

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

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<b>APPLICATION TO CHANGE WATER RIGHT NO. 76M 30150596 BY MLH MT LLC</b>	}	<b>PRELIMINARY DETERMINATION TO GRANT CHANGE</b>
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On January 28, 2021, MLH MT LLC (Applicant) submitted Application to Change Water Right No. 76M 30150596 to change Statement of Claim Nos. 76M 118475-00, 76M 118476-00, 76M 118477-00, 76M 118478-00, 76M 118479-00, 76M 118480-00, 76M 118484-00, 76M 118485-00, 76M 118486-00, 76M 118489-00, 76M 118490-00, 76M 118491-00, 76M 118492-00, 76M 118493-00, 76M 118494-00, 76M 118495-00, 76M 118496-00, 76M 118497-00 and Provisional Permit No. 76M 2789-00 to the Missoula Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the Application on its website on February 8, 2021. The Department sent the Applicant a deficiency letter under § 85-2-302, Montana Code Annotated (MCA), dated July 27, 2021. The Applicant responded with information dated October 8, 2021. The Application was determined to be correct and complete as of July 26, 2022. The Applicant amended the application on October 26, 2022, to remove Statement of Claim Nos. 76M 118476-00, 76M 118479-00, 76M 118486-00, 76M 118489-00, 76M 118493-00 and 76M 118496-00 from the Application. An Environmental Assessment for this Application was completed November 30, 2022.

**INFORMATION**

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

**Application as filed:**

- Non-Irrigation Application to Change Water Right, Form 606-NIR
- Attachments
  - Appendix A – 1991 Hydrogeology Report & 1991 Environmental Impact Statement
  - Appendix B – Historical Use & Proposed Use Maps
  - Appendix C – Water Measurement & Wastewater Discharge Records
  - Appendix D – Water Marketing Purpose Addendum

- Appendix E – Change in Purpose Addendum
- Appendix F – Reasonable Use Addendum
- Maps:
  - Seven aerial imagery maps showing the historic place of use and point of diversion of each well
  - Aerial map showing the proposed place of use

#### Information Received after Application Filed

- Response to deficiency letter dated and received by the Department on October 8, 2021
- Amendment to Application dated and received by the Department on October 26, 2022
- Email from Julie Merritt, WGM Group, dated November 17, 2002, clarifying rotational use of Mill wells.
- Form 639 Waiver of 12 Days Statutory Timeline for Preliminary Determination Decision received November 11, 2022

#### Information within the Department's Possession/Knowledge

- 1960 Missoula County Water Resources Survey maps, field notes, and aerial photos
- Montana Cadastral parcel and property information
- Clark Fork River surface water rights information
- Final Order issued for Application for Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Co. (2006) (TRLC)
- 2011 DNRC Memorandum – HB 24 Implementation
- Statement of Claim and Provisional Permit files for all 13 water rights being changed
- File for Change Authorization No. 76M 11849500 issued July 27, 1992
- Department Deficiency Letter dated July 27, 2021
- Department Technical Report dated July 25, 2022
- Email from DNRC to Applicant dated December 4, 2020, allowing point of diversion change for purpose of reducing the number of applications required.
- Email from Department Hydrologist, Atilla Folnagy, dated October 15, 2021, identifying upstream location of historical depletions to the Clark Fork River.
- Application for Extension of Time for Provisional Permit 76M 2789-00, received by the Department on October 5, 1976, identifying proposed Mill expansions requiring additional flow rate and volume for planned increases in production.

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

## **WATER RIGHTS TO BE CHANGED**

### **FINDINGS OF FACT**

1. This Change Application consists of 13 water rights, including 12 Statements of Claim (claims) and one Beneficial Water Use Permit (permit) that were historically used at the former Smurfit-Stone Container Mill (Mill) in Frenchtown, Montana. The water rights are for the nine wells located in what is known as the Fairbanks Well Field, which is located in the SW of Section 25, T14N, R21W, Missoula County.
2. The thirteen water rights proposed for change have a year-round period of diversion and period of use. The claims were filed on multiple uses of water diverted from the wells in the Mill's Fairbanks Well Field, including the purposes of industrial, fire protection, and power generation for each well. Each well has three claims associated with it, one per purpose. The claims for fire protection are not included in this change as they were removed from this application by the Applicant via the amendment received on October 26, 2022.
3. Within the Fairbanks Well Field, Well Nos. 11,12,14,17, and 20 were drilled and put to beneficial use between 1966 and 1973. County Groundwater Forms for these wells were submitted to the Missoula County Clerk and Recorder's Office and became the basis for the claims that were filed during the Statewide Adjudication process.
  - Claims 76M 118484-00 and 76M 118485-00 were filed for well no. 11
  - Claims 76M 118492-00 and 76M 118494-00 were filed for well no. 12
  - Claims 76M 118478-00 and 76M 118480-00 were filed for well no. 14
  - Claims 76M 118490-00 and 76M 118491-00 were filed for well no. 17
  - Claims 76M 118475-00 and 76M 118477-00 were filed for well no. 20
  - Claims 76M 118495 and 76M 118497 were filed for well no. 21.
4. On July 27, 1992, the Department issued Change Authorization 76M 11849500 which allowed the Mill to change the point of diversion from Well No. 6, located in a separate well field known as the Mill Well Field, to Well No. 21 in the Fairbanks Well Field. The claims subject to

this change in point of diversion were 76M 118495-00, 76M 118496-00 and 76M 118497-00. This Change Authorization was certified by the Department on April 23, 1998.

5. In 1974 the Fairbanks Well Field was expanded, and the Mill filed Beneficial Water Use Permit Application No. 76M 2789-00 on July 2, 1974. The Department issued the Provisional Permit on June 14, 1976. The purpose requested in the permit application was commercial use for Well Nos. 13, 15 and 16. The uses of these three wells are the same as all the other wells in the Fairbanks Well Field.

6. Hoerner Waldorf Corporation merged with Champion International Corporation in 1977. Between 1977 and 1980, three smaller support wells were drilled. In combination, these wells supplied 170 GPM up to 20.47 AF of water for site-specific uses such as use of the log chipper, the waste fuel boiler, the 'car' wash, and use in the Hoffman construction office. The water rights for these production support wells are not included in this change application because they were not supplemental to the main production wells in the Fairbanks and Mill Well Fields.

7. The Mill ceased operation on January 10, 2010 and has since been partially dismantled.

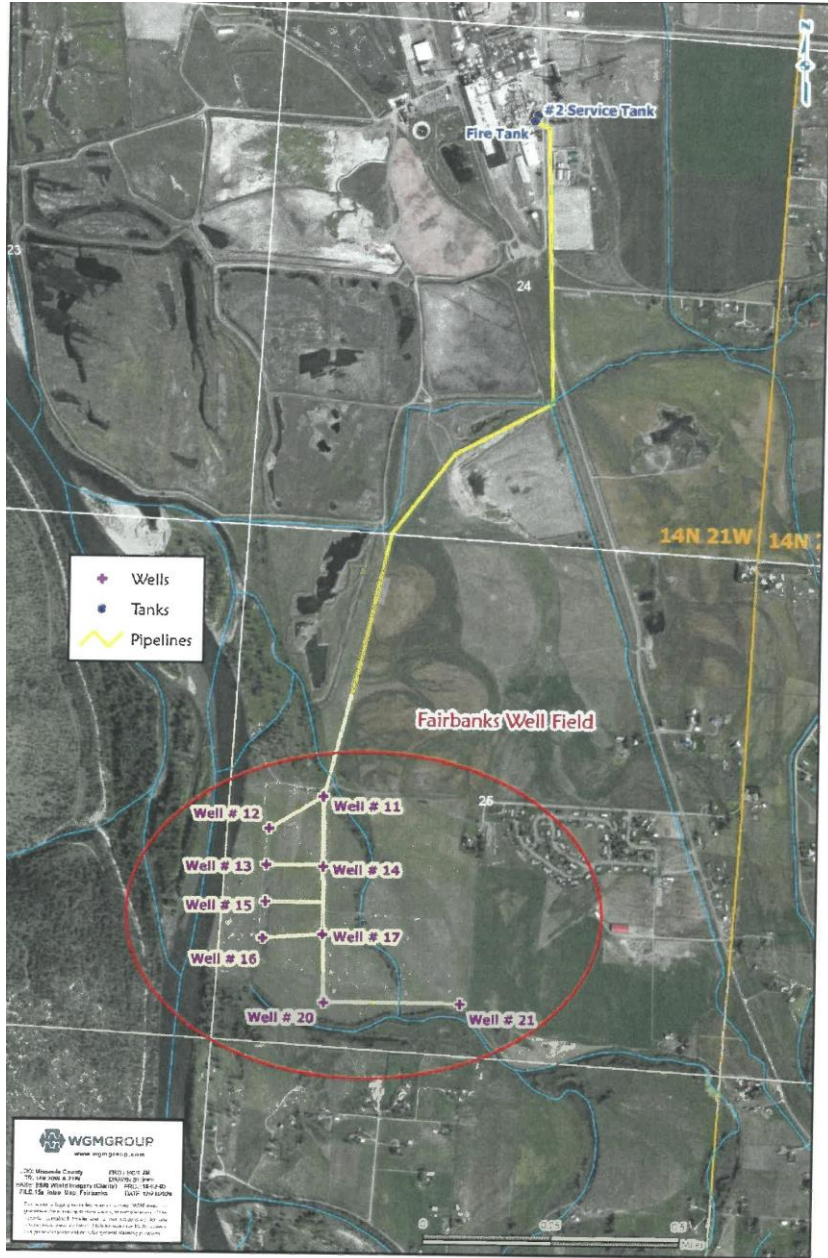
8. Table No. 1 lists and Map 1 shows the elements of the water rights to be changed.

**Table No. 1: WATER RIGHTS PROPOSED FOR CHANGE**

(Note: PG = Power Generation, IN = Industrial, CM = Commercial)

<b>WR Number</b>	<b>Well No.</b>	<b>Purpose</b>	<b>Flow Rate</b>	<b>Volume AF</b>	<b>Period of Use</b>	<b>Priority date</b>	<b>Point of Diversion Section 25, T14N, R21W</b>
76M - 118484	11	PG	2,000 GPM	3234.3	01/01-12/31	4/21/1966	NE NW SW
76M - 118485	11	IN	2,000 GPM	3244.4	01/01-12/31	4/21/1966	
76M - 118492	12	IN	2,000 GPM	3244.4	01/01-12/31	6/12/1973	SW NW SW
76M - 118494	12	PG	2,000 GPM	3234.3	01/01-12/31	6/12/1973	
76M - 118478	14	IN	2,000 GPM	3244.4	01/01-12/31	4/21/1966	SE NW SW
76M - 118480	14	PG	2,000 GPM	3234.3	01/01-12/31	4/21/1966	
76M - 118490	17	PG	2,000 GPM	3234.3	01/01-12/31	4/21/1966	NE SW SW
76M - 118491	17	IN	2,000 GPM	3244.4	01/01-12/31	4/21/1966	
76M - 118475	20	PG	2,000 GPM	3234.3	01/01-12/31	4/21/1966	SE SW SW
76M - 118477	20	IN	2,000 GPM	3244.4	01/01-12/31	4/21/1966	
76M - 118495	21	IN	2,000 GPM	3244.4	01/01-12/31	8/12/1961	SE SE SW
76M - 118497	21	PG	2,000 GPM	3234.3	01/01-12/31	8/12/1961	
76M - 2789	13,15,16	CM	6,000 GPM	9672	01/01- 12/31	7/2/1974	E2 E2 SW

Map No. 1 – Fairbanks Well Field Location



## **CHANGE PROPOSAL**

### **FINDINGS OF FACT**

9. The Applicant proposes to change the point of diversion of each water right such that all the wells in the Fairbanks Well Field are included as points of diversion on all of the water rights that are associated with that well field. The point of diversion change was requested because the retirement of the nine wells and historical beneficial use will provide marketing for mitigation water supplementally and reduce the number of change applications required to be filed by the Applicant per Administrative Rules of Montana (ARM) 36.12.1901(7). The Department agreed with the Applicant that adding each well to each water right being changed, to reduce the number of applications required, was acceptable in an email to the Applicant dated December 4, 2020.

10. The Applicant proposes to change the purpose listed on each of the subject water rights from industrial, power generation, or commercial uses to marketing for mitigation or aquifer recharge. The Applicant is requesting the proposed change in purpose to be able to market mitigation water in the lower Clark Fork River (Basins 76M and 76N) to offset depletions to surface water caused by future unknown water uses, pursuant to § 85-2-420, MCA. The subject water rights will no longer be used for industrial, power generation, or commercial purposes in the former Mill after this change.

11. Although the requested change in purpose is to marketing for mitigation or aquifer recharge, the Applicant's proposed plan does not involve aquifer recharge. Aquifer recharge as defined in § 85-2-420, MCA, "means either the controlled subsurface addition of water directly to the aquifer or controlled application of water to the ground surface for the purpose of replenishing the aquifer to offset adverse effects resulting from net depletion of surface water". In this instance, the source of water being changed to marketing for mitigation is groundwater; however, the cessation of groundwater pumping by the Applicant does not constitute controlled subsurface addition of water directly to the aquifer. The groundwater being changed to mitigation is already part of the groundwater aquifer. Cessation of groundwater pumping allows for water that was previously diverted to reach the Clark Fork River. This provides mitigation water but does not artificially increase the amount of groundwater in the aquifer through controlled means such as an injection well or application of water to the ground surface. The Applicant's proposed mitigation plan acts similarly to a surface water user reducing diversions at a headgate for the purpose of providing mitigation water to a stream. As such, the Applicant's proposed plan provides mitigation water to the Clark Fork River but does not contemplate aquifer recharge. If authorized, the

purpose listed on the water rights will be marketing for mitigation or aquifer recharge, however the plan is to provide mitigation water only and will be referred to as marketing for mitigation throughout this document.

12. The Applicant proposes to change the place of use for each water right from the historical Mill site to a reach of the Clark Fork River beginning at the upstream extent of the area where historical depletions occurred in the Clark Fork River from well pumping in the SE of Section 36, T14N, R21W, and ending downstream on the Clark Fork River at the Noxon Rapids Dam located in the S2S2 of Section 33, T26N, R32W, Sanders County. The Applicant proposes to reallocate up to 20,305.1 acre-feet (AF) of diverted volume and 4,671.0 AF of consumed volume to marketing for mitigation throughout the period of use, January 1 to December 31, annually. Marketing for mitigation water will be delivered with all thirteen water rights being changed through a total combined flow rate reduction of 16,000 gallons per minute (GPM) (35.7 cubic feet per second (CFS)). The Mill will continue to operate each well only as needed for well maintenance and continued fire protection at the Mill. This continued operation will be non-consumptive and will cease once the marketing for mitigation change is fully perfected.

13. Pursuant to § 85-2-420 (4)(b), MCA, the Applicant will not be required to measure water left instream for marketing for mitigation. Due to the nature of the mitigation plan involving the retirement of groundwater wells, there is no feasible location to measure water left instream for marketing for mitigation. The amount of mitigation water made available through this proposed change in water use is calculable and provided to the Clark Fork River through the retirement of the use of the groundwater wells.

14. The Applicant also submitted Application to Change a Water Right No. 76M 30151160 for the four water rights associated with their Mill Well Field to change the point of diversion, place of use, and purpose to marketing for mitigation in conjunction with the subject application.

15. This Change Authorization will be subject to the following conditions to ensure compliance pursuant to § 85-2-420, MCA.

PURSUANT TO § 85-2-420, MCA, THE APPROPRIATOR SHALL HAVE A 20-YEAR PERIOD FOR COMPLETION OF THIS CHANGE AUTHORIZATION. IF THE FULL AMOUNT OF WATER AUTHORIZED FOR CHANGE TO MARKETING FOR MITIGATION IS NOT SOLD OR LEASED FOR THESE PURPOSES PRIOR TO THE 20-YEAR COMPLETION DATE, THE WATER RIGHT RETAINS THE BENEFICIAL USE IN PROPORTIONATE AMOUNTS NOT PERFECTED FOR MARKETING FOR MITIGATION AND AS AUTHORIZED PRIOR TO THIS CHANGE AUTHORIZATION. THE APPROPRIATOR SHALL NOTIFY THE DEPARTMENT WITHIN 30 DAYS EACH TIME A PORTION OF THE CHANGE IS COMPLETED (SOLD OR LEASED) ON A FORM PROVIDED BY THE DEPARTMENT. THE FORM SHALL BE ACCOMPANIED BY A COPY OF THE WATER LEASE AGREEMENT OR DEED EVIDENCING THE SALE OF A PORTION



OF THE WATER RIGHT FOR MITIGATION/AQUIFER RECHARGE PURPOSE. THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT EVERY 5 YEARS FROM THE DATE OF ISSUANCE OF THE AUTHORIZATION OF THE ACTIVITIES TO DATE TOWARD DILIGENCE IN MARKETING THE WATER. THE REPORTS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THIS CHANGE.

IF THE CHANGE IS NOT FULLY PERFECTED BY THE COMPLETION DEADLINE AND NO EXTENSION IS REQUESTED THE APPROPRIATOR SHALL FILE A PROJECT COMPLETION FORM FOR THE AMOUNT COMPLETED. THE REMAINING WATER NOT CHANGED REVERTS TO ITS HISTORICAL USE ON A PRO RATA BASIS AS AUTHORIZED BY THE DEPARTMENT AND CAN BE USED AS SUCH IF PRACTICAL.

### **CHANGE CRITERIA**

16. Because this change proposes consumption of greater than 4,000 acre-feet of water per year and 5.5 CFS, the Department is authorized to approve a change if the applicant meets its burden to prove the applicable § 85-2-402, MCA, criteria by clear and convincing evidence. Clear and convincing evidence is defined as “a requirement that a preponderance of the evidence be definite, clear, and convincing, or that a particular issue must be clearly established by a preponderance of the evidence or by a clear preponderance of proof.” Harding v. Savoy, 2004 MT 280, ¶ 51, 323 Mont. 261, 100 P.3d 976 (citations omitted) 85-2-402(2), (4) and (5), MCA. Under this Preliminary Determination, the relevant change criteria in § 85-2-402(2), MCA, are:

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

(a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3. For purposes of this section, adverse effects analysis is specific to the proposed change in appropriation right and a determination that water is not legally available pursuant to **85-2-311** does not necessarily mean that an adverse effect will occur.

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

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

(d) The applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written

special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water. This subsection (2)(d) does not apply to: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.

17. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. *Matter of Royston*, 249 Mont. 425, 429, 816 P.2d 1054, 1057 (1991); *Hohenlohe v. DNRC*, 2010 MT 203, ¶¶ 29-31, 357 Mont. 438, 240 P.3d 628 (an applicant's burden to prove change criteria by a preponderance of evidence is "more probably than not."); *Town of Manhattan v. DNRC*, 2012 MT 81, ¶8, 364 Mont. 450, 276 P.3d 920

18. This application is subject to additional criteria in § 85-2-420 as it involves an appropriation of water for marketing for mitigation or aquifer recharge purposes. This change to marketing for mitigation is subject to a unique two-step process. The first step involves DNRC authorization of an amount of water available to market. The second step is DNRC authorization of the actual, location-specific mitigation use of the previously authorized amount. *Centennial Livestock Inc. v. DNRC*, Order on Petition for Judicial Review, 6, 13 (Mont. Water Ct. March 12, 2021); 85-2-310(10) and 420, MCA. This Preliminary Determination only addresses the first step – the amount of water available to market. Whether water marketed by the applicant provides effective mitigation must be determined in a later permit proceeding rather than this change application. *Centennial Livestock Inc.*, p. 13.

19. This application is subject to additional criteria in § 85-2-402(4) as it involves an appropriation of more than 4,000 AF and 5.5 CFS of water. See COL 96

## **HISTORIC USE AND ADVERSE EFFECT**

### **FINDINGS OF FACT - Historic Use**

20. The water rights proposed to be changed under this application include only the main Fairbanks Well Field water supply production water rights for the former Smurfit-Stone Container Mill (Mill). There are two well fields (the Fairbanks Well Field and Mill Well Field) with multiple wells that contain the points of diversion for the production water rights. This application concerns

the Fairbanks Well Field which includes nine wells. There are a total of nineteen water rights associated with these nine wells but only thirteen are included in this change application. The remaining six water rights are for fire protection and are not included in this application because they did not provide any historical consumptive use that could be changed to provide marketing for mitigation water.

21. The original Mill owner, Hoerner Waldorf Corporation, acquired property in 1966 known as the Fairbanks Ranch, located in the SW of Section 25, T14N, R21W, south of the Mill. Between 1966 and 1973, Well Nos. 11, 12, 14, 17 and 20 were installed on this property. This area is referred to as the Fairbanks Well Field. County Groundwater Forms were filed in Missoula County for all these wells, which were later replaced with Statements of Claim during the original claim filing period. The wells were drilled to depths between 150 and 185 feet. The pumps installed in the wells are 100hp vertical turbine pumps or similar that are capable of producing up to 2,000 GPM.

22. In 1974, the Fairbanks Well Field was expanded, and the Mill owner filed for a Provisional Permit to divert water from three new wells (Nos. 13, 15 and 16). The Department issued Provisional Permit No. 76M 2789-00 on June 14, 1976, after objections were received and a hearing was held. The purpose of Permit 76M 2789-00 is Commercial use. This differs from the purposes listed on the claims for the pre-July 1, 1973, wells because the single purpose of commercial allowed for the multiple water use purposes of industrial, fire protection, and power generation to be used at the Mill under one purpose listed on the water right. The uses of Well Nos. 13, 15, and 16 with Permit 76M 2789-00 are exactly the same as all the other wells in the Fairbanks Well Field because water from all nine wells is conveyed via one central pipeline from the well field to the Mill, and water diverted from the pre- and post-1973 wells are comingled in this pipeline. After the expansion of the Fairbanks Well Field in 1976 the uses of water for the various different processes within the former pulp mill did not change, however the output of the Mill increased with the additional flow rate and volume of water diverted from the Fairbanks Well Field. The Application for Extension of Time submitted by the Mill on October 15, 1976, stated the additional three wells were required for two phases of planned increases in production, with planned product output increasing from 1,150 tons per day (TPD) to 1,850 TPD upon perfection of the use of the three new wells permitted under 76M 2789-00. The historical use for Permit 76M 2789-00 is included in the calculations conducted for the former pulp mill water use below and is further broken down by the Department to determine the historical extent of the power generation

and industrial purposes. The historical use of Permit No. 76M 2789-00 includes 0.73 AF of water that was diverted for non-consumptive fire protection purposes. Since the fire protection purpose is non-consumptive the retirement of the diverted volume for fire protection from Permit No. 76M 2789-00 cannot provide mitigation water.

23. In 1991 the Mill received Authorization No. 76M 11849500 from the Department to change the point of diversion for Claims 76M 118495-00, 76M 118496-00, and 76M 118497-00. The change authorized the point of diversion for this set of claims to be moved from Well No. 6 in the Mill Well Field to a new well (No. 21) in the Fairbanks Well Field. The change in point of diversion was issued by the Department on July 27, 1992, and a Project Completion Notice was received by the Department on December 5, 1997. This authorization was certified by the Department on April 23, 1998. The Department did not make any historical use findings during the processing of Application to Change a Water Right 76M 11849500 but did authorize the replacement of Well No. 6 in the Mill Well Field with Well No. 21 in the Fairbanks Well Field. The public notice for this application described the past use of water as a year-round diversion of 2,000 GPM up to an annual volume 9,713 AF. The authorization granted by the Department was for 2,000 GPM up to 3,226.01 AF per year, which equates to a constant flow rate of 2,000 GPM diverted for 365 days. The Department did not authorize a volume of 9,713 AF because the subject water rights were multiple uses of the same rights and the new well could not produce more than 3,226.01 AF in a year with a flow rate of 2,000 GPM. For purposes of describing historical use for Claims 76M 118495-00, 76M 118496-00 and 76M 118497-00 is the date of Project Completion Notice filing, which is December 5, 1997.

24. In 1992, ownership of the Mill was updated from Stone Brown Papers, Inc. to Stone Container Corporation. The Mill operated continuously and without operational changes to Well Nos. 11, 12, 14, 17 and 20 until production ceased on January 10, 2010. M2Green acquired the Mill and all associated properties in the same year.

25. In 2019, MLH Montana LLC (MLH or Applicant) assumed ownership of portions of the Mill property. Some parcels, mainly surrounding ranch lands that were never directly associated with Mill operations, have been transferred to other owners. MLH now owns the parcels where the main production facilities were located, which is the place of use listed on the claims being changed, and the water rights associated with the Mill.

26. The Applicant submitted information from a 2012 report prepared by Lotic Water Marketing, a water rights consulting firm that created an Industrial Use Water Calculations Report

specifically for the former Smurfit Stone pulp mill in Frenchtown in 2012. The report relies on multiple inputs to provide the water use calculations for the Mill, resulting in outputs for historically diverted flow rates and volume, and consumed volume for the Mill.

27. Multiple in-person interviews and follow up exchanges with former long-time Mill employee, Neal Marxer, who worked in different capacities from 1969 to 2015, were conducted by Lotic Water Marketing to complete the 2012 report. Mr. Marxer served as a process chemical engineer, pulp mill foreman, power and recovery assistant superintendent, production manager, and technical manager. In these positions he was responsible for operating and overseeing the operation of the mill's water system. Mr. Marxer worked with Lotic on the development of the Industrial Use Water Calculation Report, providing inputs and information not contained in the Water Resource Use Logs or Wastewater Treatment System Annual Discharge Data. Mr. Marxer provided an affidavit, dated September 30, 2021, stating his role in the development of the report and that the report represents a true and correct representation of the water use at the former Smurfit-Stone Container Mill. Based on Mr. Marxer's expert familiarity with historical and expanded Mill operations and professional involvement in the development of the Industrial Use Water Calculations Report, the Department considers this report to be substantial and credible in its use by the Applicant to prove the historic extent of the 13 water rights being changed.

28. The source inputs for the report are as follows: 1) Water Resource Use Information Logs dating from 2000 through 2009. These logs are records of the total diverted volume from the Fairbanks Well Field wells. Change Authorization 76M 11849500 required the owner to measure and record water use from the Fairbanks Well Field and submit those records to the Department on an annual basis. The Fairbanks Well Field water production records are found in Appendix C of the application file. 2) Wastewater Treatment System Annual Discharge Data from 2001-2009, found in Appendix C of the application. These data were kept in accordance with the DEQ effluent discharge permit requirements.

29. The Industrial Use Water Calculations Report includes 1) the minimum, maximum and average diversion and effluent values as reported on the Water Resource Use Information Logs for the time period spanning 2000 - 2009, 2) the Wastewater Treatment System Annual Discharge Data from 2001-2009, and 3) Mill operation information from Mr. Marxer. These years were used because they were years for which complete diversion and effluent records were available. In addition, Mr. Marxer confirmed in his affidavit submitted with the application materials that the use

of water during these years is representative of the normal operations of the Mill since completion of Phase 2 expansion. The use of Well Nos. 11, 12, 14, 17 and 20 during these years is representative of the normal operations that occurred before July 1, 1973, because their operation did not change upon completion of Phase 2. Increased Mill output, represented in the water use records from 2000 – 2009, was facilitated with water diverted from the three new wells added by Permit No. 76M 2789-00. According to the Applicant, this expansion did not alter the operation of Well Nos. 11, 12, 14, 17 and 20. The year 2000 was used for the diversion records because it was the maximum value for the time period and included the use of Permit No. 76M 2789-00. The effluent records from the year 2007 were used as an integral part of the Industrial Use Water Calculations Report because it was the maximum recorded discharge for the period of record.

30. Prior to July 1, 1973, there were five wells in operation at the Fairbanks Well Field, with four wells operating at any given time through a rotation required for maintenance. Upon perfection of Permit No. 76M 2789-00 and Change No. 76M 11850700, the standard operating procedure was to pump eight of the nine wells in the Fairbanks Well Field continuously, allowing for one well to be taken offline for maintenance and repairs while the peak flow rate of 16,000 GPM (35.7 CFS) was maintained. Water diverted from the individual wells in the Fairbanks Well Field was combined and transported through a 30-inch main pipeline to the fire water tank and then on to the #2 service water tank. The fire water tank was kept full at all times. Part of the water from the #2 service tank was diverted to be used in the non-contact cooling system and part of it was combined with the water from the #1 service tank to supply water for the manufacturing processes. Effluent from the Mill operations was treated in different ways. The waste stream from the waste fuel boiler, the recaust sewer and the sludge plant were treated in the sludge ponds (Ponds 3, 4, 5 and 17). The main waste stream from the Mill went to the aeration basins (ASBI-3) for primary treatment before being discharged to the storage ponds (Ponds 1, IA, 2, 7, 9- 13, 13A, 16 and 18). The Historical Use maps in Appendix B of the file depict the locations of the wastewater treatment ponds. Water historically diverted but not consumed during the manufacturing of paper products in the mill and related processes including power generation, non-contact cooling and effluent treatment including evaporation, was discharged directly to the Clark Fork River. Discharge to the river was constant with the plant operating 365 days per year.

31. The water entering the plant at the beginning of the paper-making process is a combination of water from diverted from both the nine Fairbanks Well Field wells and two Mill Well Fields wells, which per reported outputs totals 25,014.4 AF/yr. The Applicant calculated the

Fairbanks portion of the diverted volume after Mill expansion related to Permit No. 76M 2789-00 to be approximately 81.2% of the total historical diverted volume from both well fields, equaling 20,311.7 AF/yr. Although this percentage may have been different prior to addition of four wells in the Fairbanks Well Field, the pre-July 1, 1973, wells in the Fairbanks Well Field were historically used to their full capacity. This total historical diverted volume number includes fire protection water use that is not included in this application. The Department finds the diverted volume for the water rights subject to this change application equals 20,306.4 AF. The total historical diverted volume figure includes water diverted from the well fields for both process water used for both power generation and pulp paper manufacturing processes, and non-contact cooling water required for manufacturing but not incorporated into the final product.

### Power Generation Water Rights

32. Claims 76M 118475-00, 76M 118480-00, 76M 118484-00, 76M 118490-00, 76M 118494-00, and 76M 118497-00 were filed for the purpose of power generation at the former pulp mill. Water diverted from the Fairbanks Well Field was used in a boiler to generate steam power to run the Mill. Power generation is one of the three main consumptive uses of water historically diverted from the well field.

33. The Applicant used the following method to calculate consumptive use volumes for each water right with the purpose of power generation. Neal Marxer stated that the consumptive use from the boiler that was used to generate power (before and after July 1, 1973) was approximately 45% of the diverted volume for this purpose. Based on this and the information given for the consumptive use in the Boiler Feed Water variable from the Industrial Use Water Calculations Report, it is understood that a volume of 1,066.2 AF of water was consumed each year after full operation expansion generating power using the Mill's boiler. When considering a 45% rate of consumption, the total volume of water diverted for power generation purposes after operation expansion is 2,369.4 AF ( $1,066.2 \text{ AF} / 0.45 = 2,369.2 \text{ AF}$ ). This figure included water diverted from both well fields ( $1,066.23 \text{ AF} / 0.45 = 2,369.41 \text{ AF}$ ).

34. To determine the portion of the total volume diverted for power generation (2,369.4 AF) after full operation expansion that originated in the Fairbanks Well Field, the Department employed the weighting system described in Table 8 of the Applicant's response to the Department's Deficiency Letter, received by the Department on October 8, 2021. Based on this information the Fairbanks Well Field was estimated to contribute 79.34% of the overall Process Water, which is based on the total amount of water diverted from both well fields. The Fairbanks

Well Field supplied 18,075.7 AF of the total production of 22,782.2 AF (18,075.7 AF / 22,782.2 AF x 100 = 79.34%). This percentage was applied to the power generation diverted volume to calculate the portion of power generation water supplied by the Fairbanks Well Field (2,369.4 AF x 79.34% = 1,879.9 AF). This volume is then divided equally among the nine wells resulting in a 208.8 AF volume diverted per well for the purpose of power generation. It is reasonable to divide the volume equally among the nine wells because the pumps and motors operating these wells required diligent maintenance to maintain the pumping levels required to keep the Mill operating at full capacity. Any unexpected reduction in the amount of water available would reduce plant production. On average, each of the nine wells would operate the same number of hours each year, estimated to be 7,787 hours per well per year, or approximately 21.3 hours per day. The same methodology was used to calculate the historical consumed volume from the Fairbanks Well Field associated with the power generation purpose (1,066.2 AF x 79.34% = 846 AF).

35. The historically diverted and consumed volumes associated with the power generation purpose were divided equally among the nine wells (1,879.9 AF / 9 = 208.8 AF diverted; 846 AF / 9 = 94 AF consumed). Table 2 below summarizes the diverted and consumed volumes associated with power generation over the three relevant time periods and attributes a portion of this purpose to Permit 76M 2789-00. The three different time periods relate to the use of five wells prior to 1973, eight wells between 1974 and 1992 with the addition of Permit No. 76M 2789-00, and nine wells after 1992 with Change Authorization 76M 118507800. The only difference among the three time periods is the number of wells operating. There are differences between the calculations above and the totals in the table below due to rounding discrepancies.

**Table 2 – Power Generation Claims and Commercial Permit Diverted and Consumed Volumes**

Water Right	Well Name	Purpose	Flow (GPM)	Pre-1973 PG Diverted Vol (AF)	1974-1992 PG Diverted Vol (AF)	Post-1992 PG Diverted Vol (AF)	Pre-1973 PG Consumed Vol (AF)	1974-1992 PG Consumed Vol (AF)	Post-1992 PG Consumed Vol (AF)
76M 118484	11	PG	2,000.00	208.8	208.8	208.8	93.9	93.9	93.9
76M 118494	12	PG	2,000.00	208.8	208.8	208.8	93.9	93.9	93.9
76M 2789	13, 15, 16	CM	6,000.00	NA	626.6	626.6	NA	281.9	281.9
76M 118480	14	PG	2,000.00	208.8	208.8	208.8	93.9	93.9	93.9
76M 118490	17	PG	2,000.00	208.8	208.8	208.8	93.9	93.9	93.9
76M 118475	20	PG	2,000.00	208.8	208.8	208.8	93.9	93.9	93.9
76M 118497	21	PG	2,000.00	NA	NA	208.8	NA	NA	93.9
<b>Total Vol (AF)*</b>				<b>1,044</b>	<b>1,670.6</b>	<b>1,879.4</b>	<b>469.5</b>	<b>751.4</b>	<b>845.3</b>

\* Volume figures rounded to 10<sup>th</sup> per ARM 36.12.1901(9)



## Industrial Use Water Rights

36. Claims 76M 118477-00, 76M 118478-00, 76M 118485-00, 76M 118491-00, 76M 118492-00, and 76M 118495-00 were filed for the purpose of industrial use in the former pulp mill. There are two major consumptive processes associated with the industrial purpose at the former pulp mill. The first process is to wash the incoming wood product and “cooking” wood chips in water under pressure with caustic chemicals, referred to as re-causticizing, which creates pulp. This washed pulp is then bleached to become a paper product. As part of the bleaching process water must be evaporated from the pulp. The second consumptive process is the treating of black liquor. Black liquor is the by-product left over from washing pulp. Black liquor is concentrated in evaporators and then burned in a recovery boiler. The product left over after this process is then recycled. Water is also consumed during the treatment of effluent from the Mill with evaporative losses associated with evaporation from sludge ponds and evaporation from secondary effluent treatment ponds incorporating aerators. Based on the calculations in the 2012 Lotic Report, the water diverted from both well fields that is consumed during the industrial use of paper manufacturing in the Mill, not including evaporation during treatment of effluent, equals 3,530.4 AF. The 2012 Lotic Report calculated evaporative losses during treatment of effluent to equal 2,357 AF total for the Mill, including water diverted from both well fields.

37. The Applicant calculated the portion of industrial use consumption attributed to the Fairbanks Well Field using the same method used for power generation. The rate of consumption for the different steps in the industrial process varies. The industrial use is presumed by the Department to be the remaining diverted and consumed volumes once the fire protection and power generation purposes have been calculated. It should be noted that the 100% of the water diverted for non-contact cooling was supplied from the Fairbanks Well Field wells. Water diverted from this well field was conveyed to Service Tank No. 2, from which non-contact cooling water entered a closed loop non-consumptive cooling system. No water diverted from the Mill Well Field was conveyed to Service Tank No. 2 or used for cooling.

38. In addition, 79.34% (the Fairbanks Well Field portion per FOF 34) of the water consumed by evaporation is considered part of the industrial use. The remainder of the evaporative consumed volume of water was diverted from wells in the Mill Well Field with water rights that are not being changed in this application. The industrial use historical diverted volume associated with the wells in the Fairbanks Well Field is calculated as follows: 20,307.9 AF Fairbanks Well

Field diverted volume – 2.1 AF fire protection diverted volume – 1,879.9 AF power generation diverted volume = 18,425.9 AF.

39. The historical industrial use consumed volume associated with the wells in the Fairbanks Well Field is calculated by the Applicant as follows: (3,530.4 AF System consumed volume x 79.34%) – 845.9 AF Power Generation consumptive volume + (2,357 AF System evaporative volume x 79.34%) = 3,825.2 AF. Based on the varied rotational pumping schedule and continuous operation, each well is considered to contribute equally to the totals, so the total diverted and consumed volume for industrial use was divided among the nine wells (FOF 34). The total diverted volume for industrial use from each well was calculated to be 2,047.3 AF (18,425.8 / 9 = 2,047.3 AF) and industrial use consumed volume for each well of 425 AF (3,825.2 / 9 = 425 AF). Table 3 summarizes the Department’s findings for historical industrial diverted and consumed volumes attributed to the 13 water rights being changed.

**Table 3. – Industrial Claims and Commercial Permit Diverted and Consumed Volumes**

Water Right	Well Name	Purpose	Flow (GPM)	Pre-1973 Industrial Diverted Vol (AF)	1974-1992 Industrial Diverted Vol (AF)	Post-1992 Industrial Diverted Vol (AF)	Pre-1973 Industrial Consumed Vol (AF)	1974-1992 Industrial Consumed Vol (AF)	Post-1992 Industrial Consumed Vol (AF)
76M 118485	11	IN	2,000.00	2,047.3	2,047.3	2,047.3	425	425	425
76M 118492	12	IN	2,000.00	2,047.3	2,047.3	2,047.3	425	425	425
76M 2789	13, 15, 16	CM	6,000.00	NA	6,141.9	6,141.9	NA	1,275.1	1,275.1
76M 118478	14	IN	2,000.00	2,047.3	2,047.3	2,047.3	425	425	425
76M 118491	17	IN	2,000.00	2,047.3	2,047.3	2,047.3	425	425	425
76M 118477	20	IN	2,000.00	2,047.3	2,047.3	2,047.3	425	425	425
76M 118495	21	IN	2,000.00			2,047.3			425
<b>Total Vol (AF)*</b>				<b>10,236.5</b>	<b>16,378.4</b>	<b>18,425.7</b>	<b>2,125</b>	<b>3,400.1</b>	<b>3,825.1</b>

\* Volume figures rounded to 10<sup>th</sup> per ARM 36.12.1901(9) resulting in slight differences from above findings of fact

40. The Department finds a total historical diverted volume for all the water rights in this change application to be 20,305.8 AF. The Department finds the amount of historical diverted and consumed volume available to be changed to marketing for mitigation to be 20,305.1 AF and 4,671.0 AF of historic consumed volume. This historical diverted volume available to be changed to marketing for mitigation does not include 0.73 AF of non-consumptive fire protection water provided by Permit No. 76M 2789-00. Each of the nine wells has a historical flow rate of 2,000 GPM but only eight wells were ever used simultaneously (2,000 GPM x 8 = 16,000 GPM) (see FOF 30). Table 4 lists the historical use of each subject water right.

**Table 4. – Historical Use Per Individual Water Right**

Water Right no.	W/R Type	Purpose	Flow Rate	Historic diverted volume (AF)	Historic consumptive volume (AF)
76M 118497 00	STOC	Power Generation	2000 GPM	208.8	93.9
76M 118475 00	STOC	Power Generation	2000 GPM	208.8	93.9
76M 118480 00	STOC	Power Generation	2000 GPM	208.8	93.9
76M 118484 00	STOC	Power Generation	2000 GPM	208.8	93.9
76M 118490 00	STOC	Power Generation	2000 GPM	208.8	93.9
76M 118494 00	STOC	Power Generation	2000 GPM	208.8	93.9
76M 118485 00	STOC	Industrial	2000 GPM	2,047.3	425
76M 118492 00	STOC	Industrial	2000 GPM	2,047.3	425
76M 118478 00	STOC	Industrial	2000 GPM	2,047.3	425
76M 118491 00	STOC	Industrial	2000 GPM	2,047.3	425
76M 118477 00	STOC	Industrial	2000 GPM	2,047.3	425
76M 118495 00	STOC	Industrial	2000 GPM	2,047.3	425
76M 2789 00	PRPM	Commercial	6000 GPM	6,769.2	1,557
			<i>TOTAL</i>	<i>*20,305.8</i>	<i>4,671.0</i>

\* total volume figure includes 0.73 acre-feet of fire protection water for Permit 76M 2789-00 not being changed to marketing for mitigation.

41. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118475-00 of 208.8 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 93.9 AF (FOF Nos. 20 - 35).

42. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118477 of 2,047.3 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 425 AF (FOF Nos. 20 - 31 and 36 - 40).

43. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118478 of 2,047.3 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 425 AF (FOF Nos. 20 - 31 and 36 - 40).

44. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118480 of 208.8 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 93.9 AF (FOF Nos. 20 - 35).

45. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118484 of 208.8 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 93.9 AF (FOF Nos. 20 - 35).
46. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118485 of 2,047.3 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 425 AF (FOF Nos. 20 - 31 and 36 - 40).
47. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118490 of 208.8 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 93.9 AF (FOF Nos. 20 - 35).
48. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118491 of 2,047.3 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 425 AF (FOF Nos. 20 – 31 and 36 - 40).
49. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118492 of 2,047.3 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 425 AF (FOF Nos. 20 - 31 and 36 - 40).
50. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118494 of 208.8 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 93.9 AF (FOF Nos. 20 - 35).
51. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118495 of 2,047.3 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 425 AF (FOF Nos. 20 - 35 and 36 -40).
52. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118497 of 208.8 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 93.9 AF (FOF Nos. 20 - 35).
53. The Department finds that the Applicant has proven by clear and convincing evidence the historical use of Provisional Permit 76M 2789 of 6,769.2 AF diverted volume and 6,000 GPM flow rate with a consumptive use being 1,557 AF (FOF Nos. 20 – 40).

FINDINGS OF FACT – Adverse Effect

54. Applicant seeks to change the point of diversion, purpose and place of use of Claims 76M 118475-00, 76M 118477-00, 76M 118478-00, 76M 118480-00, 76M 118484-00, 76M 118485-00, 76M 118490-00, 76M 118491-00, 76M 118492-00, 76M 118494-00, 76M 118495-00, 76M 118497-00, and Permit 76M 2789-00. Upon authorization of this change, the Applicant will no longer divert 16,000 GPM (35.7 CFS) and 20,305.8 AF from the historic points of diversion. Water will instead be left in the Missoula groundwater aquifer for the purpose of marketing for mitigation. Water left in the Missoula groundwater aquifer will stop depleting surface water in the Clark Fork River. The mitigation plan proposes to provide mitigation water to offset depletions to the Clark Fork River that occur within the reach starting in the SE of Section 36, T14N, R21W, Missoula County, downstream in the Clark Fork River to the Noxon Rapids Dam powerhouse located in the S2S2 of Section 33, T26N, R32W, Sanders County. The Applicant's mitigation plan proposes to provide mitigation water during months from January 1 through December 31 annually. Within the Lower Clark Fork River Basin this authorization may mitigate depletions caused by new uses on tributaries to the Clark Fork River.

55. The Department's findings on historical use reaffirm the Applicant's historical use of water for power generation, industrial, and commercial purposes. The Department found the Applicant's method of calculating historical consumed volume to be substantial and credible. The amount of water available for marketing for mitigation will be limited to the historical diverted and consumed volumes, ensuring no post-change expansion of the subject water rights.

56. Following a change in purpose of water from power generation, industrial and commercial purposes to marketing for mitigation and upon full perfection of the change in water use being authorized, water will cease to be diverted from the Fairbanks Well Field. The nine wells are fitted with electric pumps that allow the Applicant to fully control the diversion of water from the wells located in the Fairbanks Well Field. Ceasing diversion of the wells for industrial and power generation purposes for pulp paper production at the former Mill site ensures that no adverse effects will result from continued use of the wells for the stated historical purposes.

57. The Applicant will submit annual measurement reports of mitigation water provided as a condition to this change authorization along with reporting mitigation water sales within 30 days of completion per § 85-2-420 (4)(c), MCA. Mitigation water available to market cannot exceed the historical diverted and consumed volumes.

58. Ceasing diversion of water from the Fairbanks Well Field will not result in any additional withdrawal or drawdown of the groundwater aquifer, that could result in adverse effect to any neighboring groundwater wells.

59. The entire mitigation flow rate and volume will remain in the Clark Fork River. The discontinued pumping of the Fairbanks Well Field will result in historically diverted but not consumed, and historically consumed water to remain in the Clark Fork River, ensuring no adverse effect in the Clark Fork River. Leaving historically diverted but non-consumed water in the Clark Fork River will ensure that other downstream water users reliant on effluent discharge (return flow) will not be adversely affected. Due to the year-round nature of the historical appropriation, and year-round discharge of non-consumed water, leaving diverted but not consumed water instream for the purpose of marketing for mitigation will not alter the timing, location, or amount of return flows.

60. This authorization will be subject to the following conditions and remarks:

PURSUANT TO § 85-2-420, MCA, THE APPROPRIATOR SHALL HAVE A 20-YEAR PERIOD FOR COMPLETION OF THIS CHANGE AUTHORIZATION. IF THE FULL AMOUNT OF WATER AUTHORIZED FOR CHANGE TO MARKETING FOR MITIGATION IS NOT SOLD OR LEASED FOR THESE PURPOSES PRIOR TO THE 20-YEAR COMPLETION DATE, THE WATER RIGHT RETAINS THE BENEFICIAL USE IN PROPORTIONATE AMOUNTS NOT PERFECTED FOR MARKETING FOR MITIGATION AND AS AUTHORIZED PRIOR TO THIS CHANGE AUTHORIZATION. THE APPROPRIATOR SHALL NOTIFY THE DEPARTMENT WITHIN 30 DAYS EACH TIME A PORTION OF THE CHANGE IS COMPLETED (SOLD OR LEASED) ON A FORM PROVIDED BY THE DEPARTMENT. THE FORM SHALL BE ACCOMPANIED BY A COPY OF THE WATER LEASE AGREEMENT OR DEED EVIDENCING THE SALE OF A PORTION OF THE WATER RIGHT FOR MITIGATION/AQUIFER RECHARGE PURPOSE. THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT EVERY 5 YEARS FROM THE DATE OF ISSUANCE OF THE AUTHORIZATION OF THE ACTIVITIES TO DATE TOWARD DILIGENCE IN MARKETING THE WATER. THE REPORTS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THIS CHANGE.

IF THE CHANGE IS NOT FULLY PERFECTED BY THE COMPLETION DEADLINE AND NO EXTENSION IS REQUESTED THE APPROPRIATOR SHALL FILE A PROJECT COMPLETION FORM FOR THE AMOUNT COMPLETED. THE REMAINING WATER NOT CHANGED REVERTS TO ITS HISTORICAL USE ON A PRO RATA BASIS AS AUTHORIZED BY THE DEPARTMENT AND CAN BE USED AS SUCH IF PRACTICAL.

61. The Department finds the Applicant has proved with clear and convincing evidence that there will be no adverse effect to other water users resulting from this proposed change under the terms and conditions set out in this Preliminary Determination.

## **BENEFICIAL USE**

### **FINDINGS OF FACT**

62. The Applicant proposes to use water historically diverted for power generation, commercial, and industrial uses for marketing for mitigation or aquifer recharge pursuant to § 82-2-420, MCA.

63. The Applicant proposes to cease historical appropriation of 20,305.1 AF of diverted volume and 4,671.0 AF of consumed volume to market water for mitigation. The Department recognizes mitigation as a beneficial use and is aware of the need for marketing for mitigation water for sale or lease in basins where hydropower water rights limit new consumptive uses of water. *Application for Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Co. (2006) (TRLIC)*. The former Smurfit-Stone Container pulp mill operated continuously throughout the historical year-round periods of diversion and use. Monthly marketing for mitigation volumes were calculated by the Department by dividing the total historical diverted and consumed volumes for each right by 12 months. Marketing for mitigation flow rates were calculated by dividing the annual diverted and consumed volumes by 365 days and converting the daily volume figure into a flow rate by multiplying the daily volume by gallons per AF and then dividing that figure by 1,440 minutes per day. Table 5 provides total and monthly marketing for mitigation volumes and flow rate for each of the subject water rights.

**Table 5. Post-change Marketing for Mitigation Volumes Per Water Right**

Water Right no.	WR Type	Historical annual diverted volume (AF)	Historical annual consumptive volume (AF)	Monthly diverted volume for marketing for mitigation (AF)	Monthly consumed volume for marketing for mitigation (AF)	Diverted volume marketing for mitigation flow rate (GPM)	Consumed volume marketing for mitigation flow rate (GPM)
76M 118497 00	STOC	208.8	93.9	17.4	7.8	129.4	58.2
76M 118475 00	STOC	208.8	93.9	17.4	7.8	129.4	58.2
76M 118480 00	STOC	208.8	93.9	17.4	7.8	129.4	58.2
76M 118484 00	STOC	208.8	93.9	17.4	7.8	129.4	58.2
76M 118490 00	STOC	208.8	93.9	17.4	7.8	129.4	58.2
76M 118494 00	STOC	208.8	93.9	17.4	7.8	129.4	58.2
76M 118485 00	STOC	2,047.3	425	170.6	35.4	1,269.2	263.5
76M 118492 00	STOC	2,047.3	425	170.6	35.4	1,269.2	263.5
76M 118478 00	STOC	2,047.3	425	170.6	35.4	1,269.2	263.5
76M 118491 00	STOC	2,047.3	425	170.6	35.4	1,269.2	263.5
76M 118477 00	STOC	2,047.3	425	170.6	35.4	1,269.2	263.5
76M 118495 00	STOC	2,047.3	425	170.6	35.4	1,269.2	263.5
76M 2789 00	PRPM	6,768.5	1,557	564.1	129.8	4,196.2	965.3
	<i>Total</i>	<i>20,305.1</i>	<i>4,671.0</i>	<i>1,692.2</i>	<i>389</i>	<i>12,587.8</i>	<i>2,895.5</i>

64. The Department finds the Applicant’s proposed change will make 12,587.8 GPM up to 20,305.1 AF available to be marketed for mitigation. From these amounts, mitigation water to offset future depletions is limited to what was historically consumed, which equals 2,895.5 GPM up to 4,671 AF. The place of use for marketing for mitigation is in the Clark Fork River in basins 76M and 76N within the proposed place of use for marketing for mitigation from the SE of Section 36, T14N, R21W, Missoula County, downstream in the Clark Fork River to the Noxon Rapids Dam powerhouse located in the S2S2 of Section 33, T26N, R32W, Sanders County. The Department finds that the Applicant’s proposed mitigation plan provides mitigation water throughout this stream reach, which may mitigate adverse effect to those water rights within this stream reach that are junior to the priority dates of the subject water rights. Leaving the entire historically diverted flow rates and volumes of water within this stream reach ensures that the historically consumed flow rate and volumes are available throughout the stream reach to offset future depletions in the Clark Fork River that may result in adverse effect.

65. The Department finds that the Applicant has proved by clear and convincing evidence that the proposed change in water use will provide up to 2,895.5 GPM (6.45 CFS) and 4,671.0 AF of



water for marketing for mitigation purposes to the Clark Fork River, beginning at the mitigation delivery point on the Clark Fork River in the SE of Section 36, T14N, R21W, Missoula County and ending at the Noxon Rapids Dam Powerhouse in the S2S2 of Section 33, T26N, R32W, Sanders County.

### **ADEQUATE DIVERSION**

#### **FINDINGS OF FACT**

66. The Applicant is not required to prove that the proposed means of diversion, construction, and operation of the appropriation are adequate for a change in appropriation right pursuant to § 85-2-420, MCA, for marketing for mitigation. See § 85-2-402(2)(b)(iii), MCA.

### **POSSESSORY INTEREST**

#### **FINDINGS OF FACT**

67. The Applicant is not required to prove it has a possessory interest in the place of use for a change in appropriation right pursuant to § 85-2-420, MCA, for marketing for mitigation. See § 85-2-402(2)(d)(iii), MCA.

### **REASONABLE USE**

#### **FINDINGS OF FACT**

68. The Applicant proposes to change up to 16,000 GPM (35.65 CFS) and 20,305.1 AF from power generation, industrial, and commercial uses to marketing for mitigation (FOF Nos. 9-15). Accordingly, the Applicant is required to prove that the proposed change in excess of a volume of 4,000 AF and flow rate of 5.5 CFS of water is a reasonable use pursuant to § 85-2-402(4)(b), MCA.

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

70. Approval of this marketing change benefits the Applicant by allowing them to actively continue to put these historical water rights to beneficial use and to continue to benefit financially from the use of this water through marketing.

71. The quantity of water available for appropriation in the Clark Fork River through this change will be increased throughout the proposed place of use for marketing beginning in the SE of Section 36, T14N, R21W, and ending downstream on the Clark Fork River at the Noxon Rapids Dam located in the S2S2 of Section 33, T26N, R32W, Sanders County. Water quality will not be adversely affected as a result of this change and significant adverse environmental impacts will not result from increased water availability.

72. The Department finds the Applicant has proven the proposed change in purpose of the 13 water rights included in this application and the appropriation of more than 4,000 AF and 5.5 CFS is a reasonable use of water.

## **CONCLUSIONS OF LAW**

### **HISTORIC USE AND ADVERSE EFFECT**

73. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one may change only that to which he or she has the right based upon beneficial use. A change to an existing water right may not expand the consumptive use of the underlying right or remove the well-established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. *McDonald v. State*, 220 Mont. 519, 530, 722 P.2d 598, 605 (1986)(beneficial use constitutes the basis, measure, and limit of a water right); E. *Quigley v. McIntosh*, 110 Mont. 495, 103 P.2d 1067, 1072-74 (1940)(appropriator may not expand a water right through the guise of a change – expanded use constitutes a new use with a new priority date junior to intervening water uses);

74. Sections 85-2-401(1) and -402(2)(a), MCA, codify the prior appropriation principles that Montana appropriators have a vested right to maintain surface and ground water conditions substantially as they existed at the time of their appropriation; subsequent appropriators may insist that prior appropriators confine their use to what was actually appropriated or necessary for their originally intended purpose of use; and, an appropriator may not change or alter its use in a manner that adversely affects another water user. *Spokane Ranch & Water Co. v. Beatty*, 37 Mont. 342, 96 P. 727, 731 (1908); *Quigley*, 110 Mont. at 505-11, 103 P.2d at 1072-74; *Matter of Royston*, 249 Mont. at 429, 816 P.2d at 1057; *Hohenlohe*, at ¶¶43-45.

75. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the “historic use” of the water right being changed. *Town of Manhattan*, at ¶10 (recognizing that the Department’s obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. *Quigley*, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right).

76. Although the level of analysis may vary, the extent to which a proposed change may alter the amount, location, or timing return flows is critical in order to prove that the proposed change will not adversely affect other appropriators who rely on those return flows as part of the source of supply for their water rights. *Royston*, 249 Mont. at 431, 816 P.2d at 1059-60; *Hohenlohe*, at ¶¶ 45-6 and 55-6.

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

78. The Department concludes that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118475-00 of 208.8 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 93.9 AF (FOF Nos. 20 – 35).

79. The Department concludes that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118477-00 of 2,047.3 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 425 AF (FOF Nos. 20 - 31 and 36 – 40).

80. The Department concludes that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118478-00 of 2,047.3 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 425 AF (FOF Nos. 20 - 31 and 36 - 40).
81. The Department concludes that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118480-00 of 208.8 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 93.9 AF (FOF Nos. 20 - 35).
82. The Department concludes that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118484-00 of 208.8 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 93.9 AF (FOF Nos. 20 - 35).
83. The Department concludes that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118485-00 of 2,047.3 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 425 AF (FOF Nos. 20 - 31 and 36 - 40).
84. The Department concludes that the Applicant has proven by a preponderance of the evidence the historical use of Statement of Claim 76M 118490-00 of 208.8 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 93.9 AF (FOF Nos. 20 - 35).
85. The Department concludes that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118491-00 of 2,047.3 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 425 AF (FOF Nos. 20 - 31 and 36 - 40).
86. The Department concludes that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118492-00 of 2,047.3 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 425 AF (FOF Nos. 20 - 31 and 36 - 40).
87. The Department concludes that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118494-00 of 208.8 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 93.9 AF (FOF Nos. 20 - 35).
88. The Department concludes that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118495-00 of 2,047.3 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 425 AF (FOF Nos. 20 - 31 and 36 - 40).
89. The Department concludes that the Applicant has proven by clear and convincing evidence the historical use of Statement of Claim 76M 118497-00 of 208.88 AF diverted volume and 2,000 GPM flow rate with a consumptive use being 93.9 AF (FOF Nos. 20 - 35).

90. The Department concludes that the Applicant has proven by clear and convincing evidence the historical use of Provisional Permit 76M 2789 of 6,769.2 AF diverted volume and 6,000 GPM flow rate with a consumptive use being 1,557 AF (FOF Nos. 20 - 40).

91. The Applicant only proposes to market that portion of its water rights historically consumed. Water previously depleted from the Clark Fork River that was not consumed and returned to the Clark Fork River will remain instream under the Applicant's proposal. The Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. § 85-2-402(2)(b), MCA. (FOF Nos. 54 - 61)

### BENEFICIAL USE

92. A change applicant must prove that the proposed use is a beneficial use. Sections 85-2-102(4) and -402(2)(c), MCA. Beneficial use is and has always been the hallmark of a valid Montana water right: "[T]he amount actually needed for beneficial use within the appropriation will be the basis, measure, and the limit of all water rights in Montana . . ." *McDonald*, 220 Mont. at 532, 722 P.2d at 606. The analysis of the beneficial use criterion is the same for change authorizations under § 85-2-402, MCA, and new beneficial permits under § 85-2-311, MCA.ARM 36.12.1801.

93. Applicant proposes to use water for marketing for mitigation which is a recognized beneficial use pursuant to the Legislature's enactment of the marketing for mitigation statute in 2011. Sections 85-2-102(5)(e) and 420, MCA. Section 85-2-420, MCA, provides a two-step approval process. The first step involves DNRC authorization of an amount of water available to market. The second step is DNRC authorization of the actual, location-specific mitigation use of the previously authorized amount. *Centennial Livestock Inc. v. DNRC*, Order on Petition for Judicial Review, 6, 13 (Mont. Water Ct. March 12, 2021). Under the unique statutory provisions applicable to marketing for mitigation, the extent to which the marketed water will be beneficially used will not be determined until a future permit application proposes to use water marketed pursuant to this change for mitigation. Sections 85-2-310(10) and 420, MCA; *Centennial*, 6. 13. Applicant has proven by a clear and convincing evidence marketing for mitigation is a beneficial use and that 20,305.1 acre-feet of diverted volume and 16,000 GPM flow rate of water requested

is the amount needed to sustain the beneficial use. Section 85-2-402(2)(c), MCA (FOF Nos. 62 - 65)

#### ADEQUATE MEANS OF DIVERSION

94. Pursuant to § 85-2-402 (2)(b), MCA, the Applicant is not required to prove that the proposed means of diversion, construction, and operation of the appropriation works are adequate because this application involves a change in appropriation right pursuant to § 85-2-420 for mitigation or marketing for mitigation or aquifer recharge purposes.

#### POSSESSORY INTEREST

95. Pursuant to § 85-2-402(2)(d), MCA, the applicant is not required to prove that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use because this application involves a change in appropriation right pursuant to § 85-2-420 MCA for mitigation or marketing for mitigation.

#### REASONABLE USE

96. The Department may not approve a change in purpose of use or place of use of an appropriation of 4,000 or more acre-feet of water a year and 5.5 or more cubic feet per second of water unless the appropriator proves by clear and convincing evidence that the § 85-2-402(4), MCA, criteria are satisfied and the proposed change in appropriation right is a reasonable use. Sections 85-2-402(4)-(5), MCA. The appropriator must consider: the existing legal demands of water rights on the state water supply and future beneficial purposes; the benefits to the applicant and the state; the effects on the quantity and quality of the water for existing uses; the availability of using low-quality water for the purpose of the appropriation; the effects on private property rights by any saline seep contributions; and the probable significant adverse environmental impacts of the proposed use. *Id.* The Applicant has proven by clear and convincing evidence that the proposed appropriation of 20,305.7 acre-feet and 16,000 GPM is a reasonable use of water.

### **PRELIMINARY DETERMINATION**

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change a Water Right No. 76M 30150596 should be granted subject to the following: The Applicant will no longer divert a volume of 20,305.1 AF of water from Well Nos. 11, 12, 13, 14, 15, 16, 17, 20, and 21 located within the Fairbanks Well Field, reducing their consumptive use by 4,671.0 AF. The place of use for marketing for mitigation or aquifer recharge purposes consists of a reach of the Clark Fork River beginning in the SE of Section 36, T14N, R21W, and ends at the Noxon Rapids Dam located in the S2S2 of Section 33, T26N, R32W, Sanders County.

The Department determines that the Applicant may change 129.4 GPM up to 208.8 AF of statement of claim no. 76M 118497-00 from power generation to marketing for mitigation, providing 58.2 GPM up to 93.9 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

The Department determines that the Applicant may change 129.4 GPM up to 208.8 AF of statement of claim no. 76M 118475-00 from power generation to marketing for mitigation, providing 58.2 GPM up to 93.9 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

The Department determines that the Applicant may change 129.4 GPM up to 208.8 AF of statement of claim no. 76M 118480-00 from power generation to marketing for mitigation, providing 58.2 GPM up to 93.9 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

The Department determines that the Applicant may change 129.4 GPM up to 208.8 AF of statement of claim no. 76M 118484-00 from power generation to marketing for mitigation, providing 58.2 GPM up to 93.9 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

The Department determines that the Applicant may change 129.4 GPM up to 208.8 AF of statement of claim no. 76M 118490-00 from power generation to marketing for mitigation, providing 58.2 GPM up to 93.9 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

The Department determines that the Applicant may change 129.4 GPM up to 208.8 AF of statement of claim no. 76M 118494-00 from power generation to marketing for mitigation, providing 58.2 GPM up to 93.9 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

The Department determines that the Applicant may change 1,269.2 GPM up to 2,047.3 AF of statement of claim no. 76M 118485-00 from industrial to marketing for mitigation, providing 263.5 GPM up to 425 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

The Department determines that the Applicant may change 1,269.2 GPM up to 2,047.3 AF of statement of claim no. 76M 118492-00 from industrial to marketing for mitigation, providing 263.5 GPM up to 425 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

The Department determines that the Applicant may change 1,269.2 GPM up to 2,047.3 AF of statement of claim no. 76M 118478-00 from industrial to marketing for mitigation, providing 263.5 GPM up to 425 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

The Department determines that the Applicant may change 1,269.2 GPM up to 2,047.3 AF of statement of claim no. 76M 118491-00 from industrial to marketing for mitigation, providing 263.5 GPM up to 425 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

The Department determines that the Applicant may change 1,269.2 GPM up to 2,047.3 AF of statement of claim no. 76M 118477-00 from industrial to marketing for mitigation, providing 263.5 GPM up to 425 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

The Department determines that the Applicant may change 1,269.2 GPM up to 2,047.3 AF of statement of claim no. 76M 118495-00 from industrial to marketing for mitigation, providing 263.5 GPM up to 425 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

The Department determines that the Applicant may change 4,196.2 GPM up to 6,768.5 AF of provisional permit no. 76M 2789-00 from commercial to marketing for mitigation, providing 965.3



GPM up to 1,557 AF of mitigation water to the Clark Fork River from January 1 to December 31 annually.

This change will be subject to the following remarks and conditions:

PURSUANT TO § 85-2-420, MCA, THE APPROPRIATOR SHALL HAVE A 20-YEAR PERIOD FOR COMPLETION OF THIS CHANGE AUTHORIZATION. IF THE FULL AMOUNT OF WATER AUTHORIZED FOR CHANGE TO MARKETING FOR MITIGATION IS NOT SOLD OR LEASED FOR THESE PURPOSES PRIOR TO THE 20-YEAR COMPLETION DATE, THE WATER RIGHT RETAINS THE BENEFICIAL USE IN PROPORTIONATE AMOUNTS NOT PERFECTED FOR MARKETING FOR MITIGATION AND AS AUTHORIZED PRIOR TO THIS CHANGE AUTHORIZATION. THE APPROPRIATOR SHALL NOTIFY THE DEPARTMENT WITHIN 30 DAYS EACH TIME A PORTION OF THE CHANGE IS COMPLETED (SOLD OR LEASED) ON A FORM PROVIDED BY THE DEPARTMENT. THE FORM SHALL BE ACCOMPANIED BY A COPY OF THE WATER LEASE AGREEMENT OR DEED EVIDENCING THE SALE OF A PORTION OF THE WATER RIGHT FOR MITIGATION/AQUIFER RECHARGE PURPOSE. THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT EVERY 5 YEARS FROM THE DATE OF ISSUANCE OF THE AUTHORIZATION OF THE ACTIVITIES TO DATE TOWARD DILIGENCE IN MARKETING THE WATER. THE REPORTS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THIS CHANGE.

IF THE CHANGE IS NOT FULLY PERFECTED BY THE COMPLETION DEADLINE AND NO EXTENSION IS REQUESTED THE APPROPRIATOR SHALL FILE A PROJECT COMPLETION FORM FOR THE AMOUNT COMPLETED. THE REMAINING WATER NOT CHANGED REVERTS TO ITS HISTORICAL USE ON A PRO RATA BASIS AS AUTHORIZED BY THE DEPARTMENT AND CAN BE USED AS SUCH IF PRACTICAL.

## NOTICE

This 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. E.g., §§ 85-2-310, -312, MCA.

DATED this 30th day of November 2022.

/Original signed by Jim Nave/  
Jim Nave, Missoula Regional Manager  
Department of Natural Resources  
and Conservation

**CERTIFICATE OF SERVICE**

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 30<sup>th</sup> day of November 2022, by first class United States mail.

FERGUSON LAW  
P O BOX 8359  
MISSOULA, MT 59807  
ATTN: JOHN FERGUSON

/Original signed by Kathleen Schubert/

Regional Office, (406) 721-4284