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

* * * * * * *

APPLICATION TO CHANGE WATER RIGHT NO. 41J 30116558 BY THORSON RANCH, LLC.	)))	**PRELIMINARY DETERMINATION TO GRANT CHANGE**

* * * * * * *

On September 7, 2018, Thorson Ranch, LLC (Applicant) submitted Application to Change an Existing Irrigation Water Right No. 41J 30116558 to change Statement of Claim No. 41J 29451 to the Lewistown Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The proposed change in appropriation right has been submitted for purposes of offsetting depletions to surface water resulting from Groundwater Application for Beneficial Water Use Permit No. 41J 30116562, by Tintina Montana, Inc. The proposal includes adding two purposes - marketing for mitigation and aquifer recharge - and adding a place of use for each additional purpose. The Department published receipt of the Application on its website. The Department sent Applicant a deficiency letter under §85-2-302, Montana Code Annotated (MCA), dated March 5, 2019. The Applicant responded with information dated June 3, 2019. The Application was determined to be correct and complete as of January 29, 2020. An Environmental Assessment for this Application was completed and posted on March 13, 2020. In addition, an Environmental Impact Statement for Tintina Montana's Black Butte Copper Project was issued by the Montana Department of Environmental Quality on March 13, 2020.

INFORMATION

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

Application as filed:

- Application to Change Water Right, Form 606 and Attachments (narrative; calculations, etc.).

- Maps of historical and proposed uses of water; proposed storage reservoir location and supply line; service area for the purpose of Marketing for Mitigation; etc.
- Addendums: Historical Water Use; Reservoir/Place of Storage, Change in Purpose; Water Marketing Purpose
- Affidavit of Barbara Jean Russell, Managing Member of Thorson-Russell Ranch, LLC, regarding historic irrigation practices

Information Received after Application Filed

- Applicant's deficiency response, dated June 3, 2019
- Points of Diversion Clarification email, dated November 5, 2019
- Technical Memo – Evaluation of Historic Diverted Volume, Hydrometrics, Inc., dated November 7, 2019
- Technical Memo – Return Flow Mitigation Analysis, Hydrometrics, Inc., dated January 20, 2020
- Applicant's February 14, 2020 letter to the Department amending and clarifying elements of the proposed change
- Applicant's February 18, 2020 letter to the Department providing minor comments and clarifications to the Department's technical report for the proposed change
- Barbara Jean Russell's Black Butte Copper Project Water Rights Permitting and Change Authorization waiver letter, dated February 24, 2020
- Multiple verbal and email communications with Applicant's consultant and/or attorney

Information within the Department's Possession/Knowledge

- Department Technical Report
- Water right records including, but not limited to, the file for the Statement of Claim to be changed in this matter and application files and existing water rights associated with the Black Butte Copper Project: 41J 30116563 (permit application); and 41J 30116553, 41J 30116554, 41J 30116556, 41J 30116557, 41J 30116558, and 41J 30116559 (water right change applications)
- 1950 Meagher County Water Resources Survey and associated field notes and maps
- Aerial photos; topographic maps

- Notes from pre-application meeting, held on August 29, 2018
- Department Memorandums:
    - Memos dated October 31, 2019 and December 30, 2019 documenting phone discussions with Greg Bryce, Hydrometrics, Inc.
    - Memo dated January 8, 2020, from Attila Folnagy, regarding assessment of Groundwater Flow Model and Thorson Ranch Return Flow Analysis'
    - Memo dated January 16, 2020 regarding discharge permit and compliance with § 85-2-364, MCA
    - Memo dated January 28, 2020 from Attila Folnagy, summarizing Applicant's Mitigation and Return Flow plans.
    - Memo dated February 20, 2020 regarding John Tietz's February 14, 2020 Marketing Clarification Letter, dated February 20, 2020
    - Memo dated February 28, 2020 regarding clarification points to the Department's technical report
- Department Environmental Assessment, March 13, 2020.
- Black Butte Copper Project Final Environmental Impact Statement, Montana Department of Environmental Quality (DEQ) Environmental Impact Statement, March 13, 2020.
- 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 Lewistown Regional Office at (406) 538-7459 to request copies of the following documents.
    - Return Flow Memo, dated April 1, 2016
    - Historic Diverted Volume Memo, dated September 13, 2012
    - HB99 Implementation and Guidance, dated August 2017

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 RIGHT TO BE CHANGED

FINDINGS OF FACT

1. The water right proposed to be changed is Statement of Claim No. 41J 29451. The following table displays elements of the historical use of the water right as decreed in the Basin 41J Preliminary Decree. Water right records.

TABLE 1: HISTORICAL WATER USE (PRE-JULY 1, 1973). BASIN 41J PRELIMINARY DECREE.

WR Number	Purpose	Source	Flow Rate	Period of Diversion / Period of Use	Points of Diversion	Place of Use	Priority Date	Acres Irrigated
41J 29451	Irrigation	Wolsey Creek	10.0 Cubic Feet Per Second (CFS)	May 1 to Sept 30	Two PODs in the NESWNE Sec 27, T12N, R7E	Sec 27, T12N, R7E	June 28, 1889	85.0

2. 12.7 acres of the historical place of use of Statement of Claim No. 41J 29451 overlap with the claimed place of use of Statement of Claim No. 41J 29450. 41J 29450 is an existing appropriation right from Sheep Creek and is proposed to be changed in a concurrent process.

CONCURRENT PROCEEDINGS

3. The proposed change application is part of a bundle of eight water right applications related to the Black Butte Copper Project in Meagher County. The Project is a proposed underground copper mine generally located about 15 miles north of White Sulphur Springs in the Sheep Creek drainage, in Sections 19, 29, 30, 31 and 32, T12N R7E, and Sections 24, 25 and 36 in T12N, R6E. The Preliminary Determinations for all eight applications (two permit applications and six applications to change irrigation water rights) must be read in conjunction with one another to understand the full scope of the proposal. The application numbers are 41J 30116563, 41J 30116562, 41J 30116553, 41J 30116554, 41J 30116556, 41J 30116557, 41J 30116558, and 41J 30116559.

CHANGE PROPOSAL

4. The Applicant seeks to change Statement of Claim No. 41J 29451 by adding two purposes and a place of use for each additional purpose.[1] The proposal includes the additional purposes of marketing for mitigation and aquifer recharge.[2] The proposed flow rate for marketing for mitigation is 10.0 cubic feet per second (CFS) and the volume is commensurate with the consumption associated with the historic water use for irrigation (70.2 acre-feet (AF)). The proposed flow rate for aquifer recharge is 339 gallons per minute (GPM) and the volume is 45.0 AF. Water associated with aquifer recharge is non-consumed, as it returns to the stream in the non-irrigation season. Aquifer recharge is for purposes of replicating or maintaining the historic return flow pattern in timing, amount and location. The principle reason the water right is proposed for change is because Applicant has entered an agreement with Tintina Montana, Inc., to supply water to Tintina's Black Butte Copper Project, a proposed underground copper mine. Under Applicant's proposal, it will have the option to market the water right for mitigation purposes during any given year or continue use under the historic purpose of irrigation.[3] The additional place of use for marketing for mitigation is at Applicant's lower existing point of diversion in the SENWNE Section 27, T12N, R7E (the diversion structure is considered to be the point of sale for the water right). The service area for marketing for mitigation includes portions of the following sources, generally located in T12N, R5E; T12N, R6E; and T12N, R7E: Sheep Creek, Black Butte Creek, and Coon Creek. The place of use for aquifer recharge in the N2 Section 27, T12N, R7E (the location of aquifer recharge basins). Application File.

5. A diversion structure on Sheep Creek that is proposed in a separate and concurrent proceeding by Tintina Montana, Inc., is part of the infrastructure to be used to achieve delivery to the intended service area. The feature includes a wet well and pump system located in the

[1] The proposed change was amended and clarified on February 14, 2020 per letter received from the Applicant's attorney.
[2] The purpose of aquifer recharge is required to mitigate the change in return flows that will result from intermittently retiring irrigation water rights and marketing the water.
[3] Water will be marketed annually as necessary to achieve mitigation of surface water depletions caused by a groundwater appropriation by the mine. Appropriations may alternate from year-to-year between marketing for mitigation and irrigation, although appropriations will not occur for both purposes during the same irrigation season.

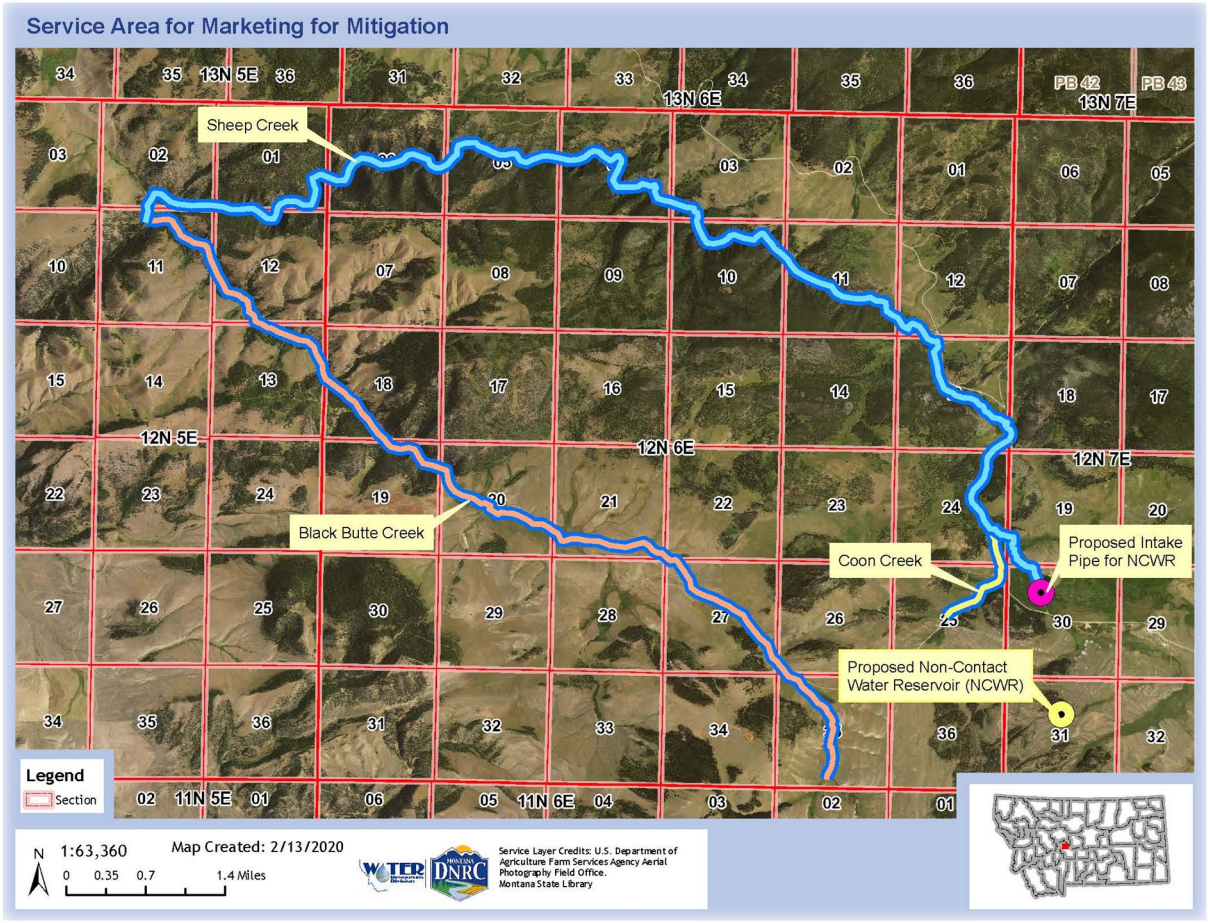
SWNENW Section 30, T12N, R7E.[4] The structure will divert water to a reservoir referred to as the Non-Contact Water Reservoir, or NCWR, with a capacity of 291.9 AF. The reservoir will be administered by Tintina Montana, Inc. to deliver water to the service area. The NCWR will be located on an Unnamed Tributary of Little Sheep Creek in the N2 Section 31, T12N, R7E, and water can be pumped from the NCWR from January 1 through December 31 to supply mitigation water to the three surface water sources. Application File.

6. When used under the additional purpose of marketing for mitigation, the water right may be administered under two different scenarios. First, it may be retired from irrigation for the season and left instream to offset or mitigate up to 70.2 AF of surface water depletions resulting from a groundwater appropriation by the Black Butte Copper Project. Groundwater Application for Beneficial Water Use Permit No. 41J 30116562. Water that would otherwise be diverted for irrigation purposes will remain in Wolsey Creek and flow into and offset depletions in Sheep Creek, which is one of the depleted sources. Under the second marketing for mitigation scenario, water may be left instream and flow down to Tintina Montana's diversion structure on Sheep Creek, at which time it will be diverted and stored in the off-stream reservoir (the NCWR). Water will later be released from the reservoir during any time of year to Black Butte Creek, Coon Creek and Sheep Creek to offset depletions in those sources. Application File.

7. The additional purpose of aquifer recharge is to replicate the historic return flow pattern associated with irrigation and to prevent adverse effects due to the change. Under this purpose, non-consumed water will be diverted into two aquifer recharge basins (ARB) during the irrigation season and return to the drainage in the non-irrigation season. The place of use for aquifer recharge is considered to be the location of the ARB's and the general intended area of mitigation is in Sheep Creek from the point where return flows enter the source through any reach of stream that experiences reduced return flows due to the change.

8. The Department imposes conditions of water measurement in this Preliminary Determination so that the Applicant can effectively execute its water marketing and return flow plans. Conditions Section.

[4] The diversion structure on Sheep Creek is an element of Tintina Montana's proposed high spring flow permit (41J 30116563), not an element of this proposed change. This structure and other features are explained in this Preliminary Determination to inform the reader about the intended purpose of the marketed water.



§ 85-2-402, MCA, CHANGE CRITERIA [5]

GENERAL CONCLUSIONS OF LAW

9. An applicant in a change proceeding must affirmatively prove all of the relevant criteria in § 85-2-402, MCA. Under this Preliminary Determination, the relevant change criteria in § 85-2-402(2), MCA, are:

> (2) . . . the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria

[5] Unless otherwise provided herein, references are to the 2017 MCA, in effect when the Application was filed. References to the Administrative Rules of Montana are to the rules in effect as of Sept. 7, 2018, the date the Application was filed.

are met:

(a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.

(b) The proposed means of diversion, construction, and operation of the appropriation works are adequate, except for: . . . (iii) a change in appropriation right made 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 . . . except for: . . . (iii) a change in appropriation right made pursuant to 85-2-420 for mitigation or marketing for mitigation.

10. In addition to the requirements in § 85-2-402, MCA, for an application for change in appropriation right for the purpose of aquifer recharge or mitigation or for the purpose of marketing water for aquifer recharge or mitigation must also comply with the following requirements in § 85-2-420, MCA:

(2) During the completion period authorized by the department for a change pursuant to this section, the appropriator may continue to use the appropriation right for any authorized beneficial use provided that proportionate amounts of the appropriation right are retired as the mitigation or aquifer recharge beneficial use is perfected.

(3) (a) If the full amount of the appropriation right is not sold or marketed as mitigation or aquifer recharge prior to the completion date, the water right retains the beneficial uses authorized prior to the change approved pursuant to this section.

(b) For an appropriation right that retains the original beneficial uses pursuant to this section, the flow rate and volume of water allowed at the point of diversion must be equal to the flow rate and volume allowed under the initial beneficial uses minus the amount that was sold or marketed for mitigation or aquifer recharge.

(4) As part of a change in appropriation right approved pursuant to this section, the department shall:

(a) determine a period for the change in appropriation right to be completed that does not exceed 20 years; and

(b) require the appropriator to notify the department within 30 days each time a portion of the change is completed.

The Department has jurisdiction to approve a change if the appropriator proves the applicable criteria in § 85-2-402, MCA. The requirements of Montana's change statute have been litigated

and upheld in 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, and the applicant has the burden of proof at all stages before the Department and courts. Hohenlohe v. DNRC, 2010 MT 203, ¶ 75; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 8, *aff'd on other grounds*, Town of Manhattan v. DNRC, 2012 MT 81.

11. The burden of proof in a change proceeding is by a preponderance of evidence, which is "more probably than not." Hohenlohe ¶¶ 33, 35.

12. In a change proceeding and in accordance with well-settled western water law, other appropriators have a vested right to have the stream conditions maintained substantially as they existed at the time of their appropriations. Spokane Ranch & Water Co. v. Beatty (1908), 37 Mont. 342, 96 P. 727;); McDonald v. State (1986), 220 Mont. 519, 722 P.2d 598 (existing water right is the pattern of historic use; beneficial use is the basis measure and the limit); Robert E. Beck, 2 Waters and Water Rights § 14.04(c)(1) (1991 edition); W. Hutchins, Selected Problems in the Law of Water Rights in the West 378 (1942); *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991)(senior appropriator cannot change pattern of use to detriment of junior); see also Farmers Reservoir and Irr. Co. v. City of Golden, 44 P.3d 241, 245 (Colo.,2002)("We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation). This right to protect stream conditions substantially as they existed at the time of appropriations was recognized in the Water Use Act in § 85-2-401, MCA. An applicant must prove that all other appropriators can continue to reasonably exercise their water rights under changes in the stream conditions attributable to the proposed change; otherwise, the change cannot be approved. Montana's change statute reads in part to this issue:

> 85-2-402. (2) … 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.

....

(13) A change in appropriation right contrary to the provisions of this section is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized change in appropriation right. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to change an appropriation right except in accordance with this section

(italics added).

13. Montana's change statute simply codifies western water law.[6] One commentator describes the general requirements in change proceedings as follows:

> Perhaps the most common issue in a reallocation [change] dispute is whether other appropriators will be injured because of an increase in the consumptive use of water. Consumptive use has been defined as "diversions less returns, the difference being the amount of water physically removed (depleted) from the stream through evapotranspiration by irrigated crops or consumed by industrial processes, manufacturing, power generation or municipal use." "Irrigation consumptive use is the amount of consumptive use supplied by irrigation water applied in addition to the natural precipitation which is effectively available to the plant."
>
> An appropriator may not increase, through reallocation [change] or otherwise, the actual historic consumptive use of water to the injury of other appropriators. In general, any act that increases the quantity of water taken from and not returned to the source of supply constitutes an increase in historic consumptive use. As a limitation on the right of reallocation, historic consumptive use is an application of the principle that appropriators have a vested right to the continuation of stream conditions as they existed at the time of their initial appropriation.
>
> Historic consumptive use varies greatly with the circumstances of use.

[6] Although Montana has not codified the law in the detail, Wyoming has, and the two states' requirements are virtually the same. Wyo. Stat. § 41-3-104 states:

When an owner of a water right wishes to change a water right … he shall file a petition requesting permission to make such a change …. The change … may be allowed provided that the quantity of water transferred … shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.

Colorado follows a similar analysis under its requirement that a "change of water right, … shall be approved if such change, …will not injuriously affect the owner of or persons entitled to use water under a vested water right or a decreed conditional water right." §37-92-305(3)(a), C.R.S. E.g., Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002).

Robert E. Beck, 2 Water and Water Rights at § 14.04(c)(1)(b), pp. 14-50, 51 (1991 edition) .

In Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District (Colo. 1986), 717 P.2d 955, 959, the court held:

> [O]nce an appropriator exercises his or her privilege to change a water right … the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right … which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right.

See also 1 Wells A. Hutchins, Water Rights and Laws in the Nineteen Western States (1971), at p. 624 (changes in exercise of appropriative rights do not contemplate or countenance any increase in the quantity of water diverted under the original exercise of the right; in no event would an increase in the appropriated water supply be authorized by virtue of a change in point of diversion, place of use, or purpose of use of water); A. Dan Tarlock, Law of Water Rights and Water Resources (2007), at § 5:78 ("*A water holder can only transfer the amount that he has historically put to beneficial use*.… A water holder may only transfer the amount of water consumed. The increment diverted but not consumed must be left in the stream to protect junior appropriators. Consumption is a function of the evapotranspiration of the appropriator's crops. Carriage losses are usually added to the amount consumed by the crops."); § 37-92-301(5), C.R.S. (in proceedings for a reallocation [change], it is appropriate to consider abandonment of the water right); Wyo. Stat. Ann. § 41-3-104.

Accordingly, the DNRC in administrative rulings has held that a water right in a change proceeding is defined by actual beneficial use, not the amount claimed or even decreed. E.g., *In the Matter of Application for Change Authorization No. G(W)028708-41I by Hedrich/Straugh/Ringer*, (DNRC Final Order 1991); *In the Matter of Application for Change Authorization No.G(W)008323-g76L by Starkel/Koester*, (DNRC Final Order 1992); *In The Matter of Application for Beneficial Water User Permit No 20736-S41H by the City of Bozeman and In the Matter of the Application to Sever or Sell Appropriation Water Right 20737-S41H*, Proposal for Decision and Memorandum at Pgs. 8-22 (Adopted by Final Order January 9,1985); see McDonald, supra (beneficial use is the measure, limit and basis, irrespective of greater quantity attempted to be appropriated); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067

(amount of water right is actual historic use); Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use, *citing* McDonald).

The Montana Supreme Court recently explained:

> An appropriator historically has been entitled to the greatest quantity of water he can put to use. Sayre v. Johnson, 33 Mont. 15, 18, 81 P. 389, 390 (1905). The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. In re Adjudication of Existing Rights to the Use of All Water, 2002 MT 216, ¶ 56, 311 Mont. 327, 55 P.3d 396; see also § 85-2-311(1)(d), MCA. This limitation springs from a fundamental tenet of western water law - that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator "is entitled to have the water flow in the same manner as when he located," and the appropriator may insist that prior appropriators do not affect adversely his rights. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342, 351, 96 P. 727, 731 (1908)….
>
> We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 43, 45; see also Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 9.

14. The extent of the historic beneficial use must be determined in a change case. E.g., McDonald; Hohenlohe ¶ 43; Quigley; Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo.,1999); *City of Bozeman* (DNRC), *supra* ("the doctrine of historic use gives effect to the implied limitations read into every decreed right that an appropriator has no right to waste water or to otherwise expand his appropriation to the detriment of juniors"). As a point of clarification, a claim filed for an existing water right in accordance with Mont. Code Ann.

§ 85-2-221 constitutes *prima facie* proof of the claim only for the purposes of the adjudication pursuant to Title 85, Chapter 2, Part 2. The claim does not constitute *prima facie* evidence of historical use for the purposes of a change in appropriation proceeding before the Department under § 85-2-402, MCA. Importantly, irrigation water right claims are also not decreed with a volume and are, thus, limited by the Water Court to their "historic beneficial use." § 85-2-234, MCA. Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 11 (proof of historic use is required even where a water right is decreed).

15. The Department is within its authority to put a volume on a change authorization even where there is no volume on the Statement of Claim. The placement of a volume on the change authorization is not an "adjudication" of the water right. Hohenlohe ¶¶ 30-31.

16. Consumptive use of water may not increase when an existing water right is changed. Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 9; *In the Matter of Application to Change a Water Right No. 40M 30005660 By Harry Taylor II and Jacqueline R. Taylor*, (DNRC Final Order 2005); *In The Matter of Application to Change a Water Right No. 40A 30005100 by Berg Ranch Co./Richard Berg*, DNRC Proposal For Decision (2005) (Final Order adopted findings of fact and conclusions of law in proposal for decision*); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC*, DNRC Proposal For Decision (2003) (Final Order adopted findings of fact and conclusions of law in proposal for decision); see also Quigley. An increase in consumptive use constitutes a new appropriation. Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review* (2011) Pg. 9 (*citing* Featherman v. Hennessy, (1911) 43 Mont. 310, 316-17).

In a change proceeding, the *consumptive* use of the historical right has to be determined:

> In a reallocation [change] proceeding, both the actual historic consumptive use and the expected consumptive use resulting from the reallocation [change] are estimated. Engineers usually make these estimates.
> With respect to a reallocation [change], the engineer conducts an investigation to determine the historic diversions and the historic consumptive use of the water subject to

> reallocation [change]. This investigation involves an examination of historic use over a period that may range from 10 years to several decades, depending on the value of the water right being reallocated [changed].
> ....
> When reallocating [changing] an irrigation water right, the quantity and timing of historic consumptive use must be determined in light of the crops that were irrigated, the relative priority of the right, and the amount of natural rainfall available to and consumed by the growing crop.
> ....
> Expected consumptive use after a reallocation [change] may not exceed historic *consumptive* use if, as would typically be the case, other appropriators would be harmed. Accordingly, if an increase in consumptive use is expected, the quantity or flow of reallocated [changed] water is decreased so that actual historic consumptive use is not increased.

2 Water and Water Rights at § 14.04(c)(1); see also, Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 -566 (Wyo,1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.). The Department can request consumptive use information from an applicant. Hohenlohe ¶¶ 51, 68-69.

17. Denial of a change in appropriation in whole or part does not affect the exercise of the underlying right(s). The water right holder can continue to exercise the underlying right, unchanged as it has historically. The Department's change process only addresses the water right holder's ability to make a different use of that existing right. E.g., Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

HISTORIC USE

FINDINGS OF FACT

Water Source, Diversion Point, Conveyance Facility, and Priority Date

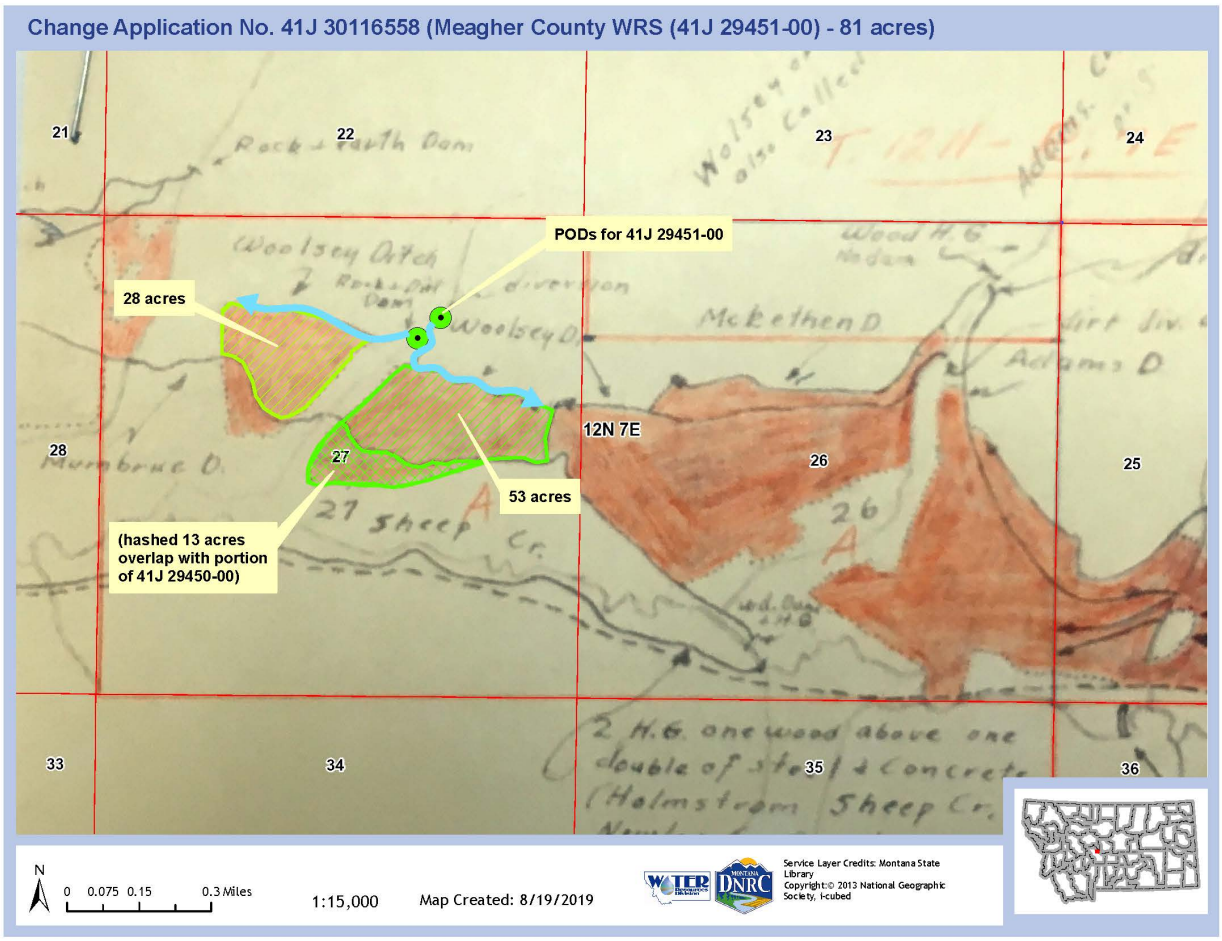
18. The source of water for Statement of Claim No. 41J 29451 is Wolsey Creek. Water is appropriated from two diversion points, Eastern and Western Woolsey Creek Ditches, both located in the SENWNE Section 27, T12N, R7E.[7] The points of diversion were incorrectly claimed for adjudication purposes under an adjacent 10-acre legal land description but have been refined to the correct legal description from this point forward in this Preliminary Determination. The diversions/ditches are observable on aerial photos and identified in the 1950 Meagher County Water Resources Survey (1950 WRS). The appropriation right was decreed with a June 28, 1889 priority date in 1980 by the Fourteenth Judicial District Court, Case No. 4501, Meagher County. The Department's water right records reflect the 1889 appropriation is the most senior appropriation and only irrigation appropriation on Wolsey Creek.[8] Aerial photos; 1950 WRS; water right records; District Court Decree.

[7] For purposes of this Preliminary Determination, the two historical diversion ditches are referred to as the Eastern and Western Woolsey Creek Ditches, as referenced by the Applicant in the application materials. However, these ditches are referenced as the Woolsey Ditches in the Meagher County Water Resources Survey and the Basin 41J Preliminary Decree.

[8] The U.S. Geological Survey topographic map for the area identifies the source name as Wolsey Creek, which is spelled different than the ditch names identified in the 1950 WRS and application materials (Woolsey Ditches). In this Preliminary Determination, the Department will refer to the source under its name assigned by the topographic map.

Place of Use

Map of Claimed Place of Use for Statement of Claim No. 41J 29451



19. The historic place of use claimed for adjudication purposes under 41J 29451 is 85.0 acres in Section 27, T12N, R7E. Statement of Claim No. 41J 29451.

20. *1950 Meagher County Water Resources Survey (1950 WRS)* – The 1950 WRS materials, including the published survey, field notes, and 1947 aerial photo, support 81.0 acres of irrigation from Wolsey Creek. 1950 WRS; Department Technical Report.

21. *USDA Aerial Photo No. 40 30059 279-62, dated September 18, 1979* – The Department's interpretation of the 1979 aerial photo is that 71 acres were irrigated at that time. The remainder of the claimed acreage that was not irrigated was irrigable. Department Technical

Report.

22. The Department's findings for maximum historical irrigation is 81.0 acres, based on the analysis of the Meagher Co. Water Resources Survey (WRS).

Period of Diversion and Flow Rate

23. The claimed period of diversion is May 1 to September 30. Applicant Barbara Jean Russell (Managing Member of Thorson Ranch, LLC), who has personally been involved with ranch operations, including irrigation practices, throughout her life, provided an affidavit asserting details of historical irrigation practices. The ranch has been in her family since 1946. Russell states that irrigation historically occurred every year, with appropriations typically beginning between May 1 and May 15, and ending around September 30. The wild flood irrigation that was employed prior to 1973 is the same type of irrigation in practice today. She has no knowledge of the water right ever being called by another water user. The only down time for irrigation was for haying operations for 2-3 weeks each summer. The Irrigation Climatic Area standard for Area IV (U.S. Department of Agriculture guideline) includes a start date of April 20 and extends to October 10. The claimed period of diversion/use for 41J 29451 begins after the standard start date of April 20 and extends just before the ending date by 10 days. The Department finds the claimed period of May 1 to September 30 is reasonable when considering Barbara Jean Russell's personal knowledge of irrigation practices, climatic area guidelines, and seniority of the water right. Application File; Statement of Claim File No. 41J 29451; USDA Climatic Area Guidelines.

24. Statement of Claim No. 41J 29451 was decreed at a flow rate of 10.0 CFS in 1980 by the Fourteenth Judicial District Court, Meagher County, Case No. 4501. Applicants' consultant took a cross section of the ditch and supplied slope calculations. Ditch dimensions for the two ditches are 10.6 feet wide by 1.33 feet deep, for a calculated carrying capacity of 22.4 CFS; and 13.5 feet wide by 1.6 feet deep, for a calculated carrying capacity of 23.9 CFS. The ditch capacities exceed the claimed and decreed flow rate of 10.0 CFS. The Department finds the historical flow rate to be 10.0 CFS. District Court Decree; Application File.

Volume

25. An applicant proposing to change a water right may request the Department to calculate

historic diverted and consumed volume based on standard methodology set out in administrative rule (ARM 36.12.1902) and the Department's Historic Diverted Volume Memo, dated September 13, 2012. If an applicant chooses not to adopt the standard methodology, and requests consideration of a different amount of water, it must submit an Historical Water Use Addendum (HUA) outlining details to justify its request. In this instance, Applicants have submitted an HUA and requested that the Department assign the consumed volume associated with historic use based on its standard methodology, but not the diverted volume. Applicants have requested an alternative method be used to calculate diverted volume. As such, the Applicants bear the burden of proof in showing the diverted volume of water is greater than that which would be calculated under the rule. Application; ARM 36.12.1902.

26. *Consumptive Volume* – The Department calculated consumptive volume per ARM 36.12.1902. Consumptive volume for flood irrigation of 81 acres is equivalent to the Irrigation Water Requirement (IWR) near White Sulphur Springs of 16.41 inches (1.37 feet) multiplied by the Meagher County Management factor of 57.3%, plus estimated irrecoverable losses (such as non-crop consumption/evaporation).[9] Therefore, the *total consumptive us*e for the 81 acres is calculated to be 76.2 AF (16.41"/12 X 0.573 X 81 Ac + 12.7 AF = 76.2 AF). However, 12.7 of those 81 acres are supplemental to another water right and are therefore irrigated by two sources of water – Wolsey Creek and Sheep Creek. The Applicant has estimated that 50% of the consumed volume for the 12.7 acres should be attributed to Wolsey Creek, and the other 50% to Sheep Creek. The Department finds this method of apportioning the consumed volume between the two sources reasonable for purposes of the proposed change. Therefore, the consumed volume for 41J 29451 is 70.2 AF. See Department Technical Report for detailed calculations.

27. *Diverted Volume* – Applicants filed an HUA requesting to utilize site-specific details in calculating diverted volume. Those site-specific details include the historic operation pattern of irrigation and source flows as described in two documents contained in the Application File: 1) Affidavit of Barbara Jean Russell, and 2) a memorandum filed by Applicants' consultant titled,

[9] Irrecoverable losses of 12.7 AF are calculated by dividing crop consumptive volume (58.5 AF) by the estimated on-farm efficiency, (25% for wild flood irrigation), multiplied by 5% (58.5/0.25 X 0.05 = 12.7 AF).

"Evaluation of Historic Diverted Volume for Water Rights 41J 29449-00, 41J 29450-00, 41J 29451-00, 41J 29452-00, 41J 198907-00, and 41J 198908-00." Application File.

28. Barbara Russell, Managing Member of Thorson Ranch, LLC, submitted an affidavit describing the historic irrigation operation pattern. Russell grew up working and living on the ranch and is familiar with all aspects of irrigation. The affidavit states that flood irrigation practices used by her father prior to 1973 are the same as those used since 1973. Russell states that irrigation begins between May 1 and May 15 every year, concluding typically around September 30. Flow of the creek is diverted in two ditches and delivered to the irrigated fields. Diversions are shut down for 2-3 weeks per year to harvest hay. After harvest, appropriations continue for purposes of loading up the soil profile for the following year. The water right has never been called or curtailed. Affidavit of Barbara Jean Russell.

29. Greg Bryce, Hydrometrics, Inc. (consultant), submitted a technical memo to the Department on November 7, 2019 evaluating historic diverted volume for all water rights proposed for change for the Black Butte Copper Project, including an evaluation for the water right to be changed in this matter. Bryce noted that historic practices and field conditions required additional water compared to typical irrigation practices and based his analysis on above-average flow conditions to characterize water use in maximum water years (conforming to each water right owner's historic knowledge of irrigation as outlined in his/her affidavit). He provided a hydrologic evaluation of stream conditions showing the estimated 20th percent duration flow for the source, which is defined as the streamflow that is exceeded 20 percent of the time. Bryce calculated the diverted flow and volume based on the 20th percent duration flow for each month of the period of use, minus a temporary cessation of 14 days of diversions during harvest. For months where estimated stream flow exceeds the decreed flow rate, the flow rate was used to calculate volume for that month. For months where the 20th percent duration flow was less than the decreed flow rate, the 20th percent flow value was used to calculate volume. And further, if the pre-1973 method of diversion was uncontrolled, it was assumed that approximately 75% of the available stream flow was diverted, up to the decreed flow rate of each

water right.[10] The resulting diverted volume is 1,295.2 AF, as identified in Table 3 of Bryce's technical memo. Technical Memo – Evaluation of Historic Diverted Volume, Hydrometrics, Inc.

30. The Applicants have provided site-specific details to credibly estimate historic diverted volume. Based on the consultant's flow estimation technique, the affidavit of Barbara Jean Russell, and the seniority status of the water right, the Department finds the historical diverted volume for 41J 29451 to be 1,295.2 AF.

Historical Use

31. The following table displays the Department's findings for historical use of Statement of Claim No. 41J 29451 as determined for this change application proceeding.

TABLE 2: DEPARTMENT FINDING - HISTORICAL WATER USE (PRE-JULY 1, 1973).

WR Number	Purpose	Source	Flow Rate	Period of Diversion/ Period of Use	Point of Diversion	Place of Use	Priority Date	Volume Diverted/ Consumed
41J 29451	Irrigation	Wolsey Creek	10.0 Cubic Feet Per Second (CFS)	May 1 to Sept 30	Two ditches in SENWNE Sec 27, T12N, R7E	81.0 acres in Sec 27, T12N, R7E	June 28, 1889	Div = 1,295.2 AF Cons = 70.2 AF

CONCLUSIONS OF LAW

32. Applicant seeks to change existing water rights represented by its Water Right Claims. The "existing water rights" in this case are those as they existed prior to July 1, 1973, because no changes could have been made to those rights after that date without the Department's approval. § 85-2-402(1), MCA; Royston, supra; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 7; cf. General Agriculture Corp. v. Moore (1975), 166 Mont. 510, 534 P.2d 859 (limited exception for perfection). Thus, the focus in a change proceeding is what those rights

[10] Prior to 1977 diversions for water right numbers 41J 29449, 41J 29451, and 41J 29452 were uncontrolled. The uncontrolled diversions were managed by blocking the stream with rocks and farm waste and were less efficient due to the coarse stream substrate and materials used, which allowed water to bypass the diversions. For the purpose of calculating historical diverted volume, it was assumed that approximately 75% of the available stream flow was diverted up to the decreed volume.

looked like and how they were exercised prior to July 1, 1973. E.g., Matter of Clark Fork River Drainage Area (1992), 254 Mont. 11, 17, 833 P.2d 1120; 85-2-102(12)("Existing right" or "existing water right" means a right to the use of water that would be protected under the law as it existed prior to July 1, 1973). An applicant can change only that to which it has a perfected right. E.g., McDonald, supra; Quigley, supra; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg. 9 (the rule that one may change only that to which it has a right is a fundamental tenet of Montana water law and imperative to MWUA change provisions, *citing* Featherman v. Hennessy, (1911) 43 Mont. 310, and Quigley v. McIntosh, (1940) 110 Mont. 495); see also In re Application for Water Rights in Rio Grande County 53 P.3d 1165, 1170 (Colo. 2002) (while the enlargement of a water right, as measured by historic use, may be injurious to other rights, it also simply does not constitute a permissible "change" of an existing right); Robert E. Beck, 2 Water and Water Rights at § 16.02(b) at p. 271 (issues of waste and historic use, as well as misuse … properly be considered by the administrative official or water court when acting on a reallocation application," (citations omitted)); *In the Matter of Application for Change in Appropriation of Water Right No. 1339988-40A, 1339989-40A, and 50641-40A by Careless Creek Ranch* (DNRC Final Order 1988)(where there is water at new point of diversion, more often than not purpose of change is to pick up that extra water, application must be made for a new water right to cover the extra water; it cannot be appropriated under the guise of a change in the old right).

33. The Department as fact finder in a change proceeding must have the required information to evaluate historic use of a water right to determine whether the change will result in expansion of the original right or adversely affect water users. The Department cannot determine whether there will be adverse effect to other appropriators from a different use of water until it knows how the water has been historically used, including the pattern of use. Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg.13 (upholding ARM 36.12.1902, as reflecting basic water law principles).

The requirement that a water user establish the parameters and pattern of use of a water right through evidence of historic use is a fundamental principle of Montana water law that

serves to ensure that a change does not expand a water right (i.e. bootstrap a new use with a senior priority date) or adversely affect other water users. Evidence of historic use serves the important function of protecting other water users who have come to rely upon maintaining surface and ground water conditions for their livelihood. Id. at Pg. 14; *In the Matter of Change Application No. 43D-30002264 by Chester and Celeste Schwend* (DNRC Final Order 2008)(applicant must provide evidence on actual historic use of water right regardless of decree; statement that "we will not be using any more water than was used before" is not sufficient).

34. Water Resources Surveys were authorized by the 1939 legislature. 1939 Mont. Laws Ch. 185, § 5. Since their completion, Water Resources Surveys have been invaluable evidence in water right disputes and have long been relied on by Montana courts. In re Adjudication of Existing Rights to Use of All Water in North End Subbasin of Bitterroot River Drainage Area in Ravalli and Missoula Counties (1999), 295 Mont. 447, 453, 984 P.2d 151, 155 (Water Resources Survey used as evidence in adjudicating of water rights); Wareing v. Schreckendgust (1996), 280 Mont. 196, 213, 930 P.2d 37, 47 (Water Resources Survey used as evidence in a prescriptive ditch easement case); Olsen v. McQueary (1984), 212 Mont. 173, 180, 687 P.2d 712, 716 (judicial notice taken of Water Resources Survey in water right dispute concerning branches of a creek).

35. The Department has adopted a rule providing for the calculation of historic consumptive use where the applicant proves by a preponderance of the evidence that the acreage was historically irrigated. ARM 36.12.1902.

If an applicant seeks more than the historic consumptive use as calculated by ARM 36.12.1902, the applicant bears the burden of proof to demonstrate the amount of historic consumptive use by a preponderance of the evidence. The actual historic use of water could be less than the optimum utilization represented by the calculated duty of water in any particular case. E.g., Application for Water Rights in Rio Grande County 53 P.3d 1165 (Colo., 2002) (historical use must be quantified to ensure no enlargement); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005); Orr v. Arapahoe Water and Sanitation Dist. 753 P.2d 1217, 1223 -1224 (Colo., 1988)(historical use of a water right could very well be less than the duty of water); Weibert v. Rothe Bros., Inc., 200

Colo. 310, 317, 618 P.2d 1367, 1371 - 1372 (Colo., 1980) (historical use could be less than the optimum utilization "duty of water").

36. While evidence may be provided that a particular parcel was irrigated, the actual amount of water historically diverted and consumed is critical. E.g., *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, supra. The Department cannot assume that a parcel received the full duty of water or that it received sufficient water to constitute full service irrigation for optimum plant growth. Even when it seems clear that no other rights could be affected solely by a particular change in the location of diversion, it is essential that the change also not enlarge an existing right. Trail's End Ranch, L.L.C. v. Colorado Div. of Water Resources 91 P.3d 1058, 1063 (Colo., 2004) (*citing* Application for Water Rights in Rio Grande County, 53 P.3d at 1168 and Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139, 1147 (Colo., 2001).

37. Absent quantification of annual volume historically consumed, no protective condition limiting annual volume delivered can be placed on a Change Authorization, and without such a condition, the evidence of record will not sustain a conclusion of no adverse effect to prior . . . appropriators*." In the Matter of the Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Keith and Alice Royston*, COL No. 8 (DNRC Final Order 1989), *affirmed* (1991), 249 Mont. 425, 428, 816 P.2d 1054, 1057; *In the Matter of the Application of Beneficial Water Use Permit Number 41H 30003523 and the Application for Change No. 41H 30000806 by Montana Golf Enterprises, LLC.*, DNRC Proposal for Decision (November 19, 2003) (proposed decision denied change for lack of evidence of historical use; application subsequently withdrawn); see also Hohenlohe ¶¶ 43, 45; Application for Water Rights in Rio Grande County (2002), supra; *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, supra.

38. The Department has the authority to consider waste in determining a volume for change in a water right.

> *The Department retains the discretion to take into account reasonable or wasteful use and to amend or modify a proposed change of use application according to those determinations. See* Bostwick*, 2009 MT 181, ¶ 21, 351 Mont. 26, 208 P.3d 868*.

Hohenlohe ¶ 71.

39. Applicant may proceed under ARM 36.12.1902, the Department's historic consumptive use rule, for the calculation of consumptive use or may present its own evidence of historic beneficial use. In this case Applicant has elected to proceed under ARM 36.12.1902 for consumptive volume but has not elected to proceed under ARM 36.12.1902 for diverted volume. (FOF No.25)

40. The Department finds that the Applicant has proven by a preponderance of the evidence the historic use of Statement of Claim No. 41J 29451 of 10.0 CFS in flow rate and a diverted volume of 1,295.2 AF. The consumptive volume is 70.2 AF. (FOF Nos. 18-31)

Adverse Effect:

FINDINGS OF FACT

41. The Applicant proposes to change Statement of Claim No. 41J 29451 by adding two purposes and two places of use. The proposal includes the additional purpose of marketing for mitigation at a flow rate of up to 10.0 CFS and volume of 70.2 AF. The second additional purpose is aquifer recharge at a flow rate of 339 GPM and volume of 45 AF. Water associated with aquifer recharge through injection into two aquifer recharge basins is non-consumed, as it returns to the stream in the non-irrigation season.

42. The general purpose of the proposed change is to market mitigation water to the Black Butte Copper Project to offset depletions to surface water caused by the Project's proposed groundwater appropriation and mitigate impacts to return flows caused by this proposed change. The amount of water required to fully mitigate annual surface water depletions under the Project is 340.3 AF. Preliminary Determination to Grant Permit No. 41J 30116562; Finding of Fact No. 4. The water right to be changed in this proceeding is one of six irrigation water rights proposed for change in concurrent proceedings, and a proposed permit to appropriate water during high spring flows. The water rights will be marketed for mitigation of potential adverse effects to surface water users in Sheep Creek, Black Butte Creek, and Coon Creek. The Applicant's plan for administering the marketing for mitigation purpose in this matter is the same as the other existing water rights proposed to be changed. First, when the water right is selected to be used for marketing for mitigation it will be retired from irrigation for the season and left instream to offset

or mitigate surface water depletions. Water that would otherwise be diverted for irrigation purposes will remain in Wolsey Creek and flow into and offset depletions in Sheep Creek, which is one of the sources projected to experience depletions. Under the second marketing for mitigation scenario, water may be left instream and flow down to Tintina Montana's diversion point in Sheep Creek (wet well and pump), at which time it will be diverted and stored in a 291.9 AF capacity off-stream reservoir. Water will later be released by Tintina Montana from the reservoir during any time of year to Black Butte Creek, Coon Creek and Sheep Creek to offset depletions in those sources. The volume used under the marketing scenarios cannot exceed 70.2 AF in combination. The Applicant, along with Tintina Montana, Inc., will determine when the water right is appropriate to be used in the rotation plan as necessary to achieve mitigation of 340.3 AF. Collectively, the consumptive volume of mitigation water rights exceeds 340.3 AF, therefore, not all will be needed simultaneously to meet Tintina Montana's obligation to offset depletions. Application.

43. Applicant will have the option to market the water right for mitigation purposes during any given year or continue use for irrigation. Only one type of use will occur in any given year. That is, once water is appropriated for either purpose (irrigation or marketing for mitigation), it will not be appropriated for the other purpose in that calendar year. Application; Department Memo dated December 30, 2019.

44. When used for Irrigation purposes, the flow rate, diverted volume and consumed volume will remain the same as historically (10.0 CFS in flow rate, 1,295.2 AF in diverted volume, and 70.2 AF in consumed volume). When used for the purpose of marketing for mitigation, the flow rate will remain the same as historically used (up to 10.0 CFS), but only the volume of water historically consumed will be used to offset depletions (up to 70.2 AF). Additionally, when the water is marketed, aquifer recharge of 45.0 AF (non-consumed volume) will occur in September. There will be no expansion of water use under either scenario, and when the water right is marketed, the diverted volume will be reduced.

45. The water right to be changed, 41J 29451, is supplemental to water right number 41J 29450. 12.7 of the 81 irrigated acres overlap with the supplemental water right and are supplied water from both Wolsey Creek and Sheep Creek. The Applicant estimates that each source and water right contribute 50% of the consumed volume associated with the 12.7 acres. The

consumed volume associated specifically with 41J 29451 has been calculated at 70.2 AF. Finding of Fact No. 26. The amount of water marketed under the water right proposed for change shall not exceed 70.2 AF.

Return Flow Analysis

46. During years that the purpose of use is changed to marketing for mitigation there will be a change in the timing and amount of return flows. The Department's April 1, 2016 Return Flow Memo provides guidance for determining if a change in return flows should be analyzed for adverse effects and whether a monthly return flow schedule should be developed. Generally, when an appropriation right is changed, an analysis is undertaken to determine if all water sources and stream reaches that historically received return flows will accrue them under the changed condition, or if water is to be left instream, the flow will continue to be available to those sources. In this instance, water is proposed to be left instream for marketing for mitigation purposes and one or more of the sources (or stream reaches) that historically accrued return flows no longer will when the water right is marketed. Therefore, a monthly analysis and assessment of the potential adverse effects due to the change in return flows is required. Department Return Flow Memo.

47. Based on the location of the irrigated places of use, return flows likely historically accrued to two sources under the irrigation operation – Wolsey Creek and Sheep Creek (including to Sheep Creek both upstream and downstream of the Wolsey Creek confluence). When marketed for mitigation, water will be left instream and the appropriation right will only be available to Wolsey Creek and Sheep Creek downstream of the Wolsey Creek confluence. Return flows from the appropriation will not accrue to Sheep Creek upstream of the Wolsey Creek confluence when marketed.

48. Thorson Ranch, LLC is the Applicant in this matter, and is also the only water user downstream of the historic diversion point on Wolsey Creek. Therefore, the Applicant's proposed change could only impact itself in relation to the reduction or cessation of return flows in that tributary source. Thorson Ranch owns an instream stock water right below the irrigation diversions in the source. Thorson Ranch has provided written consent to the approval of its own application to change, and in such an instance, the Department does not conduct an adverse effect analysis on the consenting water right. § 85-2-402(19), MCA. Therefore, since

Thorson Ranch is the only water user on the tributary that could be adversely affected by a reduction or cessation of return flows, no further analysis will take place in relation to Wolsey Creek.

49. Numerous water rights downstream of the tributary confluence exist on Sheep Creek. Thorson Ranch provided written consent to the approval of its proposed change based on its Sheep Creek appropriation right (like the tributary water rights), however, no consent forms were obtained from other water users. Therefore, an analysis to determine the effects of a reduction or cessation of return flows on Sheep Creek is required.

50. Stream flows in Sheep Creek typically vary from a high in June to a low in March. The following table represents median of the mean monthly flows at a point near the proposed Black Butte Copper Project (referred to as Physical Availability at SW1 in the table), which is the entity the Applicant has agreed to market water to. The flow data were compiled by Hydrometrics, Inc., a scientific and engineering consulting firm in Montana, based on a stream monitoring investigation it conducted from 2011-2017. Preliminary Determination No. 41J 30116563, Finding of Fact No. 16.

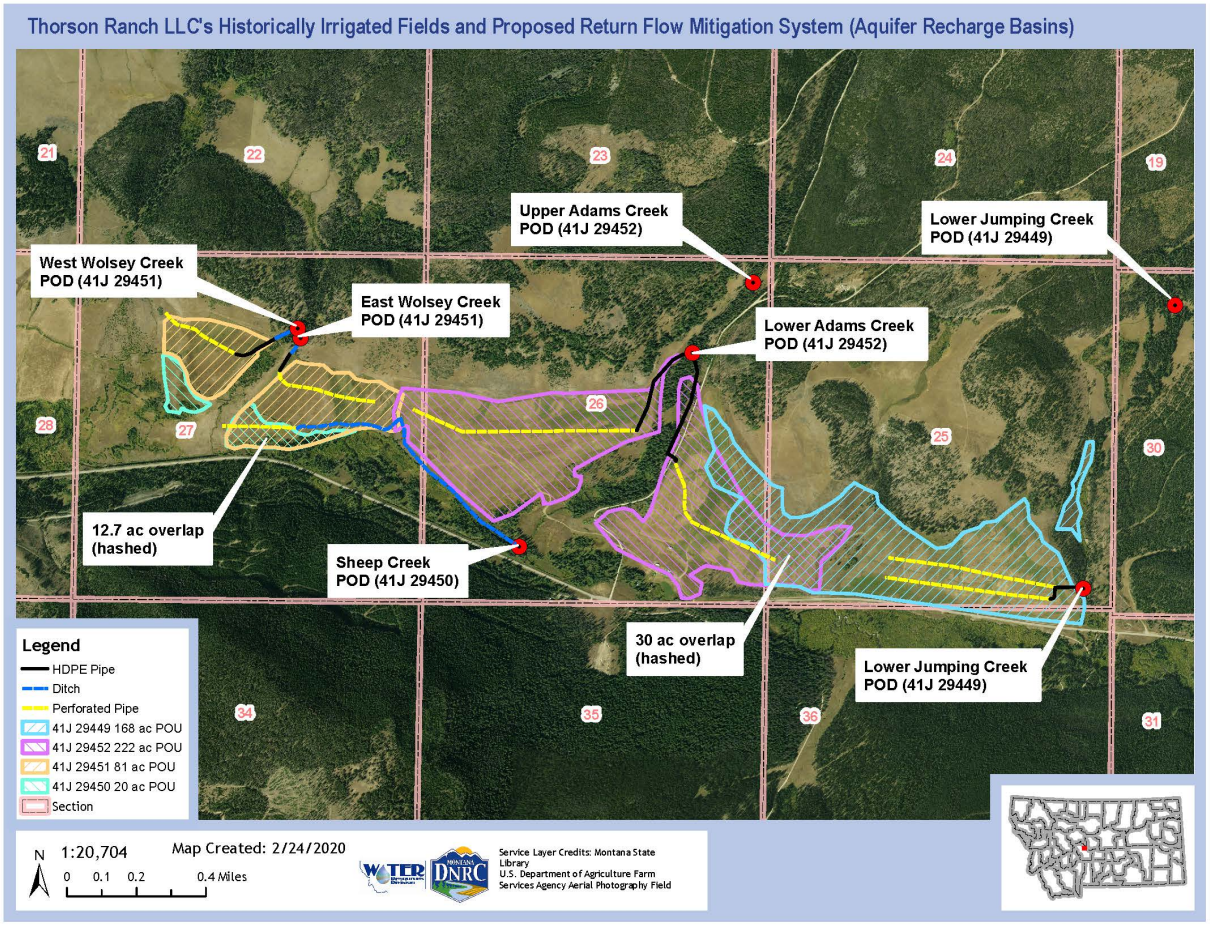
TABLE 3: Median of the Mean Monthly Flows and Volume (Sheep Creek @ SW1)

Month	Physical Availability at SW1 (CFS)	Physical Availability at SW1 (AF)
January	11.5	707.1
February	11.3	650.0
March	10.1	621.0
April	21.9	1303.1
May	129.9	7987.2
June	152.9	9098.2
July	55.9	3437.2
August	28.6	1758.6
September	22.7	1350.7
October	19.5	1199.0
November	15.6	928.3
December	12.7	780.9

51. Downstream of the water right to be changed numerous water rights exist on Sheep Creek. For example, the Montana Department of Fish, Wildlife and Parks holds a year-round instream water reservation in the amount of 35 CFS, and stream flows commonly drop below the water reservation during the non-high spring flow months. This water reservation and other water rights could be adversely affected by a reduction or change in return flows. Water right records.

52. Applicant has set forth a plan to replace or replicate return flows during the non-irrigation season to protect existing water rights that have historically relied on those return flows to supply their appropriations. Applicant proposes to divert a portion of its historic appropriation (non-consumed part) into two aquifer recharge basins (ARB's) during September, in an amount necessary to replicate return flows from October through April. The aquifer recharge plan includes construction of the ARB's within the historic irrigated place of use so that the same reaches of Sheep Creek that accrue return flows during irrigation will continue doing so when the water right is marketed. Water diverted to the ARB's will seep into the ground and return to

Sheep Creek in timing and amount to replicate return flows in the non-irrigation season. Specifically, Thorson Ranch will divert 45 AF into the ARB's in September, with an anticipated 27.9 AF returning during the non-irrigation season (the amount necessary to replicate non-irrigation season return flows). The Applicant's plan to mitigate non-irrigation season changes in return flows is adequate to prevent adverse effects. The plan will allow return flows to be matched in timing and amount. Department Groundwater Hydrologist, Attila Folnagy, reviewed Applicant's plan and computer modeling supplied by its consultant in developing aquifer recharge estimates, and found the plan to be credible. A map of the ARB's for all changes to the Thorson water rights follows. Department Memo – Assessment of Groundwater Flow Model and Thorson Ranch Return Flow Analysis.



53. 41J 29451 is the senior-most water right on Wolsey Creek and the only irrigation right on the source. FOF 18. After the proposed change and during select years, water will remain instream and flow through the affected reach of Sheep Creek or be diverted from Sheep Creek and released later. Both scenarios are designed to replace water consumed by the mine under its groundwater appropriation and make the same amount of water available to downstream appropriators as historically. A portion of the non-consumed volume will be diverted to the ARB's for purposes of replicating the historical pattern of return flows, thereby maintaining return flows for water users downstream of the existing irrigation right. Consumption of water will not increase under the marketing for mitigation purpose.

54. To ensure protection for other water rights, the Department has imposed conditions of water measurement and documentation in this Preliminary Determination and will impose appropriate conditions in all related water rights used for mitigation purposes. Preliminary Determination Nos. 41J 30116553, 41J 30116554, 41J 30116556, 41J 30116557, 41J 30116559, and 41J 30116563. The Applicant shall monitor Wolsey Creek near the historic diversion point to account for the flow of the stream when it is marketing for mitigation. The amount marketed (left instream or diverted from Wolsey Creek) cannot exceed the instantaneous flow of the stream or the flow rate of the water right, whichever is less. The Applicant is required to document stream flows and diversions when using water for the additional purpose. The Applicant shall also measure discharge into the ARB's to administer its return flow plan. Conditions Section.

55. The Department finds there will be no adverse effects from the proposed change under the terms and conditions set out in this Preliminary Determination.

CONCLUSIONS OF LAW

56. The Applicant bears the affirmative burden of proving that 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. § 85-2-402(2)(a), MCA. Royston, supra. It is the applicant's burden to produce the required evidence. *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).

57. Prior to the enactment of the Water Use Act in 1973, the law was the same in that an adverse effect to another appropriator was not allowed. Holmstrom Land Co., Inc., v. Newlan Creek Water District (1979), 185 Mont. 409, 605 P.2d 1060, *rehearing denied*, (1980), 185 Mont. 409, 605 P.2d 1060, *following* Lokowich v. Helena (1913), 46 Mont. 575, 129 P. 1063; Thompson v. Harvey (1974), 164 Mont. 133, 519 P.2d 963 (plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); McIntosh v. Graveley (1972), 159 Mont. 72, 495 P.2d 186 (appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); Head v. Hale (1909), 38 Mont. 302, 100 P. 222 (successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); Gassert v. Noyes (1896), 18 Mont. 216, 44 P. 959 (after the defendant used his water right for placer mining purposes the water was turned into a gulch, whereupon the plaintiff appropriated it for irrigation purposes; the defendant then changed the place of use of his water right, resulting in the water no longer being returned to the gulch - such change in use was unlawful because it absolutely deprived the plaintiff of his subsequent right).

The cornerstone of an evaluation of adverse effect to other appropriators is the determination of historic use of water. One cannot determine whether there is adverse effect to another appropriator until one knows what the historic water right is to be changed. It is a fundamental part of Montana and western water law that the extent of a water right is determined by reference to the historic beneficial use of the water right. McDonald; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review* (2011) Pg.13; *City of Bozeman* (DNRC), supra; Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002). The Montana Supreme Court has explained:

> An appropriator historically has been entitled to the greatest quantity of water he can put to use. Sayre v. Johnson, 33 Mont. 15, 18, 81 P. 389, 390 (1905). The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. In re Adjudication of Existing Rights to the Use of All Water, 2002 MT 216, ¶ 56, 311 Mont. 327, 55 P.3d 396; see also § 85-2-311(1)(d), MCA. This limitation springs from a fundamental tenet of western water law-that an appropriator has a right only to that

> amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator "is entitled to have the water flow in the same manner as when he located," and the appropriator may insist that prior appropriators do not affect adversely his rights. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342, 351, 96 P. 727, 731 (1908)….
>
> The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the "amount historically consumed" and the water that re-enters the stream as return flow…
>
> We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe ¶¶ 43-45.

The Colorado Supreme Court has repeatedly addressed this same issue of historic use and adverse effect. E.g., Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo.1999); Orr v. Arapahoe Water and Sanitation Dist., 753 P.2d 1217, 1223 (Colo.1988). The Colorado Supreme Court has consistently explained:

> "A classic form of injury involves diminution of the available water supply that a water rights holder would otherwise enjoy at the time and place and in the amount of demand for beneficial use under the holder's decreed water right operating in priority." (citations omitted) . . .
>
> … it is inherent in the notion of a "change" of water right that the property right itself can only be changed and not enlarged. (citation omitted). The appropriator of native water may not enlarge an appropriation without establishing all of the elements of an independent appropriation, which will necessarily have a later priority date (citation omitted) …
>
> … diversions are implicitly limited in quantity by historic use at the original decreed point of diversion…
>
> …we have explained this limitation by noting that "over an extended period of time a pattern of historic diversions and use under the decreed right at its place of use will mature and become the measure of the water right for change purposes." (citation

> omitted). The right to change a point of diversion is therefore limited in quantity by the historic use at the original point of diversion. (citations omitted) "Thus, a senior appropriator cannot enlarge the historical use of a water right by changing the point of diversion and then diverting from the new location the full amount of water decreed to the original point of diversion, even though the historical use at the original point of diversion might have been less than the decreed rate of diversion."
>
> FN9. The term "historic use" refers to the "historic consumptive use," (citations omitted).

Application for Water Rights in Rio Grande County, 53 P.3d at 1169-1170.

58. Consumptive use of water may not increase when an existing water right is changed. E.g., Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* (2011) Pg.9; *In the Matter of Application to Change a Water Right No. 40M 30005660 by Harry Taylor II And Jacqueline R. Taylor*, (DNRC Final Order 2005); *In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC,* DNRC Proposal For Decision adopted by Final Order (2003). Applicant must provide evidence of historical amount consumed and the amount to be consumed under the proposed change. *In the Matter of the Application of Beneficial Water Use Permit Number 41H 30003523 and the Application for Change No. 41H 30000806 by Montana Golf Enterprises, LLC.*, DNRC Proposal for Decision (2003) (application subsequently withdrawn); *In the Matter of Application to Change A Water Right No. 43B 30002710 by USA (Dept. of Agriculture – Forest Service*) (DNRC Final Order 2005); *In the Matter of Application No. 76H-30009407 to Change Water Right Nos. 76H-108772 and 76H-1-8773 by North Corporation* (DNRC Final Order 2008*).* #It is well settled in Montana and western water law, that once water leaves the control of the appropriator whether through seepage, percolating, surface, or waste waters," and reaches a water course, it is subject to appropriation. E.g., Rock Creek Ditch & Flume Co. v. Miller (1933), 93 Mont. 248, 17 P.2d 1074, 1077; Newton v. Weiler (1930), 87 Mont. 164, 286 P. 133; Popham v. Holloron (1929), 84 Mont. 442, 275 P. 1099, 1102; Galiger v. McNulty (1927) 80 Mont. 339, 260 P. 401; Head v. Hale (1909), 38 Mont. 302, 100 P. 222; Alder Gulch Con. Min. Co. v. King (1886), 6 Mont. 31, 9 P. 581; Doney, *Montana Water Law Handbook* (1981) [hereinafter Doney] p.22 (if return flows not part of original appropriation then it is available for appropriation by others); see also Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185. An intent to capture and reuse return flows must be manifested at the time of the appropriation.

E.g., Rock Creek Ditch and Flume, 17 P.2d at 1080; Albert Stone, *Montana Water Law* (1994) p. 84. This is consistent with the cornerstone of the prior appropriation doctrine that beneficial use is the basis, the measure and limit of a water right. E.g., McDonald v. State (1986), 220 Mont. 519, 722 P.2d 598; Toohey v. Campbell (1900), 24 Mont. 13, 60 P. 396. Return flows are not part of the water right of the appropriator changing their water right and an appropriator changing their water right is not entitled to return flows in a change in appropriation. Generally, return flow is water that is not consumed or is lost to the system. See also, Doney, p. 21.

The Montana Supreme Court also recently recognized the fundamental nature of return flows to Montana's water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell's flows are fed by irrigation return flows available for appropriation. Bitterroot River Protective Ass'n, Inc. v. Bitterroot Conservation Dist. 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, ¶¶ 22, 31,43, 198 P.3d 219, ¶¶2 2, 31,43, *citing* Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; see discussion in Hohenlohe, supra.

59. The analysis of return flow is a critical component of a change in appropriation and specifically whether a change will cause adverse effect to another appropriator. A change can affect return flow patterns and timing, affecting other water users. E.g., I*n the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991). An applicant for a change in appropriation must analyze return flows (amount, location, and timing) to prove that the proposed change does not adversely affect other appropriators who may rely on those return flows as part of their water supply to exercise their water rights. E.g., Royston, supra; *In the Matter of Change Application No. 43D-30002264 by Chester and Celeste Schwend* (DNRC Final Order 2008) (applicant must show that significant changes in timing and location of historic return flow will not be adverse effect.) The level of analysis of return flow will vary depending on the nature of the change application. Hohenlohe ¶¶ 45-46, 55-56.

60. The Applicant has proven by a preponderance of the evidence 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. 41-55)

Adequate Diversion

FINDINGS OF FACT

61. There are four scenarios under which water will be diverted and/or used after implementation of the proposed change. First, when water is not being marketed for mitigation, it will be diverted from Wolsey Creek as it historically has for irrigation, utilizing the same diversions and conveyance works. Appropriations will occur via two headgates, at a combined flow rate of up to 10.0 CFS and conveyed through the two Woolsey Ditches to the existing places of use. The ditches are located in the SENWNE Section 27, T12N, R7E. Ditch dimensions for the Eastern and Western Woolsey Ditches are 0.6 feet wide by 1.33 feet deep, for a calculated carrying capacity of 22.4 CFS; and 13.5 feet wide by 1.6 feet deep, for a calculated carrying capacity of 23.9 CFS. The ditch capacities are adequate to appropriate a flow rate of 10.0 CFS. Application.

62. Second, water may be retired from irrigation for the season and marketed (left instream) to offset or mitigate surface water depletions realized from a groundwater appropriation by the Black Butte Copper Project. Water will remain in Woolsey Creek and flow into and offset depletions in Sheep Creek, which is one of the affected sources. Under this scenario, there will be no diversion of water.

63. Third, marketed water may be left instream and flow down to Tintina Montana's diversion in Sheep Creek, at which time it will be diverted by Tintina and stored in an off-stream reservoir. Tintina's diversion point is in the SWNENW Section 30, T12N, R7E, and the means of diversion consists of an 8-foot diameter wet well set adjacent to Sheep Creek, with a 22-inch pipeline extending into the source. Water will be diverted into the wet well and then conveyed to a 291.9 AF capacity off-stream storage reservoir (referred to as the Non-Contact Water Reservoir, or NCWR). The NCWR is in the N2 Section 31, T12N, R7E. The wet well is connected to the NCWR via 7,150 feet of 20-inch HDPE pipe. Water will be diverted from the wet well by a variable frequency drive, 4-stage 425 horse-power vertical turbine pump at a rate up to 7.5 CFS,

and diversions will be measured. Water will later be released from the reservoir by Tintina to Black Butte Creek, Coon Creek and Sheep Creek to offset depletions in those sources.

64. Fourth, water will be diverted at the existing point of diversion and placed into an ARB's for purposes of aquifer recharge. Diversions for this use will occur in September only, but water will return to Sheep Creek through the non-irrigation season. The plan will allow for the replacement or replication of return flows to protect existing water rights that have historically relied on those return flows to supply their appropriations. The conceptual design of the ARB's includes solid 6-inch HDPE transfer lines from the diversion point to buried, perforated 6-inch HDPE pipes located through segments of the historic place of use. Water diverted to the ARB's will seep into the ground and return to Sheep Creek in timing and amount to replicate return flows.

65. Pursuant to § 85-2-402 (2)(b), MCA, the Applicant is not required to prove the adequacy of the diversion works for changes in appropriation rights for the marketing for mitigation purpose, however, the general marketing for mitigation plan has been described in this section for information purposes. Otherwise, the Department finds the diversion works and use of water to be adequate under the purpose of irrigation.

CONCLUSIONS OF LAW

66. Pursuant to § 85-2-402 (2)(b), MCA, except for a change in appropriation right for instream flow to protect, maintain, or enhance streamflows to benefit the fishery resource pursuant to § 85-2-436, MCA, or a temporary change in appropriation right authorization to maintain or enhance streamflows to benefit the fishery resource pursuant to § 85-2-408, MCA, or a change in appropriation right to instream flow to protect, maintain, or enhance streamflows pursuant to § 85-2-320,MCA, the Applicant must prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate. The adequate means of diversion statutory test merely codifies and encapsulates the common 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; see also, *In the Matter of Application to Change a Water Right No. G129039-76D by Keim/Krueger* (DNRC Final Order 1989)(whether party presently has

easement not relevant to determination of adequate means of diversion); *In the Matter of Application for Beneficial Water Use Permit No. 69141-76G by Silver Eagle Mining* (DNRC Final Order 1989) (collection of snowmelt and rain in lined ponds considered adequate means of diversion); *In the Matter for Application to Change a Water Right No. 101960-41S by Royston* (DNRC Final Order 1989)(irrigation system is designed for flow rates of 750 GPM, and maximum usage allowed during non-high water periods, is 144-247 GPM, and the evidence does not show that the system can be operated at the lower flow rates; diversion not adequate), *affirmed*, 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; *In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC* (DNRC Final Order 2002)(information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies based upon project complexity; design by licensed engineer adequate); *In the Matter of Application for Beneficial Water Use Permit No. 43B-30002710 by USDA* (DNRC Final Order 2005) (specific ditch segments would be adequate after completion of maintenance and rehabilitation work).

Adequate diversions can include the requirement to bypass flows to senior appropriators. E.g., *In the Matter of Application for Beneficial Water Use Permit No. 61293-40C by Goffena* (DNRC Final Order 1989) (design did not include ability to pass flows, permit denied).

67. 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 uses. § 85-2-402 (2)(b), MCA. (FOF's 61-65).

Beneficial Use

FINDINGS OF FACT

68. Applicant proposes to add the purposes of marketing for mitigation and mitigation to Statement of Claim No. 41J 29451.[11] The amount of water to be used for marketing for mitigation is a flow rate of 10.0 CFS and 70.2 AF in volume. The volume represents only the historic consumed volume under the water right. Water will continue to be used as it historically

[11] The Applicant has entered into a contract to market its water right to the Tintina Black Butte Copper Project.

has, for irrigation purposes, when not being used for marketing for mitigation. When being used for Irrigation, the amount of water associated to the existing use is 10.0 CFS and a diverted volume of up to 1,295.2 AF, and the place of use consists of 81 acres. Application; Department Technical Report.

69. The volume of water associated with the purpose of marketing for mitigation represents a portion of the total volume required to offset or mitigate all surface water depletions caused by groundwater pumping from the copper mine (340.3 AF). Five other existing irrigation water rights are proposed to be changed, in addition to a proposed permit to appropriate water during high spring flows, to fully offset depletions. Marketing of the existing water rights will occur on a rotational basis and as necessary to execute the plan. The combination of water rights will supply 340.3 AF for mitigation purposes to Sheep Creek, Black Butte Creek, and Coon Creek. Application; water right records.

70. When beneficially using the water right for marketing for mitigation, water will either be left instream to offset depletions in Sheep Creek or diverted via a wet well and pumping system to the NCWR, for later releases into Sheep Creek, Black Butte Creek, and Coon Creek. When stored in the NCWR, the period of use is expanded to January 1 through December 31. When left instream, the period of use is the same as historically, May 1 through September 30. Application.

71. The amount of water associated with aquifer recharge is 339 GPM and 45 AF. Hydrometrics, Inc. (consultant) established the volume needed to replicate return flows through a groundwater model, and the Department's expert, Attila Folnagy, found the model and computation to be credible. The replication of return flows will sustain source conditions during the non-irrigation period so that other water users can exercise their water rights as historically. Department Memo – Assessment of Groundwater Flow Model and Thorson Ranch Return Flow Analysis.

72. The Applicant's obligation to market water is complete upon the cessation of irrigation and the appropriation reaches Applicant's point of diversion (point of sale). At that point, the purchaser, Tintina Montana, assumes responsibility for managing the marketed water. When marketed and stored by Tintina, the period of use of the water right may expand to January 1 through December 31 (the period of diversion shall remain May 1 through September 30).

73. The Black Butte Copper Project is being permitted under the statutory requirements of the Metal Mine Reclamation Act (Mine Operating Permit Application No. 00188).

74. The Department finds that the proposed additional purposes of marketing for mitigation (10.0 CFS up to 70.2 AF), aquifer recharge (339 GPM and 45 AF) and irrigation (10.0 CFS up to 1,295.2 AF) are beneficial uses of water.

CONCLUSIONS OF LAW

75. Under the change statute, § 85-2-402(2)(c), MCA, an applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. An appropriator may appropriate water only for a beneficial use. §§ 85-2-301 and 311(1)(d), MCA.

76. 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. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel*, Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; Worden v. Alexander (1939), 108 Mont. 208, 90 P.2d 160; Allen v. Petrick (1924), 69 Mont. 373, 222 P. 451; Quigley; Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 3 (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); *In the Matter of Application for Beneficial Water Use Permit No. 76H-84577 by Thomas and Janine Stellick*, (DNRC Final Order 1995)(permit denied because no evidence in the record that the amount of water needed for fish and wildlife; absence of evidence of waste does not meet the standard of proof); *In the Matter of Application No. 40A-108497 by Alex Matheson*, DNRC Proposal for Decision adopted by Final Order (2000) (application denied as to fishery and recreation use for lack of proof); *In the Matter of Application for Beneficial Water Use Permit No. 76LJ-115-831 by Benjamin and Laura Weidling*, (DNRC Final Order 2003), *aff'd on other grounds*, In the Matter of Application for Beneficial Water Use Permit No. 76LJ-115-83100 by Benjamin and Laura Weidling and No. 76LJ-1158300 by Ramona S. and William N. Nessly, *Order on Motion for Petition for Judicial Review*, Cause No. BDV-2003-100, Montana First Judicial District (2004) (fish and wildlife use denied for lack of proof); *In the Matter of Application*

for Beneficial Water Use Permit 76LJ 30008762 by Vinnie J & Susan N Nardi, DNRC Proposal for Decision adopted by Final Order (2006); Statement of Opinion, *In the Matter of Beneficial Water Use Permit No. 41H-30013678 by Baker Ditch Company* (June 11, 2008)(change authorization denied - no credible evidence provided on which a determination can be made of whether the quantity of water requested is adequate or necessary to sustain the fishery use, or that the size or depth of the ponds is adequate for a fishery); *In The Matter Of Application For Beneficial Water Use Permit No. 43C 30007297 By Dee Deaterly*, DNRC Final Order (2007), *aff'd on other grounds*, Deaterly v. DNRC et al., Cause No. BDV-2007-186, Montana First Judicial District, *Nunc Pro Tunc Order on Petition for Judicial Review* (2008) (permit denied in part because of failure to support quantity of water needed for pond); *In The Matter of Change Application No. 43D-30002264 by Chester and Celeste Schwend* (DNRC Final Order 2008) (when adding new water rights to land already irrigated by other water rights, applicant must show that all of the proposed rights together are needed to irrigate those lands);.

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. §85-2-312, MCA; see also, McDonald; Toohey. Waste is defined to include the "application of water to anything but a beneficial use." § 85-2-102(23), MCA. An absence of evidence of waste does not prove the amount requested is for a beneficial use. E.g., *Stellick*, supra.

77. It is the Applicant's burden to prove the required criteria. Royston. A failure to meet that affirmative burden does not mean the criterion is met for lack of contrary evidence. E.g., *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).

78. Applicant proposes additional water uses of marketing for mitigation and aquifer recharge, which are recognized beneficial uses. § 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence 10.0 CFS in flow rate and 70.2 AF in volume is the amount needed to sustain the beneficial use of marketing for mitigation; and 339 GPM and 45 AF is the amount needed to sustain the beneficial use of aquifer recharge. When the water right is used for its historic purpose, Irrigation, the appropriation is 10.0 CFS up to 1,295.2 AF in diverted volume. § 85-2-402(2)(c), MCA. (FOF Nos. 68-74)

Possessory Interest

FINDINGS OF FACT

79. Per § 85-2-402(2)(d)(iii), MCA, the Applicants are not required to prove the possessory interest criteria in relation to the marketing for mitigation and mitigation purposes. Otherwise, the Applicants signed and had the affidavit on the application form notarized affirming the Applicant has 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 when used for Irrigation purposes. Application.

CONCLUSIONS OF LAW

80. Pursuant to § 85-2-402(2)(d), 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 . . ." This requirement "does not apply to . . . a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation." 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.

81. 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 for irrigation. § 85-2-402(2)(d), MCA. (FOF No. 79).

Discharge Permit

FINDINGS OF FACT

82. A discharge permit from the Montana Department of Environmental Quality (DEQ) is not required for the actions taken in this change proceeding. According to the DEQ the only discharge permit that applies to the Black Butte Copper Project is for groundwater diverted from the mine and discharged through an underground infiltration gallery after treatment. The surface water right to be changed in this proceeding is not associated with groundwater from the mine and will not undergo a treatment process. Department Memo on Discharge Permit Compliance with § 85-2-364, MCA, dated January 16, 2020.

CONCLUSIONS OF LAW

83. Sections 85-2-362(3) and 85-2-364, MCA, require that an applicant receive the appropriate water quality permits for a mitigation or an aquifer recharge plan pursuant to Title 75, chapter 5, MCA, as required by §§ 75-5-410 and 85-2-364, MCA, prior to the grant of beneficial water use permit application as part of a combined application under § 85-2-363, MCA. Applicant is not required to obtain a water quality discharge permit for purposes of the proposed change.

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Order, the Department preliminarily determines that Application to Change an Existing Irrigation Water Right No. 41J 30116558 should be **GRANTED**. The authorized change will mitigate a portion of the depletions associated with Groundwater Application for Beneficial Water Use Permit No. 41J 30116562.

The Appropriator is authorized to add two purposes of use and two places of use to Statement of Claim No. 41J 29451. The additional purposes are marketing for mitigation and aquifer recharge. The place of use for marketing for mitigation, or point of sale of the water right, is in the SENWNE Section 27, T12N, R7E, and the general service area includes portions of the following streams, located in T12N, R5E; T12N, R6E; and T12N, R7E: Sheep Creek, Black Butte Creek, and Coon Creek. The places of use for aquifer recharge are in the N2 Section 27, T12N, R7E (the location of aquifer recharge basins). The amount of water used for marketing for

mitigation shall be a flow rate of up to 10.0 CFS and volume of up to 70.2 AF. The amount of water used for aquifer recharge shall be a flow rate of 339 GPM and a volume of 45 AF. When the purposes of marketing for mitigation and aquifer recharge are being used simultaneously, the combined flow rate may not exceed 10.0 CFS. The period of diversion and period of use is May 1 to September 30.

Water may also be appropriated for its historical purpose of irrigation but shall not be appropriated during any calendar year that it is appropriated for marketing for mitigation. When used for irrigation purposes, the Applicant may divert water from May 1 through September 30, from two points in the SENWNE Section 27, T12N, R7E. The amount of water that may be appropriated for irrigation purposes is a flow rate of up to 10.0 CFS, and a diverted volume of up to 1,295.2 AF. The place of use shall be 81.0 acres located in Section 27, T12N, R7E.

The Appropriator shall monitor, record and report on water use as described in the Conditions section of this Preliminary Determination.

CONDITIONS

1. WATER MEASUREMENT AND MONITORING REQUIRED:

   A. THE APPROPRIATOR SHALL INSTALL A DEPARTMENT-APPROVED STREAM MONITORING DEVICE IN WOLSEY CREEK AS NEAR AND PRACTICABLE TO THE EXISTING POINT OF DIVERSION FOR 41J 29451 LOCATED IN THE SENWNE SECTION 27, T12N, R7E. THE APPROPRIATOR SHALL KEEP A DAILY WRITTEN RECORD OF THE FLOW RATE MEASURED IN WOLSEY CREEK WHEN APPROPRIATIONS ARE OCCURRING FOR THE MARKETING FOR MITIGATION PURPOSE. THE APPROPRIATOR SHALL SUBMIT A PLAN INDICATING THE PROPOSED DESIGN OF THE MONITORING DEVICE AND A MAP OF THE SPECIFIC LOCATION OF THE DEVICE. THE PLAN AND DEVICE LOCATION MUST BE APPROVED BY THE DEPARTMENT BEFORE WATER IS DIVERTED UNDER THIS CHANGE AUTHORIZATION.

   B. THE APPROPRIATOR SHALL KEEP A WRITTEN DAILY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER MARKETED FOR MITIGATION WHEN LEAVING WATER INSTREAM TO OFFSET DEPLETIONS AND MITIGATE ADVERSE EFFECTS IN THE SHEEP CREEK DRAINAGE. THE AMOUNT OF WATER AVAILABLE FOR APPROPRIATION SHALL BE A

FLOW RATE OF UP TO 10.0 CUBIC FEET PER SECOND AND VOLUME OF UP TO 70.2 ACRE-FEET, BUT THE FLOW RATE CANNOT EXCEED THE STREAM FLOW RECORDED AT THE MONITORING DEVICE IN WOLSEY CREEK AT ANY TIME. APPROPRIATOR MUST ADJUST ITS APPROPRIATION FOR MARKETING FOR MITIGATION ACCORDINGLY WHEN STREAM FLOWS IN WOLSEY CREEK DROP BELOW 10.0 CFS. THE APPROPRIATOR IS REQUIRED TO NOTIFY THE DEPARTMENT WITHIN 30 DAYS OF THE STARTING DATE FROM WHEN THE WATER IS MARKETED FOR MITIGATION. THE APPROPRIATOR SHALL SUBMIT ITS NOTIFICATION TO THE DEPARTMENT ON FORM WM-09 (MITIGATION AND MARKETING FOR MITIGATION REPORTING FORM).

FOR EVERY YEAR AFTER THE INITIAL APPROPRIATION FOR MARKETING FOR MITIGATION HAS BEEN COMPLETED AND REPORTED, THE APPROPRIATOR SHALL NOTIFY THE DEPARTMENT WHICH PURPOSE THE WATER RIGHT IS BEING USED FOR IN THAT YEAR – IRRIGATION OR MARKETING FOR MITIGATION. ANNUAL NOTIFICATION TO THE DEPARTMENT IS REQUIRED WITHIN 30 DAYS OF THE STARTING DATE OF APPROPRIATIONS FOR EACH YEAR.

C. THE APPROPRIATOR SHALL INSTALL A DEPARTMENT-APPROVED MEASURING DEVICE IN THE SUPPLY LINE(S) FOR THE AQUIFER RECHARGE BASIN(S). THE LOCATION OF THE MEASURING DEVICE MUST BE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE VOLUME OF ALL WATER DIVERTED TO THE AQUIFER RECHARGE BASIN(S), INCLUDING THE PERIOD OF TIME. THE APPROPRIATOR IS REQUIRED TO SUBMIT ITS RECORDS TO THE DEPARTMENT BY DECEMBER 31 OF EACH YEAR THAT WATER HAS BEEN USED FOR AQUIFER RECHARGE.

FAILURE TO SUBMIT RECORDS AS REQUIRED BY THESE CONDITIONS MAY BE CAUSE FOR REVOCATION OF THE CHANGE AUTHORIZATION. THE RECORDS MUST BE SENT TO THE LEWISTOWN WATER RESOURCES REGIONAL OFFICE AT THE ADDRESS BELOW. THE APPROPRIATOR SHALL MAINTAIN ALL MONITORING AND MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE WATER ACCURATELY.

SUBMIT RECORDS TO:
LEWISTOWN WATER RESOURCES REGIONAL OFFICE
613 NE MAIN ST, SUITE E
LEWISTOWN, MT 59457
PH: (406)538-7459

2. MARKETING FOR MITIGATION SERVICE AREA AND FACILITIES

WHEN THIS WATER RIGHT IS MARKETED FOR MITIGATION THE SERVICE AREA INCLUDES SHEEP CREEK, BLACK BUTTE CREEK AND COON CREEK, GENERALLY IN T12N, R5E; T12N, R6E; AND T12N, R7E. WATER MAY BE LEFT INSTREAM TO IMPLEMENT THE MARKETING PLAN IN SHEEP CREEK, OR IT MAY BE DIVERTED FROM SHEEP CREEK AND STORED IN A RESERVOIR. WHEN STORED, WATER WILL BE RELEASED AT A LATER DATE TO SHEEP CREEK, BLACK BUTTE CREEK AND COON CREEK. THE FACILITIES USED TO EXECUTE THE MARKETING PLAN INCLUDE A DIVERSION STRUCTURE ON SHEEP CREEK IN THE SWNENW SECTION 30, T12N, R7E; AND A 291.9 ACRE-FOOT RESERVOIR IN THE N2 SECTION 31, T12N, R7E.

3. IMPORTANT INFORMATION

STATEMENT OF CLAIM NOS. 41J 29451 AND 41J 29450 ARE ASSOCIATED. THEY SHARE A PORTION OF THE AUTHORIZED PLACE OF USE FOR IRRIGATION AND ARE USED IN COMBINATION FOR MARKETING FOR MITIGATION PURPOSES. THE OVERLAPPING PLACE OF USE CONSISTS OF 12.7 ACRES IN SECTION 27, T12N, R7E LYING DOWNGRADIENT OF THE CONVEYANCE DITCH FOR 41J 29450 (COOK DITCH). THE TWO WATER RIGHTS SHALL BE ADMINISTERED CONCURRENTLY. THEY MUST BE USED SIMULTANEOUSLY FOR THE SAME PURPOSE IN ANY GIVEN YEAR (EITHER MARKETING FOR MITIGATION OR IRRIGATION).

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 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, the Application and objection will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If valid objections to an application are received and withdrawn with stipulated conditions and the department preliminarily determined to grant the application, the department will grant the application subject to conditions necessary to satisfy applicable criteria based on the preliminary determination.

DATED this 13th day of March 2020.

/Original signed by Scott Irvin/
Scott Irvin, Regional Manager
Lewistown Regional Office
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 13th day of March 2020, by first class United States mail.

JOHN TIETZ
BROWNING, KALECZYC, BERRY & HOVEN, P.C.
PO BOX 1697
HELENA, MT 59624

_____ _____

NAME DATE