

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

COMBINED APPLICATION FOR BENEFICIAL) WATER USE PERMIT NO. 76H 30163647 BY) CITY OF MISSOULA AND APPLICATION TO) CHANGE WATER RIGHT NO. 76H 30165219) BY TOLLEFSON PROPERTIES, LLC)	DRAFT PRELIMINARY DETERMINATION TO GRANT COMBINED APPLICATION
---	--

On March 3, 2025, the City of Missoula submitted Application for Beneficial Water Use Permit No. 76H 30163647 and Tollefson Properties LLC submitted Change Application No. 76H 30165219 to the Missoula Regional Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC). The City of Missoula and Tollefson Properties LLC (Applicant or Applicants) submitted the applications pursuant to Montana Code Annotated (MCA) § 85-2-360. The permit application was submitted for a flow rate of 2.18 CFS (980 GPM) up to an annual volume of 99.0 AF from a groundwater well for municipal purposes. The change application was submitted to change the point of diversion, place of use and purpose from irrigation to aquifer recharge for Statement of Claim 76H 30165310. The Department published receipt of the applications on its website. For permit application 76H 30163674, a preapplication meeting was held between the Department and the Applicant on May 7, 2024, in which the Applicant designated that the technical analyses for the application would be completed by the Department. The Applicant returned the completed Preapplication Meeting Form for the permit application on September 3, 2024. The Department delivered the Department-completed technical analysis for the permit application on October 16, 2024. For change application 76H 30165219, a preapplication meeting was held between the Department and the Applicant on January 22, 2025, in which the Applicant designated that the technical analyses for the application would be completed by the Department. The Applicant returned the completed Preapplication Form for the change application on January 30, 2025. The Department delivered the Department-completed technical analysis for the change application on February 13, 2025. Both applications were determined to be correct and complete as of March 26, 2025. Environmental Assessments for these applications were completed on May 23, 2025.

INFORMATION

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

Applications as filed:

- Application for Beneficial Water Use Permit, Form 600
 - Addenda:
 - Mitigation Addendum, Form 600/606-MIT
 - Aquifer Testing Addendum, Form 600-ATA
 - Maps:
 - Historical Use Map, undated
 - Proposed Use Map, undated
 - Map of claimed POD, conveyance, storage, and POU, supplemental overlap, undated
 - Department- completed technical analyses based on information provided in the Preapplication Meeting Form, dated October 16, 2024
- Application for Change of Appropriation Water Right, Form 606
 - Addenda:
 - Mitigation Addendum, Form 600/606-MIT
 - Attachments:
 - Oxbow Ranch Surface Water Diversion plan diagrams, dated February 2025
 - 20 HP 5TMH-375 Berkeley submersible turbine pump curve
 - Maps:
 - Detail map of new POD 2 to aquifer recharge site, undated
 - Design details of proposed POD 2 diversion to aquifer recharge site, undated
 - Proposed POD 2 aquifer recharge site, and place of use, undated
 - Department-completed technical analysis based on information provided in the Preapplication Meeting Form, dated February 13, 2025

Information Received after Application Filed

- N/A

Information within the Department's Possession/Knowledge

- Application file for combined Permit Application 76H 30150412 and Change Application 76H 30150414

- Water Resource Survey Book for Missoula County
- Water Resource Survey Field Notes for Missoula County
- USGS flow records for Gage #12352500
- Variance Request Form 653 received May 3, 2024
- Department Variance Grant Letter dated May 3, 2024
- The Department also routinely considers the following information. The following information is not included in the administrative file for this application but is available upon request. Please contact the Missoula Regional Office at (406) 721-4284 to request copies of the following documents.
 - Memorandum: Development of standardized methodologies to determine Historical Diverted Volume, dated September 13, 2012
 - DNRC Technical Memorandum: Standard Practices for Net Surface Water Depletion from Ground Water Pumping, dated July 6, 2018

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, MCA).

For the purposes of this document, Department or DNRC means the Department of Natural Resources & Conservation; CFS means cubic feet per second; GPM means gallons per minute; AF means acre-feet; AC means acres; and AF/YR means acre-feet per year.

BENEFICIAL WATER USE PERMIT APPLICATION NO. 76H 30163647

PROPOSED APPROPRIATION

FINDINGS OF FACT

1. The Applicant proposes to divert water from groundwater from the Bitterroot River Valley Shallow Aquifer, by means of an 82-ft well, from May 1 to October 31 at 2.18 CFS (980 GPM) up to 99.0 AF, from a point in the NWSWNW, Sec. 14, T12N, R20W, for municipal use from May 1 through October 31. The Applicant proposes to provide additional water within the place of use, supplementing 66 municipal water rights owned by the City of Missoula. The place of use is generally located in Sections 1, 2, 11, 12, 13, and 14 T12N, R20W, Missoula County, described in detail in Table 1.1. Water will be pumped to the City's Sophie and Upper Linda

Vista water tanks, and thence to the place of use by water mains. Table 1 below provides a summary of the proposed use.

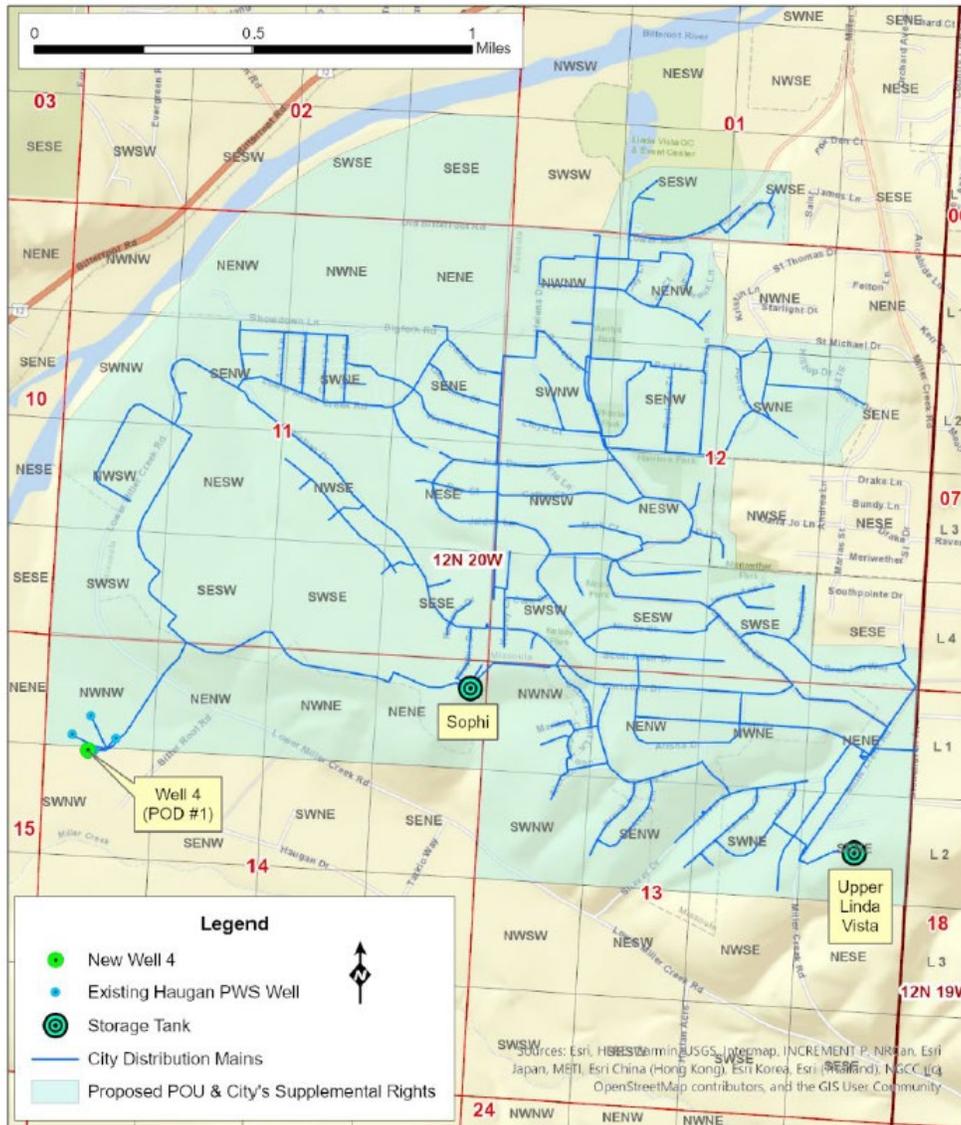
Table 1: Summary of Proposed Use

Flow Rate	Volume	Purpose	Period Of Use	Place Of Use (General Location)	Point Of Diversion
2.18 CFS	99.0 AF	Municipal	5/1 – 10/31	Secs. 1, 2, 11, 12, 13, and 14 T12N, R20W	NWSWNW, Sec. 14, T12N, R20W

Table 1.1: Detailed Description of Proposed Place of Use

¼	¼	¼	Section	Township	Range
SE	SW	SW	1	12N	20W
	SE	SW	1	12N	20W
W2	SW	SE	1	12N	20W
	S2	SE	2	12N	20W
SE	SE	SW	2	12N	20W
			11	12N	20W
		W2	12	12N	20W
S2	S2	NE	12	12N	20W
W2	SE	NE	12	12N	20W
	SW	NE	12	12N	20W
W2	NW	SE	12	12N	20W
	SW	SE	12	12N	20W
S2	SE	SE	12	12N	20W
		N2	13	12N	20W
	N2	N2	14	12N	20W

2. The proposed point of diversion is located approximately 2500 ft east of the Bitterroot River.
3. Per DNRC Technical Memorandum: Standard Practices for Net Surface Water Depletion from Ground Water Pumping, dated July 6, 2018, municipal use is considered to be 100% consumptive. Thus, the consumptive use for this application is the full 99.0 AF diverted.
4. If granted, this permit will be supplemental to 66 of the City of Missoula’s municipal water rights, which are enumerated in Table 25 of the application form for Permit Application 76H 30163647.



CITY OF MISSOULA - Beneficial Permit App. 76H 30163647
 Map of POD, POU, Conveyance, Storage & Supplemental Rights
 T12N, R20W, Missoula, Montana



Figure 1. Applicant-Submitted Map of Proposed Appropriation.

5. The Applicant is held to the following water measurement condition to meet the adverse effect criterion:

WATER MEASUREMENT-INLINE FLOW METER REQUIRED: THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED,

INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR UNTIL THE PROVISIONAL PERMIT IS PERFECTED AND THE DEPARTMENT RECEIVES A PROJECT COMPLETION NOTICE. IN THE EVENT THAT PERMITTED FLOW RATES AND/OR VOLUMES HAVE BEEN EXCEEDED DURING PERFECTION OF THE PROVISIONAL PERMIT OR THE APPROPRIATOR FAILS TO SUBMIT ANNUAL REPORTS, THE DEPARTMENT MAY CONTINUE TO REQUIRE ANNUAL SUBMISSIONS OF MONTHLY FLOW RATE AND VOLUME RECORDS. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE MISSOULA WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

BASIN CLOSURE

6. This application is for the appropriation of groundwater for the purpose of Municipal use. This application is located within the Statutory Bitterroot River Subbasin Temporary Closure, in which the Department may not grant an application for a permit to appropriate water or for a state water reservation, with certain exceptions (§ 85-2-344, MCA). One exception to the closure are permits to appropriate groundwater where the applicant complies with § 85-2-360, MCA.

7. The Applicant submitted a completed Form 600P Permit Preapplication Meeting Form and elected for DNRC to conduct the Technical Analysis (TA). The Applicant's submittal of this TA with the Form 600 Application for Beneficial Water Use Permit meets the requirements for submission of a hydrogeologic assessment report per §§ 85-2-360 and -361, MCA.

§ 85-2-311, MCA, BENEFICIAL WATER USE PERMIT CRITERIA

BASIN CLOSURE

8. Pursuant to § 85-2-360, MCA, a combined application for new appropriations of groundwater in a closed basin shall consist of a hydrogeologic assessment with an analysis of net depletion, a mitigation plan or aquifer recharge plan if required, an application for a beneficial water use permit or permits, and an application for a change in appropriation right or rights if necessary. A combined application must be reviewed as a single unit. A beneficial water use permit may not be granted unless the accompanying application for a change in water right is also granted. *E.g., In the Matter of Application No. 76H-30046211 for a Beneficial Water Use Permit and Application No. 76H-30046210 to Change a Non-filed Water Right by Patricia Skergan and Jim Helmer (DNRC Final Order 2010, Combined Application)(combined application, reviewed as a single unit).*

GENERAL CONCLUSIONS OF LAW

9. The Montana Constitution expressly recognizes in relevant part that:

- (1) All existing rights to the use of any waters for any useful or beneficial purpose are hereby recognized and confirmed.
- (2) The use of all water that is now or may hereafter be appropriated for sale, rent, distribution, or other beneficial use . . . shall be held to be a public use.
- (3) All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law.

Mont. Const. Art. IX, § 3. While the Montana Constitution recognizes the need to protect senior appropriators, it also recognizes a policy to promote the development and use of the waters of the state by the public. This policy is further expressly recognized in the water policy adopted by the Legislature codified at § 85-2-102, MCA, which states in relevant part:

- (1) Pursuant to Article IX of the Montana constitution, the legislature declares that any use of water is a public use and that the waters within the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided in this chapter. . . .
- (3) It is the policy of this state and a purpose of this chapter to encourage the wise use of the state's water resources by making them available for appropriation consistent with this chapter and to provide for the wise utilization, development, and conservation of the waters of the state for the maximum benefit of its people with the least possible degradation of the natural aquatic ecosystems. In pursuit of this policy, the state encourages the development of facilities that store and conserve waters for beneficial use, for the maximization of the use of those waters in Montana . . .

10. Pursuant to § 85-2-302(1), MCA, except as provided in §§ 85-2-306 and 85-2-369, MCA, a person may not appropriate water or commence construction of diversion, impoundment, withdrawal, or related distribution works except by applying for and receiving a permit from the Department. See § 85-2-102(1), MCA. An Applicant in a beneficial water use permit proceeding must affirmatively prove all of the applicable criteria in § 85-2-311, MCA. Section § 85-2-311(1) states in relevant part:

- ... the department shall issue a permit if the Applicant proves by a preponderance of evidence that the following criteria are met:
- (a) (i) there is water physically available at the proposed point of diversion in the amount that the Applicant seeks to appropriate; and
 - (ii) water can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:
 - (A) identification of physical water availability;
 - (B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and
 - (C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.
 - (b) the water rights of a prior appropriator under an existing water right, a certificate, a

permit, or a state water reservation will not be adversely affected. In this subsection (1)(b), adverse effect must be determined based on a consideration of an Applicant's plan for the exercise of the permit that demonstrates that the Applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied;

(c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;

(d) the proposed use of water is a beneficial use;

(e) 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 use has 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 under the permit;

(f) the water quality of a prior appropriator will not be adversely affected;

(g) the proposed use will be substantially in accordance with the classification of water set for the source of supply pursuant to 75-5-301(1); and

(h) the ability of a discharge permit holder to satisfy effluent limitations of a permit issued in accordance with Title 75, chapter 5, part 4, will not be adversely affected.

(2) The Applicant is required to prove that the criteria in subsections (1)(f) through (1)(h) have been met only if a valid objection is filed. A valid objection must contain substantial credible information establishing to the satisfaction of the department that the criteria in subsection (1)(f), (1)(g), or (1)(h), as applicable, may not be met. For the criteria set forth in subsection (1)(g), only the department of environmental quality or a local water quality district established under Title 7, chapter 13, part 45, may file a valid objection.

To meet the preponderance of evidence standard, “the Applicant, in addition to other evidence demonstrating that the criteria of subsection (1) have been met, shall submit hydrologic or other evidence, including but not limited to water supply data, field reports, and other information developed by the Applicant, the department, the U.S. geological survey, or the U.S. natural resources conservation service and other specific field studies.” Section 85-2-311(5), MCA (emphasis added). The determination of whether an application has satisfied the § 85-2-311, MCA criteria is committed to the discretion of the Department. *Bostwick Properties, Inc. v. Montana Dept. of Natural Resources and Conservation*, 2009 MT 181, ¶ 21. The Department is required grant a permit only if the § 85-2-311, MCA, criteria are proven by the Applicant by a preponderance of the evidence. Id. A preponderance of evidence is “more probably than not.” *Hohenlohe v. DNRC*, 2010 MT 203, ¶¶ 33, 35, 357 Mont. 438, 240 P.3d 628.

11. Pursuant to § 85-2-312, MCA, the Department may condition permits as it deems necessary to meet the statutory criteria:

(1) (a) The department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used without waste for the purpose stated in the application. The department may require

modification of plans and specifications for the appropriation or related diversion or construction. The department may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria listed in 85-2-311 and subject to subsection (1)(b), and it may issue temporary or seasonal permits. A permit must be issued subject to existing rights and any final determination of those rights made under this chapter.

E.g., Montana Power Co. v. Carey (1984), 211 Mont. 91, 96, 685 P.2d 336, 339 (requirement to grant applications as applied for, would result in, “uncontrolled development of a valuable natural resource” which “contradicts the spirit and purpose underlying the Water Use Act.”); see also, *In the Matter of Application for Beneficial Water Use Permit No. 65779-76M by Barbara L. Sowers* (DNRC Final Order 1988)(conditions in stipulations may be included if it further compliance with statutory criteria); *In the Matter of Application for Beneficial Water Use Permit No. 42M-80600 and Application for Change of Appropriation Water Right No. 42M-036242 by Donald H. Wyrick* (DNRC Final Order 1994); Admin. R. Mont. (ARM) 36.12.207.

12. The Montana Supreme Court further recognized in *Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starner*, 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080 (1996), *superseded by legislation on another issue*:

Nothing in that section [85-2-313], however, relieves an Applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an Applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.

See also, *Wesmont Developers v. DNRC*, CDV-2009-823, First Judicial District Court, *Memorandum and Order* (2011). The Supreme Court likewise explained that:

.... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co., 211 Mont. at 97-98, 685 P.2d at 340; see also Mont. Const. art. IX §3(1).

13. An appropriation, diversion, impoundment, use, restraint, or attempted appropriation, diversion, impoundment, use, or restraint contrary to the provisions of § 85-2-311, MCA is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized appropriation, diversion, impoundment, use, or other restraint. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to appropriate, divert, impound, use, or otherwise restrain or

control waters within the boundaries of this state except in accordance with this § 85-2-311, MCA. Section 85-2-311(6), MCA.

14. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge, as specifically identified in this document. ARM 36.12.221(4).

PHYSICAL AVAILABILITY

FINDINGS OF FACT

15. The Applicant proposes to divert up to 99.0 AF at a flow rate of up to 2.18 CFS for municipal use from the Bitterroot River Valley Shallow Aquifer.

16. The Department evaluated the volume of water that is physically available from the source aquifer using applicant-supplied data from an aquifer test on Well 4 (the proposed POD). Department Groundwater Hydrologist Melissa Brickl used data from said tests to produce the October 16, 2024, Technical Analysis. A variance was granted by the Department from Aquifer Testing Requirements in ARM 36.12.121(3) (a), (d), (e), and (h) on May 3, 2024 for pumping rate, pumping duration, and measurement schedule.

17. Using the Theis (1935) solution, an aquifer transmissivity (T) value of 150,905 ft²/day, specific yield of 0.1 (Lohman, 1972), a normalized pump schedule using the requested diverted volume, and a constant head boundary 2,500 ft west of the well to represent the Bitterroot River, the Department modeled a 0.01-foot drawdown contour, or zone of influence to inform the groundwater flux in the Bitterroot River Valley Shallow Aquifer at the point of diversion. Groundwater flux through the zone of influence is equal to 10,956 AF/year.

18. The Department finds groundwater is physically available during the proposed period of diversion.

LEGAL AVAILABILITY

FINDINGS OF FACT

19. The Department determined the legal availability of water in the source aquifer by subtracting the legal demands of existing water rights within the zone of influence of the proposed point of diversion from the amount of water physically available in the source aquifer.

20. The Department defined the zone of influence to be the area within which existing wells would experience a drawdown of 0.01 feet or more. This was calculated to be an area roughly described extending 6,000 ft east and 2,500 ft west of the proposed well. A map of the zone of influence and the method of its calculation may be found in the Department's technical analysis.

21. One groundwater right was identified within the zone of influence: Ground Water Certificate 76H 30124274, which has a legal demand of 1.28 AF.

22. The amount of water legally available in the source aquifer is 10,954.72 AF (10,956 AF physically available – 1.28 AF legally available = 10,954.72 AF legally available).

23. The Department determined in its technical analysis that the Bitterroot River is hydraulically connected to the source aquifer. The location where depletions begin to accrue was identified as the southern boundary of the NWNE Sec. 15, T12N, R20W, Missoula County, and the area of potential impact was defined as the reach between this point and the confluence of the Bitterroot and Clark Fork Rivers located in the NWNW of Section 27, T13N, R20W, Missoula County.

24. The Department considers municipal use to be 100% consumptive. As a result, the depletions to the Bitterroot River were set equal to the diverted volume of 99.0 AF. As part of the technical analysis of the proposal, the Department modeled the timing of depletions (Table 2).

Table 2. Timing of Depletions to the Bitterroot River

Month	Depletions to Bitterroot River (AF)	Depletions to Bitterroot River (GPM)
January	1.3	9.2
February	1.0	7.9
March	0.9	6.9
April	0.8	6.2
May	11.8	86.3
June	17.2	129.7
July	19.5	142.9
August	20.0	146.1
September	13.0	98.4
October	9.7	70.8
November	2.2	16.8
December	1.6	11.6

25. The Department calculated the physical availability of water on the Bitterroot River by taking the Median Mean Monthly flow rate (MMM) as recorded at USGS Gage #12352500 (Bitterroot River near Missoula MT). Flow rates were converted to volumes using the following equation: $MMM \text{ (CFS)} \times 1.98 \text{ (AF/day/CFS)} \times \text{days per month} = \text{AF/month}$. The monthly legal demands of water rights between the gage and the point of depletions were then added to the physical

availability at the gage to arrive at physical availability at the point of depletions. The legal demands of water rights within the area of potential impact were then subtracted from the physical availability to assess legal availability at the point of depletions (Table 3). A full description of the methodology can be found in Part B of the Department’s technical analysis for Permit Application 76H 30163647.

Table 3: Physical and Legal Availability of Water at the Point of Depletions

Month	Physical Availability at Point of Depletions (CFS)	Physical Availability at Point of Depletions (AF)	Legal Demands (CFS)	Legal Demands (AF)	Legal Availability at Point of Depletions (CFS)	Legal Availability at Point of Depletions (AF)
January	782.58	48,118.97	900.66	55,379.42	-118.08	-7,260.45
February	820.08	45,951.59	900.66	50,466.73	-80.58	-4515.14
March	1,164.08	71,576.49	900.66	55,379.42	263.42	16197.07
April	2,578.63	153,439.14	940.30	55,951.74	1638.33	97487.4
May	6,770.63	416,309.81	7,740.30	475,932.5	-969.67	-59622.69
June	7,487.63	445,544.93	7,740.30	460,579.8	-252.67	-15034.87
July	2,333.40	143,475.17	635.07	39,048.93	1698.33	104426.24
August	867.80	53,358.94	635.07	39,048.93	232.73	14310.01
September	826.40	49,174.21	635.07	37,789.29	191.33	11384.92
October	930.70	57,226.51	935.07	57,495.21	-4.37	-268.7
November	1,040.08	61,889.06	900.66	53,592.99	139.42	8296.07
December	872.83	53,668.22	900.66	55,379.42	-27.83	-1711.2

26. The comparison between physically available and legally available water in the Bitterroot River indicates that water is legally available in the amount of water modeled to be depleted during the months of March, April, July, August, September, and November, but legally unavailable during the rest of the year (the months of January, February, May, June, October, and December).

27. The Department finds the proposed appropriation of 2.18 CFS and up to 99.0 AF of groundwater to be legally available during the proposed period of use.

28. The Department finds that surface water in the hydraulically connected Bitterroot River is not legally available in the amount modeled to be depleted during portions of the year.

29. The Applicant has addressed legal availability of surface water in the Bitterroot River by providing an aquifer recharge plan which proposes to fully mitigate the depletions to the Bitterroot

River during months in which water is not legally available. This aquifer recharge plan is fully addressed under “Adverse Effect” below.

30. The Department finds that surface water in the hydraulically connected Bitterroot River is legally available when considering the aforementioned aquifer recharge plan.

ADVERSE EFFECT

FINDINGS OF FACT

31. The Applicant submitted a plan for responding to a valid call on their water right by a senior appropriator. The City of Missoula can restrict or curtail the use of water for landscaping purposes in the place of use, as needed, if a call is made. The proposed diversion can also be shut off. In this case, the City’s Sophie and Upper Linda Vista storage tanks can provide a level of backup water if the duration of call is short. The area supplied by the proposed diversion is also supplied from three other wells in the immediate area and can be supplemented from wells elsewhere in the municipal water system.

32. To determine if the proposed appropriation of groundwater will cause adverse effect to other water users, the Department modeled whether any extant wells would experience drawdown of 1 foot or more. No wells met this criterion. The Department determined that no groundwater rights will be adversely affected by drawdown from the proposed diversion.

33. The Department determined in its technical analysis of Permit Application 76H 30163647 that the proposed groundwater diversion will deplete the Bitterroot River. During the months of January, February, May, June, October, and December, water is not legally available. An aquifer recharge plan was submitted to mitigate depletions during the months where water is not legally available.

34. The water right proposed for use in the aquifer recharge plan is Statement of Claim 76H 30165310, which has a priority date of June 30, 1958. This claim was historically used for irrigation of 82 acres, and has a historical consumptive use of 105.57 AF. The retirement of the 82 acres and the aquifer recharge plan will provide sufficient water to mitigate the depletions of Permit Application 76H 30163647 during the months where water is legally unavailable, as shown in Table 7 and more fully described in the analysis of Change Application 76H 30165219, below. To the Applicant’s knowledge, no calls have ever been made on Statement of Claim 76H 30165310.

35. Water is physically and legally available for appropriation in the groundwater aquifer, and the aquifer recharge plan fully offsets the depletions to surface water in the Bitterroot River during the months in which water is not legally available. Thus, the Department finds there will be no adverse effect to existing water users as a result of the proposed appropriation.

36. To ensure that the proposed flow rate and volume of water are not exceeded, and that the amount of mitigation water provided to the Bitterroot River is adequate to offset adverse effect, the Applicant will be required to adhere to the following water measurement conditions:

THE APPROPRIATOR'S USE OF WATER UNDER THIS PERMIT IS CONDITIONED UPON THE 99.0 AC-FT OF MITIGATION VOLUME REQUIRED TO OFFSET ADVERSE EFFECTS FROM NET DEPLETION TO THE BITTERROOT RIVER. DIVERSION UNDER THIS PERMIT MAY NOT COMMENCE UNTIL THE MITIGATION PLAN AS SPECIFICALLY DESCRIBED AND APPROVED THROUGH CHANGE AUTHORIZATION 76H 30165219 IS LEGALLY IMPLEMENTED. DIVERSION UNDER THIS PERMIT MUST STOP IF MITIGATION AS HEREIN REQUIRED IN AMOUNT, LOCATION, AND DURATION CEASES.

WATER MEASUREMENT-INLINE FLOW METER REQUIRED: THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR UNTIL THE PROVISIONAL PERMIT IS PERFECTED AND THE DEPARTMENT RECEIVES A PROJECT COMPLETION NOTICE. IN THE EVENT THAT PERMITTED FLOW RATES AND/OR VOLUMES HAVE BEEN EXCEEDED DURING PERFECTION OF THE PROVISIONAL PERMIT OR THE APPROPRIATOR FAILS TO SUBMIT ANNUAL REPORTS, THE DEPARTMENT MAY CONTINUE TO REQUIRE ANNUAL SUBMISSIONS OF MONTHLY FLOW RATE AND VOLUME RECORDS. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE MISSOULA WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

37. The Department finds that the proposed appropriation of 2.16 CFS up to 99 AF annually will not result in adverse effect to existing water rights.

ADEQUATE MEANS OF DIVERSION

FINDINGS OF FACT

38. The proposed point of diversion is a 12-inch well in the City of Missoula's Haugen well field (GWIC 326236). The well pump has not yet been installed but is planned to be similar to the pump in Haugan Well #2 (GWIC 251974), which is a Goulds 10RJLC, an 8-in, 150 hp unit capable of 1000 GPM at 330 ft of lift. Water is pumped from the well through a 10-inch pipe to the pump house and chlorinating unit. From the pump house, water is conveyed to the Sophie and Upper Linda Vista storage tanks via an 18-inch pipeline. Total dynamic head is 330 feet to the storage

tanks. From the tanks, water is distributed throughout the municipal place of use in 10- to 12-inch water mains.

39. The Department conducted an evaluation of the potentially available water column to determine adequacy of diversion. Using FWS:SOLV software, predicted drawdown within the well casing was modeled based on the monthly pumping schedule provided by the Applicant. Based on the Department's modeling, after one year of pumping 63 feet of water column would remain in the well casing. A full description of the methodology can be found in the Department's technical analysis titled Groundwater Permit Technical Analyses Report – Part A.

40. The Department finds that the proposed means of diversion and conveyance are capable of diverting and conveying the proposed flow rate and volume.

BENEFICIAL USE

FINDINGS OF FACT

41. Permit Application 76H 30165219 is for 980 GPM and up to 99.0 AF for municipal use.

42. The requested flow rate is needed to provide pressure to deliver the diverted water to the City's storage tanks, while the volume is what the City determined to be necessary to serve its municipal water users. The place of use is in the Miller Creek area of Missoula, which is experiencing development and growth with increased water demand. The period of diversion requested corresponds with lawn and garden irrigation season, and the additional flow rate and volume will allow the City to provide additional water during this higher demand period. The Department considers the City to be a reliable authority on the requirements of its municipal water system.

43. The Department finds the proposed water use is beneficial, and that the requested flow rate of 980 GPM and annual volume of 99.0 AF are the amounts necessary for the municipal purpose.

POSSESSORY INTEREST

FINDINGS OF FACT

44. This application is for municipal use, in which water is supplied to another. It is clear that the ultimate user will not accept the supply without consenting to the use of water. The Applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

APPLICATION TO CHANGE A WATER RIGHT NO. 76H 30165219

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

45. The Applicant seeks to change the Point of Diversion, Place of Use, and Purpose of Use of Statement of Claim 76H 30165310 in this Application. Statement of Claim 76H 30165310 is filed for 2.5 CFS from the Bitterroot River via means of a pump for the purpose of Irrigation (Sprinkler) for 82 acres. The original filing did not include a volume; however, the Department's technical analysis calculated a historical diverted volume of 131.96 AF. The period of use is April 1 through October 31. The point of diversion is located in the NWSESE Sec. 2, T12N, R20W, Missoula County.

Table 4: Water Right Proposed for Change

Water Right Number	Flow Rate	Purpose	Period Of Use	Place Of Use	Point Of Diversion	Priority Date
76H 30165310	2.5 CFS	Irrigation	April 1 – October 31	S2SE Sec. 2 T12N, R20 W; NENE Sec. 11 T12N, R20W	NWSESE Sec. 2 T12N, R20W	6/30/1958

46. Statement of Claim 76H 30165310 is a child right of Statement of Claim 76H 105168-00, created when the Applicant submitted DNRC Form 641: Ownership Update, Divided Interest (Split) to the Department on February 6, 2025 (OUID #270457). Statement of Claim 76H 30122609 is also a child right of Statement of Claim 76H 105168-00. All three rights are associated by a shared point of diversion and share a flow rate of 2.5 CFS. The parent right was filed for 100 acres of irrigation of which 82 acres are associated with 76H 30165310, 8 acres associated with 76H 30122609, with 10 acres remaining with the parent claim.

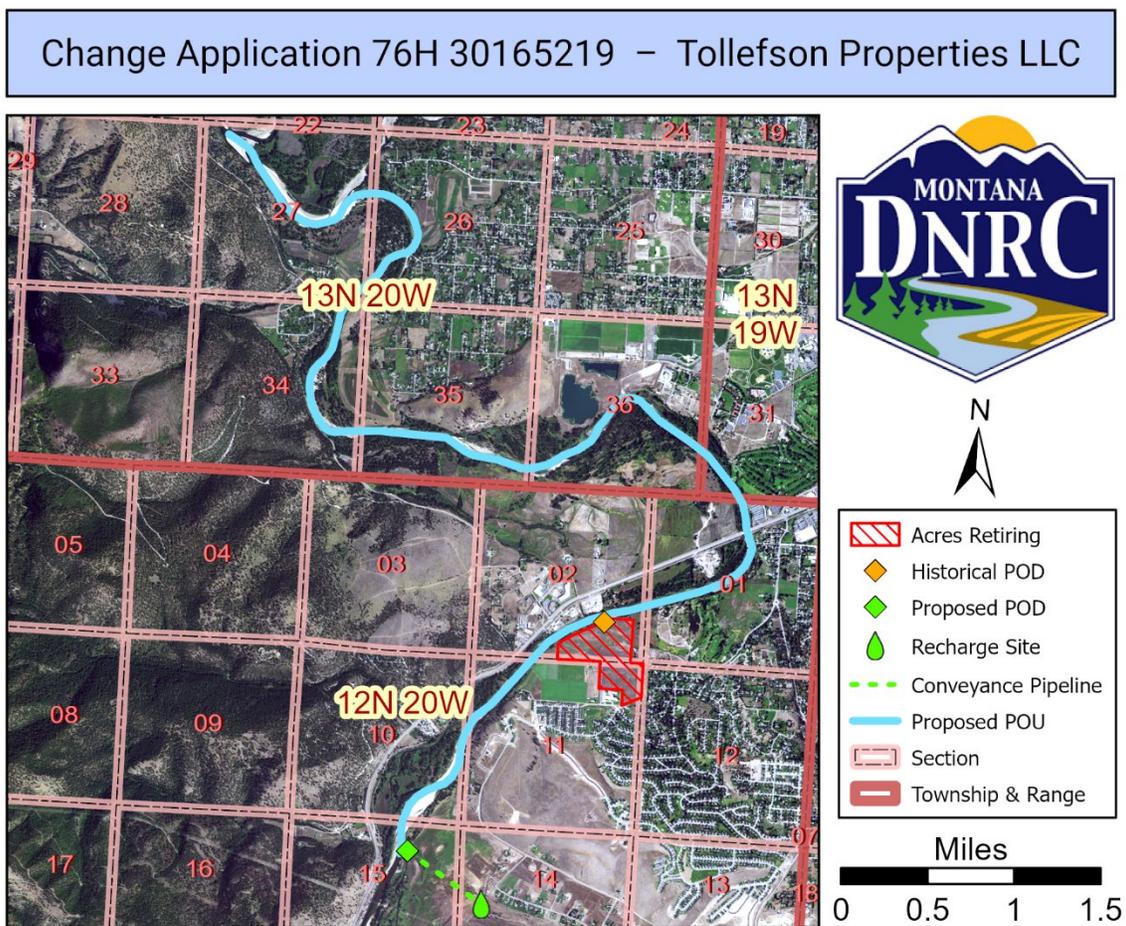
CHANGE PROPOSAL

FINDINGS OF FACT

47. The Applicant proposes to change the purpose of Statement of Claim 76H 30165310 from irrigation to aquifer recharge, retiring 82 acres in the S2SE Sec. 2 and the NENE Sec. 11, T12N, R20W, which constitute the entirety of the irrigated acres on this right. The place of use for the new aquifer recharge purpose will be the Bitterroot River from the southern boundary of the NENW Sec. 15, T12N, R20W to the confluence of the Bitterroot and Clark Fork Rivers in the NWNW of Sec. 27, T13N, R20W. A pump in the SENWNE Sec. 15, T12N, R20W will serve as the new point of diversion for aquifer recharge; the current point of diversion in the NWSESE Sec.

2, T12N, R21W will no longer be used by this right. Map 2 shows the elements of the proposed change.

48. This Application is to provide mitigation water via aquifer recharge for Permit Application 76H 30163647. The Applicant will divert 101.1 AF of water at up to 366.6 GPM from the Bitterroot River from April 1 to October 31 and convey it via a pipeline to a point in the SESWNW Sec. 14, T12N, R20W, where water will be released into Miller Creek, a losing stream. Water will infiltrate into the groundwater aquifer and provide year-round mitigation water to the Bitterroot River from the southern boundary of the NENW Sec. 15, T12N, R20W to the confluence of the Bitterroot and Clark Fork Rivers.



Map 2. Department-Generated Map of Proposed Change

49. The Applicant is held to the following conditions to meet the adverse effect and beneficial use criteria:

WATER MEASUREMENT-INLINE FLOW METER REQUIRED: THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. IN THE EVENT THAT AUTHORIZED FLOW RATES AND/OR VOLUMES HAVE BEEN EXCEEDED DURING PERFECTION OF THE CHANGE AUTHORIZATION OR THE APPROPRIATOR FAILS TO SUBMIT ANNUAL REPORTS, THE DEPARTMENT MAY CONTINUE TO REQUIRE ANNUAL SUBMISSIONS OF MONTHLY FLOW RATE AND VOLUME RECORDS. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE MISSOULA WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

THIS CHANGE AUTHORIZATION PROVIDES MITIGATION WATER FOR BENEFICIAL WATER USE PERMIT NO. 76H 30163647. THE BENEFICIAL USE CRITERION OF THIS CHANGE AUTHORIZATION IS CONDITIONED UPON THE AUTHORIZATION OF BENEFICIAL WATER USE PERMIT AUTHORIZATION NO. 76H 30163647.

CHANGE CRITERIA

50. 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.

51. 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 FOR ADVERSE EFFECT

FINDINGS OF FACT

52. Statement of Claim 76H 30165310 is one of two child rights to Statement of Claim 76H 105168-00. Application to Change a Water Right 76H 30150414 was filed on the other child right, Statement of Claim 76H 30122609. The historical use analysis in this Change Application covered the entirety of the original parent right. The Department reaffirms the historical use analysis conducted in Change Application 76H 30150414 and has relied on these findings in its historical use analysis of Statement of Claim 76H 30165310.

53. Statement of Claim 76H 30165310 lists a priority date of June 30, 1958, and an 82-acre place of use in the S2SE Sec. 2 and the NENE Sec. 11, T12N, R20W, Missoula County. The Water Resource Survey aerial photographs were taken in August 1955, before the 1958 priority date of this Claim. However, Statement of Claim 76H 30165310 is a child right of Statement of Claim 76H 105168-00. Change Application 76H 30150414 was submitted for another child right of Statement of Claim 76H 105168-00. This application includes 1966 aerial imagery (Map IR.2.C in deficiency letter response) which confirms the full 100 acres claimed under Statement of Claim 76H 105168-00 were historically irrigated, including 82 irrigated acres under what is now Statement of Claim 76H 30165310.

54. The Department reviewed the Water Resources Survey Field Notes for Missoula County, T12N, R20W, for further evidence of irrigation. Notes dated August 13, 1959, for property then

owned by Daniel Maloney show that the 82-acre place of use for Statement of Claim 76H 30165310 were irrigated at that time.

55. There are no water rights historically supplemental to Statement of Claim 76H 30165310.

56. The Applicant opted to use Department methodology per ARM 36.12.1902(16) and (17) to determine historical consumptive use. The variables used in this calculation are shown in Table 5.

Table 5. Historical Consumptive Use for Statement of Claim 76H 30165310.

Irrigation Method	Acres	IWR (in) ¹	Mgmt. Factor ²	Field Efficiency	Crop Consumption (AF)	Field Applied Volume (AF)	Irrecoverable Losses (AF)	Total Consumed Volume (AF)
Sprinkler	82	19.45	70%	70%	92.37	131.96	13.2	105.57

¹Missoula WSO AP IWR Weather Station

²Missoula County Historical Use Management Factor (Pre-July 1, 1973)

57. The Department verified the historical point of diversion in the NWSESE Sec. 2, T12N, R20W using USDA aerial photograph 1079-109, dated September 24, 1979.

58. The pump historically used to divert water to the place of use was a Baldwor Reliance 25 HP pump motor. A performance curve could not be located due to the discontinuation of this product by the manufacturer. The Applicant relied on calculations based on the publication *Irrigation Water Pumps* (AE1057, Revised Aug 2017), by Thomas F. Scherer, Extension Agricultural Engineer at N. Dakota State University. Using 18.75 water horse power (WHP) and a total dynamic head of 69.7 ft, the Applicant calculated:

$$(18.75 \text{ WHP} \times 3960 \text{ constant}) / 69.7 \text{ TDH} = 1,065 \text{ GPM, or } 2.37 \text{ CFS}$$

59. The decreed flow rate on this claim is 2.5 CFS, and these calculations indicate the pump supported a flow rate of 2.37 CFS. The Water Court added an informational remark to parent Claim 76H 105168-00 which notes that this claim and its children share and alternate the use of the point of diversion and flow rate, so that the combined flow rate of Statements of Claim 76H 105168-00, 76H 30165310, and 76H 30122609 may not exceed 2.5 CFS.

60. Water was conveyed to the place of use by a buried 8-inch mainline pipe running approximately 2400 feet, with risers spaced 60 ft apart. Lateral lines extended from the main line, with risers 30 ft apart.

61. As the historical conveyance is by pipeline, there are no meaningful conveyance losses. Therefore, the historically diverted volume is equal to the field applied volume of 131.96 AF, per ARM 36.12.1902(10).

62. The historical period of diversion for the subject water right was described in the application materials submitted for Application to Change a Water Right 76H 30150414. In that application the Department found the historical period of diversion to be April 1 to October 31, matching what was decreed by the Montana Water Court.

63. The Department finds the following historical use, as shown in Table 6.

Table 6. Summary of historical use findings for Statement of Claim 76H 30165310

Priority Date	Diverted Volume	Flow Rate	Purpose (Total Acres)	Consumptive Use	Place of Use	Point of Diversion
6/30/1958	131.96 AF	2.5 CFS	Sprinkler Irrigation (82 acres)	105.57 AF	S2SE Sec. 2; NENE Sec. 11, T12N, R20W	NWSESE Sec. 2, T12N, R20W

ADVERSE EFFECT

FINDINGS OF FACT

64. The Applicant proposes to retire all 82 irrigated acres on Statement of Claim 76H 30165310 and to use 101.1 AF at a flow rate of up to 336.6 GPM for aquifer recharge to offset the depletions of proposed Permit 76H 30163647. The volume of 101.1 AF was identified as the amount of water necessary for the seasonal aquifer recharge schedule to offset the depletions of the proposed permit during the months when adverse effect would occur.

65. The historical consumptive use for this Claim is 105.57 AF. The proposed retirement of all irrigated acres and transition to the nonconsumptive aquifer recharge purpose will thus result in a decrease of 105.57 AF of consumed volume.

66. Return flows were found to historically accrue in the Bitterroot River beginning in the SESESW Section 2, T12N, R20W, Missoula County. This change is for aquifer recharge, utilizing a portion of the historically consumed volume to mitigate depletions to the Bitterroot River. Historically, irrigation of the 82 acres being retired from irrigation generated 26.4 AF of return flows to the Bitterroot River. The proposed aquifer recharge injection schedule requires a volume of 101.1 AF to be diverted from the Bitterroot River, leaving 30.86 AF of historically diverted water in the Bitterroot River, offsetting lost return flows. When return flows return to the source at the location that they historically did and water is left instream so that historically diverted flows are available during the historical period of diversion where return flows historically returned to the

source (as is the case in this application), the Department does not conduct a monthly analysis of the rate and timing of return flows.

67. The Applicant proposes to move the location of their Bitterroot River diversion approximately 2 miles upstream, allowing the mitigation provided by the aquifer recharge plan to offset depletions from proposed permit 76H 30163647 in the location where they occur. Eight water rights lie between the historical point of diversion and the proposed point of diversion (Table 7). Of these, three are senior irrigation rights, four are junior instream rights, and one is a junior irrigation right.

Table 7. Rights with Points of Diversion between Historical and Proposed POD.

Water Right	Owner	Purpose	Priority Date
76H 104521-00	BOGCESS FAMILY TRUST	IRRIGATION	12/13/1932
76H 131603-00	MR RIVER PROPERTY LLC	IRRIGATION	12/31/1936
76H 120055-00	BUREAU OF RECLAMATION	IRRIGATION	12/4/1944
76H 151306-00	CSKT; MT DFWP	RECREATION	7/1/1970
76H 151311-00	CSKT; MT DFWP	RECREATION	7/1/1970
76H 151312-00	CSKT; MT DFWP	RECREATION	7/1/1970
76H 151313-00	CSKT; MT DFWP	RECREATION	7/1/1970
76H 39791-00	KHOURY INC	IRRIGATION	1/13/1982

68. The reach between the historical and proposed points of diversion will be depleted by the proposed diverted volume of 101.1 AF.

69. The Department finds that the proposed change in point of diversion will not adversely affect senior irrigation rights between the historical and proposed points of diversion. The Department’s analysis shows that there is sufficient physical availability of water in the Bitterroot River to satisfy all senior water rights in this reach of the river year-round. The analysis demonstrating physically available water in the Bitterroot River at this location can be found in the technical analysis for the proposal requiring mitigation, Application 76H 30163647. The change in point of diversion will not result in a need for increased call for water by senior users as their rights are satisfied due to sufficient water flows in the reach.

70. The Department finds that the proposed change in point of diversion will not adversely affect junior rights between the historical and proposed points of diversion. Prior to this change, these rights were subject to call by the water right proposed for change. While 101.1 AF of water

will no longer be physically available in this reach, this water was never legally available for appropriation by junior water rights. This change does not cause previously available water to become unavailable but only changes the manner in which water was unavailable from legal to physical. Therefore, the Department finds no adverse effect to junior water users in this reach.

71. The change in point of diversion will not result in an increase in the frequency of call on junior water users between the historical and proposed points of diversion by CSKT and DFWP. Both the historical and proposed points of diversion are located upstream of the USGS gage used by CSKT and DFWP to monitor streamflows and to potentially make call. Because of this, and because there is no increase in consumptive use, this change will not result in any difference in flows measured at the gage and therefore will not result in any change in date or frequency of call.

72. Water users downstream of the historical point of diversion will not be adversely affected as a result of this change, since there is not a proposed increase in the amount of water being diverted from the source. Historically 131.96 AF was diverted from the Bitterroot River for irrigation purposes with a consumptive use of 105.57 AF. The proposed change to aquifer recharge would result in a diverted volume of 101.1 AF which will provide 99.0 AF of mitigation water.

73. The historical period of diversion for irrigation is April 1 to October 31. The proposed aquifer recharge plan injection schedule begins on May 1 and ends on October 31. The proposed volume to be injected for aquifer recharge is 101.1 AF, less than the 105.57 AF historically consumed by irrigation.

74. To ensure that the historical and proposed amount of water diverted from the Bitterroot River are not exceeded, which would result in adverse effect, the Applicant will be required to adhere to the following water measurement condition:

WATER MEASUREMENT-INLINE FLOW METER REQUIRED: THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. IN THE EVENT THAT AUTHORIZED FLOW RATES AND/OR VOLUMES HAVE BEEN EXCEEDED DURING PERFECTION OF THE CHANGE AUTHORIZATION OR THE APPROPRIATOR FAILS TO SUBMIT ANNUAL REPORTS, THE DEPARTMENT MAY CONTINUE TO REQUIRE ANNUAL SUBMISSIONS OF MONTHLY FLOW RATE AND VOLUME RECORDS. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE MISSOULA WATER RESOURCES REGIONAL OFFICE.

THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

75. The Department finds that the proposed change in water use will not result in adverse effect to existing water rights.

BENEFICIAL USE

FINDINGS OF FACT

76. This Change Application is intended to provide mitigation water via aquifer recharge for Application for Beneficial Water Use Permit No. 76H 30163647, which requires mitigation water to be made available in the Bitterroot River in the months of January, February, May, June, October, and December to offset its net depletions that would result in adverse effect to senior surface water users. The Department's technical analysis of the Applicants' proposal found that a flow rate of 336.6 GPM and annual volume of 101.1 AF were the amounts required to provide sufficient mitigation water via aquifer recharge to offset the depletions of Application 76H 30163647.

77. The proposed aquifer recharge plan results in water accretions to the Bitterroot River in every month of the year. In the adverse effect analysis conducted for permit application 76H 30163647, the Department found that depletions from groundwater pumping would result in adverse effect during the months of January, February, May, June, October, and December. Although mitigation water is not required in every month of the year to offset adverse effects from groundwater pumping, the injection schedule proposed for aquifer recharge is necessary to generate sufficient volumes of mitigation water in the Bitterroot River during the months of January, February, May, June, October, and December when it is needed, and is a beneficial use. Table 8 below displays the monthly net effect (i.e. mitigation accretions – permit depletions) of the Applicants' proposed aquifer recharge plan to the Bitterroot River. A full description of the methodology can be found in the Department's technical analysis titled Surface Water Change Technical Analysis Report – Part B.

Table 7. Monthly net effect to the Bitterroot River from the proposed aquifer recharge plan

Month	Permit Consumed Volume (AF)	Bitterroot River Net Depletion (AF)	Bitterroot River Net Depletion (GPM)	Aquifer Recharge Accretions Bitterroot River (AF)	Aquifer Recharge Accretions Bitterroot River (GPM)	Net Effect to Bitterroot River (AF)	Net Effect to Bitterroot River (GPM)
Jan	0	1.3	9.2	1.5	11.2	0.2	1.7
Feb	0	1	7.9	1.2	9.6	0.2	1.5
Mar	0	0.9	6.9	1.1	8.4	0.2	1.8
Apr	0	0.8	6.2	1	7.6	0.2	1.5
May	13.9	11.8	86.3	11.9	86.8	0.1	0.5
June	19.8	17.2	129.7	17.3	130.4	0.1	0.4
Jul	21.8	19.5	142.9	19.6	143	0.1	0.4
Aug	21.8	20	146.1	20.1	146.9	0.1	0.6
Sep	12.8	13	98.4	13.1	98.9	0.1	0.6
Oct	8.9	9.7	70.8	9.8	71.4	0.1	0.5
Nov	0	2.2	16.8	2.7	20.2	0.5	3.6
Dec	0	1.6	11.6	1.9	14.1	0.3	2.4
Total	99	99		101.1		2.1	

78. To meet the beneficial use criterion, the change authorization is subject to the following condition:

THIS CHANGE AUTHORIZATION PROVIDES MITIGATION WATER FOR BENEFICIAL WATER USE PERMIT NO. 76H 30163647. THE BENEFICIAL USE CRITERION OF THIS CHANGE AUTHORIZATION IS CONDITIONED UPON THE AUTHORIZATION OF BENEFICIAL WATER USE PERMIT AUTHORIZATION NO. 76H 30163647.

79. The Department finds that the proposed water use is beneficial (contingent upon the issuance of Permit Application 76H 30163647), and that the requested flow rate of 336.6 GPM and annual volume of 101.1 AF are the amount required to offset depletions to surface water resulting in adverse effect from Permit Application 76H 30163647.

ADEQUATE DIVERSION

FINDINGS OF FACT

80. The aquifer recharge system was designed by a professional engineer. Three 30-foot sections of 12-in horizontal, slotted, HPDE infiltration pipe will be installed in a side channel to the Bitterroot River in the SENWNE Sec. 15, T12N, R20W. This influent pipe will connect to a solid 12-inch HPDE pipe extending about 800 ft to the southeast to a 5-foot diameter wet well (pump station) located adjacent to an active oxbow. The pipeline connecting the POD to the wet well is

designed with a siphon so that flows from the river cannot reach the wet well without pumping. A turbine pump and 4-inch totalizing inline flow meter will be installed in a pump house located above and adjacent to the wet well. The pump will be a 20 HP 5TMH-375 Berkeley submersible turbine pump, which can convey the requested 336.6 GPM over a vertical elevation lift of about 45 feet. Total dynamic head is about 170 ft at 335 GPM. From the wet well, water will be conveyed through a 4-inch pipeline approximately 1820 ft to an effluent outfall at the aquifer recharge site on lower Miller Creek.

81. Miller Creek is a losing stream and frequently dry in the lower reaches where the aquifer recharge site is located. The Applicant proposes that by discharging water into the Creek, the Bitterroot River Shallow Valley Aquifer will be recharged and supplement flows to the Bitterroot River throughout the year. Department Hydrologist Melissa Brickl analyzed the Applicant's proposal for aquifer recharge using data from shallow wells local to the area and by hydrologic modeling. The Department's analysis of the Applicant's plan found that the use of Miller Creek as a natural carrier and infiltration gallery for aquifer recharge is reasonable.

82. The City of Missoula currently utilizes Miller Creek for mitigation required for issuance of Beneficial Water Use Permit 76H 30063540. The mitigation plan for this permit retired irrigated acreage in the Miller Creek valley and left the water instream where it naturally recharges the groundwater aquifer through the streambed. The mitigation plan was approved in Authorization to Change a Water Right 76H 30063540, issued June 28, 2012. In the analyses conducted for that change application, the Department found Miller Creek to be a losing stream, and that water left in Miller Creek would infiltrate into the groundwater aquifer providing mitigation to the Bitterroot River. The Department corroborates this previous analysis for the purpose of this application.

83. The Department finds the means of diversion adequate for the proposed beneficial use.

POSSESSORY INTEREST

FINDINGS OF FACT

84. 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 aquifer recharge per § 85-2-420, MCA.

APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 76H 30163647

BENEFICIAL WATER USE PERMIT CONCLUSIONS OF LAW

BASIN CLOSURE

85. The proposed well is located within the Bitterroot River north end subbasin (76HB). Per § 85-2-344(2)(a), MCA, DNRC cannot grant an application for a permit to appropriate surface water within a Bitterroot River subbasin until the closure for the basin is terminated pursuant to § 85-2-344(5), MCA.

86. The application falls under the exceptions for the basin closure, § 85-2-344(2)(b), MCA. This application is for the appropriation of groundwater and complies with the provisions of § 85-2-360, MCA.

87. In reviewing an application for groundwater in a closed basin, the District Court in *Sitz Ranch v. DNRC* observed:

The basin from which Applicants wish to pump water is closed to further appropriations by the legislature. The tasks before an Applicant to become eligible for an exception are daunting. The legislature set out the criteria discussed above (§ 85-2-311, MCA) and placed the burden of proof squarely on the Applicant. The Supreme Court has instructed that those burdens are exacting. It is inescapable that an Applicant to appropriate water in a closed basin must withstand strict scrutiny of each of the legislatively required factors.

Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7.

88. A basin closure exception does not relieve the Department of analyzing § 85-2-311, MCA criteria. Qualification under a basin closure exception allows the Department to accept an application for processing. The Applicant must still prove the requisite criteria. *E.g.*, *In the Matter of Application for Beneficial Water Use Permit No. 41K-30043385 by Marc E. Lee* (DNRC Final Order 2011); *In the Matter of Application for Beneficial Water Use Permit No. 41K-30045713 by Nicholas D. Konen*, (DNRC Final Order 2011).

PHYSICAL AVAILABILITY

89. Pursuant to § 85-2-311(1)(a)(i), MCA, an Applicant must prove by a preponderance of the evidence that “there is water physically available at the proposed point of diversion in the amount that the Applicant seeks to appropriate.”

90. It is the Applicant’s burden to produce the required evidence. *In the Matter of Application for Beneficial Water Use Permit No. 27665-411 by Anson* (DNRC Final Order 1987) (Applicant

produced no flow measurements or any other information to show the availability of water; permit denied); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).

91. An Applicant must prove that at least in some years there is water physically available at the point of diversion in the amount the Applicant seeks to appropriate. *In the Matter of Application for Beneficial Water Use Permit No. 72662s76G by John Fee and Don Carlson* (DNRC Final Order 1990); *In the Matter of Application for Beneficial Water Use Permit No. 85184s76F by Wills Cattle Co. and Ed McLean* (DNRC Final Order 1994).

92. The Applicant has proven that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate. Section 85-2-311(1)(a)(i), MCA (FOF 15-18).

LEGAL AVAILABILITY

93. Pursuant to § 85-2-311(1)(a), MCA, an Applicant must prove by a preponderance of the evidence that:

- (ii) water can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:
 - (A) identification of physical water availability;
 - (B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and
 - (C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

E.g., ARM 36.12.101 and 36.12.120; *Montana Power Co.*, 211 Mont. 91, 685 P.2d 336 (Permit granted to include only early irrigation season because no water legally available in late irrigation season); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC Final Order 1992).

94. It is the Applicant's burden to present evidence to prove water can be reasonably considered legally available. *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (the legislature set out the criteria (§ 85-2-311, MCA) and placed the burden of proof squarely on the Applicant. The Supreme Court has instructed that those burdens are exacting.); *see also Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston* (1991), 249 Mont. 425, 816 P.2d 1054 (burden of proof on Applicant in a change proceeding to prove required criteria); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1*,

LLC., (DNRC Final Order 2005) (it is the Applicant's burden to produce the required evidence.); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions, LLC* (DNRC Final Order 2007) (permit denied for failure to prove legal availability); *see also* ARM 36.12.1705.

95. Pursuant to *Montana Trout Unlimited v. DNRC*, 2006 MT 72, 331 Mont. 483, 133 P.3d 224, the Department recognizes the connectivity between surface water and ground water and the effect of pre-stream capture on surface water. *E.g.*, *Wesmont Developers v. DNRC*, CDV-2009-823, Montana First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 7-8; *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 and 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006) (mitigation of depletion required), *affirmed*, *Faust v. DNRC et al.*, Cause No. CDV-2006-886, Montana First Judicial District (2008); *see also Robert and Marlene Takle v. DNRC et al.*, Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994) (affirming DNRC denial of Applications for Beneficial Water Use Permit Nos. 76691-76H, 72842-76H, 76692-76H and 76070-76H; underground tributary flow cannot be taken to the detriment of other appropriators including surface appropriators and ground water appropriators must prove unappropriated surface water, *citing Smith v. Duff*, 39 Mont. 382, 102 P. 984 (1909), and *Perkins v. Kramer*, 148 Mont. 355, 423 P.2d 587 (1966)); *In the Matter of Beneficial Water Use Permit No. 80175-s76H by Tintzman* (DNRC Final Order 1993)(prior appropriators on a stream gain right to natural flows of all tributaries in so far as may be necessary to afford the amount of water to which they are entitled, *citing Loyning v. Rankin* (1946), 118 Mont. 235, 165 P.2d 1006; *Granite Ditch Co. v. Anderson* (1983), 204 Mont. 10, 662 P.2d 1312; *Beaverhead Canal Co. v. Dillon Electric Light & Power Co.* (1906), 34 Mont. 135, 85 P. 880); *In the Matter of Beneficial Water Use Permit No. 63997-42M by Joseph F. Crisafulli* (DNRC Final Order 1990) (since there is a relationship between surface flows and the ground water source proposed for appropriation, and since diversion by Applicant's well appears to influence surface flows, the ranking of the proposed appropriation in priority must be as against all rights to surface water as well as against all groundwater rights in the drainage).

96. Because the Applicant bears the burden of proof as to legal availability, the Applicant must prove that the proposed appropriation will not result in prestream capture or induced infiltration and cannot limit its analysis to ground water. Section 85-2-311(a)(ii), MCA. Absent such proof, the Applicant must analyze the legal availability of surface water in light of the proposed ground water appropriation. *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 By Utility Solutions LLC* (DNRC Final Order 2007) (permit denied); *In the Matter of*

Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer (DNRC Final Order 2009); *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 5 ; *Westmont Developers v. DNRC*, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12.

97. Where a proposed ground water appropriation depletes surface water, Applicant must prove legal availability of amount of depletion of surface water throughout the period of diversion either through a mitigation /aquifer recharge plan to offset depletions or by analysis of the legal demands on, and availability of, water in the surface water source. *Robert and Marlene Takle v. DNRC*, Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994); *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 and 41H 30013629 by Utility Solutions LLC* (DNRC Final Order 2006) (permits granted), *affirmed*, *Faust v. DNRC et al.*, Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (DNRC Final Order 2007)(permit granted), *affirmed*, *Montana River Action Network et al. v. DNRC*, Cause No. CDV-2007-602, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions LLC* (DNRC Final Order 2007) (permit denied for failure to analyze legal availability outside of irrigation season (where mitigation applied)); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 by Utility Solutions LLC* (DNRC Final Order 2008); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009)(permit denied in part for failure to analyze legal availability for surface water depletion); *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 5 (Court affirmed denial of permit in part for failure to prove legal availability of stream depletion to slough and Beaverhead River); *Westmont Developers v. DNRC*, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12 (“DNRC properly determined that Westmont cannot be authorized to divert, either directly or indirectly, 205.09 acre-feet from the Bitterroot River without establishing that the water does not belong to a senior appropriator”; Applicant failed to analyze legal availability of surface water where projected surface water depletion from groundwater pumping); *In the Matter of Application for Beneficial Water Use Permit No. 76D-30045578 by GBCI Other Real Estate, LLC* (DNRC Final Order 2011) (in an open basin, Applicant for a new water right can show legal availability by using a mitigation/aquifer recharge plan or by showing that any depletion to surface water by groundwater pumping will not take water already appropriated; development next to Lake Kooconusa will not take previously appropriated water). Applicant

may use water right claims of potentially affected appropriators as a substitute for “historic beneficial use” in analyzing legal availability of surface water under § 85-2-360(5), MCA.

Royston, supra.

98. In analyzing legal availability for surface water, Applicant was required to evaluate legal demands on the source of supply throughout the “area of potential impact” by the proposed use under § 85-2-311(1)(a)(ii), MCA, not just within the “zone of influence.” *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 6.

99. Based on the Applicant’s proposed aquifer recharge plan, the Department finds that the Applicant has proven by a preponderance of the evidence that surface water can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, in the amount requested. (FOF 29, 33-35).

100. Applicant has proven by a preponderance of the evidence that water can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, in the amount requested, based on the records of the Department and other evidence provided to the Department. Section 85-2-311(1)(a)(ii), MCA. (FOF 19-30)

ADVERSE EFFECT

101. Pursuant to § 85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Analysis of adverse effect must be determined based on a consideration of an Applicant’s plan for the exercise of the permit that demonstrates that the Applicant’s use of the water will be controlled so the water right of a prior appropriator will be satisfied. *See Montana Power Co.*, 211 Mont. 91, 685 P.2d 336 (1984) (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users); *Bostwick Properties, Inc.*, ¶ 21.

102. An Applicant must analyze the full area of potential impact under the § 85-2-311, MCA criteria. *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006). While § 85-2-361, MCA, limits the boundaries expressly required for compliance with the hydrogeologic assessment requirement, an Applicant is required to analyze the full area of potential impact for adverse effect in addition to the requirement of a hydrogeologic assessment. *Id.* ARM 36.12.120(5).

103. Applicant must prove that no prior appropriator will be adversely affected, not just the objectors. *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, 4 (2011).

104. In analyzing adverse effect to other appropriators, an Applicant may use the water rights claims of potentially affected appropriators as evidence of their “historic beneficial use.” See *Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston*, 249 Mont. 425, 816 P.2d 1054 (1991).

105. It is the Applicant’s burden to produce the required evidence. *E.g., Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, 7 (2011) (legislature has placed the burden of proof squarely on the Applicant); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005). The Department is required to grant a permit only if the § 85-2-311, MCA, criteria are proven by the Applicant by a preponderance of the evidence. *Bostwick Properties, Inc.*, ¶ 21.

106. Section 85-2-311 (1)(b) of the Water Use Act does not contemplate a de minimis level of adverse effect on prior appropriators. *Wesmont Developers v. DNRC*, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, 8 (2011).

107. A plan to prove legal availability and prevent adverse effect can be to use mitigation or augmentation. Section 85-2-360, MCA; e.g., *In the Matter of Beneficial Water Use Permit Application Nos. 41H 30012025 and 41H 30013629 by Utility Solutions, LLC* (DNRC Final Order 2006) (permit conditioned to mitigate/augment depletions to the Gallatin River by use of infiltration galleries in the amount of .55 cfs and 124 AF), *affirmed, Faust v. DNRC*, Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Beneficial Water Use Permit Application Nos. 41H 30019215 by Utility Solutions, LLC* (DNRC Final Order 2007) (permit conditioned to mitigate 6 gpm up to 9.73 AF of potential depletion to the Gallatin River), *affirmed, Montana River Action Network v. DNRC*, Cause No. CDV-2007-602, Montana First Judicial District Court, (2008); *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7; *Wesmont Developers v. DNRC*, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pg. 12; *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 By Utility Solutions LLC* (DNRC 2008) (permit conditioned on mitigation of 3.2 gpm up to 5.18 AF of depletion to the Gallatin River); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (HB 831, DNRC Final Order 2009) (permit denied in part for failure to analyze legal availability for surface water for depletion of 1.31 AF to Bitterroot River); § 85-2-360, MCA. The Department has a history of approving new appropriations where Applicant will mitigate/augment to offset depletions caused by the new appropriation. *In the Matter of Beneficial Water Use Permit Application No. 41I-104667 by Woods and Application to Change Water Right No 41I-G(W) 125497 by Ronald J. Woods* (DNRC Final Order 2000); *In The Matter*

of Application To Change Appropriation Water Right 76GJ 110821 by Peterson and MT Department of Transportation (DNRC Final Order 2001); In The Matter of Application To Change Appropriation Water Right No. 76G-3235699 by Arco Environmental Remediation LLC (DNRC Final Order 2003) (allows water under claim 76G-32356 to be exchanged for water appropriated out of priority by permits at the wet closures and wildlife to offset consumption). In The Matter of Designation of the Larsen Creek Controlled Groundwater Area as Permanent, Board of Natural Resources Final Order (1988).

Montana case law also provides a history of mitigation, including mitigation by new or untried methods. *See Thompson v. Harvey* (1974), 154 Mont. 133, 519 P.2d 963; *Perkins v. Kramer* (1966), 148 Mont. 355, 423 P.2d 587. Augmentation/mitigation is also recognized in other prior appropriation states for various purposes. *E.g.* C.R.S.A. § 37-92-302 (Colorado); A.R.S. § 45-561 (Arizona); RCWA 90.46.100 (Washington); ID ST § 42-1763B and § 42-4201A (Idaho).

The requirement for mitigation in closed basins has been codified in § 85-2-360, *et seq.*, MCA. Section 85-2-360(5), MCA provides in relevant part:

A determination of whether or not there is an adverse effect on a prior appropriator as the result of a new appropriation right is a determination that must be made by the *department based on the amount*, location, and duration of the amount of net depletion that causes the adverse effect relative to the historic beneficial use of the appropriation right that may be adversely affected.

(Emphasis added.)

108. The Department can and routinely does, condition a new permit's use on use of that special management, technology, or measurement such as augmentation now generally known as mitigation and aquifer recharge. See § 85-2-312; § 85-2-360 *et seq.*, MCA; *see, e.g., In the Matter of Beneficial Water Use Permit No. 107-411 by Diehl Development* (DNRC Final Order 1974) (No adverse effect if permit conditions to allow specific flow past point of diversion.); *In the Matter of Combined Application for Beneficial Water Use Permit No. 76H- 30043133 and Application No. 76H-30043132 to Change Water Right Nos. 76H-121640-00, 76H-131641-00 and 76H-131642-00 by the Town of Stevensville* (DNRC Final Order 2011).

109. It was within the discretion of the Department to decline to consider an undeveloped mitigation proposal as mitigation for adverse effect in a permit proceeding. *Wesmont Developers v. DNRC*, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pg. 10.

110. Pursuant to § 85-2-360, MCA, an applicant whose hydrogeologic assessment conducted pursuant to § 85-2-361, MCA, predicts that there will be a net depletion of surface water shall

offset the net depletion that results in the adverse effect through a mitigation plan or an aquifer recharge plan.

111. Pursuant to § 85-2-362, MCA, an aquifer recharge plan must include: evidence that the appropriate water quality related permits have been granted pursuant to Title 75, chapter 5, and pursuant to §§ 75-5-410 and 85-2-364, MCA; where and how the water in the plan will be put to beneficial use when and where, generally, water reallocated through exchange or substitution will be required; the amount of water reallocated through exchange or substitution that is required; how the proposed project or beneficial use for which the aquifer recharge plan is required will be operated; evidence that an application for a change in appropriation right, if necessary, has been submitted; a description of the process by which water will be reintroduced to the aquifer; evidence of water availability; and evidence of how the aquifer recharge plan will offset the required amount of net depletion of surface water in a manner that will offset any adverse effect on a prior appropriator.

112. In this case the Applicant proposes to mitigate consumptive use during the months in which water is not legally available in the hydrologically connected surface waters. The full depletion of surface waters by the proposed appropriation in amount, location, and duration will be mitigated during these months. Because adverse effect from consumptive use would only occur during months in which water is not legally available, and because the Applicant proposes to mitigate the full amount of consumptive use in these months, there is no adverse effect from depletion of surface waters to the historical beneficial use of surface water rights.

113. The Applicant has proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Section 85-2-311(1)(b), MCA (FOF 31-37).

ADEQUATE DIVERSION

114. Pursuant to § 85-2-311(1)(c), MCA, an Applicant must demonstrate that the proposed means of diversion, construction, and operation of the appropriation works are adequate.

115. The adequate means of diversion statutory test merely codifies and encapsulates the case law notion of appropriation to the effect that the means of diversion must be reasonably effective, i.e., must not result in a waste of the resource. *In the Matter of Application for Beneficial Water Use Permit No. 33983s41Q by Hoyt* (DNRC Final Order 1981); § 85-2-312(1)(a), MCA.

116. Information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies, based upon project complexity design

by licensed engineer adequate. *In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC* (DNRC Final Order 2002).

117. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. Section 85-2-311(1)(c), MCA (FOF 38-40).

BENEFICIAL USE

118. Under § 85-2-311(1)(d), MCA, an Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use.

119. An appropriator may appropriate water only for a beneficial use. See also, § 85-2-301 MCA. It is a fundamental premise of Montana water law that beneficial use is the basis, measure, and limit of the use. *E.g.*, *McDonald; Toohey v. Campbell* (1900), 24 Mont. 13, 60 P. 396. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. *E.g.*, *Bitterroot River Protective Association v. Siebel, Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court, Lewis and Clark County (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; *In The Matter Of Application For Beneficial Water Use Permit No. 43C 30007297 by Dee Deaterly* (DNRC Final Order), *affirmed other grounds, Dee Deaterly v. DNRC*, Cause No. 2007-186, Montana First Judicial District, *Order Nunc Pro Tunc on Petition for Judicial Review* (2009); *Worden v. Alexander* (1939), 108 Mont. 208, 90 P.2d 160; *Allen v. Petrick* (1924), 69 Mont. 373, 222 P. 451; *In the Matter of Application for Beneficial Water Use Permit No. 41S-105823 by French* (DNRC Final Order 2000).

120. Amount of water to be diverted must be shown precisely. *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, 3 (2011) (citing *BRPA v. Siebel*, 2005 MT 60, and rejecting Applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet).

121. It is the Applicant's burden to produce the required evidence. *Bostwick Properties, Inc. v. DNRC*, 2013 MT 48, ¶ 22, 369 Mont. 150, 296 P.3d 1154 ("issuance of the water permit itself does not become a clear, legal duty until [the applicant] proves, by a preponderance of the evidence, that the required criteria have been satisfied"); *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7; *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005); *see also Royston; Ciotti*.

122. Applicant proposes to use water for Municipal which is a recognized beneficial use. Section 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence Municipal is a beneficial use and that 99.0 AF of diverted volume and 2.18 CFS is the amount needed to sustain the beneficial use. Section 85-2-311(1)(d), MCA. (FOF 41-42).

POSSESSORY INTEREST

123. Pursuant to § 85-2-311(1)(e), MCA, an Applicant must prove by a preponderance of the evidence that it has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has 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 under the permit.

124. Pursuant to ARM 36.12.1802:

(1) An Applicant or a representative shall sign the application affidavit to affirm the following:

(a) the statements on the application and all information submitted with the application are true and correct and

(b) except in cases of an instream flow application, or where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use, the Applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

(2) If a representative of the Applicant signs the application form affidavit, the representative shall state the relationship of the representative to the Applicant on the form, such as president of the corporation, and provide documentation that establishes the authority of the representative to sign the application, such as a copy of a power of attorney.

(3) The department may require a copy of the written consent of the person having the possessory interest.

125. This application is for municipal use, in which water is supplied to another. It is clear that the ultimate user will not accept the supply without consenting to the use of water. The Applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest. Section 85-2-311(1)(e), MCA (FOF 44).

APPLICATION TO CHANGE WATER RIGHT NO. 76H 30165219

WATER RIGHT CHANGE CONCLUSIONS OF LAW

HISTORICAL USE AND ADVERSE EFFECT

126. 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

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

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

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

128. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the “historic use” of the water right being changed. *Town of Manhattan*, ¶10 (recognizing that the Department’s obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change Applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a statement of claim, permit, or decree may not include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.³ A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. *Quigley*, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right); *Royston*, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record could not sustain a conclusion of no adverse effect because the Applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); *Hohenlohe*, ¶ 44-45; *Town of Manhattan v. DNRC*, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); *Matter of Application For Beneficial Water Use Permit By City of Bozeman*, *Memorandum*, Pgs. 8-22 (Adopted by DNRC *Final Order* January 9, 1985)(evidence of historic use must be compared to the proposed

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

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

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

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

⁴ Other western states likewise rely upon the doctrine of historic use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: *Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District*, 717 P.2d 955, 959 (Colo. 1986) (“[O]nce an appropriator exercises his or her privilege to change a water right ... the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right ... which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right.”); *Santa Fe Trail Ranches Property Owners Ass'n v. Simpson*, 990 P.2d 46, 55 -57 (Colo., 1999); *Farmers Reservoir and Irr. Co. v. City of Golden*, 44 P.3d 241, 245 (Colo. 2002) (“We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation); *Application for Water Rights in Rio Grande County*, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (When an owner of a water right wishes to change a water right ... he shall file a petition requesting permission to make such a change The change ... may be allowed provided that the quantity of water transferred ... shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.); *Basin Elec. Power Co-op. v. State Bd. of Control*, 578 P.2d 557, 564 -566 (Wyo, 1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.)

subsequent water users).⁵

130. 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.

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

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

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

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

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

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

⁵ The Montana Supreme Court recently recognized the fundamental nature of return flows to Montana’s water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell’s flows are fed by irrigation return flows available for appropriation. *Bitterroot River Protective Ass’n, Inc. v. Bitterroot Conservation Dist.*, 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, 198 P.3d 219,(citing *Hidden Hollow Ranch v. Fields*, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

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

133. 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).

134. 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).

135. 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).

136. 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 55).

137. 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").

138. Based upon the Applicant's evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of Statement of Claim 76H 30165310 to be a diverted volume of 131.96 AF, a historically consumed volume of 105.57 AF, and flow rate of 2.5 CFS. (FOF 52-63)

139. 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 64-75)

BENEFICIAL USE

140. 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).

141. Applicant proposes to use water for aquifer recharge which is a recognized beneficial use. Section 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence that aquifer recharge is a beneficial use and that 101.1 AF of diverted volume and 336.6 GPM of water requested is the amount needed to sustain the beneficial use. Section 85-2-402(2)(c), MCA (FOF 76-79).

142. This Change Application is intended to provide aquifer recharge water for Application for Beneficial Water Use Permit No. 76H 30163647 which requires 99.0 AF of water delivered to the Bitterroot River via infiltration.

ADEQUATE MEANS OF DIVERSION

143. 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 (iii) a change in appropriation right pursuant to § 85-2-420 for mitigation or marketing for mitigation.

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

145. Pursuant to § 85-2-402 (2)(b), MCA, Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. (FOF 80-83)

POSSESSORY INTEREST

146. 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 aquifer recharge.

147. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. (FOF 84).

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Combined Application for Beneficial Water Use Permit No. 76H 30163647 and Change Application No. 76H 30165219 should be GRANTED subject to the following.

The Department determines the Applicant may divert groundwater from the Bitterroot River Valley Shallow Aquifer by means of a well from May 1 to October 31 at 980 GPM up to 99.0 AF from a point in the NWSWNW, Sec. 14, T12N, R20W, for municipal use from May 1 to October 31 in Sections 1, 2, 11, 12, 13, and 14 T12N, R20W.

Permit application 76H 30163647 will be subject to the following conditions, limitations, or restrictions to meet the adverse effect criterion:

WATER MEASUREMENT-INLINE FLOW METER REQUIRED: THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR UNTIL THE PROVISIONAL PERMIT IS PERFECTED AND THE DEPARTMENT RECEIVES A PROJECT COMPLETION NOTICE. IN THE EVENT THAT PERMITTED FLOW RATES AND/OR VOLUMES HAVE BEEN EXCEEDED DURING PERFECTION OF THE PROVISIONAL PERMIT OR THE APPROPRIATOR FAILS TO SUBMIT ANNUAL REPORTS, THE DEPARTMENT MAY CONTINUE TO REQUIRE ANNUAL SUBMISSIONS OF MONTHLY FLOW RATE AND VOLUME RECORDS. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE MISSOULA WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

THE APPROPRIATOR'S USE OF WATER UNDER THIS PERMIT IS CONDITIONED UPON THE 99.0 AC-FT OF MITIGATION VOLUME REQUIRED TO OFFSET ADVERSE EFFECTS FROM NET DEPLETION TO THE BITTERROOT RIVER. DIVERSION UNDER THIS PERMIT MAY NOT COMMENCE UNTIL THE MITIGATION PLAN AS SPECIFICALLY DESCRIBED AND APPROVED THROUGH CHANGE AUTHORIZATION 76H 30165219 IS LEGALLY IMPLEMENTED. DIVERSION UNDER THIS PERMIT MUST STOP IF MITIGATION AS HEREIN REQUIRED IN AMOUNT, LOCATION, AND DURATION CEASES.

The area that will be depleted is located along the Bitterroot River. To mitigate depletions to the affected reach, the Department determines the Applicant may use Statement of Claim 76H 30165310 to provide aquifer recharge by retiring 82 acres in the S2SE Sec. 2 and NENE

Sec. 11, T12N, R20W. The Applicant may change the point of diversion from a point on the Bitterroot River in the NWSESE Sec. 2, T12N, R20W to a point on the Bitterroot River in the SENWNE Sec. 15, T12N, R20W. The Applicant may pump water from the new point of diversion to a location on Miller Creek in the SESWNW Sec. 14, T12N, R20W, where the water will be discharged for aquifer recharge purposes.

Change application 76H 30165219 will be subject to the following conditions, limitations, or restrictions to meet the adverse effect and beneficial use criteria:

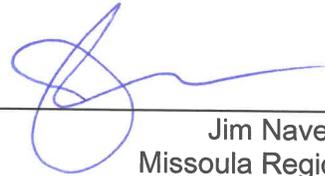
WATER MEASUREMENT-INLINE FLOW METER REQUIRED: THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. IN THE EVENT THAT AUTHORIZED FLOW RATES AND/OR VOLUMES HAVE BEEN EXCEEDED DURING PERFECTION OF THE CHANGE AUTHORIZATION OR THE APPROPRIATOR FAILS TO SUBMIT ANNUAL REPORTS, THE DEPARTMENT MAY CONTINUE TO REQUIRE ANNUAL SUBMISSIONS OF MONTHLY FLOW RATE AND VOLUME RECORDS. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE MISSOULA WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

THIS CHANGE AUTHORIZATION PROVIDES MITIGATION WATER FOR BENEFICIAL WATER USE PERMIT NO. 76H 30163647. THE BENEFICIAL USE CRITERION OF THIS CHANGE AUTHORIZATION IS CONDITIONED UPON THE AUTHORIZATION OF BENEFICIAL WATER USE PERMIT AUTHORIZATION NO. 76H 30163647.

NOTICE

The Department will provide a notice of opportunity for public comment on these Applications and the Department's Draft Preliminary Determination to Grant pursuant to § 85-2-307, MCA. The Department will set a deadline for public comments to these Applications pursuant to §§ 85-2-307, and -308, MCA. If these Applications receive public comments, the Department shall consider the public comments, respond to the public comments, and issue a preliminary determination to grant the applications, grant the applications in modified form, or deny the applications. 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 23rd day of May, 2025.



Jim Nave, Manager
Missoula Regional Office
Montana Department of Natural Resources and Conservation

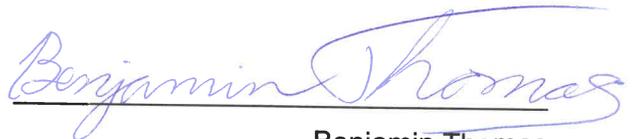
CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the DRAFT PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 23rd day of May, 2025, by first class United States mail.

ATTN: LOGAN MCINNIS
CITY OF MISSOULA
435 RYMAN ST
MISSOULA, MT 59802

TOLLEFSON PROPERTIES LLC
15311 TYSON WAY
FRENCHTOWN, MT 59834-8535

ATTN: DAVE BALDWIN
HYDROSOLUTIONS INC
303 CLARKE ST
HELENA, MT 59601



Benjamin Thomas
Water Conservation Specialist
Missoula Regional Office
(406) 542-5883