THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

GOVERNOR GREG GIANFORTE



DNRC DIRECTOR AMANDA KASTER

Water Resources Division – Kalispell Regional Office 655 Timberwolf Pkwy, Ste. 4 Kalispell, MT 59901-1215 (406) 752-2288 DNRCKalispellWater@mt.gov

August 1, 2025

WEST GLACIER ASSETS, LLC PO BOX 215 WEST GLACIER, MT 59936-0215

Subject: Preliminary Determination to Grant Beneficial Water Use Permit Application No. 76LJ 30160349

Dear Applicant,

The Water Resources Division has completed our preliminary review of your application. This review consists of an evaluation of the criteria for issuance of a permit, found in §85-2-311, MCA. The Department preliminarily determines that the criteria are met, and this Application should be granted. A copy of the Preliminary Determination to Grant your application is enclosed. The next step in the process is for the Water Resources Division to provide public notice of this application and an opportunity for objection.

If you have any questions regarding the enclosed preliminary determination document, please contact me at (406) 752-2746 or Travis. Wilson@mt.gov.

Sincerely.

Travis Wilson

Water Resource Specialist

Kalispell Regional Water Resources Office

Encl.: Preliminary Determination to Grant Beneficial Water Use Permit Application No. 76LJ 30160349

Cc via email:

Mikel Siemens, Core Water Consulting

Mike Atkinson

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

* * * * * * *

APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 76LJ 30160349
BY WEST GLACIER ASSETS LLC
PRELIMINARY DETERMINATION TO
GRANT PERMIT

* * * * * * *

West Glacier Assets LLC (Applicant) submitted Groundwater Application for Beneficial Water Use Permit No. 76LJ 30160349 to the Kalispell Water Resources Office of the Department of Natural Resources and Conservation on October 2, 2023. The Department published receipt of the Application on its website on October 10, 2023. A pre-application meeting was held between the Department and the Applicant on April 4, 2023. The Department sent the Applicant a deficiency letter under § 85-2-302, MCA, dated March 28, 2024. The Applicant responded with information dated July 25, 2024. An Amendment to Application (priority date reset) was received on October 7, 2024. The Applicant proposes diverting up to 32.59 acrefeet (AF) of volume annually at a flow rate of 137.8 gallons per minute (GPM) from three wells for commercial and lawn and garden irrigation uses. The application was determined to be correct and complete as of April 5, 2025. An Environmental Assessment for this application was completed on July 30, 2025.

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
- Aguifer Testing Addendum, Form 600-ATA
- Attachments:
 - Appendix A. Figures
 - o Figure 1. Vicinity Map
 - o Figure 2. Site Map / Place of Use
 - o Figure 3. Point of Diversion Existing Infrastructure
 - o Figure 4. Diversion Works, POD
 - o Figure 5. Irrigated Acreage Existing
 - o Figure 6. Expansion Water System for 2025

Page 1 of 34

- o Figure 7. Hydraulic Gradient Aquifer
- Appendix B. Tract Maps and Surveys
- Appendix C. Water Rights
- Appendix D. Diversion Works
- Appendix E. Pump and Pump House Specifications
- Appendix F. General Area Maps
- Appendix G. Irrigation Water Requirements for Hungry Horse
- Appendix H.i. Water Volume Analysis
- Appendix H.ii. Pump Test Graphs & Forms 633
- Appendix I. Signature Authority & Waterline Easement
- Appendix J. Preapplication Meeting Form

Information Received after Application Filed

- A letter to the DNRC from the Applicant's consultant, Core Water Consulting, received July 25, 2024. This letter was in response to the Department's March 28, 2024 deficiency letter.
- Amendment to Application form to increase the total volume requested by this permit application, received October 7, 2024. The DNRC deemed this to be a major amendment, thus resetting the priority date and statutory timelines.
- An email to the DNRC from the Applicant's consultant, Core Water Consulting, received February 11, 2025 requesting a variance from ARM 36.12.121(3)(j). This email was in response to a February 11, 2025 email from the Department notifying Core Water Consulting that the DNRC Water Sciences Bureau had identified a deficiency in the Applicant's aquifer test that would require a request for a variance from the aquifer testing requirements in ARM 36.12.121(3)(j).

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

- Letter from DNRC to Core Water Consulting approving their requested variances from ARM 36.12.121(3)(j), dated February 11, 2025.
- Groundwater Permit Report by DNRC Water Sciences Bureau Groundwater Hydrologist Evan Norman, dated February 11, 2025.
- Lake Five waterbody information from the Montana Department of Fish, Wildlife, and Parks.
- Halfmoon Lake waterbody information from Provisional Permit File No. 76LJ 30010391.
- 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 Kalispell Regional Office at 406-752-2288 to request copies of the following documents:

- Technical Memorandum: DNRC Consumptive Use Methodology Turf Grass, dated March 23, 2010.
- Technical Memorandum: 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 and Conservation				
NRCS means the Natural Resource Conservation	NRCS means the Natural Resource Conservation Service			
DEQ means the Montana Department of Environ	nmental Quality			
AF means acre-feet	AOPI means Area of Potential Impact			
ARM means Administrative Rules of Montana	BGS means below ground surface			
BTC means below top of casing	CFS means cubic feet per second			
FOF means finding(s) of fact	GPD means gallons per day			
GPM means gallons per minute	HDPE means high density polyethylene			
HP means horsepower Hz means Hertz				
IWR means Irrigation Water Requirements	KOA means Kampgrounds of America			
MCA means Montana Code Annotated	POD means point of diversion			
PSI means pounds per square inch	PVC means polyvinyl chloride			
PWS means Public Water Supply SWL means static water level				
TDH means total dynamic head	VFD means variable frequency drive			
WSB means the Water Sciences Bureau	ZOI means zone of influence			

PROPOSED APPROPRIATION

FINDINGS OF FACT

1. The Applicant proposes to divert up to 32.59 AF of groundwater volume annually at a flow rate of 137.8 GPM by means of three wells from January 1 – December 31 for commercial use and from April 25 – October 5 for lawn and garden irrigation. The Applicant proposes to use volumes of up to 13.49 AF/year to supply the commercial uses and up to 19.10 AF/year to irrigate 8.0 acres of lawn and garden areas associated with the West Glacier KOA's PWS system. While the overall periods of diversion and use for the commercial purpose is year-round, the Applicant anticipates that only approximately 0.1 AF will be

used for minimal staff and guest water use in the Tucker Lodge during the off-season period of November 1 – April 31 annually. The proposed appropriation will consume 14.72 AF/year; 1.35 AF/year will be consumed by the commercial uses (equal to 10-percent of the requested 13.49 AF/year), while 13.37 AF/year will be consumed by lawn and garden irrigation (equal to 70-percent of the requested 19.10 AF/year).

- 2. The three wells, referred to as PWS 2 (GWIC ID: 87707; Completion depth: 198.0 feet BGS), PWS 3 (GWIC ID: 224823; Completion depth: 210.0 feet BGS), and PWS 4 (GWIC ID: 276379; Completion depth: 217.0 feet BGS), will divert water at flow rates of 35.0 GPM, 62.1 GPM, and 48.4 GPM, respectively. While the total combined flow rate capacity of the three wells is 145.5 GPM, the Applicant's variable frequency drives will be programmed so that the wells do not exceed the requested diverted flow rate of 137.8 GPM when operating simultaneously. The centroid of the three proposed wells is approximately 4,700 feet east-southeast of Halfmoon Lake and 6,800 feet east-southeast of Lake Five.
- 3. The three PODs are in the SENESE (PWS 2) and SWNESE (PWS 3 and PWS 4) of Section 11, Township 31N, Range 19W, Flathead County, Montana (Figure 1). The proposed places of use are in the NESE of Section 11 and the NWSW of Section 12, Township 31N, Range 19W, Flathead County, Montana (Figure 1). The PODs are in Water Right Basin No. 76LJ (the Flathead River, to and including Flathead Lake), in an area that is not subject to water right basin closures or controlled groundwater area restrictions.
- 4. The Applicant's initial application requested a total of 30.47 AF/year of volume for the proposed beneficial uses. In their response to the Department's deficiency letter, the Applicant's lawn and garden volume needs decreased from 19.66 AF/year to 19.10 AF/year while their commercial volume needs increased from 10.81 AF/year to 13.49 AF/year. Overall, their total volume demand increased from 30.47 AF/year to 32.59 AF/year, prompting the Applicant to submit an Amendment to Application.
- 5. The Applicant owns four existing Groundwater Certificate water rights associated with their four existing PWS wells:
 - i. 76LJ 54265-00 is associated with PWS 1;
 - a. This water right is not supplemental to the other three existing water right nor the proposed appropriation. PWS 1 was the original system well, is not currently manifold with the expanded PWS system, and does not currently distribute water to overlapping place of use served by PWS 2, PWS 3, and PWS 4.
 - ii. 76LJ 56285-00 is associated with PWS 2;
- iii. 76LJ 30068979 is associated with PWS 3; and,
- iv. 76LJ 30102722 is associated with PWS 4.

The requested permit will supplement flow rate and volume to the three existing Groundwater Certificate water rights serving the existing commercial, domestic, and lawn and garden irrigation uses associated with the West Glacier KOA's PWS system wells PWS 2, PWS 3, and PWS 4. Groundwater Certificate No. 76LJ 56285-00, associated with well PWS 2, is for 25.0 GPM up to 3.9 AF/year for commercial and domestic uses. Groundwater Certificate No. 76LJ 30068979, associated with well PWS 3, is for 35.0 GPM up to 1.85 AF/year for commercial uses. Groundwater Certificate No. 76LJ 30102722, associated with well PWS 4, is for 31.0 GPM up to 1.94 AF/year for commercial uses. The PWS system is registered with and regulated by the Montana DEQ as Water System Nos. MT0000882 (West Glacier KOA Campground) and MT0004901 (West Glacier KOA Campground Expansion).

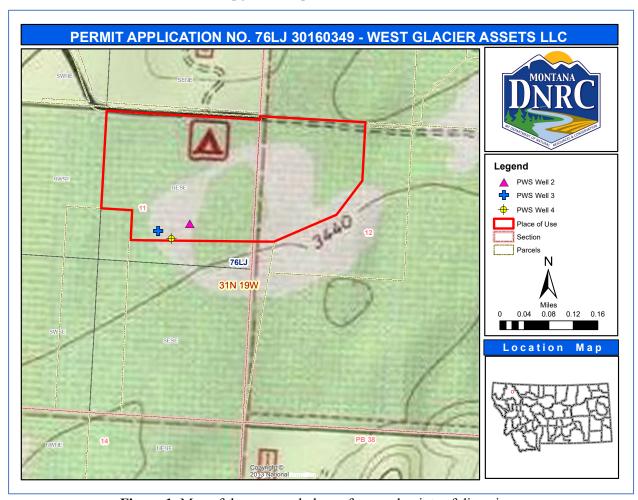


Figure 1: Map of the proposed place of use and points of diversion.

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

GENERAL CONCLUSIONS OF LAW

- 6. 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...
- 7. 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." § 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.

8. 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.
- 9. 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).

10. 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.

11. 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

- 12. The Applicant proposes to divert up to 32.59 AF of groundwater annually at a flow rate of 137.8 GPM for commercial and lawn and garden irrigation uses from three existing wells. The wells are completed in sand and gravel lenses underlying or within deposits of glacial till and fine-grained glacial-lake sediments. Glacial till in most of the Coram subarea of Flathead, Lake, Missoula, and Sanders Counties has a thickness of approximately 30 feet and overlies Tertiary sediments, bedrock, or deep alluvium (LaFave et al., 2004¹). Further, glacial outwash deposits are common across much of the Coram subarea with terraces approximately 100 feet above the present-day Flathead River (LaFave et al., 2004). The intermediate or deep alluvial aquifers are within or below glacial till in the Coram subarea and are the primary source of water for wells generally within 200 ft of land surface (LaFave et al., 2004). The proposed permit is within the southern extension of the Rocky Mountain Trench and northeast part of the Kalispell valley. The valley is a half-graben with the eastern margin defined by the Mission Fault. The Flathead Lobe of the Cordilleran Ice Sheet occupied the valley during much of the Pleistocene Epoch. Tectonics, erosion, and glaciation have resulted in the deposition of complex sequences of sedimentary materials within the intermontane valleys (LaFave et al., 2004).
- 13. The Department derived aquifer properties using Applicant-submitted aquifer test data from a 24-hour constant-rate aquifer test performed on well PWS 3 (GWIC ID: 224823) for the purpose of evaluating the volume of water physically available in the source aquifer. Department Groundwater Hydrologist Evan Norman used the aquifer test data to produce the February 11, 2025 Groundwater Permit Report.

VARIANCES

14. The Applicant requested and was granted a variance from the aquifer testing requirements in ARM 36.12.121 (3)(j) for not collecting background water level measurements for at least two days prior to beginning the aquifer test conducted on well PWS 3 (GWIC ID: 224823). WSB noted that the wells had a

¹ LaFave, J., Smith, L., Patton, T. 2004. Ground-water resources of the Flathead Lake Area: Flathead, Lake, and parts of Missoula and Sanders counties. Part A- Descriptive overview, Montana Bureau of Mines and Geology: Ground-Water Assessment Atlas 2A, 132 p., http://www.mbmg.mtech.edu/pdf/GWA 2.pdf.

slight increasing water level trend of 0.15 feet per day during the background monitoring period, however, the levels showed no trend the last 200 minutes of the background monitoring period. The WSB determined that the aquifer test data did not appear to be affected by any background level trends and did not affect their ability to analyze the aquifer test for aquifer properties.

AQUIFER TEST ANALYSIS

- 15. The Applicant performed three aquifer tests in support of this application:
 - i. A 24.0-hour constant-rate aquifer test was conducted on well PWS 3 (GWIC ID: 224823) at an average flow rate of 62.1 GPM;
 - a. Wells PWS 4 (GWIC ID: 276379) and PWS 2 (GWIC ID: 87707) were used as observation wells for this aquifer test.
 - ii. A 25.3-hour constant-rate aquifer test was conducted on well PWS 4 (GWIC ID: 276379) at an average flow rate of 48.4 GPM; and,
- iii. A 24.0-hour constant-rate aquifer test was conducted on well PWS 2 (GWIC ID: 87707) at an average flow rate of 35.0 GPM.

The Department determined the physically available volume of water in the source aquifer using the aquifer properties derived from the aquifer test conducted on well PWS 3 (using wells PWS 4 and PWS 2 as observation wells). The 25.3-hour and 24.0-hour constant-rate aquifer tests on wells PWS 4 and PWS 2 were conducted in lieu of 8.0-hour yield and drawdown tests. The total requested flow rate of 137.8 GPM could not be obtained from a single well, so the Applicant demonstrated through the three constant-rate aquifer tests that the three production wells can produce the total requested flow rate in combination, as allowed by ARM 36.12.121(3)(b).

16. The WSB generated estimates of aquifer properties for the source aquifer using the AQTESOLV® software to match analytical groundwater solutions to observation well drawdown data. The WSB determined the Cooley-Case (1973) leaky-confined aquifer solution, with the assumption of fully penetrating wells with a water-table aquitard, was the appropriate solution with which to analyze aquifer properties. Application of the Cooley-Case (1973) solution to the drawdown and recovery data from observation well PWS 2 (GWIC ID: 87707) resulted in an aquifer Transmissivity (T) of 3,242 ft²/day and an aquifer Storativity (S) of 1.1 x 10⁻⁴. A summary of the drawdown and recovery analyses using AQTESOLV® is shown in Table 1.

Table 1: Aquifer Test Analysis Summary					
Production Well (GWIC ID; Testing Phase)	Observation Well (GWIC ID)	Analysis Solution	T (ft²/day)	s	
PWS 3 (224823); Pumping & Recovery	PWS 2 (87707)	Cooley-Case (1973)	3,242	1.1 x 10 ⁻⁴	
PWS 3 (224823); Pumping & Recovery	PWS 4 (276379)	Cooley-Case (1973)	3,819	2.2 x 10 ⁻⁴	

17. The two additional aquifer tests conducted on wells PWS 4 and PWS 2 were plotted in AQTESOLV® using drawdown and recovery data from observations wells PWS 2 (GWIC ID: 87707) and PWS 3 (GWIC ID: 224823), respectively. The data were plotted against the Cooley-Case (1973) solution and compared as additional T and S estimates in Table 2. The T and S estimates from the aquifer tests performed on PWS 4 and PWS 2 are within the range of recommended aquifer properties from the aquifer test conducted on well PWS 3. There were no existing nearby aquifer tests to use for comparison to the tests performed for this application.

Table 2: Additional Aquifer Test Analysis Summary					
Production Well (GWIC ID; Testing Phase)	Observation Well (GWIC ID)	Analysis Solution	T (ft²/day)	s	
PWS 4 (276379); Pumping & Recovery	PWS 2 (87707)	Cooley-Case (1973)	2,395	2.1 x 10 ⁻⁵	
PWS 2 (87707); Pumping & Recovery	PWS 3 (224823)	Cooley-Case (1973)	3,451	8.2 x 10 ⁻⁵	

18. The Department evaluated physical groundwater availability for this application by calculating groundwater flux through a ZOI corresponding to the 0.01-foot drawdown contour. Due to their proximity to each other, the three proposed wells were modeled as one at a point centroid of the three. The 0.01-foot drawdown contour was generated using the Cooley-Case (1973) solution, the assumed monthly pumping schedule shown in Table 3, a T of 3,242 ft2/day, an S of 1.1 x 10-4, constant-head boundaries at Halfmoon Lake and Lake Five northwest of the proposed wells, and a constant-head boundary at the Flathead River west of the proposed wells.

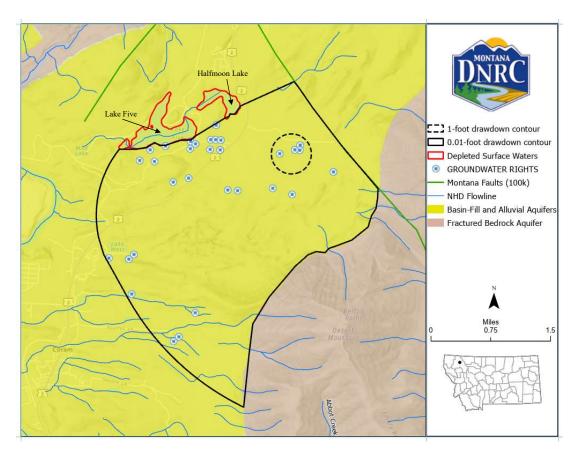


Figure 2: The 0.01-foot and one-foot drawdown contours.

Tabl	Table 3: Assumed Monthly Pumping Schedule and Diverted Volume for the Proposed Wells					
Month	IWR, West Glacier (inches)	Total Diverted Volume (AF)*	Monthly Flow Rate (GPM)	Diverted Volume per Well (AF)	Monthly Flow Rate Per Well (GPM)	
January	0.0	0.02	0.13	0.01	0.04	
February	0.0	0.02	0.13	0.01	0.04	
March	0.0	0.02	0.13	0.01	0.04	
April	0.05	0.08	0.60	0.03	0.20	
May	1.92	4.69	34.21	1.56	11.40	
June	2.95	5.92	44.63	1.97	14.88	
July	4.45	7.89	57.58	2.63	19.19	
August	3.97	7.28	53.15	2.43	17.72	
September	1.75	4.40	33.17	1.47	11.06	
October	0.0	2.26	16.47	0.75	5.49	
November	0.0	0.02	0.13	0.01	0.04	
December	0.0	0.02	0.13	0.01	0.04	
Total	15.08	32.59		10.86		

^{*}Commercial diverted volume is equal to 0.1 AF (November through March) and 13.4 AF (April through October).

19. The 0.01-foot drawdown contour occurs as an irregularly shaped polygon that extends to a fault boundary to the northeast, to Halfmoon Lake and Lake Five to the northwest, and through the contour's maximum extent within the basin-fill source aquifer to the south (Figure 2). The maximum distance the 0.01-foot drawdown contour extends from the centroid of the proposed wells is approximately 14,000 feet, while the width of the ZOI is 20,500 feet. A regional groundwater gradient was generated from well logs in the NW of Section 11 and the SE of Section 10, Township 31 North, Range 19 West along with the proposed wells' static water level data and the local groundwater flow predominantly follows topography in a south-southwesterly direction at a hydraulic gradient of 0.0065 ft/ft (Core Water Consulting LLC, 2023). The calculation for groundwater flux (Q) through the delineated ZOI is given by Equation 1 and is 431,996.5 ft3/day and 3,619.8 AF/year (Q = 3,242.0 ft2/day x 20,500.0 feet x 0.0065 ft/ft = 431,996.5 ft3/day ÷ 43,560.0 ft3/AF = 9.92 AF/day x 365 days/year = 3,619.8 AF/year). This flux value (which represents physical availability of water) will be compared to existing groundwater rights within the ZOI to make findings for the legal availability criterion (see FOF 22, below).

$$Q = TWi$$

Where:

 $T = Transmissivity = \frac{3,242 ft^2}{day}$ $W = Width \ of \ ZOI = 20,500 \ feet$ $i = Groundwater \ Gradient = 0.0065 \ ft/ft$

Equation 1: Groundwater flux through the ZOI

20. Based on the calculated annual groundwater flux through the delineated ZOI of 3,619.8 AF/year, the Department finds that the amount of groundwater that the Applicant seeks to appropriate, 32.59 AF/year diverted at 137.8 GPM, is physically available in the aquifer.

LEGAL AVAILABILITY

FINDINGS OF FACT

21. The Applicant proposes to divert up to 32.59 AF of groundwater annually at a flow rate of 137.8 GPM for commercial and lawn and garden irrigation uses from three existing wells. Legal availability for this application will be based on analyses of both the ZOI in the source aquifer and the AOPI of any potentially depleted surface water source(s). Halfmoon Lake and Lake Five were identified as the potentially depleted surface water sources which will be analyzed for legal availability.

GROUNDWATER

22. Physical groundwater availability was evaluated for comparison with existing water rights (legal demands) by calculating groundwater flux through a ZOI corresponding to the 0.01-foot drawdown contour. Legal availability of groundwater will be based on a comparison of the physically available water to the existing legal demands within the ZOI. The Department queried the existing groundwater legal demands within the ZOI in the source aquifer and found 46 water rights, a list of which is included in the application file and is available upon request. The Department calculated the sum of their total annual volumes (Table 4) which was then subtracted from the physically available volume (annual groundwater flux through the ZOI) to determine the legally available volume in the source aquifer (Table 5). The volume of water legally available in the source aquifer is 3,385.79 AF/year.

Table 4: Summary of Groundwater Legal Demands				
Water Right Type	Number of Rights	Total Volume (AF)		
Statement of Claim	7	33.88		
Groundwater Certificate	39	200.13		
Total Legal Demands	46	234.01		

Table 5: Legal Availability of Groundwater			
Physically Available Groundwater within the ZOI (AF) Total Volume of Existing Groundwater Legal Demands within the ZOI (AF) Legally Available Groundwater within the ZOI (AF)			
3,619.80	234.01	3,385.79	

SURFACE WATER

23. Halfmoon Lake and Lake Five are the surface water sources that will 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 the non-consumed water. Surface water depletion resulting from the Applicant's proposed wells pumping from the source aquifer would primarily occur from propagation of drawdown through the source aquifer to Halfmoon Lake and Lake Five. The depth of the wells, the leaky-confined nature of the source aquifer, and the distances to Halfmoon Lake and Lake Five cause the depletion effects to be dampened, resulting in constant year-round rates of depletion of 6.0 GPM (equivalent to 9.7 AF/year) and 3.1 GPM (equivalent to 5.0 AF/year) to Halfmoon Lake and Lake Five, respectively. These two values are equivalent to the total consumed flow rate and volume of 9.1 GPM and 14.7 AF, respectively. To determine

Page 14 of 34

² Net surface water depletion rates, timing, and locations were determined per DNRC standard practices detailed in Technical Memorandum: Net Surface Water Depletion from Ground Water Pumping, dated July 6, 2018.

the legal availability of water in Halfmoon Lake and Lake Five, both the physical and legal availability of water in these two surface water sources were evaluated.

Table 6: To	Table 6: Total consumed volume and net depletion to Halfmoon Lake and Lake Five from the proposed use.				
24.0	Consumed	Halfmoon Lake	Net Depletions	Lake Five N	et Depletions
Month	Volume (AF)*	AF	GPM	AF	GPM
January	0.00	0.83	6.02	0.43	3.10
February	0.00	0.75	6.02	0.38	3.10
March	0.00	0.83	6.02	0.43	3.10
April	0.05	0.80	6.02	0.41	3.10
May	1.93	0.83	6.02	0.43	3.10
June	2.83	0.80	6.02	0.41	3.10
July	4.17	0.83	6.02	0.43	3.10
August	3.74	0.83	6.02	0.43	3.10
September	1.77	0.80	6.02	0.41	3.10
October	0.23	0.83	6.02	0.43	3.10
November	0.00	0.80	6.02	0.41	3.10
December	0.00	0.83	6.02	0.43	3.10
Total	14.72	9.71		5.00	

^{*} Total consumed volume equal to 0.002 AF/month and rounded to 0.00 AF/month from November through April.

<u>Halfmoon Lake – Physical Availability (quantified in order to analyze the legal availability of Halfmoon Lake)</u>

24. Physical availability of Halfmoon Lake was quantified by calculating its total volume capacity. Per information provided by the applicant of Provisional Permit Application No 76LJ 30010391 (permit issued August 10, 2004), Halfmoon Lake has a maximum depth of 50 feet. According to waterbody information³ published by the Montana Department of Fish, Wildlife, and Parks, the surface area of Halfmoon Lake is 54.8 acres. The DNRC standard equation for calculating the volume of a natural pond or lake⁴ where bathymetric survey data is not available is:

surface area (acres) x maximum depth (feet) x 0.5 (contour factor) = physical volume

³ Montana Department of Fish Wildlife & Parks, Waterbody Search (2025). *Halfmoon Lake Waterbody Information*. https://myfwp.mt.gov/fishMT/waterbody/searchByID?waterBodyID=43363. Accessed 4 April 2025.

⁴ DNRC Technical Memorandum: Physical Availability of Ponds (2019). This memorandum can be found in the DNRC Water Resources Division New Appropriations Program's Permit Application Manual which is available under the Water Right Application Resources ribbon at: https://dnrc.mt.gov/Water-Resources/Water-Rights/Apply-for-Water-Rights/Application-Forms-Guidance-Documents

Applying Halfmoon Lake's surface area and depth to this equation results in a physically available volume of 1,370.0 AF (54.8 acres x 50 feet x 0.5 = 1,370.0 AF).

<u>Halfmoon Lake – Legal Availability</u>

- 25. Halfmoon Lake is a kettle lake that intermittently discharges water to Lake Five, which is the other surface water source that will be depleted by the proposed appropriation. Since the outflow of Halfmoon Lake is intermittent, and there is no surface connection to other nearby surface water sources such as the Flathead River, it is appropriate to consider the AOPI to Halfmoon Lake to be the entire volume of Halfmoon Lake.
- 26. To calculate legal availability of Halfmoon Lake, the Department calculated the volume of water appropriated by existing users within the Halfmoon Lake AOPI by generating a list of all existing water rights on Halfmoon Lake and calculating the sum of their total annual volumes (Table 7). The total volume of existing legal demands was then subtracted from the physically available volume of Halfmoon Lake to determine the legally available volume (Table 8). The Department finds that there is 1,361.5 AF of water legally available to appropriate in Halfmoon Lake, from which the proposed appropriation will deplete 9.7 AF/year.

Table 7: Existing Legal Demands within the AOPI (the entirety of Halfmoon Lake)			
Water Right Number	Maximum Volume (AF)		
76LJ 30010391	DOMESTIC; LAWN AND GARDEN	3.5	
76LJ 20342 00 LAWN AND GARDEN		5.0	
	Total Volume (AF)	8.5	

Table 8: Legal Availability of Halfmoon Lake			
Physically Available Volume of Halfmoon Lake (AF) Total Volume of Existing Legal Legally Available Volume of Halfmoon Lake (AF) Legally Available Volume of Halfmoon Lake (AF)			
1,370.0	8.5	1,361.5	

Lake Five – Physical Availability (quantified in order to analyze the legal availability of Lake Five)

27. The volume of Lake Five was quantified by the Montana Department of Fish, Wildlife, and Parks through a bathymetric survey conducted November 11, 2002. Per the Lake Five Bathymetry Survey Map⁵, the volume of Lake Five is 2,805.0 AF. The Department finds that the volume of Lake Five has been quantified by a qualified entity based on bathymetric data pursuant to ARM 36.12.1702(3)(a) and that 2,805.0 AF is the amount of water physically available in Lake Five.

Page 16 of 34

⁵ Montana Department of Fish Wildlife & Parks, Geographic Data Services Section (2018). *Lake Five Bathymetry Survey Map*. https://myfwp.mt.gov/fishMT/waterbody/43365. Accessed: 8 May 2024. This map is also contained in the application file.

<u>Lake Five – Legal Availability</u>

- 28. Lake Five is a pothole lake with the surrounding geology primarily consisting of glacial deposits of unconsolidated boulders and cobbles. Halfmoon Lake is upstream of, and intermittently discharges water to, Lake Five, which is upstream of, and intermittently discharges water to, Mud Lake. There are no water rights on Mud Lake nor on the intermittent discharge channel between Lake Five and Mud Lake. Since the inflow and outflow of Lake Five are intermittent, and there is no surface connection to nearby surface water sources such as the Flathead River, it is appropriate to consider the AOPI to Lake Five to be the entire volume of Lake Five.
- 29. To calculate legal availability of Lake Five, the Department calculated the volume of water appropriated by existing users within the Lake Five AOPI by generating a list of all existing water rights on Lake Five and calculating the sum of their total annual volumes (Table 9). The total volume of existing legal demands was then subtracted from the physically available volume of Lake Five to determine the legally available volume (Table 10). The Department finds that there is 2,778.0 AF of water legally available to appropriate in Lake Five, from which the proposed appropriation will deplete 5.0 AF/year.

Table 9: Existing Legal Demands within the AOPI (the entirety of Lake Five)			
Water Right Number	Purpose	Maximum Volume (AF)	
76LJ 5168 00	LAWN AND GARDEN	0.50	
76LJ 5174 00	DOMESTIC	2.50	
76LJ 5371 00	DOMESTIC	1.98	
76LJ 18587 00	DOMESTIC	1.00	
76LJ 25382 00	DOMESTIC	1.50	
76LJ 34298 00	DOMESTIC	0.04	
76LJ 114528 00	MULTIPLE DOMESTIC	1.25	
76LJ 207722 00	DOMESTIC	2.00	
76LJ 12438 00	DOMESTIC	0.10	
76LJ 49057 00	DOMESTIC	0.37	
76LJ 30006633	DOMESTIC	1.63	
76LJ 30006628	DOMESTIC	1.63	
76LJ 39874 00	DOMESTIC	0.75	
76LJ 104679 00	IRRIGATION	5.50	
76LJ 131480 00	DOMESTIC	1.25	
76LJ 215028 00	LAWN AND GARDEN	1.00	
76LJ 5269 00	DOMESTIC	1.50	
76LJ 214438 00	DOMESTIC	1.50	
76LJ 30113670	DOMESTIC	1.00	
Total V	Volume (AF)	27.00	

Table 10: Legal Availability of Lake Five			
Physically Available Volume of Lake Five (AF) Total Volume of Existing Legal Demands on Legally Available Volume of Lake Five (AF) Lake Five (AF)			
2,805.00	27.00	2,778.00	

30. The Department finds that 32.59 AF/year and 137.8 GPM is legally available in the aquifer based on the comparison of groundwater flux through the ZOI to the volume of existing legal demands within the ZOI. Additionally, the Department finds that the 14.7 AF/year that the proposed groundwater appropriation will deplete from Halfmoon Lake and Lake Five (9.7 AF/year and 5.0 AF/year, respectively) is legally available in those sources.

ADVERSE EFFECT

FINDINGS OF FACT

- 31. The Applicant proposes to divert up to 32.59 AF of groundwater annually at a flow rate of 137.8 GPM for commercial and lawn and garden irrigation uses from three existing wells. The Applicant provided a plan showing they can regulate their water use to satisfy the water rights of senior appropriators. During times of water shortage, the Applicant proposes to:
 - i. Initially reduce irrigation by 50 percent;
 - ii. Deploy aquifer-monitoring transducers in wells PWS 3 and PWS 4;
- iii. Cease irrigation;
- iv. Ration commercial use water to 50 percent; and finally,
- v. Upon receiving a valid call from a senior water right holder, the Applicant will turn off their pumps and temporarily obtain their potable water from an alternative source until the call is lifted.

GROUNDWATER

32. The Department used the Applicant's proposed monthly pumping schedule (Table 3 under FOF 18) and annual diverted and consumed volume to evaluate potential impacts to existing water rights by modeling drawdown in nearby wells and modeling net depletions to hydraulically connected surface water sources. The drawdown in existing wells completed in the source aquifer resulting from pumping the proposed wells was modeled using the Cooley-Case (1973) solution, a T of 3,242 ft²/day, a S of 1.1 x 10⁻⁴, and the monthly pumping schedule for a period of five years. The drawdown is the largest at the end of the fifth July of pumping according to the assumed monthly pumping schedule. Drawdown greater than 1.0 foot occurs within approximately 1,400 feet of the centroid of the proposed wells (Figure 2 under FOF 18). The DNRC identified four (4) water rights within this area that are expected to experience drawdown greater

than 1.0 foot (Table 11). All four existing water rights within the 1.0-foot drawdown contour will have positive remaining water column with their wells from which to draw water (Table 11, column E) and thus will not be adversely affected by the proposed appropriation.

Table 11: Existing Groundwater Rights in the Source Aquifer within the 1.0-foot Drawdown Contour						
A	В	B C D E				
Water Right Number	Well Depth (ft)	Static Water Level (ft BTC)	Drawdown (ft)	Available Water Column (ft)		
76LJ 30102722	217.0	135.0	1.9	80.1		
76LJ 97277 00	205.0	135.0	1.4	68.6		
76LJ 30068979	210.0	132.0	1.9	76.1		
76LJ 56285 00	200.0	140.0	1.4	58.6		

SURFACE WATER

- 33. The Department found that the 14.7 AF/year that the proposed groundwater appropriation will deplete from Halfmoon Lake and Lake Five (9.7 AF/year and 5.0 AF/year, respectively) is legally available in those sources (FOF 26 and 29, respectively). Therefore, the proposed appropriation of groundwater will not adversely affect the existing water rights withdrawing water from Halfmoon Lake and Lake Five.
- 34. The Department finds there will be no adverse effects to senior groundwater or surface water appropriators resulting from the Applicant's proposed diversion of 32.59 AF/year at 137.8 GPM based on:
 - i. The Applicant's plan to regulate their water use to satisfy the water rights of senior appropriators (FOF 31);
 - ii. The analysis of drawdown in nearby wells completed in the source aquifer (FOF 32);
- iii. The Department's finding that water is legally available in the aquifer (FOF 22); and,
- iv. The Department's findings that water is legally available in Halfmoon Lake (FOF 26) and Lake Five (FOF 29).

ADEQUATE MEANS OF DIVERSION

FINDINGS OF FACT

35. The Applicant proposes to divert up to 32.59 AF of groundwater annually at a flow rate of 137.8 GPM for commercial and lawn and garden irrigation uses.

VARIANCES

36. See FOF 14.

<u>AQUIFER TEST ANALYSIS</u>

37. See FOF 15.

REMAINING AVAILABLE WATER COLUMN

- 38. The DNRC WSB modeled the available water column in the proposed wells using the Cooley-Case (1973) solution with a T of 3,242 ft²/day and S of 1.1 x 10⁻⁴. Predicted theoretical drawdown for the proposed wells was modeled for the period of diversion using the monthly pumping schedule identified in Table 3 (see FOF 18). The requested lawn and garden irrigation volume was apportioned in April through September according to the monthly net irrigation requirement for West Glacier listed in the IWR program (NRCS, 2003). The requested commercial volume was apportioned according to an Applicant-provided schedule with most of the volume being diverted May through October. The total diverted volume is the sum of the year-round commercial use and seasonal lawn and garden irrigation use. There is additional diverted volume from the proposed wells associated with existing Groundwater Certificate Nos. 76LJ 56285-00, 76LJ 3068979 and 76LJ 30102722 (Table 12).
- 39. As identified in Table 13, total drawdown is the sum of interference drawdown and predicted drawdown with well loss. 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 each aquifer test. The aquifer in which the proposed wells are completed would experience a predicted theoretical maximum drawdown of 2.0 feet at the end of July the first year with the monthly pumping schedule identified in Table 3 (see FOF 18). The remaining available water column for the proposed wells is equal to the available drawdown above the bottom of the wells minus total drawdown including any interference drawdown (Table 13). The additional drawdown including interference drawdown for PWS 2 (GWIC ID 87707), PWS 3 (GWIC ID 224823), and PWS 4 (GWIC ID 276379) was calculated using the commercial, domestic, and lawn and garden purposes associated with this application and the existing Groundwater Certificates detailed in Table 12. The bottom row in Table 13 shows that all three wells will still have positive remaining water column from which to draw water after appropriating all requested water (and water associated with the existing water rights in Table 12) according to the assumed monthly pumping schedule in Table 3 (FOF 18). This demonstrates that the wells themselves are adequately completed to divert the full requested amount of water.

Table 12: Associated water rights for proposed wells.						
Groundwater Certificate No.	GWIC ID	Purpose(s)	Volume (AF)	Period of Diversion		
76LJ 56285-00	87707	Commercial Domestic (including lawn and garden)	0.9 3.0 (1.0 AF of the 3.0 AF is for lawn and garden)	5/1-10/1 year-round		
76LJ 30068979	224823	Commercial	1.9	5/1-9/30		
76LJ 30102722	276379	Commercial	1.9	5/1-9/30		

Table 13: Remaining available water column in proposed wells.						
Drawdown Estimate	PWS 2 (GWIC ID: 87707)	PWS 3 (GWIC ID: 224823)	PWS 4 (GWIC ID: 276379)			
Well Depth (ft)*	198.0	212.0	219.0			
Pre-Test Static Water Level (ft btc)	115.4	116.1	117.6			
Available Drawdown Above Bottom of Well (ft)	82.6	95.9	101.4			
Aquifer Test Observed Drawdown (ft)	5.6	19.0	10.9			
Modeled Drawdown using Average test rate (ft)	3.0	5.1	4.0			
Well Efficiency (%)	53.4	26.9	36.7			
Predicted Theoretical Maximum Drawdown from assumed pumping schedule (ft)	2.0	2.0	2.0			
Predicted Drawdown with Well Loss (ft)	3.7	7.4	5.5			
Additional Drawdown** (including interference drawdown) (ft)	2.4	3.0	2.7			
Total Drawdown (ft)	6.2	10.4	8.1			
Remaining Available Water Column (ft)	76.4	85.4	93.2			

^{*}Added 2.0 ft to account for GWIC ID 224823 and GWIC ID 276379 well stick-up height.

WATER SYSTEM DESIGN AND SPECIFICATIONS

- 40. The West Glacier KOA's PWS system consists of:
 - i. PWS 2 (GWIC ID: 87707; drilled to 200.0 feet BGS and completed to a depth of 198.0 feet BGS by Billmayer Drilling (WWC-335) on April 16, 1984 in the local alluvial aquifer. The well is perforated between 195.0 and 198.0 feet BGS);
 - a. Equipped with a 3.0-HP submersible pump of unknown make and model controlled by a Franklin Electric Constant Pressure Controller SubDrive 300 VFD modified to allow up to 80 Hertz instead of typical 60 Hertz. This pump is limited to 35.0 GPM per DEQ information, which was confirmed through the pump test.
 - b. Maximum diversion rate: 35.0 GPM.
 - ii. PWS 3 (GWIC ID: 224823; drilled and completed to a depth of 210.0 feet BGS by Billmayer Drilling (WWC-335) on May 5, 2006 in the local alluvial aquifer. The well is completed with an open bottom.)
 - Equipped with a 5.0-HP Goulds 55GS50 submersible pump controlled by a Franklin Electric Constant Pressure Controller SubDrive 300 VFD modified to allow up to 80 Hertz instead of typical 60 Hertz.
 - b. Maximum diversion rate: 62.1 GPM.

^{**}Additional drawdown includes drawdown and interference drawdown from Groundwater Certificate Nos. 76LJ 56285-00, 76LJ 3068979 and 76LJ 30102722 in Table 5.

- iii. PWS 4 (GWIC ID: 276379; drilled and completed to a depth of 217.0 feet BGS by Billmayer Drilling (WWC-335) on October 28, 2013 in the local alluvial aquifer. The well is completed with an open bottom.)
 - a. Equipped with a 5.0-HP Goulds 55GS50 submersible pump controlled by a Franklin Electric Constant Pressure Controller SubDrive 300 VFD modified to allow up to 80 Hertz instead of typical 60 Hertz.
 - b. Maximum diversion rate: 48.4 GPM.
- iv. Pump house containing pump controls, flow meters, and pressure tanks;
- v. Two 2.0-inch volumetric flow meters, one meter for PWS 2 and 3, and one meter for PWS 4;
- vi. Four Well-X-Trol WX-350 pressure tanks;
- vii. Two-inch water mains associated with PWS 2 and 3, and 3.0-inch water mains associated with PWS 4; and.
- viii. Assorted galvanized, PVC, and HDPE distribution piping and fittings.
- 41. Wells PWS 1 (not included in this application), PWS 2, and PWS 3 are approved and registered PWS wells regulated by the Montana DEQ (Water System No. MT0000882), while well PWS 4 is approved and registered as the "Expansion Well" by the Montana DEQ (Water System No. MT0004901). All system design and engineering will be reviewed and approved by the Montana DEQ. System design plans include two separate systems, known as the West Loop and the East Loop, that flow through two 2.0-inch volumetric flow meters: wells PWS 2 and PWS 3 are part of the original system and will convey water through the East Loop's volumetric flow meter, while well PWS 4, which was added to the system later and operates independently, will convey water through the West Loop's flow meter. While water distribution is separated into two distinct system loops at this time, cross connection between the West and East Loops will occur upon DEQ approval. The most recent DEQ PWS approval application was facilitated by WMW Engineering, and future system analysis will be done with DEQ to confirm the overall design layout for the new looped expansion area, which again, does not and will not include PWS 1.
- 42. The pumps will be operated to maintain a constant system pressure in the pump house of 70.0 PSI. Four Well-X-Trol WX-350 pressure tanks are included in the system to prevent water hammer and repeated starts/stops of the pumps. Wells PWS 3 and PWS 4 are equipped with 4.0-inch 5.0-HP submersible Goulds 55GS50 pumps capable of diverting up to 74.0 GPM at the wells (as verified by Billmayer Drilling pump tests), and well PWS 2 is equipped with a 3.0-HP submersible pump of unknown make and model capable of diverting up to 35.0 GPM at the well. Wells PWS 2 and PWS 3 convey water to the East Loop through 2.0-inch water mains, while well PWS 4 conveys water through 3.0-inch water mains to the West Loop.

- 43. The Applicant provided a TDH value for a system service pressure of 70 PSI at the pump house. The highest head losses will be experienced by well PSW 3 due to its higher flow rate. The calculated TDH for well PWS 3 is 331.56 feet based on a service pressure of 70.0 PSI (161.7 feet), a pumping water level of 135.0 feet BGS, and friction losses of 34.86 feet in the 200 feet of galvanized steel drop pipe, 215 feet of 2.0-inch PVC main pipe, and 50 equivalent feet of pumphouse fittings (161.7 feet + 135.0 feet + 34.86 feet = 331.56 feet). With additional distribution system friction losses and a maximum elevation gain of 25 feet from the pumphouse to the campsites, the minimum service pressure at the place of use would be approximately 39.5 PSI. The entire distribution system can support the peak demand of 137.78 GPM to all connections, which has sufficient water quantity and pressure to support the commercial and irrigation beneficial uses. While the total combined flow rate capacity of the three wells is 145.5 GPM, the Applicant's variable frequency drives will be programmed so that the wells do not exceed the requested diverted flow rate of 137.8 GPM when operating simultaneously.
- 44. Based on the results of the aquifer tests conducted on wells PWS 2, PWS 3, and PWS 4, the positive remaining available water column values for the wells, the system design and specifications, and the Applicant's plan of operation, the Department finds that the diversion and conveyance system is adequate to supply the requested flow rate of 137.8 GPM and annual volume of 32.59 AF.

BENEFICIAL USE

FINDINGS OF FACT

- 45. The Applicant proposes to divert up to 32.59 AF of groundwater annually at a flow rate of 137.8 GPM for commercial and lawn and garden irrigation uses associated with their campground expansion project.
- 46. The Applicant requests 13.49 AF/year for commercial uses consisting of 349 rental campsites, pools and hot tubs, and minimal off-season employee/guest amenities. The Applicant calculated the commercial water needs for their 349 rental campsites by assuming a maximum use of 100.0 GPD for each site over the 184-day campground season for a seasonal demand of 19.71 AF/year (100.0 GPD x 184 days x 349 rental sites = 6421600 ÷ 325,851 gallons/1.0-AF = 19.71 AF/year). They additionally require 0.37 AF/year for their pools and hot tubs (capacity plus evaporation), and 0.10 AF/year for their off-season employee/guest amenities. The Applicant's total project-wide commercial volume demand is 20.18 AF/year. Existing Groundwater Certificate Nos. 76LJ 56285-00, 76LJ 30068979, and 76LJ 30102722 associated with wells

PWS 2, PWS 3, and PWS 4, respectively, provide up to 2.9 AF/year⁶, 1.85 AF/year, and 1.94 AF/year, respectively, for commercial and domestic uses. When those existing supplemental volumes are considered, the commercial volume demand for this permit application is 13.49 AF/year (20.18 AF - 2.90 AF - 1.85 AF - 1.94 AF = 13.49 AF).

- 47. The Applicant requests 14.36 AF/year for sprinkler irrigation of 8.0-acres of lawn and garden area and 4.74 AF/year for additional drip-irrigation of numerous small areas scattered around the property containing various shrubs, trees, flowers, and hanging plant baskets, for a total lawn and garden irrigation volume request of 19.10 AF/year. The demand for lawn and garden sprinkler irrigation was determined according to the standard practice detailed in the 2010 technical memorandum "DNRC Consumptive Use Methodology Turf Grass." Using the NRCS IWR software, West Glacier weather station climate data, and assuming sprinkler irrigation efficiency of 70 percent, the Applicant identified a gross irrigation requirement in a dry year of 21.54 inches per acre (1.80 AF/acre) per year for the West Glacier area (15.08 inches/acre net irrigation requirement ÷ 0.7 efficiency factor = 21.54 inches/acre gross irrigation requirement ÷ 12.0 inches/foot = 1.80 AF). The requested volume of 14.36 AF/year to irrigate 8.0 acres was determined using the IWR gross irrigation requirement value (8.0 acres x 1.80 AF/acre = 14.36 AF/year). The requested volume for the additional drip-irrigated areas was determined based on the number of drip emitters, their dispersion rate, and a 60-minute daily run-time. The Applicant will use approximately 7,000 emitters to disperse 4.74 AF/year.
- 48. Sprinkler irrigation peak flow demand was calculated to be 59.45 GPM, which leaves 78.35 GPM to satisfy other irrigation and commercial uses simultaneously. The requested flow rate of 137.8 GPM was selected to satisfy a peak instantaneous flow of the system as required by Montana DEQ PWS regulations. The requested flow rate of 137.8 GPM can divert 222.27 AF over the entire 365-day period of diversion (137.8 GPM x 1,440 minutes/day x 365 days = 72,427,680 gallons \div 325,851 gallons/AF = 222.27 AF). Therefore, the requested flow rate is adequate to satisfy the requested volume of 32.59 AF/year.
- 49. The Department finds that the proposed water use is beneficial, and that the requested flow rate of 137.8 GPM and annual volume of 32.59 AF are reasonably justified.

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⁶ Groundwater Certificate No. 76LJ 56285-00 is for 3.9 AF/year, however, 1.0 AF of that volume is for lawn and garden irrigation associated with the domestic uses. Therefore, only 2.9 AF/year was applied toward the commercial/domestic use calculations.

POSSESSORY INTEREST

FINDINGS OF FACT

50. The Applicant signed the application form affirming they have possessory interest in the property where the water is to be put to beneficial use.

CONCLUSIONS OF LAW

PHYSICAL AVAILABILITY

- 51. 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."
- 52. 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).
- 53. 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).
- 54. The Applicant has proven that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate. § 85-2-311(1)(a)(i), MCA. (FOF 12-20)

LEGAL AVAILABILITY

- 55. 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).

56. 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. 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 prestream 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 Page 26 of 34

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).

- 58. 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.
- 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 Page 27 of 34

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.

60. 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. § 85-2-311(1)(a)(ii), MCA. (FOF 21-30)

ADVER<u>SE EFFECT</u>

- 61. 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.
- 62. 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).
- 63. 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).
- 64. 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).
- 65. 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.
- 66. 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).
- 67. 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. § 85-2-311(1)(b), MCA. (FOF 31-34)

ADEQUATE DIVERSION

- 68. 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.
- 69. 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.
- 70. 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. § 85-2-311(1)(c), MCA. (FOF 35-44)

BENEFICIAL USE

- 71. Under § 85-2-311(1)(d), MCA, an Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use.
- 72. 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* Page 29 of 34

Preliminary Determination to Grant Application for Beneficial Water Use Permit No. 76LJ 30160349 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).

- 73. 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).
- 74. It is the Applicant's burden to produce the required evidence. <u>Bostwick Properties, Inc. v. DNRC</u>, 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.
- 75. Applicant proposes to use water for commercial and lawn and garden irrigation purposes, which are recognized as beneficial uses. § 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence that commercial and lawn and garden irrigation are beneficial uses, and that 32.59 AF of volume diverted at 137.8 GPM is the amount needed to sustain the beneficial use. § 85-2-311(1)(d), MCA. (FOF 45-49)

POSSESSORY INTEREST

76. 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.

77. 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.
- 78. 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. § 85-2-311(1)(e), MCA. (FOF 50)

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 30160349 should be GRANTED.

The Department determines the Applicant may divert groundwater at 137.8 GPM up to 32.59 AF annually by means of three production wells from January 1 – December 31 for commercial use and from April 25 – October 5 for lawn and garden irrigation. The Applicant may use volumes of up to 13.49 AF/year to supply the commercial uses and up to 19.10 AF/year to irrigate 8.0 acres of lawn and garden areas associated with the West Glacier KOA campground's PWS system.

The three points of diversion (wells) are referred to as PWS 2 (GWIC ID: 87707), PWS 3 (GWIC ID: 224823), and PWS 4 (GWIC ID: 276379) and their individual maximum flow rates are 35.0 GPM, 62.1 GPM, and 48.4 GPM, respectively. When operating simultaneously, the three wells will be controlled to not exceed the requested diverted flow rate of 137.8 GPM.

The three points of diversion are in the SENESE (PWS 2) and SWNESE (PWS 3 and PWS 4) of Section 11, Township 31N, Range 19W, Flathead County, Montana. The places of use are in the NESE of Section 11 and the NWSW of Section 12, Township 31N, Range 19W, Flathead County, Montana.

NOTICE

The Department will provide public notice of this application and the Department's Preliminary Determination to Grant pursuant to § 85-2-307, MCA. The Department will set a deadline for objections to this application pursuant to §§ 85-2-307, and -308, MCA. If this application receives a valid objection, it will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If this application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this application as herein approved. If this application receives a valid objection(s) and the valid objection(s) are conditionally withdrawn, the Department will consider the proposed condition(s) and grant the application with such conditions as the Department decides necessary to satisfy the applicable criteria. §§ 85-2-310, -312, MCA.

DATED this 1st Day of August 2025.

James Ferch, Regional Manager

Kalispell Regional Water Resources Office

Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the <u>PRELIMINARY DETERMINATION TO GRANT</u> was served upon all parties listed below on this 1st Day of August 2025, by first class United States mail.

WEST GLACIER ASSETS LLC

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