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

* * * * * * * * *

APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 76LJ 30171747 by RJM PROPERTIES LLC	)))	**NOTICE OF ERRATA DRAFT PRELIMINARY DETERMINATION TO GRANT IN MODIFIED FORM**

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The following errors have been found in the DRAFT PRELIMINARY DETERMINATION TO GRANT IN MODIFIED FORM:

1. In the DRAFT PRELIMINARY DETERMINATION TO GRANT IN MODIFIED FORM, on page 25, Table 8, Legal Availability from the proposed POD to the SKQ Dam:

Table 8: Legal Availability from the proposed POD to the SKQ Dam

Month	Physically Available Monthly Flow (CFS)	Physically Available Monthly Volume (AF)	Existing Legal Demands within the AOPI (CFS)	Legally Available Monthly Flow (CFS)	Legally Available Monthly Volume (AF)
January	10,459.0	641,957.0	0.1	10,380.1	637,130.0
February	9,214.3	510,841.3	0.1	9,133.1	506,338.5
March	7,834.5	480,881.6	0.1	7,748.1	475,578.0
April	14,602.0	867,347.5	5,265.0	9,223.1	547,851.5
May	23,989.5	1,472,475.0	5,285.0	18,561	1,139,259.0
June	30,837.6	1,831,752.0	5,285.0	25,401	1,508,804.6
July	18,168.1	1,115,159.2	5,285.0	12,731.0	781,413.4
August	11,564.1	709,806.0	5,285.0	6,127.0	376,060.0
September	11,370.0	675,375.6	5,265.0	5,957.3	353,860.7
October	12,569.7	771,525.1	5,265.0	7,184.1	440,959.4
November	8,646.6	513,610.4	0.1	8,556.1	508,231.7
December	9,918.7	608,812.3	0.1	9,837.1	603,800.6

Should Read:

Table 8: Legal Availability from the proposed POD to the SKQ Dam					
A	**B**	**C**	**D**	**E**	**F**
Month	**Physically Available Monthly Flow (CFS)**	**Physically Available Monthly Volume (AF)**	**Existing Legal Demands within the AOPI (CFS)**	**Legally Available Monthly Flow (CFS)**	**Legally Available Monthly Volume (AF)**
January	10,459.0	641,957.0	78.6	10,380.1	637,130.0
February	9,214.3	510,841.3	81.2	9,133.1	506,338.5
March	7,834.5	480,881.6	86.4	7,748.1	475,578.0
April	14,602.0	867,347.5	5,378.7	9,223.1	547,851.5
May	23,989.5	1,472,475.0	5,428.7	18,561	1,139,259.0
June	30,837.6	1,831,752.0	5,436.8	25,401	1,508,804.6
July	18,168.1	1,115,159.2	5,437.4	12,731.0	781,413.4
August	11,564.1	709,806.0	5,437.4	6,127.0	376,060.0
September	11,370.0	675,375.6	5,412.7	5,957.3	353,860.7
October	12,569.7	771,525.1	5,385.6	7,184.1	440,959.4
November	8,646.6	513,610.4	90.6	8,556.1	508,231.7
December	9,918.7	608,812.3	81.7	9,837.1	603,800.6

Please make these corrections to your copy.

Dated this 9th day of June 2026.

James Ferch, Manager
Kalispell Regional Office
Department of Natural Resources
and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the NOTICE OF ERRATA DRAFT PRELIMINARY DETERMINATION TO GRANT IN MODIFIED FORM was served upon all parties listed below on this 9th day of June 2026, by first class United States mail.

RJM PROPERTIES LLC
1191 MAJESTIC VIEW LN
KALISPELL MT 59901-1814
****
VIA EMAIL:
CORE WATER CONSULTING
MIKEL SIEMENS, PE

Kalispell Regional Office

6/9/2026
Date

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

* * * * * * *

APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 76LJ 30171747 BY RJM PROPERTIES LLC	)))	**DRAFT PRELIMINARY DETERMINATION TO GRANT IN MODIFIED FORM PERMIT**

* * * * * * *

On September 8, 2025, RJM Properties LLC, Montana (Applicant) submitted Application for Beneficial Water Use Permit No. 76LJ 30171747 to the Kalispell Regional Office of the Department of Natural Resources and Conservation (Department or DNRC) for 101.15 gallons per minute (GPM) up to 21.72 acre-feet annually for multiple domestic use from January 1st to December 31st and lawn and garden irrigation from April 15th to October 15th. The Department published receipt of the application on its website on September 15, 2025. The Department sent the Applicant a deficiency letter under 85-2-302, Montana Code Annotated (MCA), dated October 20, 2025. The Applicant responded with information on December 5, 2025. The Application was deemed correct and complete as of January 5, 2026. The Department delivered the completed Technical Analyses on May 5, 2026. An Environmental Assessment for this application was completed on April 30, 2026.

INFORMATION

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

Application as filed:

- Application for Beneficial Water Use Permit, Form 600- GW
- Maps and Figures:
    - Site Vicinity Map, Dated August 26, 2025
    - Means of Diversion, Dated August 26, 2025
    - Pump House Diagram, Dated August 26, 2025
    - Well Details, Dated August 26, 2025

- Attachments
    - Supplemental Information for Beneficial Water Use Application
        - Appendix A: Figures
        - Appendix B: Plat Map
        - Appendix C: Diversion Details
        - Appendix D: Hydrogeologic Maps
        - Appendix E: Pump Test and Form 633
        - Appendix F: Proof of Possessory Interest
        - Appendix G: DNRC Approvals from expired preapplication
            - These approvals are not pertinent to the current Application.

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

- A letter from the Applicants consultant to the DNRC received December 5, 2025, requesting a variance from ARM 36.12.121 (3) (a), (b), (f), and (g).
- A letter from the Applicants consultant to the DNRC received December 5, 2025. This letter was in response to the Departments October 20, 2025, deficiency letter.
    - Attachments:
        - Amended Form 633
        - Form 653
        - Form 600-ATA

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

- Department completed Technical Analyses based on information provided in the Form 600 GW Application dated September 8, 2025.
- A letter to the Applicant dated December 30, 2025, granting variance on ARM 36.12.121.
- Mean monthly stream flow data from USGS Gaging Station No. 12363000 Flathead River at Columbia Falls, MT. Period of record: October 1951 – April 2025.
- Mean monthly streamflow data from USGS Gaging Station No. 12372000 Flathead River near Polson, MT. Period of record October 1938 – April 2025.
- List of existing water rights on the Flathead River from the initial point of depletion down to USGS Gaging Station No. 12372000 Fathead River near Polson MT.

- This list is divided into four reaches:
    - The reach from USGS Gaging Station No. 12363000 to the initial point of depletion of Fennon Slough (Flathead River).
    - The initial point of depletion on Fennon Slough (Flathead River) downstream to the Flathead Lake Inlet.
    - From the Inlet to Flathead Lake downstream to Séliš Ksanka Qḷispé Dam
    - From the Séliš Ksanka Qḷispé Dam downstream to USGS Gaging Station No. 12372000

- List of existing groundwater rights in the source aquifer that are expected to experience drawdown greater than 0.01 feet.
- The following information is not included in the administrative file for this application but is available upon request. Please contact the Kalispell Regional Office at 406-752-2288 to request copies of the following documents.
    - DNRC Technical Memorandum: Physical Availability of Surface Water With Gage Data, Dated November 1, 2019
    - DNRC Technical Memorandum: Net Surface Water Depletion from Ground Water Pumping, Dated July 16, 2018
    - Department Standard Practice for Determining Physical Availability of Surface Water
    - Department Standard Practice for Determining Area of Potential Impact

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 and Conservation	
NRCS means the Natural Resource Conservation Service	
DEQ means the Montana Department of Environmental Quality	
GWIC ID means Groundwater Information Center Identification	
AF means acre-feet	**AOPI** means Area of Potential Impact
ARM means Administrative Rules of Montana	**BGS** means below ground surface
AU means Animal Units	**CFS** means cubic feet per second
BTC means below top of casing	**GPD** means gallons per day
FOF means finding(s) of fact	**POD** means point of diversion
GPM means gallons per minute	**SWL** means static water level
IWR means Irrigation Water Requirements	**VFD** means variable frequency drive
MCA means Montana Code Annotated	**ZOI** means zone of influence
TDH means total dynamic head	**WSB** means the Water Sciences Bureau
USDA United States Department of Agriculture	

PROPOSED APPROPRIATION

FINDINGS OF FACT

1. The Applicant proposes to divert water from the Flathead Deep Alluvial Aquifer (hereafter referred to as the Deep Aquifer) by means of a well, identified by GWIC ID 331034, that is completed to 714.0 feet BGS with a static water level of 5.0 feet BGS. The Applicant requests to divert water at a flow rate of 101.15 GPM up to 21.72 AF/year annually for multiple domestic use for 8 households year-round (2.24 AF) and to irrigate 10.0 acres of lawn and garden from April 15th to October 15th (19.48 AF). The total annual consumed volume is 13.8 AF, with 13.6 AF being consumed by lawn and garden and 0.2 AF being consumed by multiple domestic uses.

2. The proposed point of diversion is in the NWSWNE of Section 17, Township 27N, Range 20W, Flathead County (Figure 1), and is located one mile northwest of Fennon Slough, which is hydrologically considered to be a part of the Flathead River, and 1.25 miles north of Flathead Lake. The production well is located on Lot 2 of the Majestic Meadow subdivision. The place of use is the Majestic Meadow subdivision located in the N2SWNE of Section 17, Township 27N, Range 20W, Flathead County, Montana (Figure 1).The POD is in Water Right Basin 76LJ (Flathead River, to and including Flathead Lake) in an area that is not subject to water right basin closures or controlled groundwater area restrictions.

3. The proposed system is a multiple-user water system which is subject to a Certificate of Subdivision Approval (COSA) from DEQ. There are no supplemental rights that will overlap or share the proposed place of use.

4. The application will be subject to the following condition to satisfy the adequacy of diversion and beneficial use criteria requirements:

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 JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR UNTIL A FORM 617 PROJECT COMPLETION NOTICE IS SUBMITTED. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF THE PERMIT. THE RECORDS MUST BE SENT TO THE KALISPELL REGIONAL WATER RESOURCES OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

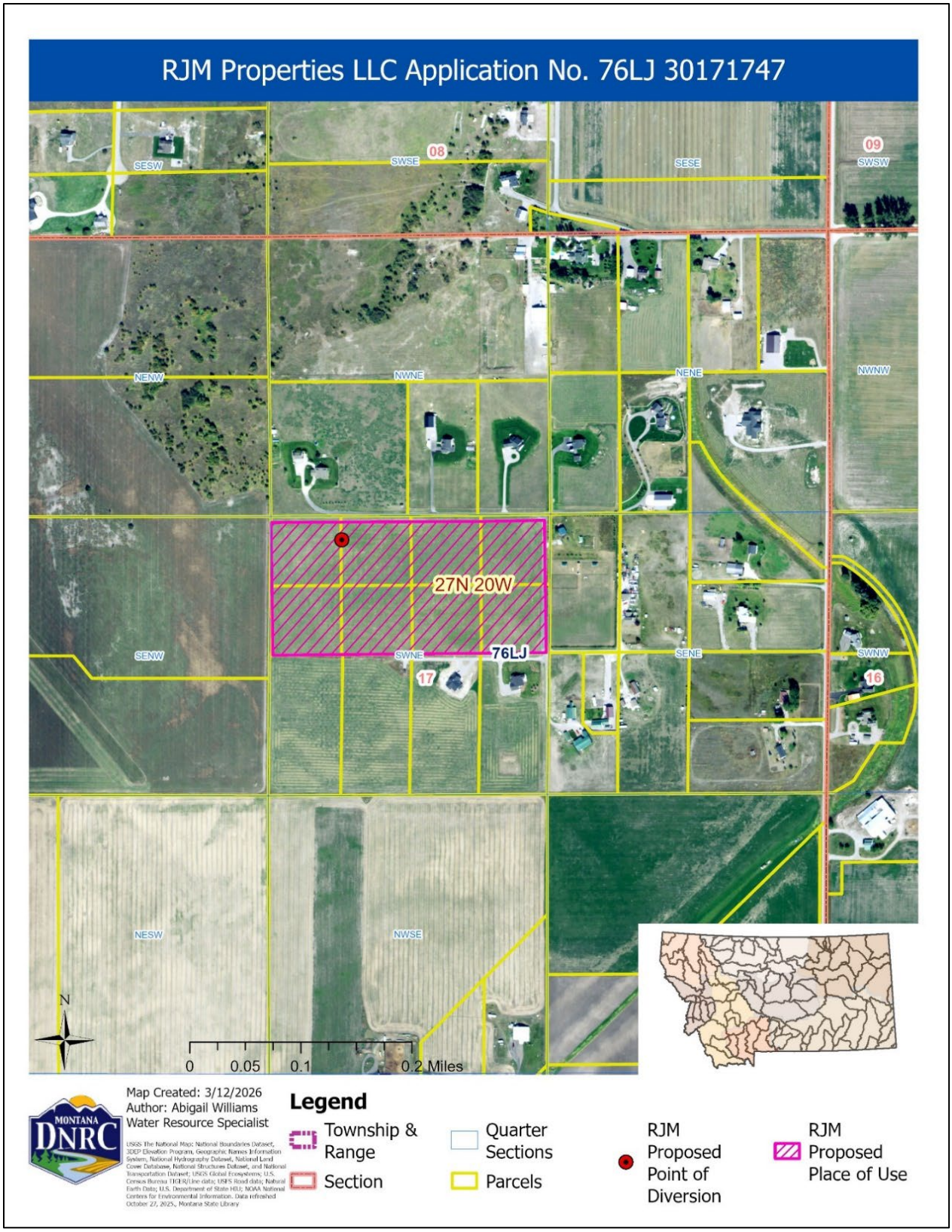

Figure 1: Map of the Applicant's proposed point of diversion and place of use.

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

GENERAL CONCLUSIONS OF LAW

5. 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 . . .

6. 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.

7. 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.

8. 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).

9. 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.

10. 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

11. The Applicant proposes to divert groundwater from a well (GWIC ID 331034) at a rate of 101.15 GPM up to 2.24 AF/year for multiple domestic use for eight households and 19.48 AF/year for irrigation of 10.0 acres of lawn and garden, for a total volume of 21.72 AF/year. The multiple domestic use will occur from January 1st to December 31st and lawn and garden will be irrigated from April 15th to October 15th. The well is constructed with a 6-inch diameter steel casing with an open bottom and is 714.0 feet deep with a static water level of 5.0 feet BGS. The production well is drilled into a confined area of the Flathead Deep Aquifer.

VARIANCES

12. The Applicant requested variances from the Aquifer Testing Requirements in ARM 36.12.121(3)(a), (f), and (g) on September 25, 2025. The requested variances were as follows:

a. ARM 36.12.121(3)(a): requested because the flow rate during the test deviated +/- 5% from the average test rate;
    a. DNRC WSB rationale for their recommendation to grant the requested variance: The flow rate anomalies were of such short duration that the changes in pumping rate would not affect WSB analysis and modeling efforts.
b. ARM 36.12.121(3)(f): requested because although the observation well was located in the same aquifer as the production well, no significant response to pumping the production well was recorded in the observation well.
    a. DNRC WSB rationale for their recommendation to grant the requested variance: in this instance, the flow rate or duration of the test may have been too low or short to cause observable drawdown in the observation well. Nearby aquifer tests completed prior to the subject well test have derived Storativity values that are sufficient for use in forward modeling of drawdown effects from the subject Production Well.
c. ARM 36.12.121(3)(g): requested because the background water levels were only monitored for 19 hours prior to the aquifer test instead of the required 48 hours.

a. DNRC WSB rationale for their recommendation to grant the requested variance: The 19 hours of background monitoring indicated that there was no significant water table trend, therefore the shortened background monitoring period would not affect analysis or modeling efforts.

The Department granted the requested variances due to rationale described above. The deviations from the rule and evaluation can be found in the WSB Aquifer Testing Addendum Review document dated December 18, 2025.

AQUIFER TESTING

13. WSB Hydrologist Kim Bolhuis completed an analysis of the Applicant-submitted data from the constant-rate pumping test conducted on the proposed production well (GWIC ID 331034) on March 10, 2024. One observation well was utilized during the test, but it had independent uses occurring during the aquifer test, causing fluctuation in the water levels that were not attributed to the pumping in the production well. Additionally, the drawdown that was recorded in the observation well was not significant enough to attribute to the pumping in the production well. Therefore, the observation well data was not used for generation of aquifer properties.

14. Two solutions were used in modeling the production well; Theis (1935) fit early time data, but the Cooper-Jacob (1946) fit mid to late time data and is considered a better fit to the data given the hydrogeologic framework. Upon comparison of the two T values calculated using the Theis (1935) and Cooper-Jacob (1946) solutions for the production well, the WSB noted that the calculated T was lower than those traditionally seen in the area. Further, since the observation well data was unusable for evaluation of the Applicant-submitted data, the WSB calculated the geometric mean of the T and S values for the aquifer obtained from nearby aquifer tests to be used in the physical availability analysis. The calculated geometric mean from the nearby aquifer tests performed for previous applications (**Table 1**) was a T of 15,862 ft^2/day and a S of $1.4X10^{-4}$ for the aquifer and is to be used in forward modeling for Physical Availability. The Department finds this is a more accurate representation of the aquifers actual T in the area as it is derived from multiple well tests and better matches T values traditionally seen in the area.

Table 1: Nearby aquifer tests associated with previous water right applications.							
Water Right Number	**Distance from Production Well (mi)**	**Volume (AF)**	**Rate (GPM)**	**Duration (hr)**	**Depth (ft BGS)**	**T (ft^2/d)**	**S (-)**
76LJ 30065601	1.3	42.84	60	25	301	17,200.0	$3.3x10^{-5}$
76LJ 30071153	0.6	607.90	485	168	717	35,000.0	$3.6x10^{-4}$
76LJ 30024283	1.3	49.10	65	24	640	28,946.0	$2.6x10^{-4}$
76LJ 30051928	1.2	209.17	313.1	72	760	5,278.0	$3.0x10^{-5}$
				Geometric Mean		**15,862**	**$1.4 x10^{-4}$**

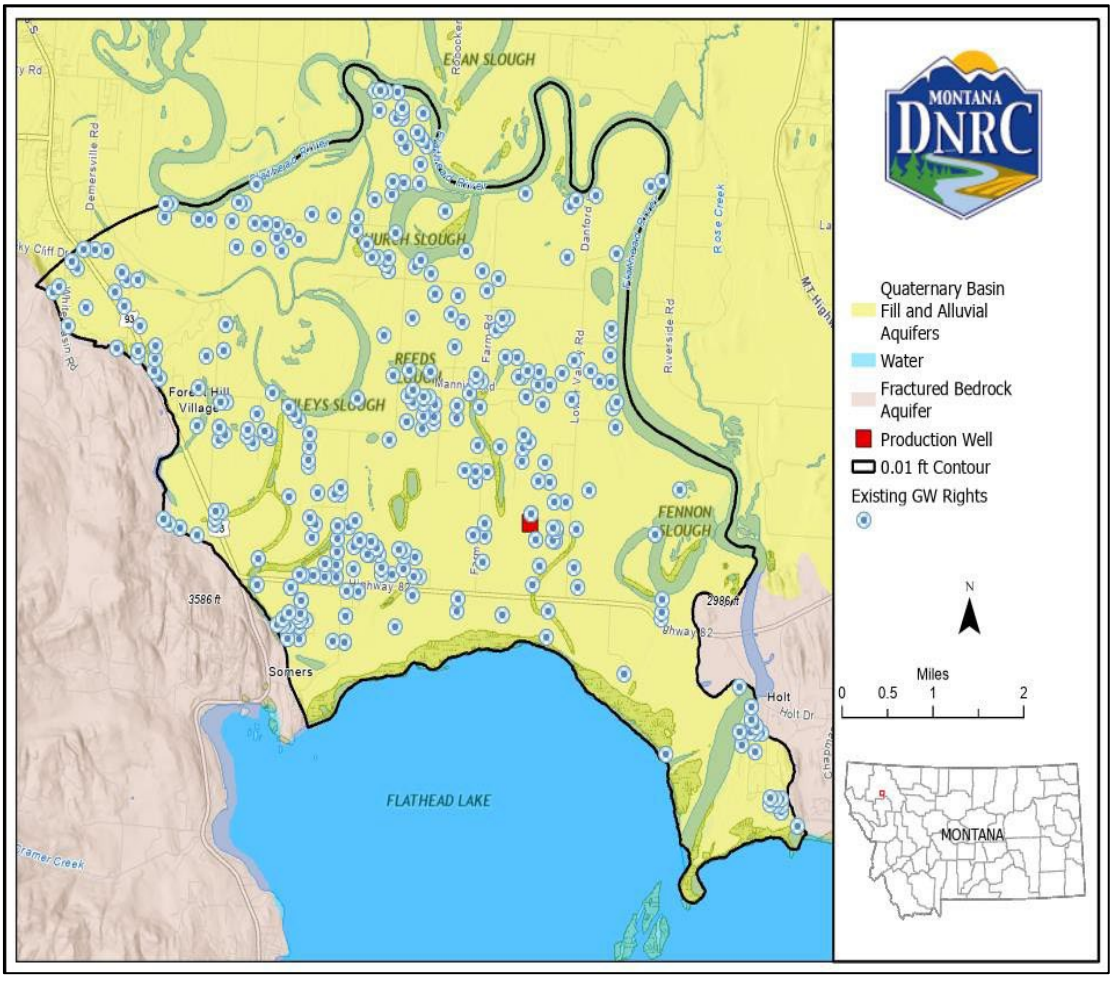

Figure 2: The 0.01-foot drawdown contour.

15. The Department evaluated the physical availability of the aquifer by calculating groundwater flux though a ZOI corresponding to the 0.01-foot drawdown contour (**Figure 2**). A distance drawdown plot was generated using the Theis (1935) confined solution, a constant pumping rate of 13.4 GPM for the period of diversion, a T = 15,862 ft^2/day, and S = $1.4x10^{-4}$.

16. The estimated 0.01-foot contour would result in a ZOI that exceeds the boundaries of the Deep Aquifer, as such the ZOI was truncated to the edge of Flathead Lake and Flathead River and is constrained by the bedrock from the bounding mountains as shown in **Figure 2.** Due to the irregular shape of the ZOI, the width was measured at the widest point and equals 33,680 feet. The calculation for groundwater flux (Q) through the delineated area is given by Equation 1 and is 534,232 ft^3/day or **4,476.0 AF/year**:

Q = TWi
where: T = Transmissivity = 15,862 ft^2/day W = Width of Zone of Influence = 33,680 ft i = Groundwater Gradient (from Berglund et al, 2024[1]) = 0.001 ft/ft.

Equation 1: Groundwater Flux Calculation

17. Based on the calculated annual groundwater flux through the delineated ZOI of 4,476.0 AF/year, the Department finds that the amount of groundwater that the Applicant seeks to appropriate, 21.72 AF/year diverted at 101.15 GPM, is physically available in the aquifer at the proposed point of diversion during the proposed period of diversion.

LEGAL AVAILABILITY

FINDINGS OF FACT

18. The Applicant proposes to divert groundwater from a well (GWIC ID 331034) at a rate of 101.15 GPM up to 2.24 AF/year for multiple domestic use for eight households and 19.48 AF/year for irrigation of 10.0 acres of lawn and garden, for a total volume of 21.72 AF/year. Legal availability for this application will be based on analyses of both the ZOI in the source aquifer and

[1] Berglund, J., Bobst, A., and Gebril, A., 2024, A groundwater flow model for the East Flathead Valley, Flathead County, Montana: Montana Bureau of Mines and Geology Report of Investigation 36, 110 p.

the AOPI of any potentially depleted surface water sources. The Flathead River and Flathead Lake were identified as the potentially depleted surface water sources which will be analyzed for legal availability.

GROUNDWATER

19. Legal availability of groundwater will be based on a comparison of the physically available water to the existing water rights (legal demands) within the ZOI. Physically available groundwater was evaluated by calculating groundwater flux through a ZOI corresponding to the 0.01-foot drawdown contour. The Department queried the existing groundwater legal demands within the ZOI and found 387 water rights. A list of these water rights is included in the application file and is available upon request. The Department calculated the sum of the water rights' annual volumes (**Table 2**) which summed to a total legal demand on the source aquifer within the ZOI of 3,469.74 AF/year.

Table 2: Summary of Groundwater Legal Demands

Water Right Type	Number of Rights	Volume (AF)
Exempt Notice	5	24.05
Ground Water Certificate	336	1,632.73
Provisional Permit	14	1,515.28
Statement of Claim	32	297.68
Total Legal Demands	**387**	**3,469.74**

20. The water rights in the source aquifer with unquantified volumes were quantified as follows:

a. Statements of Claim with a stock use were quantified by multiplying the historically claimed number of animal units by the following conversion factor: 0.034 AF per day per AU (equivalent to 30.0 GPD per AU);
b. Groundwater Certificates with unquantified volumes were assigned 10.0 AF. Groundwater Certificates issued with the verbiage "THIS RIGHT IS LIMITED TO THE ACTUAL AMOUNT USED UP TO 10 ACRE-FEET," were assigned 10.0 AF.

The Department used these methods because they lead to an overestimation of existing uses from the source, which the Department considers an appropriate method of assessing existing rights as it protects existing water users.

Table 3: Legally Available in the Source Aquifer		
Physically Available Volume in the Source Aquifer (AF)	**Existing Legal Demands within the ZOI (AF)**	**Legally Available Volume in the Source Aquifer (AF)**
4,476.0	3,469.74	1,006.26

21. The existing legal demands were subtracted from the physically available volume to determine the legally available volume of water in the ZOI in the source aquifer. The volume of water legally available in the source aquifer is 1,006.26 AF, as shown in **Table 3.**

SURFACE WATER

22. Flathead River and Flathead Lake are the surface water sources that are expected to be depleted by the proposed groundwater use. Net surface water depletion is equal to the consumed volume of the proposed groundwater use and is described as the calculated volume, rate, timing, and location of reductions to surface water that are offset by non-consumed water. The proposed point of diversion is located 1 mile northwest of Fennon Slough, which is hydrologically considered to be a part of the Flathead River, and 1.25 miles north of Flathead Lake.

23. Surface water depletion resulting from the Applicant's proposed well pumping from the Deep Aquifer would primarily occur from propagation of drawdown through the source aquifer to Flathead River and Flathead Lake resulting in constant year-round rates of depletion. The year-round constant rates of depletion are shown in **Table 4**. The total consumed flow rate and volume for these depletions are 8.5 GPM and 13.8 AF respectively. To determine legal availability in the hydraulically connected sources, both physical and legal availability of the sources was evaluated for Flathead River and Flathead Lake.

Table 4: Total consumed volume and net depletions to surface water for the Production Well							
Month	**Lawn & Garden Consumed Volume (AF)**	**Domestic Consumed Volume (AF)**	**Total Consumed Volume (AF)**	**Flathead Lake Depletions (AF)**	**Flathead River Depletions (AF)**	**Flathead Lake Net Depletions (GPM)**	**Flathead River Net Depletions (GPM)**
January	0	0.02	0.02	0.65	0.52	4.7	3.8
February	0	0.02	0.02	0.58	0.47	4.7	3.8
March	0	0.02	0.02	0.65	0.52	4.7	3.8
April	0.3	0.02	0.27	0.63	0.51	4.7	3.8
May	1.8	0.02	1.74	0.65	0.52	4.7	3.8
June	2.6	0.02	2.64	0.63	0.51	4.7	3.8
July	3.8	0.02	3.86	0.65	0.52	4.7	3.8
August	3.5	0.02	3.48	0.65	0.52	4.7	3.8
September	1.7	0.02	1.65	0.63	0.51	4.7	3.8
October	0	0.02	0.07	0.65	0.52	4.7	3.8
November	0	0.02	0.02	0.63	0.51	4.7	3.8
December	0	0.02	0.02	0.65	0.52	4.7	3.8
Total	**13.6**	**0.2**	**13.8**	**7.6**	**6.2**	**8.5**	

Flathead River- Physical Availability

24. The DNRC WSB determined that depletions to Flathead River begin in the E½NWSE Section 16, Township 27N, Range 20W, Flathead County, and extend downstream to the inlet of Flathead Lake in Section 34, Township 27N, Range 20W, Flathead County. The Department used the Flathead River at Columbia Falls, MT USGS Gaging Station No. 12363000 to quantify physically available monthly flow rates and volumes at the initial point of depletion during the period of diversion. USGS Gaging Station No. 12363000 is approximately 34 miles upstream of the initial point of depletion identified by WSB. The date range for the gage is October 1951 to April 2025, and the Department used the entre period of record.

25. Physically available monthly flow rates and volumes at the start of the depleted reach on Flathead River were quantified during the period of surface water depletion using the following method:

a. The Department calculated median of the mean monthly flow rates in CFS for the Flathead River using USGS Gaging Station No. 12363000 records for each month of the period of depletion (**Table 5**, column B). Those flows were converted to monthly volumes in AF **Table 5**, column C) using the following equation found on the DNRC Water Calculation Guide: median of the mean monthly flow (CFS) × 1.98 (AF/day/1 CFS) × days per month = AF/month.

b. The Department calculated the monthly flows appropriated by existing users upstream of the start of the depleted reach on the source (**Table 5,** column D) by:

   i. Generating a list of existing water rights from USGS Gaging Station No. 12363000 to the initial point of surface depletion using the DNRC Water Rights Information System (WRIS) data (list is included in the application file and available upon request);

   ii. Designating uses as occurring during their recorded periods of diversion;

   iii. Assigning a single combined flow rate of 0.08 CFS to all livestock direct from source rights without a designated flow rate per Department adjudication standards (quantification of said water rights is not a re-adjudication or historical use analysis); and,

   iv. Assuming that the flow rate of each existing right is continuously diverted throughout each month of the period of diversion. This assumption is necessary due to the difficulty of differentiating the distribution of appropriated volume over the period of diversion. This leads to an overestimation of existing uses from the source. The Department finds this an appropriate measure of assessing existing rights as it protects existing water users.

c. Since the gage used is upstream of the depleted reach, the Department subtracted the flow rates of the existing rights between USGS Gaging Station No. 12363000 and the initial point of depletion (**Table 5,** column D) from the median of the mean monthly gage values (**Table 5**, column B) to determine physical availability at the initial point of depletion (**Table 5,** column E). Physically available monthly flows were then converted to monthly volumes (**Table 5**, column F).

Table 5: Physical Availability at the Initial Point of Depletion on Flathead River					
A	B	C	D	E	F
Month	**Median of Mean Monthly Flow at Gage 12363000 (CFS)**	**Median of Mean Monthly Volume at Gage 12363000 (AF)**	**Existing Diverted Legal Demands between Gage No 12363000 to the Initial Point of Depletion (CFS)**	**Physically Available Monthly Flow (CFS)**	**Physically Available Monthly Volume (AF)**
January	5,074.1	311,446.1	1.28	5,072.8	311,367.5
February	4,750.4	263,359.8	1.28	4,749.1	263,288.8
March	4,738.7	290,862.0	1.94	4,736.8	290,742.9
April	10,393.3	617,364.0	47.38	10,346.0	614,549.6
May	22,645.3	1,389,969.9	100.56	22,544.8	1,383,797.5
June	24,611.7	1,461,933.0	109.22	24,502.4	1,455,445.4
July	11,280.0	692,366.4	109.22	11,170.8	685,662.5
August	5,403.7	331,679.7	109.22	5,294.5	324,975.8
September	4,423.5	262,755.9	99.16	4,324.3	256,865.8
October	4,902.6	300,920.4	58.55	4,844.0	297,326.6
November	4,527.3	268,923.6	1.34	4,526.0	268,844.0
December	5,497.7	337,451.4	1.28	5,496.5	337,372.8

Flathead River- Legal Availability

26. The Department determined the AOPI for the Flathead River should extend from the initial point of depletion in the E½NWSE Section 16, Township 27N, Range 20W, Flathead County, downstream to the inlet of Flathead Lake in Section 34, Township 27N, Range 20W, Flathead County. The Department determined that the proposed use of groundwater will deplete Flathead River starting in the E½NWSE Section 16, Township 27N, Range 20W, Flathead County, thus reducing the total volume and flow in the Flathead River above Flathead Lake. There are a total of 47 water rights in the AOPI. The Department calculated the monthly flow rates and volumes of the water rights within the AOPI during the period of surface water depletion (year-round) using the following method:

a. The Department quantified physically available monthly flow rates and volumes (**Table 6**, columns B-C) for the depleted reach of the Flathead River. The Department calculated the monthly flow rates appropriated by existing users (legal demands) on the source from the

initial point of depletion downstream to the Flathead Lake Inlet (**Table 6**, columns D-E) by:

i. Generating a list of existing water rights on the Flathead River from the initial point of depletion downstream to the Flathead Lake Inlet. This list is available in the administrative file;

ii. Designating uses as occurring during their recorded periods of diversion;

iii. Assigning a single combined flow rate of 0.08 CFS to all livestock direct from source rights without a designated flow rate per Department adjudication standards (quantification of said water rights is not a re-adjudication or historical use analysis); and,

iv. Assuming that the flow rate of each existing right is continuously diverted throughout each month of its period of diversion. This assumption is necessary due to the difficulty of differentiating the distribution of appropriated volume over the period of diversion. This leads to an overestimation of legal demands on the physical volume of water. The Department finds this an appropriate measure of assessing existing rights as it protects existing water users.

b. The Department subtracted out the flow rates of the existing legal demands (**Table 6**, column D) within the AOPI from the physically available water (**Table 6**, column B) to determine legally available flow and volume in the depleted reach (**Table 6**, columns F-G).

Table 6: Legally Available Flows within the AOPI for Flathead River					
A	B	C	D	E	F
Month	**Physically Available Monthly Flow (CFS)**	**Physically Available Monthly Volume (AF)**	**Existing Legal Demands within the AOPI (CFS)**	**Legally Available Monthly Flow (CFS)**	**Legally Available Monthly Volume (AF)**
January	5,072.8	311,367.5	3,501.3	1,571.5	96,459.0
February	4,749.1	263,288.8	3,501.3	1,247.8	69,177.9
March	4,736.8	290,742.9	3,501.9	1,234.8	75,793.9
April 1- 15	10,346.0	614,549.6	3,547.4	6,798.6	201,917.6
April 16-30	10,346.0	614,549.6	6,697.4	3,648.6	108,362.6
May	22,544.8	1,383,797.5	8,225.6	14,319.2	878,912.6
June	24,502.4	1,455,445.4	8,234.2	16,268.2	966,332.7
July 1- 15	11,170.8	685,662.5	8,234.2	2,936.6	93,030.2
July 16 - 31	11,170.8	685,662.5	5,511.2	5,659.6	168,088.9
Aug	5,294.5	324,975.8	3,609.2	1,685.3	103,441.9
Sep	4,324.3	256,865.8	3,599.2	725.2	43,075.7
Oct	4,844.0	297,326.6	3,558.6	1,285.5	78,902.8
Nov	4,526.0	268,844.0	3,501.3	1,024.7	60,864.4
Dec	5,496.5	337,372.8	3,501.3	1,995.2	122,464.3

Flathead Lake- Physical Availability

27. The DNRC WSB determined that the proposed use of groundwater will deplete Flathead Lake starting at a point in the S½SWNE of Section 20, Township 27N, Range 21W, Flathead County. In order to simplify its analysis, the Department evaluated physical availability for Flathead Lake starting at the inlet of Flathead Lake in Section 34, Township 27N, Range 20W, Flathead County. The Department used the Flathead River near Polson Montana USGS Gaging Station No. 12372000 to calculate physical availability as it is located approximately 35 miles downstream and is the closest gage to the depleted reach. The period of record for the gage is October 1938 to April 2025, and the Department used the entire period of record to quantify physically available monthly flow rates and volumes in the AOPI during the period of groundwater diversion and resulting year-round surface water depletion.

a. The Department calculated median of the mean monthly flow rates in CFS for Flathead Lake using USGS Gaging Station No. 12372000 records for each month of the proposed

period of depletion (**Table 7**, column B). Those flows were converted to monthly volumes in AF (**Table 7**, column C).

b. The Department calculated the monthly flows appropriated by existing users upstream of USGS Gaging Station No. 12372000 (**Table 7**, column D) by:

   i. Generating a list of existing water rights from the Flathead Lake inlet down to USGS Gaging Station No. 12372000 (this list is contained in the administrative file and is available upon request);

   ii. Designating uses as occurring during their recorded periods of diversion;

   iii. Assigning a single combined flow rate of 0.08 CFS to all livestock direct from source rights without a designated flow rate per Department adjudication standards (quantification of said water rights is not a re-adjudication or historical use analysis); and,

   iv. Assuming that the flow rate of each existing right is continuously diverted throughout each month of the period of diversion. This assumption is necessary due to the difficulty of differentiating the distribution of appropriated volume over the period of diversion. This leads to an overestimation of existing uses from the source. The Department finds this an appropriate measure of assessing existing rights as it protects existing water users.

c. Since the gage used is downstream of the POD, the Department added in the flow rates of the existing diversionary water rights between USGS Gaging Station No. 12372000 and the Flathead Lake inlet (**Table 7**, column D) to the median of the mean monthly gage values (**Table 7**, column B) to determine physical availability at the initial point of depletion from Flathead Lake (**Table 7**, column E). Physically available monthly flows were then converted to monthly volumes (**Table 7**, column F).

Table 7: Physical Availability at the Flathead Lake Inlet					
A	**B**	**C**	**D**	**E**	**F**
Month	**Median of the Mean Monthly Flow at Gage 12372000 (CFS)**	**Median of the Mean Monthly Volume at Gage 12372000 (AF)**	**Existing Diverted Legal Demands from the Flathead Lake Inlet to Gage 12372000 (CFS)**	**Physically Available Monthly Flow at the Flathead Lake Inlet (CFS)**	**Physically Available Monthly Volume at the Flathead Lake Inlet (AF)**
January	10,380.0	637,124.4	78.7	10,458.7	641,956.8
February	9,133.0	506,333.5	81.3	9,214.3	510,841.3
March	7,748.0	475,572.2	86.5	7,834.5	480,881.6
April	9,223.0	547,846.2	5,378.8	14,601.8	867,347.5
May	18,560.0	1,139,212.8	5,429.5	23,989.5	1,472,474.9
June	25,400.0	1,508,760.0	5,437.6	30,837.6	1,831,751.7
July	12,730.0	781,367.4	5,438.1	18,168.1	1,115,159.2
August	6,126.0	376,013.9	5,438.1	11,564.1	709,805.7
September	5,956.5	353,816.1	5,413.5	11,370.0	675,375.6
October	7,184.0	440,953.9	5,385.7	12,569.7	771,525.1
November	8,556.0	508,226.4	90.6	8,646.6	513,610.4
December	9,837.0	603,795.1	81.7	9,918.7	608,812.3

Flathead Lake- Legal Availability

28. The Department determined that the proposed use of groundwater from the Applicant's proposed production well will deplete Flathead Lake starting in the S½SWNE Section 20, Township 27N, Range 21W, Flathead County, thus reducing the total flow and volume in Flathead Lake from the inlet of Flathead Lake in Section 34, Township 27N, Range 20W, Flathead County, down to the Séliš Ksanka Qlispé (SKQ) Dam in Section 12, Township 22N, Range 21W, Lake County. There are 1,796 water rights within the Flathead Lake portion of the AOPI. The Department quantified legally available monthly flow rates and volumes within the AOPI during the period of surface water depletion (year-round) using the following method:

a. The Department quantified physically available monthly flow rates and volumes (**Table 8**, columns B-C) for the Flathead Lake AOPI. The Department calculated the monthly flow rates appropriated by existing users (legal demands) on the source from the Flathead Lake Inlet downstream to the SKQ Dam (**Table 8**, columns D-E) by:

i. Generating a list of existing water rights on the Flathead Lake from the Flathead Lake Inlet downstream to the SKQ Dam (this list is contained in the administrative file and is available upon request);

ii. Designating uses as occurring during their recorded periods of diversion;

iii. Assigning a single combined flow rate of 0.08 CFS to all livestock direct from source rights without a designated flow rate per Department adjudication standards (quantification of said water rights is not a re-adjudication or historical use analysis); and,

iv. Assuming that the flow rate of each existing right is continuously diverted throughout each month of its period of diversion. This assumption is necessary due to the difficulty of differentiating the distribution of appropriated volume over the period of diversion. This leads to an overestimation of legal demands on the physical volume of water. The Department finds this an appropriate measure of assessing existing rights as it protects existing water users.

b. The Department subtracted out the flow rates of the existing legal demands (**Table 8**, column D-E) within the AOPI from the physically available water (**Table 8**, column B) to determine legally available flow and volume in the depleted reach (**Table 8**, columns F-G).

Table 8: Legal Availability from the proposed POD to the SKQ Dam					
Month	**Physically Available Monthly Flow (CFS)**	**Physically Available Monthly Volume (AF)**	**Existing Legal Demands within the AOPI (CFS)**	**Legally Available Monthly Flow (CFS)**	**Legally Available Monthly Volume (AF)**
January	10,459.0	641,957.0	0.1	10,380.1	637,130.0
February	9,214.3	510,841.3	0.1	9,133.1	506,338.5
March	7,834.5	480,881.6	0.1	7,748.1	475,578.0
April	14,602.0	867,347.5	5,265.0	9,223.1	547,851.5
May	23,989.5	1,472,475.0	5,285.0	18,561	1,139,259.0
June	30,837.6	1,831,752.0	5,285.0	25,401	1,508,804.6
July	18,168.1	1,115,159.2	5,285.0	12,731.0	781,413.4
August	11,564.1	709,806.0	5,285.0	6,127.0	376,060.0
September	11,370.0	675,375.6	5,265.0	5,957.3	353,860.7
October	12,569.7	771,525.1	5,265.0	7,184.1	440,959.4
November	8,646.6	513,610.4	0.1	8,556.1	508,231.7
December	9,918.7	608,812.3	0.1	9,837.1	603,800.6

29. The Department finds that the requested 21.72 AF/year at a flow rate of 101.15 GPM is legally available in the aquifer based on the comparison of the flux through the ZOI to the volume of existing legal demands within the ZOI. Additionally, the Department finds that the 3.9 GPM (6.2 AF/year) and 4.8 GPM (7.6 AF/year) that the proposed groundwater appropriation will deplete from Flathead river and Flathead Lake, respectively, is legally available in those sources during the proposed period of diversion.

ADVERSE EFFECT

FINDINGS OF FACT

30. The Applicant proposes to divert groundwater from a well (GWIC ID 331034) at a rate of 101.15 GPM up to 2.24 AF/year for multiple domestic use for eight households and 19.48 AF/year for irrigation of 10.0 acres of lawn and garden, for a total volume of 21.72 AF/year. The Applicant provided a plan showing they can regulate their water use to ensure senior water rights are satisfied during times of water shortage. The Applicant plans to:

a. Initially reduce irrigation by 50 percent;

b. Cease all irrigation;

c. Initiate domestic water rationing to 50 percent during extreme shortage; and,

d. Should a valid call from a senior water holder be requested, the owner will turn off the well pump and temporarily obtain their potable water from an alternative PWS source until the call is lifted.

GROUNDWATER

31. The Department used the proposed monthly pumping schedule (**Table 9**) and the annual diverted and consumed volume to evaluate potential impacts to existing water right users. The Theis (1935) solution, a T value equal to 15,862 ft^2/day, S=1.4x10^{-4}, and the monthly pumping schedule for a period of five years were used to model drawdown in the Deep Aquifer and the effect of the drawdown on existing wells and to calculate net depletions for hydraulically connected sources. Based on aquifer T and S, and using the proposed pumping schedule in **Table 9**, there are no water rights that will experience predicted drawdown equal to or greater than 1-foot, as such no groundwater users are expected to be adversely effected.

Table 9: Assumed monthly pumping schedule for the Production Well

Month	IWR, Creston (inches)	Lawn and Garden Irrigation Diverted Volume (AF)	Multiple Domestic Diverted Volume (AF)	Total Diverted Flow Rate (GPM)
January	0.0	0.0	0.2	1.4
February	0.0	0.0	0.2	1.4
March	0.0	0.0	0.2	1.4
April	0.3	0.4	0.2	4.0
May	2.1	2.5	0.2	19.4
June	3.1	3.7	0.2	28.7
July	4.6	5.5	0.2	41.5
August	4.2	5	0.2	37.5
September	2	2.4	0.2	18.4
October	0.1	0.1	0.2	1.9
November	0.0	0.0	0.2	1.4
December	0.0	0.0	0.2	1.4
Total	**16.4**	**19.5**	**2.2**	---

32. Predicted theoretical drawdowns in **Table 11** for the proposed well are modeled for the period of diversion using the monthly pumping schedule in **Table 9**. The volume for domestic use and lawn and garden irrigation will be apportioned monthly throughout the period of diversion

based on the number of days in the month. The assumed monthly pumping schedule is shown in **Table 9**. The volume will be converted to flow rate using the following equation:

$$Total\ Diverted\ Flow\ Rate\ (GPM) = \frac{Diverted\ Volume\ (AF)}{month} \times \frac{325{,}851\ gallons}{AF} \times \frac{month}{\#\ days} \times \frac{1\ day}{1{,}440\ min}$$

SURFACE WATER

The Department found that the proposed 21.72 AF of diverted groundwater will result in a net depletion of 13.8 AF with depletions to Flathead River up to 6.2 AF and Flathead Lake up to 7.6 AF yearly. The Department found that the volume is legally available in those sources. As such the proposed appropriation of groundwater will not adversely affect the existing water right users on the depleted surface sources.

33. The Department finds there will be no adverse effects to senior surface water users nor groundwater users resulting from the Applicant's proposed diversion of 21.72 AF annually at a rate of 101.15 GPM. The Department considered the following to justify this finding:

a. The Applicants plan to regulate water usage and plan to cease use for a valid call on the source;
b. The Department's finding that water is legally available on the source aquifer;
c. The Departments finding that water is legally available on in the hydraulically connected source, and;
d. The analysis of drawdown in nearby wells completed in the source aquifer;

34. The Department finds that the proposed diverted volume of 21.72 AF and consumed volume of 13.8 AF annually at a flow rate of 101.15 GPM will not have an adverse effect on existing groundwater and surface water right holders.

ADEQUATE MEANS OF DIVERSION

FINDINGS OF FACT

35. The Applicant proposes to divert groundwater from a well (GWIC ID 331034) at a rate of 101.15 GPM up to 2.24 AF/year for multiple domestic use for eight households and 19.48 AF/year for irrigation of 10.0 acres of lawn and garden, for a total volume of 21.72 AF/year.

WATER COLUMN (WELL ADEQUACY)

36. The Applicant's production well (GWIC ID 331034) was tested with a 24-hour aquifer test at an average flow rate of 101.0 GPM. The Applicant will utilize a VFD and two pressure tanks to prevent water hammer and short cycling of the pump. The production well (GWIC ID 331034) was constructed on April 24, 2024, extending 714.0 feet BGS with a 6-inch diameter steel casing and completed with an open bottom. The static water level is 5.0 feet BGS.

37. WSB utilized two analysis solutions to evaluate the production well. The Theis (1935) solution fit the drawdown data well, but the predicted derivative curve did not closely match the observed drawdown. The Cooper-Jacob (1946) solution analysis was considered a better fit for the estimated derivative curve as it fit the mid to late time data better. The observed derivatives of the drawdown data stabilized at mid- to late-time, indicating that infinite-acting radial flow to the well was achieved during the aquifer test on the Production Well. The recommended T and S values to be used in forward modeling for the Adequacy of Diversion criterion are 3,432.8 ft^2/day derived from the Production Well aquifer test analysis (**Table 10)**, and 5.2 x 10^{-4} derived from a nearby aquifer test conducted in 2022 by MBMG (Rose et al, 2022[2]) on a well of similar depth located 3,391 feet from the Production Well, respectively. These values represent the local aquifer properties immediately around the Production Well.

Table 10: Aquifer test synopsis for Production Well

Aquifer Test Phase	Test Length (hr)	Well (GWIC ID)	Analysis Solution	Transmissivity (ft^2/day)
Production Well, Pumping	24	331034	Cooper-Jacob (1946)	3,432.80
Production Well, Pumping	24	331034	Theis (1935)	3,312.9
Note: No storativity is given due to the analysis being conducted solely on the Production Well.				

38. The WSB modeled the remaining available water column in the proposed well in AQTESOLV® using the monthly pumping schedule for the proposed well (**Table 9**), the T=3,432.8 ft^2/day derived from the Production Well aquifer test analysis using the Cooper-Jacob (1946)

[2] Rose, J., Bobst, A., and Gebril, A., 2022, Hydrogeologic investigation of the deep alluvial aquifer, Flathead Valley, Montana: Montana Bureau of Mines and Geology Report of Investigation 32, 44 p.

solution, and a S of 5.2 x 10^{-4}. The Applicant requests 21.72 AF/year. The requested lawn and garden volume of 19.48 AF was apportioned from April through October according to the monthly percent of the total net irrigation requirement calculated using climate data from the Creston Station in the USDA NRCS IWR software program. The 2.24 AF requested for multiple domestic use was apportioned from January through December based on the number of days in each month.

39. The total drawdown is the sum of interference drawdown and predicted drawdown, as shown in **Table 11**. Because only one well is proposed for the subdivision, no interference drawdown was modeled. Well loss is calculated by dividing the predicted theoretical maximum drawdown by a well efficiency value. Well efficiency is calculated by dividing the modeled maximum drawdown for the aquifer test by the maximum observed drawdown of the aquifer. The production well would experience 90.6 feet of drawdown after the first year, with a remaining water column of 611.1 feet.

Table 11: Remaining available water column for the Production Well.

Drawdown Estimate	**Proposed Well**
Total Depth at Bottom of Perforated Interval (feet)	714
Pre-Test Static Water Level (feet BTC)	12.3
Available Drawdown Above Bottom of Well (feet)	701.8
Observed Drawdown of Aquifer Test (feet)	148.6
Modeled Drawdown Using Mean Aquifer Test Rate (feet)	4.2
Well Efficiency (%)	2.8
Predicted Theoretical Maximum Drawdown (feet)	2.6
Predicted Drawdown with Well Loss (feet)	90.6
Interference Drawdown (feet)	0
Total Drawdown (feet)	90.6
Remaining Available Water Column (feet)	**611.1**

WATER SYSTEM DESIGN AND SPECIFICATIONS

40. The Applicant proposes to divert water from the production well via a Grundfos SP90S100-9 submersible pump in a 3-inch drop pipe set at 200 feet BGS. The modeled remaining available water column will be 611.1 feet BGS (**Table 11**), leaving ample water column for the pump to function year-round. The submersible pump's flow rate will be controlled by a VFD set to an output pressure of 55 PSI paired with two pressure tanks. The pump house, located on Majestic

Meadow Lot 2 south of the well, holds the pressure tanks, VFD, and control panels. After leaving the pressure tanks the water is diverted to Lots 1 through 8 of Majestic Meadow via a 4-inch PVC water main that has eight separate service connections. Branching from the service connections, the water will be conveyed via a 1 ¼ inch PVC to each household. No losses are expected with the conveyance through the closed-pipe system. A McCrometer totalizing flow meter will record flow rate and total volume for the diversion.

41. The maximum total dynamic head calculation was calculated using the well's aquifer test pumping depth of 150 feet BGS, Applicant-supplied friction loss calculations of 29.57 feet for the system, and the output/operating pressure of 55 PSI (equivalent to 127.05 feet) set by the VFD. The TDH of 306.62 feet compared to the Applicant supplied pump curve shows that the pump can produce 101.0 GPM at 306.62 feet of TDH. The VFD will control the pump to operate across a range of pumping conditions up to the maximum TDH calculated by the Applicant while maintaining a stable flow rate and an output of 55 PSI. The Applicant requested a flow rate of 101.15 GPM, however, the DNRC WSB found an average flow rate of 101.0 GPM during their assessment of the Applicant's aquifer test data Form 633. As such, the Department finds that the well will produce a flow rate of 101.0 GPM rather than the requested 101.15 GPM.

42. Due to the Applicant's requested flow rate exceeding the average aquifer test flow rate, the proposed permit will be subject to the following measurement reporting condition upon issuance to ensure the Applicant does not appropriate water at a flow rate greater than the permitted flow rate of 101.0 GPM:

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 JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR UNTIL A FORM 617 PROJECT COMPLETION NOTICE IS SUBMITTED. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF THE PERMIT. THE RECORDS MUST BE SENT TO THE KALISPELL REGIONAL WATER RESOURCES OFFICE. THE APPROPRIATOR SHALL

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

43. The Department finds that the proposed means of diversion and conveyance are adequate to divert and convey a flow rate of 101.0 GPM, which is less than the requested flow rate of 101.15 GPM, and an annual volume of 21.72 AF. The Department finds that this permit application should be granted in modified form and subject to the measurement condition described in FOF 42 due to the finding that the requested flow rate is greater than the average flow rate recorded during the Applicant's aquifer test on the proposed production well.

BENEFICIAL USE

FINDINGS OF FACT

44. The Applicant proposes to divert groundwater from a well (GWIC ID 331034) at a rate of 101.15 GPM up to 2.24 AF/year for multiple domestic use for eight households and 19.48 AF/year for irrigation of 10.0 acres of lawn and garden, for a total volume of 21.72 AF/year. However, as discussed in FOF 41, the DNRC finds a maximum flow rate 101.0 GPM.

45. The Applicant provided an estimate of the peak instantaneous demand of 22.0 GPM for multiple domestic and of 82.57 GPM for irrigation of lawn and garden. That peak flow rate for multiple domestic of 22.0 GPM is expected to occur during the daytime. The irrigation of the 10.0 acres of lawn and garden will occur during a 7-hour period overnight. The flow rate of 101.0 GPM will allow for irrigation to occur overnight and provide a buffer of approximately 18.43 GPM for non-peak nighttime domestic use. The Applicant will use a flow meter with totalizer to measure the water usage to ensure they operate within the permitted flow rate of 101.0 GPM.

46. The Applicant requests a volume of 2.24 AF for multiple domestic use for eight households from January 1st to December 31st annually. The Applicant used the DEQ standard of 0.28 AF per household to calculate their multiple domestic volume request (0.28 AF/household x 8.0 households = 2.24 AF). The Department finds that multiple domestic use is a beneficial use of water and that the requested volume of 2.24 AF is reasonable and adequate for the year-round multiple domestic purpose.

47. The Applicant requests 19.48 AF for irrigation of 10.0 acres of lawn and garden from April 15th to October 15th, with 1.25 acres being apportioned to each of the 8 lots in the subdivision.

The volume requested was calculated using the procedure described in the Department's Technical Memorandum titled DNRC Consumptive Use Methodology – Turf Grass (New Projects), dated March 23, 2010. The Applicant followed the methodology using the USDA NRCS IWR software, the Creston Weather Station (Station No. MT 242104), and a 70% sprinkler irrigation efficiency factor (per ARM 36.12.115(2)(e)) to identify the gross irrigation requirement in a dry year (80% chance) of 23.37 inches per acre per year, which is equivalent to 1.98 AF per acre per year (16.36 inches/acre net irrigation requirement ÷ 0.7 efficiency factor ÷ 12.0 inches/foot = 1.948 AF per acre.) The Applicant multiplied the gross irrigation requirement calculated from IWR by their proposed irrigated acreage to determine their requested volume of 19.48 (10 acres x 1.948 AF/acre = 19.48 AF/year).

48. The Applicant is requesting the USDA Natural Resources and Conservation Service Climatic Area III standard (ARM 36.12.112(iii)), within which the subdivision is located, to irrigate the lawn and garden from April 15th to October 15th.

49. Due to the Applicant's requested flow rate exceeding the average test flow rate, the proposed permit will be subject to the following measurement reporting condition upon issuance to ensure the Applicant does not appropriate water at a flow rate greater than the permitted flow rate of 101.0 GPM:

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 JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR UNTIL A FORM 617 PROJECT COMPLETION NOTICE IS SUBMITTED. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF THE PERMIT. THE RECORDS MUST BE SENT TO THE KALISPELL REGIONAL WATER RESOURCES OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

50. The Department finds the proposed water uses are beneficial, and that a flow rate of 101.0 GPM up to an annual volume of 21.72 AF are reasonably justified for the multiple domestic and lawn and garden purposes.

POSSESSORY INTEREST

FINDINGS OF FACT

51. The Applicant signed the application form affirming that the Applicant has possessory interest or the written consent of the person with possessory interest, in the property where the water is to be put to beneficial use.

CONCLUSIONS OF LAW

PHYSICAL AVAILABILITY

52. 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."

53. It is the Applicant's burden to produce the required evidence. *In the Matter of Application for Beneficial Water Use Permit No. 27665-41I 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).

54. 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).

55. 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 11-17)

LEGAL AVAILABILITY

56. 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).

57. 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.

58. 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).

59. 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 ; *Wesmont Developers v. DNRC*, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12.

60. 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); *Wesmont Developers v. DNRC*, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pgs. 11-12 ("DNRC properly determined that Wesmont 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

Koocanusa 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*.

61. 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 18-29.)

ADVERSE EFFECT

62. 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.

63. 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).

64. 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).

65. 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).

66. 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.

67. 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).

68. 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 30-34)

ADEQUATE DIVERSION

69. 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.

70. 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.

71. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works can produce a flow rate of 101.0 GPM, which is adequate for the proposed beneficial use. Section 85-2-311(1)(c), MCA (FOF 35-43).

BENEFICIAL USE

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

73. 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).

74. 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).

75. 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*.

76. Applicant proposes to use water for multiple domestic and lawn and garden which are recognized beneficial uses. Section 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence multiple domestic and lawn and garden is a beneficial use and that 21.72 AF of diverted volume and the permitted flow rate of 101.0 GPM is the amount needed to sustain the beneficial use. Section 85-2-311(1)(d), MCA. (FOF 44-50)

POSSESSORY INTEREST

77. 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.

78. 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.

79. 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. Section 85-2-311(1)(e), MCA. (FOF 51)

PRELIMINARY DETERMINATION

Subject to the terms, analysis, and conditions in this Order, the Department preliminarily determines that this Application for Beneficial Water Use Permit No. 76LJ 30171747 should be granted in modified form.

The Department determines the Applicant may divert groundwater at a flow rate of 101.0 GPM up to 21.72 AF annually by means of a production well (GWIC ID 331034) drilled to a depth of 714.0 feet BGS, from January 1st to December 31st for multiple domestic use, and from April 15th to October 15th to irrigate of lawn and garden. The Applicant may use up to 2.24 AF annually for multiple domestic use by eight households and up to 19.48 AF to irrigate 10.0 acres of lawn and garden. The point of diversion is in the NWSWNE of Section 17, Township 27N, Range 20W, Flathead County, Montana. The place of use is located in the N2SWNE of Section 17, Township 27N, Range 20W, Flathead County, Montana.

The provisional permit will be subject to the following condition upon issuance:

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 JANUARY 31 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR UNTIL A FORM 617 PROJECT COMPLETION NOTICE IS SUBMITTED. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF THE PERMIT. THE RECORDS MUST BE SENT TO THE KALISPELL REGIONAL WATER RESOURCES OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

NOTICE

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

DATED this 5 day of May, 2026.

James Ferch, Manager
Kalispell Regional Office
Montana Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the DRAFT PRELIMINARY DETERMINATION TO GRANT IN MODIFIED FORM was served upon all parties listed below on this 5 day of May, 2026, by first class United States mail.

RJM PROPERTIES LLC
1191 MAJESTIC VIEW LN
KALISPELL MT 59901-1814

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VIA EMAIL:
CORE WATER CONSULTING
MIKEL SIEMENS, PE

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Kalispell Regional Office, (406) 752-2288