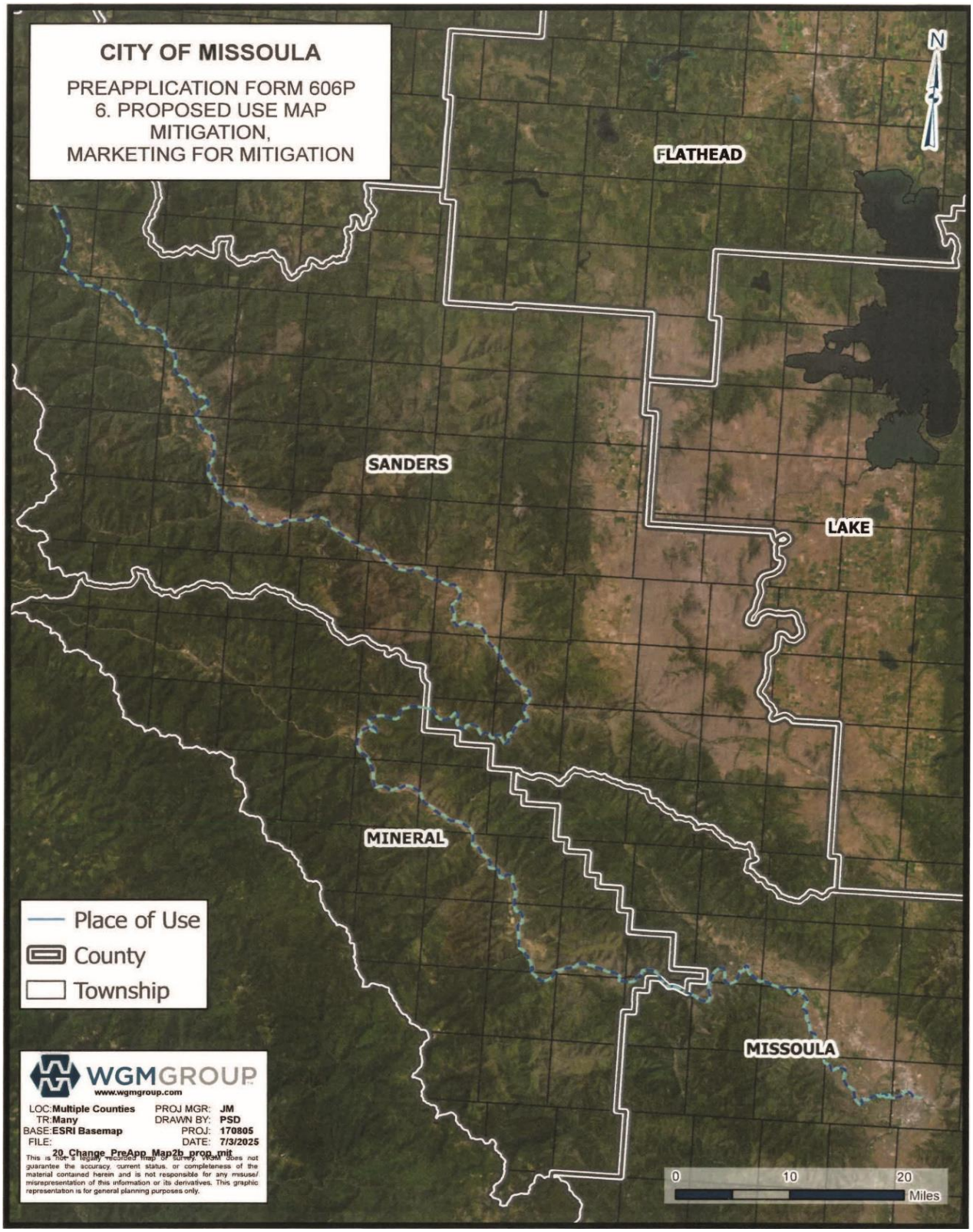

Figure 2. Proposed Use for Change Application 76M 30165370

CHANGE CRITERIA

13. 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.

14. 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

15. Irrigation Statement of Claims 76M 123868-00, 76M 123869-00 and 76M 118513-00 were filed appropriation rights for a total of 2,366 claimed acres. These rights have respective priority dates of December 1, 1902, May 31, 1903, and July 28, 1919. Stock Claim 76M 123870-00 has a priority of May 31, 1903 and was filed for 1,800 cattle, 300 horses, 200 sheep and 20 goats, for a total of 2,294 animal units (AU's).

16. All Claims were included in the Basin 76M Temporary Decree in 1984. The decreed period of diversion and use for irrigation claims 76M 123868-00, 76M 123869-00 and 76M 118513-00 was April 1 – November 1 (215 days including the end date). For stock Claim 76M 123870-00 the decreed period of use and diversion was January 1 – December 31 (365 days). The POUs of the change rights are within Climatic Area III and the Department found the decreed period of use/diversion to be outside the local Climatic Area standard found in ARM 36.12.112 for irrigation use (April 15 – October 15, or 184 days including the end date). The Applicant accepted the standard period of diversion and use and the Department used this period for it's historical irrigation analyses. The Applicant also stated that in memory of recent ditch users, the stock under 76M 123870-00 drank directly from the FLD and its laterals, and that water was not diverted outside of the irrigation season for stock use. Due to the historical diversion practices under the irrigation claims, the historical use of right 76M 123870-00 was also evaluated with the local irrigation standard period of diversion and use from April 15 - October 15.

17. Water was diverted from the Clark Fork River into a side channel with rocks, concrete barriers and other debris in the SWNWNE Section 21, T13N, R19W, Missoula County. Once separated from the main channel, water flowed towards a headgate where it was conveyed into the FLD. The HVIC diverted water into the FLD for use by various shareholders for flood/sprinkler irrigation within the decreed 2,399.0-acre POU. The 1960 Missoula Water Resources Survey (WRS) discusses historical use under the HVIC and identified the length of the "canal" to be 4.5 miles. The WRS maps (showing irrigated acres) displays the FLD and its laterals. The 4.5-mile section appears to be the length of the FLD and does not include any of the lateral conveyance ditches used by the HVIC. The Department georeferenced the WRS maps into ArcGIS Pro, and the total length of the mapped lateral ditches was approximately 3.2 miles, for a total 7.7 miles of conveyance ditches.

18. To determine the historical capacity of the FLD, the Department used Applicant-provided ditch measurements and information. This included the bottom and top widths (4 feet and 13 feet),

a wetted perimeter of 13.5 feet and a Mannings coefficient (n) of 0.035. Based on this information, the Applicant identified the historical high-water capacity of the FLD to be 71 CFS. Irrigation Claims 76M 123868-00, 76M 123869-00 and 76M 118513-00 have respective decreed flow rates of 40 CFS, 40 CFS and 62.5 CFS. Based on the ditch capacity, 100% of the flow rate under most senior right 76M 123868-00, and 43.7% (71 CFS – 40 CFS= 31 CFS, and 31 CFS / 71 CFS = 43.7%) of the flow rate from the next senior right (76M 123869-00) were capable of being diverted into the FLD. Out of 71 CFS, the proportionate share of the flow rate under senior right 76M 123868-00 is 56.3% (40 CFS / 71 CFS = 56.3%). The FLD did not have capacity to convey water to the place of use under the most junior irrigation Claim 76M 118513-00 and thus the Department did not find any historical use under this right.

19. The WRS stated that "*in 1959, there were 1,399 acres irrigated under the Company's ditch system*". When the WRS Map was georeferenced into ArcGIS Pro, the Department found that the HVIC irrigation consisted of approximately 1,404 irrigated acres. The Claim file for each irrigation right in this change proposal included a document explaining that water diverted by the HVIC's remained in the same general area over the years and there had been some major changes including expansion of irrigated acreage through the use of sprinkler systems on the benchlands in the northwest portion of the claimed POU and low lying ground along the north side of the Clark Fork River. As a result of the expansion after the completion of the 1959 Missoula County WRS and before July 1, 1973, the acreage claimed by the HVIC is greater than the amount described in the WRS.

20. During the 1984 Temporary Decree, the Department examined the irrigation Claims and noted that the claimed POU legal land descriptions did not match the map provided. The POU identified on the Temporary Decreed abstracts consists of 2,399.0 acres located across Sections 17, 18 and 19, T13N, R19W and Sections 1,11,12,13,14, and 23, T13N, R20W, all in Missoula County.

21. The change rights are actively part of the ongoing Basin 76M Preliminary Decree, and the Applicant filed objections with the Water Court on behalf of the POU of irrigation Claims 76M 123868-00, 76M 123869-00 and 76M 118513-00. The Applicant intends to amend the irrigation POU through Water Court proceedings (via the objections) so that it is generally described across each Section within the claimed POU. As of the date of this document, the Water Court has not resolved or addressed these objections.

22. The Applicant provided an aerial photography from 1976 to document historical irrigated acreage. This image represented a maximum of 2,287.5 acres that were historically irrigated

within the claimed 2,399-acre POU. The Applicant determined that 1,721.1 acres (75.24% of claimed acres) were sprinkler irrigated and 566.4 (24.76% of claimed acres) were flood irrigated. The Department analyzed the 1976 imagery at the POU and agreed with the Applicant's findings of 2,287.5 historically irrigated acres. Irrigation Claims 76M 123868-00 and 76M 123869-00 provided irrigation to these acres while the most junior Claim 76M 118513-00 did not contribute any historical flow rate or volume of water for irrigation purposes.

23. The Department utilized the consumptive use rule found in ARM 36.12.1902(16) to calculate historical consumptive use. The nearest weather station to the irrigation POU is the Missoula Airport and the maximum evapotranspiration is 19.45 inches, to which a historical (pre-July 1, 1973) County Management factor of 69.5% was applied. Due to the capacity of the FLD, the historically consumptive volume for irrigation was only calculated for Claims 76M 123868-00 and 76M 123869-00. With a maximum of 2,287.5 irrigated acres, the historical crop consumed volume under these two rights is 2,576.8 AF (19.45 in * 1ft/12 in * 0.695 * 2,287.5 ac = 2,576.8 AF).

24. With 566.4 acres of flood irrigation, the crop consumed volume is 638.0 AF (566.4 flood irrigated acres/2,287.5 total acres= 24.76%* total crop consumed volume of 2,576.8 AF = 638.0 AF). For 1,721.1 acres of sprinkler irrigation, the crop consumed volume is 1,938.8 AF (1,721.1 sprinkler irrigated acres/ 2,287.5 total acres = 75.24%* total crop consumed volume of 2,576.8 AF = 1,938.8 AF).

25. The total historical consumptive volume is the amount consumed by the crop plus the volume of any irrecoverable losses. The irrecoverable losses are determined from the volume of water applied to the field. To determine the field applied volume, the volume consumed by the crop is divided by the field efficiency. Standard field efficiencies used by DNRC for each method of irrigation can be found in Department Technical Memorandum: Development of standardized methodologies to determine Historic Diverted Volume, dated September 13, 2012. Flood irrigation by contour ditch is 55% efficient and sprinkler irrigation is 70% efficient. The field applied volume of the 566.4 flood irrigated acres is 1,160.0 AF (638.0 AF/0.55 = 1,160.0 AF) and for the 1,721.1 sprinkler irrigated acres it is 2,769.7 AF (1,938.8 AF/.70 =2,769.7 AF). The total field applied volume from Claims 76M 123868-00 and 76M 123869-00 is 3,929.7 AF (1,160.0 AF + 2,769.7 AF = 3,929.7 AF).

26. To arrive at the total consumed volume, irrecoverable losses and the non-consumed volume for both the flood and sprinkler irrigated acreages needed to be determined. Pursuant to ARM 36.12.1902(17), irrecoverable losses are 5% of the field applied volume for flood irrigation

and 10% for sprinkler irrigation. With 1,160.0 AF applied to the flood irrigated acres, the irrecoverable losses are 58.0 AF (1,160 AF * 0.05). With 2,769.7 AF applied to the sprinkler irrigated acres, the irrecoverable losses are 277.0 AF (2,769.7 AF * 0.10 = 277.0 AF).

27. The non-consumed volume is the field applied volume minus the total consumed volume. To determine the total volume consumed for each method of irrigation, the volume consumed by the crop was added to the irrecoverable losses. For the 566.4 flood irrigated acres, the total consumed volume is 696.0 AF (638.0 AF + 58.0 AF = 696.0 AF) and for 1,721.1 sprinkler irrigated acres it is 2,215.8 AF (1,938.8 AF + 277.0 AF =2,215.8 AF). With 566.4 flood irrigated acres, the non-consumed volume is 464.0 AF (field applied volume of 1,160.0 AF – total consumed volume of 696.0 AF = 464.0 AF) and for 1,721.1 sprinkler irrigated acres, the non-consumed volume is 553.9 AF (field applied volume of 2,769.7 AF – total consumed volume of 2,215.8 AF = 553.9 AF).

28. The total consumed volume including irrecoverable losses for the historic 2,287.5-acre POU was calculated to be 2,911.8 AF (696.0 AF + 2,215.8 AF = 2,911.8 AF). The historical consumed and field applied volumes for Claims 76M 123868-00 and 76M 123869-00 were calculated with the inputs shown in Table 3 below.

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

Irrigation Method	Acres	IWR (in)	Mgmt. Factor	Field Efficiency	Crop Consumption (AF)	Irrecoverable Losses (AF)	Total Consumed Volume (AF)	Field Application Volume (AF)	Non-Consumed Volume
Sprinkler	1,721.1	19.45	69.5%	70%	1,938.8	277.0	2,215.8	2,769.7	553.9
Flood	566.4	19.45	69.5%	55%	638.0	58.0	696.0	1,160.0	464.0
Total	2,287.5	-	-	-	2,576.8	335.0	2,911.8	3,929.7	1,017.9

29. There are several privately owned overlapping water rights within the HVIC service area that were historically used to provide supplement irrigation within the POU of rights 76M 123868-00 and 76M 123869-00. Table 4 below lists the privately owned overlapping water rights. According to the Applicant, the privately owned rights were junior to 76M 123868-00 and 76M 123869-00 or were from sources that were physically limited and were not adequate to provide full-service irrigation. Of the maximum 2,287.5 irrigated acres by the HVIC, 1,368.8 acres were irrigated exclusively with rights 76M 123868-00 and 76M 123869-00 and 918.7 acres were irrigated with a combination of the Applicant's rights and privately owned supplemental water rights. The overlapping rights are grouped together based on their respective overlapping or

supplemental relationship. For example, rights 76M 109001-00, 76M 109002-00 and 76M 109003-00 irrigate acres with the larger POU of 76M 109004-00.

Table 4. Supplemental overlapping water rights in the historical HVIC Place of Use

Group No.	Water Right	Priority Date	Acres	Flow Rate (CFS)	Period of Diversion	Place of Use	Source[1]
1	76M 109001-00	5/1/1895	65.7	0.83	4/15 – 10/15	SW, Sec. 11, T13N, R20W	Grant Creek
	76M 109002-00	7/1/1931	65.7	1.63	4/15 – 10/15	SW, Sec. 11, T13N, R20W	W&S, UT of Clark Fork River
	76M 109003-00	12/31/1965	60	1.5	4/15 – 10/15	E2NWSE, Sec. 11, T13N, R20W	Grant Creek
	76M 109004-00	6/1/1965	495.7	1.11	4/15 – 7/15	W2NW, NWSW Sec. 12, S2NE, NW, SW Sec. 11, all in T13N, R20W	Grant Creek
2	76M 123893-00	5/15/1928	73	1.83	5/15 – 10/1	SWSESW, SESESW, SWSWSE, NWSWSE, NESESW,NESWSE, SENWSE, SWNWSE, NWNWSE, E2E2NE, SENWSE, NWSESW, Sec. 13, T13N, R20W	UT of Clark Fork River
3	76M 149678-00	12/31/1958	55	0.36	4/15 – 10/15	SWSWNE, W2NWSE, W2SWSE, NWSWNE Sec. 14, NWNWNE Sec. 23, all in T13N, R20W	UT of Clark Fork River
4	76M 125124-00	5/15/1928	56	1.40	5/15 – 10/1	NWNWSW, SWNWSW, NENWSW, SENWSW, NWNESW, SWNESW, NENESW, SENESW, S2SENW, Sec. 12, T13N, R20W	UT of Clark Fork River
5	76M 30374-00	3/8/1948	67	5.08	5/1 – 10/19	SENESW, SESW Sec. 14, NENW Sec. 23, all in T13N, R20W	UT of Grant Creek

Group No.	Water Right	Priority Date	Acres	Flow Rate (CFS)	Period of Diversion	Place of Use	Source[1]
6	76M 29120-00[2]/ 76M 30159900	7/15/1867	277	1.63	4/15 – 7/19	S2SE Sec. 11, W2NE, NWSE, NESW, S2SENW, E2SWSE Sec. 12, all in T13N, R20W	Grant Creek
	76M 29121-00[2]/ 76M 30159898	5/1/1875	277	4.0	4/1 – 9/30	S2SE Sec. 11, W2NE, NWSE, NESW, S2SENW, E2SWSE Sec. 12, T13N, R20W	Grant Creek
	76M 29122-00[2] / 76M 30159901	5/1/1866	277	4.0	4/1 – 9/30	S2SE Sec. 11, W2NE, NWSE, NESW, S2SENW, E2SWSE Sec. 12, T13N, R20W	Grant Creek

[1] UT stands for Unnamed Tributary
[2] In 2022, a portion of parent rights 76M 29120-00, 76M 29121-00 and 76M 29122-00 were severed from their historical POU, creating these child rights

30. The Applicant calculated the apportionment of the historical consumptive volume for the privately owned water rights that provided supplemental irrigation to the HVIC POU. This allotment was based on the portion of early season use they contributed to the overall irrigation within the historical HVIC POU. The Applicant stated that the volume needed from the private rights for each time-period was split 50-50 between the private rights and the HVIC rights, provided that the private rights had an adequate flow rate to achieve the volume in the defined time-period. Otherwise, the volume was attributed proportionately based on the available flow rate. The adequacy of flow rate was determined by the ability of the listed flow rate (under each private right) to achieve the volume for the time-period assuming water use was limited to 12 hour/day. If the flow rate was not adequate, a larger proportion of the volume was attributed to the HVIC rights, equivalent to the percentage of the flow rate that was available. The Applicant provided the values in Table 5 below to quantify the Net Irrigation Requirement (NIR) volumes contributed by the private overlapping water rights.

Table 5. Net Irrigation Requirement volume attributed to private overlapping rights

Time Period	NIR Vol (AF)	GPM Needed	GPM WR	GPM Needed-GPM WR	% Prvt Rt Flow Avail	Add FL Ditch Vol	Vol from Prvt WR	Vol from FL Ditch
Missoula Airport et al (Multi supp WRs)*				326.7 Ac	WR Per of Use 4/15-10/15			
May 4-15	27.77	448.85	2275.41	<0	100.00%		13.88	13.88
June	129.05	1946.76	2275.41	<0	100.00%		64.52	64.52
July 1-3	23.33	2639.13	2275.41	<0	86.22%	1.61	10.06	13.27
						Total	**88.46**	**91.68**
Stahl 76M 123893				73 Ac	WR Period of Use 5/15-10/1			
May 4-14	2.44	100.29			0.00%	2.44	0.00	2.44
May 15-31	3.77	100.29	821.30	<0	100.00%		1.88	1.88
June	28.84	435.00	821.30	<0	100.00%		14.42	14.42
July 1-3	5.21	589.70	821.30	<0	100.00%		2.61	2.61
						Total	**18.91**	**21.34**
Stahl 76M 125124				56 Ac	WR Per of Use 5/15-10-1			
May 4-14	1.87	76.94			0%	1.87	0.00	1.87
May 15-31	2.89	76.94	628.32	<0	100.00%		1.45	1.45
June	22.12	333.70	628.32	<0	100.00%		11.06	11.06
July 1-3	4.00	452.38	628.32	<0	100.00%		2.00	2.00
						Total	**14.50**	**16.37**
Miller 76M 149678				52 Ac	WR Per of Use 4/15-10/15			
May 4-15	4.42	71.44	160	<0	100.00%		2.21	2.21
June	20.54	309.86	160	139.86	51.64%	4.97	5.30	15.24
July 1-3	3.71	420.06	160	260.06	38.09%	1.15	0.71	3.01
						Total	**8.22**	**20.45**
Frey 76M 30374				134 Ac	WR Period of Use 5/1-10/15			
May 4-15	11.39	184.10	2279.90	<0	100.00%		5.70	5.70
June	52.93	798.49	2279.90	<0	100.00%		26.47	26.47
July 1-3	9.57	1082.47	2279.90	<0	100.00%		4.78	4.78
						Total	**36.94**	**36.94**
Flynn Family Ranch (Multi supp WRs)*				277 Ac	WR Period of Use 4/15-10/15			
May 4-15	23.55	380.56	4321.94	<0	100.00%		11.77	11.77
June	109.42	1650.60	4321.94	<0	100.00%		54.71	54.71
July 1-3	19.78	2237.65	4321.94	<0	100.00%		9.89	9.89
						Total	**76.37**	**76.37**
						Total NIR Volume from Overlapping WRs	**243.41**	**263.16**

*The Airport & Flynn Family Ranch flow rates used are the sum of the individual water right flow rates

31. The Applicant used the total volumes for each overlapping right/group of rights represented in Table 5 and determined the flood/sprinkler percentages in table 6 below. Based on the respective flood/sprinkler percentages, the Applicant determined the apportionment of the flood/sprinkler irrigation volumes attributed to each overlapping supplemental right.

Table 6. Historical flood and sprinkler volume attributed to overlapping supplemental rights

Group No.	Water Right	Total Ac	Flood Ac	Sprinkler Ac	Flood %	Sprinkler %
1	76M 109001-00, 76M 109002-00, 76M 109003-00, 76M 109004-00	326.7	147.3	179.4	45.1%	54.9%
2	76M 123893-00	73	7	66	9.6%	90.4%
3	76M 125124-00	56	56	0	100%	0%
4	76M 149678-00	52	22	30	42.3%	57.7%
5	76M 30374-00	134	60	74	44.8%	55.2%
6	76M 29120-00/ 76M 30159900, 76M 29121-00/ 76M 30159898, 76M 29122-00/ 76M 30159901	277	0	277	0%	100%
	Total	918.7	292.3	626.4		

32. To calculate the historical consumptive volume contributed by each privately overlapping right, the Applicant used the monthly NIR from the Irrigation Water Requirement program. This program determines the beginning of the growing season based on the mean daily temperature of 50 degrees Fahrenheit or higher. For the Missoula Airport weather station, the growing season begins May 4 and the NIR for May 4-31 is 1.02 inches. For the month of June it is 4.74 inches, and for the month of July it is 6.64 inches. The Applicant stated that private rights were able to provide supplemental irrigation until July 3 at the latest. The NIR was pro-rated when the time-period included less than the full month. Table 7 represents the privately owned supplemental rights, and the associated volumes attributed to their supplemental use.

Table 7. Historical flood and sprinkler volume attributed to supplemental water rights

Group No.	Water Right	Total NIR (AF)	Flood NIR (AF)	Sprinkler NIR (AF)	Flood Applied Vol (AF)	Sprinkler Applied Volume (AF)	Flood IL[1] (AF)	Sprinkler IL[1] (AF)	Consumed Vol. (AF)	Non-Consumed Vol. (AF)
1	76M 109001-00, 76M 109002-00, 76M 109003-00, 76M 109004-00	88.5	39.9	48.6	72.5	69.4	3.6	6.9	99.1	42.9
2	76M 123893-00	18.9	1.8	17.1	3.3	24.4	0.2	2.4	21.5	6.2
3	76M 125124-00	14.5	14.5	0	26.4	0	1.3	0	15.8	10.5
4	76M 149678-00	8.2	3.5	4.7	6.3	6.8	0.3	0.7	9.2	3.9
5	76M 30374-00	36.9	16.5	20.4	30	29.1	1.5	2.9	41.3	17.8
6	76M 29120-00/ 76M 30159900, 76M 29121-00/ 76M 30159898, 76M 29122-00/ 76M 30159901	76.4	0	76.4	0	109.1	0	10.9	87.3	21.8
	Total[2]	243.4	76.2	167.2	138.5	238.8	6.9	23.8	274.2	103.1

[1] IL stands for Irrecoverable Losses
[2]Totals may differ by 0.1 due to rounding

33. The Department considered the use of those supplemental water rights listed in Table 7 within the historical POU. To calculate the total historical consumptive use of rights 76M 123868-00 and 76M 123869-00, the consumptive use volumes from the supplementary water rights calculated by the Applicant were subtracted from the total historic consumed volume of 2,911.8 AF (determined in FOF No. 28). When considering the consumptive volume contributed by the supplemental rights, Claims 76M 123868-00 and 76M 123869-00 proposed for change had an adjusted total combined historical consumed volume of 2,637.6 AF (2,911.8 AF– 274.2 AF).

34. The consumptive volume attributed to the change rights 76M 123868-00 and 76M 123869-00 was determined by the proportionate flow rate from change rights 76M 123868-00 and 76M 123869-00 that were conveyed through the FLD. Senior irrigation right 76M 123868-00 diverted 56.3% (40 CFS/71 CFS) of the 71 CFS in the FLD and right 76M 123869-00 diverted a proportionate flow rate of 43.7% (31 CFS/71 CFS). The proportionate consumed volumes under change rights 76M 123868-00 and 76M 123869-00 are 1,485.0 AF and 1,152.6 AF, respectively (2,637.6 AF*.563 = 1,485.0 AF and 2,637.6 AF*.437= 1152.6 AF). The historical consumptive use

attributed to Claims 76M 123868-00 and 76M 123869-00 and the respective overlapping supplemental rights is represented in Table 8 below.

Table 8. Historical Consumptive Volume for Claims 76M 123868-00, 76M 123869-00 and overlapping supplemental rights

Group No.	Water Right No.	Apportioned HCV *(Including IL)* (AF)
1	76M 123868-00	1,485.0
	76M 123869-00	1,152.6
2	76M 109001-00	99.1
	76M 109002-00	
	76M 109003-00	
	76M 109004-00	
3	76M 123893-00	21.5
4	76M 125124-00	15.8
5	76M 30374-00	41.3
6	76M 149678-00	9.2
7	76M 29120-00/ 76M 30159900	87.3
	76M 29121-00/ 76M 30159898	
	76M 29122-00/ 76M 3015901	
	Total	2,911.8

35. There are four additional privately owned water rights claiming irrigation within the historic HVIC POU. These rights are represented in Table 9. The Applicant stated that claim 76M 107874-00 has an incorrect POU legal land description and water is used from Marshall Creek near East Missoula, several miles east of the HVIC POU. For Claim 76M 147284-00, the Applicant asserted that irrigation occurred near the City of Missoula's sewer treatment plant and this parcel did not receive irrigation shares from the HVIC. The Applicant stated that overlapping Claim 76M 151571-00 has several issue remarks, and the Water Court found no legal basis for the irrigation purpose to be considered a beneficial use or an appropriation of water. The flow rate and acres were not determined for this right either. For Claim 76M 110462-00, the Applicant stated that it has been withdrawn by the owners. The current owners of this Claim (Norma and James Bauer) sold the

appurtenant property (where the right was used) to the Missoula County Airport Authority in 1991 and reserved the water right from the sale. Then in November 2024, the Bauers filed a request to withdraw the claim or interest in the claim with the Water Court. Most recently in December 2025, the Airport Authority filed a notice of intent to appear with the Water Court and stated that Claim 76M 110462-00 should be terminated. This Claim is not considered as overlapping or providing supplemental irrigation to the HVIC POU. The Department reviewed each of the water rights in Table 9 and agreed that they did not provide supplemental irrigation to the HVIC POU.

Table 9. Water rights not considered as overlapping

Water Right	Priority Date	Acres	Flow Rate (CFS)	Source
76M 107874-00	3/12/1885	26.0	0.98	Marshall Creek
76M 147284-00	12/30/1963	4.0	0.15	Groundwater
76M 151571-00	4/1/1913	-	-	Waste and Seepage, UT Clark Fork River
76M 110462-00	5/1/1871	40.0	1.0	Grant Creek

Historically Diverted Volume

36. To calculate the historical diverted volume, the Department used the methodology described in ARM 36.12.1902(10). In addition, the Department also utilized its *Irrigation and Conveyance Loss Calculator* (Calculator) to quantify the historic (conveyance) losses.

37. These losses include the cumulative amount of seepage loss, vegetative loss and ditch evaporation in the segments of the ditch outside the historically irrigated fields. The Department used the following equations to determine the conveyance losses:

Seasonal Conveyance Loss = *Seepage loss+ Vegetation Loss + Ditch Evaporation*

$$\textbf{\textit{Seepage Loss}}\ (\textbf{\textit{AF}}) = wetted\ perimiter\ (ft) \times ditch\ length\ (ft) \times loss\ rate\ \left(\frac{ft}{day}\right) \times days \times \frac{1\ acre}{43560\ ft^2}$$

$$\textbf{\textit{Vegetation Loss}}\ (\textbf{\textit{AF}}) = \left(\frac{\%\ loss}{mile}\right) \times flow\ rate\ \left(\frac{ft^3}{sec}\right) \times days \times ditch\ length\ (mi) \times 2\ (conversion\ factor)$$

$$\textbf{\textit{Ditch Evaporation Loss}}\ (\textbf{\textit{AF}}) = \ ditch\ width\ (ft) \times ditch\ length\ (ft) \times evaporation\ rate \times \frac{1\ acre}{43560 ft^2}$$

38. From the POD on the Clark Fork River, the FLD traverses in a northwesterly direction. The Applicant identified a single 5,000-foot segment (Segment #1) of the FLD between the POD and the beginning of the irrigated POU (in the NESWSE Section 17, T13N, R19W) . The Department considered a secondary segment (Segment #2) of the FLD between irrigated fields within the historic POU when calculating the historical conveyance losses. This segment, which does not

border any irrigated fields, was 1,953 feet in length and began in the NESW of Section 17 and ended in the NENESE of Section 18, both in T13N, R19W. The seasonal conveyance losses in the FLD were calculated using down-ditch information provided by the Applicant.

39. The necessary inputs for the Department's Calculator include ditch width, ditch length, wetted perimeter, flow rate, ditch loss rate, number of days irrigated and the adjusted net evaporation. The Applicant described the historic FLD, stating that the clear high-water mark showed a trapezoidal shaped channel with a bottom width of 4 ft, a top width of 13 ft and a wetted perimeter of 13.5 ft. The average of these widths is 8.5 ft and the Department used this figure for the ditch width. The length of each ditch segment was known (5,000 feet and 1,953 feet) and a wetted perimeter of 13.5 feet was used. The Applicant stated the historical capacity of the FLD was 71 CFS and this figure was used for the flow rate. For the ditch loss rate, the Department evaluated the soil type below the two ditch segments by using the Natural Resources Conservation Service (NRC) Web Soil Survey. According to the Web Soil Survey, there are two soil types below the ditch segments: Orthents 0 to 4 percent slopes and Urban Land. The Web Soil Survey did not provide a seepage loss figure, nor does it characterize the soil type for Orthents or Urban Land. To quantify the ditch seepage losses, the Department reviewed the soils directly adjacent to the two ditch segments experiencing seepage losses. The other soil types around the pertinent segments of the FLD are Desmet loam and Grantsdale loam. Based on Figure 2-50 from the Department's Memorandum *Development of standardized methodologies to determine Historic Diverted Volume*, a figure of 1.4 ft^3/ft^2/day was used since it corresponds with loam soil types. Using the historically found period of division (April 15 – October 15), the number of days irrigated was 184. Finally, the Department determined the evaporative losses based on the gridded monthly net evaporation at the historical POU. The figure was adjusted to account for period of diversion (April 15 – October 15), resulting in a total of 23.6 inches. The period adjusted evaporation rate used in the calculation was 1.97 ft (23.6 inches /12 inches = 1.97 inches).

40. For vegetative losses, the Calculator utilized the equation identified in Finding of Fact No. 37. Based on the National Engineering Handbook (1993) standard % loss per mile is 75 % (0.75). The other inputs used were a flow rate of 71 CFS, a 184-day period of diversion, the respective ditch lengths (5,000 ft and 1,953 ft), and each was multiplied by 2 (unit conversion constant). Tables 10 and 11 summarize the losses attributed to each respective ditch segment.

Table 10. Conveyance Losses for Segment #1 (from headgate to beginning of POU)

[A] Seepage Loss	Ditch Wetted Perimeter (ft)	Ditch Length (ft)	Ditch Loss Rate (ft^3/ft^2/day)	Days Irrigated	***Seepage Loss (AF)***
	13.5	5,000	1.4	184	399.2

[B] Vegetation Loss	% Loss/Mile	Historical Flow Rate (CFS)	Days Irrigated	Ditch Length (mi)	***Vegetation Loss (×2) (AF)***
	0.75	71	184	0.95	185.6
[C] Ditch Evaporation	Ditch Width (ft)	Ditch Length (ft)	Period Adjusted Evaporation Factor (ft)	***Ditch Evaporation (AF)***	**Seasonal Conveyance Loss (AF) (A+B+C)**
	8.5	5,000	1.97	*1.9*	**586.7**

Table 11. Conveyance Losses for Segment #2(between POU fields)

[A] Seepage Loss	Ditch Wetted Perimeter (ft)	Ditch Length (ft)	Ditch Loss Rate (ft^3/ft^2/day)	Days Irrigated	***Seepage Loss (AF)***
	13.5	1,953	1.4	184	155.9
[B] Vegetation Loss	% Loss/Mile	Historical Flow Rate (CFS)	Days Irrigated	Ditch Length (mi)	***Vegetation Loss (×2) (AF)***
	0.75	71	184	0.34	72.5
[C] Ditch Evaporation	Ditch Width (ft)	Ditch Length (ft)	Period Adjusted Evaporation Factor (ft)	***Ditch Evaporation (AF)***	**Seasonal Conveyance Loss (AF) (A+B+C)**
	8.5	1,953	1.97	*0.75*	**229.1**

41. To determine the proportionate share of conveyance losses attributed to irrigation rights 76M 123868-00 (40 CFS) and 76M 123869-00 (40 CFS), the Department determined the respective flow rate of each that was conveyed through the FLD. Based on the 71 CFS capacity identified by the Applicant, senior irrigation right 76M 123868-00 had a proportionate flow rate of 56.3% (40/71) and 76M 123869-00 diverted a proportionate flow of 43.7% (31/71). From the total 815.8 AF (586.7 AF + 229.1 AF) of conveyance losses, 459.3 AF (815.8*.563) was attributed to 76M 123868-00 and 356.5 AF (815.8 * .437) was attributed to 76M 123869-00. , as represented in Table 12 below.

Table 12. Proportionate conveyance losses attributed to change rights 76M 123868-00 and 76M 123869-00

Water Right	Flow Rate (CFS)	Proportionate Flow Rate	Proportionate Conveyance Losses (AF)
76M 123868-00	40	56.3%	459.3
76M 123869-00	31	43.7%	356.5
Total	71	100%	815.8

42. The stock under right 76M 123870-00 drank directly from the FLD during the irrigation season (April 15 – October 15, or 184 days) and no additional conveyance losses were calculated on behalf of this right. Stock use is considered 100% consumptive, and the historical consumptive volume is equivalent to the historical diverted volume. The Department calculated the historical diverted volume for stock based on the adjudication standard of 30 Gallons Per Day (GPD) per AU and a 184-day period of diversion. These figures are outlined in the equation below, resulting in a historical diverted volume of 38.9 AF.

$$2{,}294\ AU \times \frac{30\ GPD}{AU} \times \frac{68{,}820\ gal}{day} \times \frac{184\ days}{year} \times \frac{1\ AF}{325{,}850\ gal} = \frac{38.9\ AF}{year}$$

43. Per Department standard practice, the historical diverted volume for irrigation use is the sum of the field application volume and the calculated conveyance losses. The apportioned irrigation field applied volume for irrigation rights 76M 123868-00 and 76M 123869-00 was calculated based on the respective percentage of the flow rate conveyed through the FLD (56.3% for 76M 123868-00 and 43.7% for 76M 123869-00). The Applicant determined a total of 377.4 AF was applied to the POU with the overlapping supplemental water rights (138.6 AF from flood irrigation and 238.8 AF from sprinkler irrigation, see Table 7 in Finding of Fact No. 32). The volume of 377.4 AF associated with the supplemental rights was subtracted from the field applied volume under irrigation rights 76M 123868-00 and 76M 123869-00 proposed for change. With a total field applied volume of 3,552.3 AF, the portion attributed to 76M 123868-00 was 1,999.9 AF (3,552.3 AF * .563 = 1,999.9) and the amount attributed to 76M 123869-00 was 1,552.4 AF (3,552.3 AF * .437 = 1,552.4). The total combined historically diverted volume for Claims 76M 123868-00 and 76M 123869-00 is 4,368.1 AF (3.552.3 AF of field applied volume plus 815.8 AF of conveyance losses). Due to insufficient ditch capacity, the Department did not find any historical diverted volume attributed to junior irrigation Claim 76M 118513-00.

44. The Department finds the following historically diverted volumes and overall historical use for Claims 76M 123868-00, 76M 123869-00, 76M 118513-00 and 76M 123870-00, as shown in Tables 13 and 14.

Table 13: Historically diverted volume of 76M 123868-00, 76M 123869-00, 76M 118513-00 and 76M 123870-00

Water Right Number	Field Application Volume (AF)	Conveyance Loss Volume (AF)	Historically Diverted Volume (AF)
76M 123868-00	1,999.9	459.3	2,459.2
76M 123869-00	1,552.4	356.5	1,908.9
76M 118513-00	0	0	0
76M 123870-00	-	-	38.9
Total	3,552.3	815.8	4,407.0

Table 14. Summary of historical use findings for Claim Nos. 76M 123868-00, 76M 123869-00, 76M 118513-00 and 76M 123870-00

Water Right	Priority Date	Diverted Volume (AF)	Flow Rate (CFS)	Purpose (Total Acres or Animal Units)	Consumptive Volume (AF)	Place of Use	Point of Diversion
76M 123868-00	12/1/1902	2,459.2	40	2,287.5 acres	1,485.0	Sections 17, 18 and 19, T13N, R19W and Sections 1, 11, 12, 13, 14 and 23 T13N, R20W.	SWNWNE Section 21, T13N, R19W, Missoula County
76M 123869-00	5/31/1903	1,908.9	31	2,287.5 acres	1,152.6	Sections 17, 18 and 19, T13N, R19W and Sections 1, 11, 12, 13, 14 and 23 T13N, R20W.	SWNWNE Section 21, T13N, R19W, Missoula County
76M 118513-00	7/28/1919	0	0	0 acres	0	-	-
76M 123870-00	5/31/1903	38.9	-	2,294 animal units	38.9	All Sec. 18; SWSENW, NESW, W2NWSE Sec. 17; NENW Sec 19, T13N, R20W; All Sec. 13, W2, W2E2,SESE Sec. 12; SE, S2NE, S2NW, N2SW, N2SESW Sec. 11; NE,E2W2,W2SE Sec. 14, T13N, R20W, Missoula County	SWNWNE Section 21, T13N, R19W, Missoula County
Total		4,407.0	71	2,287.5 Ac/ 2,294 AU	2,676.5	-	-

45. The Department finds the maximum historical flow rate for irrigation rights 76M 123868-00, 76M 123869-00 and 76M 118513-00 proposed for change is 71 CFS. The historical diverted volume of Claims 76M 123868-00, 76M 123869-00, 76M 118513-00 and 76M 123870-00 is 4,407.0 AF, and the historical consumptive volume is 2,676.5 AF.

ADVERSE EFFECT

FINDINGS OF FACT

46. The Applicant proposes to change the POU, POD and purpose of use for irrigation Claims 76M 123868-00, 76M 123869-00, 76M 118513-00 and stock Claim 76M 123870-00. The new purposes will be mitigation and marketing for mitigation. The mitigation purpose is needed to offset a total consumptive volume of 383.1 AF of depletions to the Clark Fork River resulting from groundwater pumping under pending Permit Application Nos. 76M 30163329 (91.2 AF of depletions), 76M 30164554 (38.9 AF of depletions) and 76M 30165615 (253.1 AF of depletions). When totaling the depletions from these three applications, there is a discrepancy of 0.1 in the total 383.1 AF of consumptive volume due to rounding. The marketing for mitigation purpose will leave water in the Clark Fork River beginning at the historical POD in the SWNWNE Section 21, T13N, R19W, Missoula County and ending at the Noxon Rapids Powerhouse in the S2S2 Section 33, T26N, R 32W, Sanders County (as seen on the map provided as Figure 2). The POU for the proposed marketing for mitigation purposes and the period of use and diversion for both will be April 15 - October 15. The Applicant will be responsible for the sale and leasing of water under the marketing for mitigation use, and mitigation water will be available for up to 20 years.

47. Through the proposed change, the Applicant will leave the 4,407.0 AF of historically diverted volume instream at the upstream extent of the reach of the historical POD location and protect a portion of the historically consumed volume within the aforementioned reach of the Clark Fork River. The total consumed volume and maximum historical flow rate of the water rights included in this change application is 2,676.5 AF and 71 CFS. In their preapplication follow up materials, the Applicant specified that the proposed mitigation purpose needs a flow rate of 1.05 CFS (471.14 GPM) and that this flow rate is based on the average flow needed to mitigate for the consumed volumes of the three permit applications. The remaining available flow rate of 69.95 CFS (71 CFS – 1.05 CFS) will be used for the marketing for mitigation purpose. Since water can no longer be diverted from the Clark Fork River into the FLD, the historical POU will no longer be irrigated with water shares under the historical Claims.

48. The Applicant's proposed use is limited to the maximum historical consumed volumes found by the Department. The proposed consumed volume is equal to the historical consumed

volume and the proposed diverted volume is equal to the historical diverted volume. The Department finds that the proposed change in POD, POU and purpose of use will not increase the consumed or diverted volumes of Claims 76M 123868-00, 76M 123869-00, 76M 118513-00 and 76M 123870-00.

49. The Department has considered an area of potential adverse effect on the Clark Fork River. This reach was determined by accounting for the location of the historical and proposed PODs for the mitigation purpose as well as the proposed marketing for mitigation reach. The proposed marketing for mitigation reach extends from the historical POD on the Clark Fork River in the SWNWNE Section 21, T13N, R19W, Missoula County, downstream to the S2S2 Section 33, T26N, R32W, Sanders County as seen in Figure 2. Water will be left instream in the Clark Fork River so that users in the proposed reach will have access to additional water for mitigation purposes as compared to historical conditions.

50. The historical use of Claim Nos. 76M 123868-00, 76M 123869-00, and 76M 118513-00 is irrigation. Pursuant to ARM 36.12.1303(3)(c), a return flow analysis is required for irrigation water rights changing the place of use or purpose. The total volume of water not consumed by the crop through irrigation (non-consumed volume) is the difference between the volume applied to the field and the total consumed volume. The non-consumed volume is also referred to as return flows. Water that is not consumed by the crop would historically return to the source of supply. In its Surface Water Change Technical Analyses Report – Part B, dated February 4, 2026, Department Hydrologist Evan Norman determined that a total of 914.7 AF of return flows historically returned to the Clark Fork River from 2,287.5 acres of irrigation. The starting point of these return flows is a point in the SENESW Section 17, T13N, R19W, Missoula County. This point of return is upstream from the next downstream appropriator. The Department did not conduct an analysis of rate and timing of return flows since the Applicant is leaving the difference between the historically diverted volume and the historically diverted non-consumed volume of Claims 76M 123868-00, 76M 123869-00 and 76M 123870-00 instream on the Clark Fork River at the historical POD.

51. The Department finds the proposed change in POD, POU, and purpose of use for Claims 76M 123868-00, 76M 123869-00, 76M 118513-00 and 76M 123870-00 will not cause adverse effects to other water users.

BENEFICIAL USE

FINDINGS OF FACT

52. The Applicant proposes to use water for mitigation and marketing for mitigation, which are beneficial uses in the State of Montana. No irrigation under Claims 76M 123868-00, 76M 123869-00, and 76M 118513-00 nor any stock use under Claim 76M 123870-00 will continue following the proposed change.

53. Through this change proposal, the Applicant requests to protect the historically consumed volume, equal to 2,676.5 AF at the historical POD in the SWNWNE Section 21, T13N, R21W, Missoula County. A portion of the historically consumed volume, equal to 383.1 AF, is proposed for the mitigation purpose. The Applicant specified that the mitigation purpose required a flow rate of 1.05 CFS (471.14 GPM). For the marketing for mitigation purpose, the remaining consumed volume and flow rate, equal to 2,293.4 AF and 69.95 CFS, will be available for marketing for mitigation use. Water will be available for the marketing for mitigation and mitigation purposes from April 15 - October 15. The mitigation and marketing for mitigation volumes provided by each water right were calculated based on the proportionate share of the total consumed volume that each right contributed, see Table 15 below. Due to rounding, the total marketing for mitigation and mitigation volumes differ up to 0.2 AF.

Table 15. Proportionate share of mitigation and marketing for mitigation volume

Water Right	Percentage of Total Consumed Volume	Mitigation Volume (AF)	Marketing for Mitigation Volume (AF)
76M 123868-00	55.48 %	212.54	1,272.38
76M 123869-00	43.06 %	164.96	987.54
76M 123870-00	1.45 %	5.55	33.25
Total	100 %	383.1	2,293.2

54. This Change Application is intended to provide a total of 383.1 AF of mitigation water for Application for Beneficial Water Use Permit Nos. 76M 30163329 (91.2 AF), 76M 30164554 (38.9 AF) and 76M 30165615 (253.1 AF). Each Application requests to appropriate groundwater from respective individual wells, and the Department modeled the consumptive use of each proposed appropriation, which was found to deplete the Clark Fork River. The Applicant proposes to use this change application to provide mitigation water to offset those depletions under these individual permits and they will receive a direct beneficial use.

55. The place of use for mitigation begins at the uppermost location of depletions resulting from the proposed groundwater appropriations, which is the SWNW (Govt. Lot 2), of Section 19, T13N, R19W, Missoula County, and ends at the Noxon Dam Powerhouse in the S2S2 Section 33, T26N, R32W, Sanders County. The place of use for marketing for mitigation begins at the historical POD located in the SWNWNE Section 21, T13N, R19W, Missoula County, and ends at the Noxon Dam Powerhouse in the S2S2 Section 33, T26N, R32W, Sanders County.

56. The water rights proposed for change are in the Clark Fork River in Basin 76M (Clark Fork, between Blackfoot and Flathead Rivers). Currently there are no closures on the Clark Fork River. However, the Department considers downstream hydropower rights owned by Avista at Noxon Dam when evaluating new appropriations within the Middle and Lower Clark Fork Basins.

57. As a result of the Department's decision denying the Thompson River Lumber Company's permit in Matter of *Application for Beneficial Water Use Permit No. 76N 30010429 by Thompson River Lumber Company*, Final Order (December 21, 2006), there is a need to mitigate the adverse effects of new water uses in basins 76M and 76N when the appropriation depletes the Clark Fork River by more than 35 GPM and 10 AF. The sale or lease of water will aid in the development of future water projects in the Middle and Lower Clark Fork Basins by providing mitigation water for future uses that deplete the Clark Fork.

58. In their application materials, the Applicant included a Reasonable Use Addendum. They discussed several documents including the 2015 *Montana State Water Plan: A Watershed Approach,* a 2015 report from Kirk Engineering and Natural Resources, Inc. titled *Water Supply Report Series I Water Availability and Mitigation Options in the Clark Fork Basin*, and a report from the City of Missoula titled *Our Missoula 2045 Land Use Plan*. The *2015 State Water Plan* discusses water demand in the State's four main water basins, which includes the Clark Fork/Kootenai. It summarizes that the basins in western Montana are over-appropriated. The document from Kirk Engineering analyzes the existing demands for the Clark Fork River basin. According to Kirk, the major factors limiting legal (water) availability are Avista's hydropower rights. The City of Missoula's 2045 Land Use Plan projects ongoing growth in City limits and immediate surrounding areas (Wye, Grant Creek Rattlesnake Creek, South Hills, East Missoula). These documents referenced by the Applicant support the anticipated need for future mitigation (via marketing for mitigation) through Claims 76M 123868-00, 76M 123869-00 and 76M 123870-00. The quantity of available water for marketing for mitigation of the Clark Fork River through this change will be increased throughout the proposed POU reach.

59. The proposed reach and beneficial use for future mitigation was reviewed by the Department (Surface Water Change Technical Analyses Report – Part B: Marketing for Mitigation Reach Review, dated February 4, 2026). The proposed marketing for mitigation reach is approximately 186.7 miles long and is within the Middle Clark Fork and Lower Clark Fork hydrologic unit code boundaries. The entirety of the Clark Fork River is identified as a perennial source in the USGD National Hydrologic Dataset and USGS PROSPER Datasets. The proposed marketing reach is hydraulically connected to unconsolidated aquifers and fractured bedrock aquifers (groundwater), and the volume requested could reasonably mitigate a net depletion to the Clark Fork River. The Department found that the marketing for mitigation volume (2,293.4 AF) was a small fraction of the historical volume in the proposed reach, and that because the reach does not lose calculable mitigation water to evaporation, evapotranspiration or groundwater, the full upstream marketing volume is considered recoverable downstream. The Department finds the proposed marketing for mitigation reach to be reasonable.

60. Due to the hydrologic connectivity to groundwater to the Clark Fork River, increases in groundwater pumping or loss of return flows would ultimately increase the rate of groundwater recharge from the reach or decrease the rate of groundwater discharge to the proposed mitigation reach (through a process defined as capture by Lohman (1972)).

61. The Applicant has not secured a purchaser for the marketing for mitigation volume of 2,293.4 AF, under Claims 76M 123868-00, 76M 123869-00, 76M 118513-00, and 76M 123870-00, but they have requested up to 20 years for completion of the proposed change. This timeline will allow the Applicant to find user(s) for the marketing for mitigation use. The Application will be required to report to the Department within 30 days of leasing or selling any portion of water, as well as submit progress reports every 5 years to show diligence in marketing the water. Upon authorization of this change, those Claims found to have been historically used (76M 123868-00, 76M 123869-00, 76M 123870-00) will be subject to the following conditions:

IMPORTANT INFORMATION
PURSUANT TO § 85-2-420, MCA, THE APPROPRIATOR SHALL HAVE A 20-YEAR PERIOD FOR COMPLETION OF THIS CHANGE AUTHORIZATION. IF THE FULL AMOUNT OF WATER AUTHORIZED FOR CHANGE TO MARKETING FOR MITIGATION IS NOT SOLD OR LEASED FOR THESE PURPOSES PRIOR TO THE 20-YEAR COMPLETION DATE, THE WATER RIGHT RETAINS THE BENEFICIAL USE IN PROPORTIONATE AMOUNTS NOT PERFECTED FOR MARKETING FOR MITIGATION AND AS AUTHORIZED PRIOR TO THIS CHANGE AUTHORIZATION. IF THE CHANGE IS NOT FULLY PERFECTED BY THE COMPLETION DEADLINE AND NO EXTENSION IS REQUESTED THE APPROPRIATOR SHALL FILE A PROJECT

COMPLETION FORM FOR THE AMOUNT COMPLETED. THE REMAINING WATER NOT CHANGED REVERTS TO ITS HISTORICAL USE ON A PRO RATA BASIS AS AUTHORIZED BY THE DEPARTMENT AND CAN BE USED AS SUCH IF PRACTICAL.

IMPORTANT INFORMATION
WATER MARKET REPORT: THE APPROPRIATOR SHALL SUBMIT TO THE DEPARTMENT FORM WM09 WITHIN 30 DAYS OF LEASING OR SELLING ANY PORTION OF WATER UNDER THIS AUTHORIZATION. THE FORM SHALL BE ACCOMPANIED BY A COPY OF THE WATER LEASE AGREEMENT OR DEED EVIDENCING THE SALE OF A PORTION OF THE WATER RIGHT FOR MITIGATION PURPOSE.

WATER MARKETING INFORMATION
WATER MARKET REPORT: THE APPROPRIATOR SHALL SUBMIT TO THE DEPARTMENT FORM WM09 WITHIN 30 DAYS OF LEASING OR SELLING ANY PORTION OF WATER UNDER THIS AUTHORIZATION. THE FORM SHALL BE ACCOMPANIED BY A COPY OF THE WATER LEASE AGREEMENT OR DEED EVIDENCING THE SALE OF A PORTION OF THE WATER RIGHT FOR MITIGATION/AQUIFER RECHARGE PURPOSE.

WATER MARKETING PROGRESS REPORT
PROGRESS REPORT ON MARKETING: THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT EVERY 5 YEARS FROM THE DATE OF ISSUANCE OF THIS AUTHORIZATION OF THE ACTIVITIES TO DATE TOWARDS DILIGENCE IN MARKETING THE WATER. THE REPORTS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE.

62. The Department finds changing Claims 76M 123868-00, 76M 123869-00 and 76M 123870-00 to marketing for mitigation and mitigation purposes are beneficial uses of water.

63. The Department finds no historical use under Claim 76M 118513-00. As a result, the Department determined there is no beneficial use for the proposed marketing for mitigation and mitigation purposes under this Claim.

64. The Department finds the beneficial use criterion for this application to be met with the modification of the exclusion of Claim 76M 118513-00 from the proposed purposes of mitigation and marketing for mitigation.

ADEQUATE DIVERSION

FINDINGS OF FACT

65. The proposed change of water rights 76M 123868-00, 76M 123869-00, 76M 118513-00 and 76M 123870-00 does not require a means of diversion or conveyance. Per § 85-2-

402(2)(b)(iii), MCA, a change to mitigation and marketing for mitigation pursuant to § 85-2-420, MCA, is exempt from the adequacy of diversion criterion.

POSSESSORY INTEREST

FINDINGS OF FACT

66. Pursuant to § 85-2-402(2)(d)(iii), MCA, the Applicant is not required to prove they have the possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to a beneficial use because this application involves mitigation and marketing for mitigation per § 85-2-420, MCA.

REASONABLE USE

FINDINGS OF FACT

67. The Applicant proposes to change up to 71 CFS and a consumed volume of 2,676.5 AF from irrigation and stock uses to mitigation and marketing for mitigation uses (FOF No. 45). Accordingly, the Applicant is required to prove that the proposed change in excess of a volume of 4,000 AF and flow rate of 5.5 CFS of water is a reasonable use pursuant to § 85-2-402(4)(b), MCA.

68. The Department finds the Applicant has proven the proposed change in POU, POD and purpose of use of Claims 76M 123868-00, 76M 123869-00, 76M 118513-00 and 76M 123870-00 and the appropriation of more than 4,000 AF and 5.5 CFS is a reasonable use of water.

69. The Applicant's proposed change provides the beneficial use of marketing for mitigation of future water uses in the Clark Fork River. Enactment of § 85-2-420, MCA, providing for marketing for mitigation reflects public policy benefitting the State. The availability of this marketing for mitigation water may provide a source of mitigation for new uses within the basin.

70. The quantity of water available for appropriation in the Clark Fork River through this change will be increased throughout the proposed POU for marketing beginning in the SWNWNE Section 21, T13N, R19W, Missoula County, downstream to the S2S2 Section 33, T26N, R32W, Sanders County (Noxon Rapids Powerhouse).

CONCLUSIONS OF LAW

HISTORICAL USE AND ADVERSE EFFECT

71. 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]

72. 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.[2]

73. 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

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

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

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 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]

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

[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

74. 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 subsequent water users).[5]

75. 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.

76. 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-

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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.)

[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).

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).

77. 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.

78. 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).

79. 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).

80. 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).

81. 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. 23).

82. 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").

83. Based upon the Applicant's evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of water right Nos. 76M 123868-00, 76M 123869-00 and 76M 123870-00 to be a diverted volume of 4,407.0 AF, a historically consumed volume of 2,676.5 AF, and flow rate of 71 CFS. (FOF Nos. 15-45). No historic use was found under Claim 76M 118513-00. (FOF Nos. 18, 22, 43-44).

84. 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. 46-51).

BENEFICIAL USE

85. 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).

86. Applicant proposes to use water for mitigation and marketing for mitigation purposes, which are a recognized beneficial uses. Section 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence marketing for mitigation is a beneficial use and that 2,676.5 AF of consumed volume and 71 CFS flow rate of water requested is the amount needed to sustain the beneficial use. Section 85-2-402(2)(c), MCA (FOF Nos. 52-64).

87. This Change Application is intended to provide mitigation water for Application for Beneficial Water Use Permit Nos. 76M 30163329, 76M 30164554 and 76M 30165615, which requires a total of 383.1 AF of consumptive volume to offset their depletions to the Clark Fork River from groundwater pumping. Permit 76M 30163329 results in 91.2 AF of depletions, 76M 30164554 results in 38.9 AF of depletions and 76M 30165615 results in 253.1 AF of depletions.

ADEQUATE MEANS OF DIVERSION

88. Pursuant to § 85-2-402 (2)(b), MCA, the Applicant is not required to prove that the proposed means of diversion, construction, and operation of the appropriation works are adequate because this application involves a change in appropriation right pursuant to § 85-2-420 for mitigation and marketing for mitigation (FOF No. 65).

POSSESSORY INTEREST

89. Pursuant to § 85-2-402(2)(d), MCA, the Applicant is not required to prove 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 because this application involves a change

in appropriation right pursuant to § 85-2-420 MCA for mitigation and marketing for mitigation. (FOF No. 66).

REASONABLE USE

90. The Department may not approve a change in purpose of use or place of use of an appropriation of 4,000 or more acre-feet of water a year and 5.5 or more cubic feet per second of water unless the appropriator proves by a preponderance of the evidence that the § 85-2-402(4), MCA, criteria are satisfied and the proposed change in appropriation right is a reasonable use. The appropriator must consider: the existing legal demands of water rights on the state water supply and future beneficial purposes; the benefits to the Applicant and the state; the effects on the quantity and quality of the water for existing uses; the availability of using low-quality water for the purpose of the appropriation; the effects on private property rights by any saline seep contributions; and the probable significant adverse environmental impacts of the proposed use. *Id.* The Applicant has proven by a preponderance of the evidence that the proposed appropriation of 2,676.5 AF and 71 CFS is a reasonable use of water (FOF Nos. 67-70).

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. 76M 30165370 should be GRANTED WITH MODIFICATIONS subject to the following.

The Department does not authorize the proposed change to the point of diversion, place of use, and purpose of Statement of Claim 76M No. 118513-00 because the beneficial use criterion has not been met for that water right, as the Department founds a historically diverted volume of 0 AF and a historical flow rate of 0 CFS.

The Applicant is authorized to change the point of diversion, place of use and purpose of use of Statement of Claim Nos. 76M 123868-00, 76M 123869-00 76M 123870-00. The Applicant is authorized to change the purpose for these Claims from irrigation and stock use to marketing for mitigation and mitigation purposes. The authorized marketing for mitigation place of use and points of diversion are within a reach of the Clark Fork River, beginning in the SWNWNE Section 21, T13N, R19W, Missoula County, to the S2S2 Section 33, T26N, R32W, Sanders County. The authorized mitigation place of use begins at the uppermost location of depletions from the proposed groundwater appropriations, which is in the SWNW (Govt. Lot 2) of Section 19, T13N, R19W, Missoula County, and ends at the Noxon Rapids Dam Powerhouse in the S2S2 Section 33, T26N, R32W, Sanders County. Under Claims 76M 123868-00, 76M 123869-00 and 76M 123870-00, the Applicant may protect a maximum consumed volume of 2,676.5 AF at the

upstream POD for marketing for mitigation and mitigation purposes. A maximum consumptive volume of 2,293.4 AF and a flow rate of 69.95 CFS will be available for marketing for mitigation. A maximum 383.1 AF of consumptive volume and a flow rate of 1.05 CFS will available for the purpose of mitigation for three pending permit applications, 76M 30163329, 76M 30164554 and 76M 30165615. The marketing for mitigation and mitigation water will be available during the historical period of diversion (April 15 – October 15). The maximum flow rate for the new purposes is 71 CFS and the Applicant will no longer irrigate the claimed 2,399-acre place of use.

This authorization is subject to the following conditions to meet the beneficial use criterion:

IMPORTANT INFORMATION
PURSUANT TO § 85-2-420, MCA, THE APPROPRIATOR SHALL HAVE A 20-YEAR PERIOD FOR COMPLETION OF THIS CHANGE AUTHORIZATION. IF THE FULL AMOUNT OF WATER AUTHORIZED FOR CHANGE TO MARKETING FOR MITIGATION IS NOT SOLD OR LEASED FOR THESE PURPOSES PRIOR TO THE 20-YEAR COMPLETION DATE, THE WATER RIGHT RETAINS THE BENEFICIAL USE IN PROPORTIONATE AMOUNTS NOT PERFECTED FOR MARKETING FOR MITIGATION AND AS AUTHORIZED PRIOR TO THIS CHANGE AUTHORIZATION. IF THE CHANGE IS NOT FULLY PERFECTED BY THE COMPLETION DEADLINE AND NO EXTENSION IS REQUESTED THE APPROPRIATOR SHALL FILE A PROJECT COMPLETION FORM FOR THE AMOUNT COMPLETED. THE REMAINING WATER NOT CHANGED REVERTS TO ITS HISTORICAL USE ON A PRO RATA BASIS AS AUTHORIZED BY THE DEPARTMENT AND CAN BE USED AS SUCH IF PRACTICAL.

IMPORTANT INFORMATION
WATER MARKET REPORT: THE APPROPRIATOR SHALL SUBMIT TO THE DEPARTMENT FORM WM09 WITHIN 30 DAYS OF LEASING OR SELLING ANY PORTION OF WATER UNDER THIS AUTHORIZATION. THE FORM SHALL BE ACCOMPANIED BY A COPY OF THE WATER LEASE AGREEMENT OR DEED EVIDENCING THE SALE OF A PORTION OF THE WATER RIGHT FOR MITIGATION PURPOSE.

WATER MARKETING INFORMATION
WATER MARKET REPORT: THE APPROPRIATOR SHALL SUBMIT TO THE DEPARTMENT FORM WM09 WITHIN 30 DAYS OF LEASING OR SELLING ANY PORTION OF WATER UNDER THIS AUTHORIZATION. THE FORM SHALL BE ACCOMPANIED BY A COPY OF THE WATER LEASE AGREEMENT OR DEED EVIDENCING THE SALE OF A PORTION OF THE WATER RIGHT FOR MITIGATION/AQUIFER RECHARGE PURPOSE.

WATER MARKETING PROGRESS REPORT

PROGRESS REPORT ON MARKETING: THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT EVERY 5 YEARS FROM THE DATE OF ISSUANCE OF THIS AUTHORIZATION OF THE ACTIVITIES TO DATE TOWARDS DILIGENCE IN MARKETING THE WATER. THE REPORTS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE.

NOTICE

The Department will provide a notice of opportunity for public comment on this Application and the Department's Draft Preliminary Determination to Grant with Modifications 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 17th day of April 2026

Jim Nave, Manager
Missoula 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 IN MODIFIED FORM was served upon all parties listed below on this 17th day of April 2026, by first class United States mail.

CITY OF MISSOULA
435 RYMAN ST
MISSOULA, MT 59802

and

WGM GROUP
C/O JULIE MERRITT
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MISSOULA, MT 59802

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