

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

APPLICATION TO CHANGE A WATER)
RIGHT NO. 41P 30071109 BY RIVER RIDGE) **PRELIMINARY DETERMINATION TO**
RANCH INC) **GRANT CHANGE**

On November 3, 2014, River Ridge Ranch Inc. (Applicant) submitted Application to Change Water Right No. 41P 30071109 to change Water Right Claim Nos. 41P 161027 to the Havre Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the Application on its website. The Application was determined to be correct and complete as of March 18, 2015. An Environmental Assessment for this Application was completed on July 10, 2015.

INFORMATION

The Department considered the following information submitted by the Applicant.

Application as filed:

- Water right information as required in Form 606
- Copy of Amendment to Statement of Claim
- Water Resource Survey Photographic Evidence

Information within the Department’s Possession/Knowledge

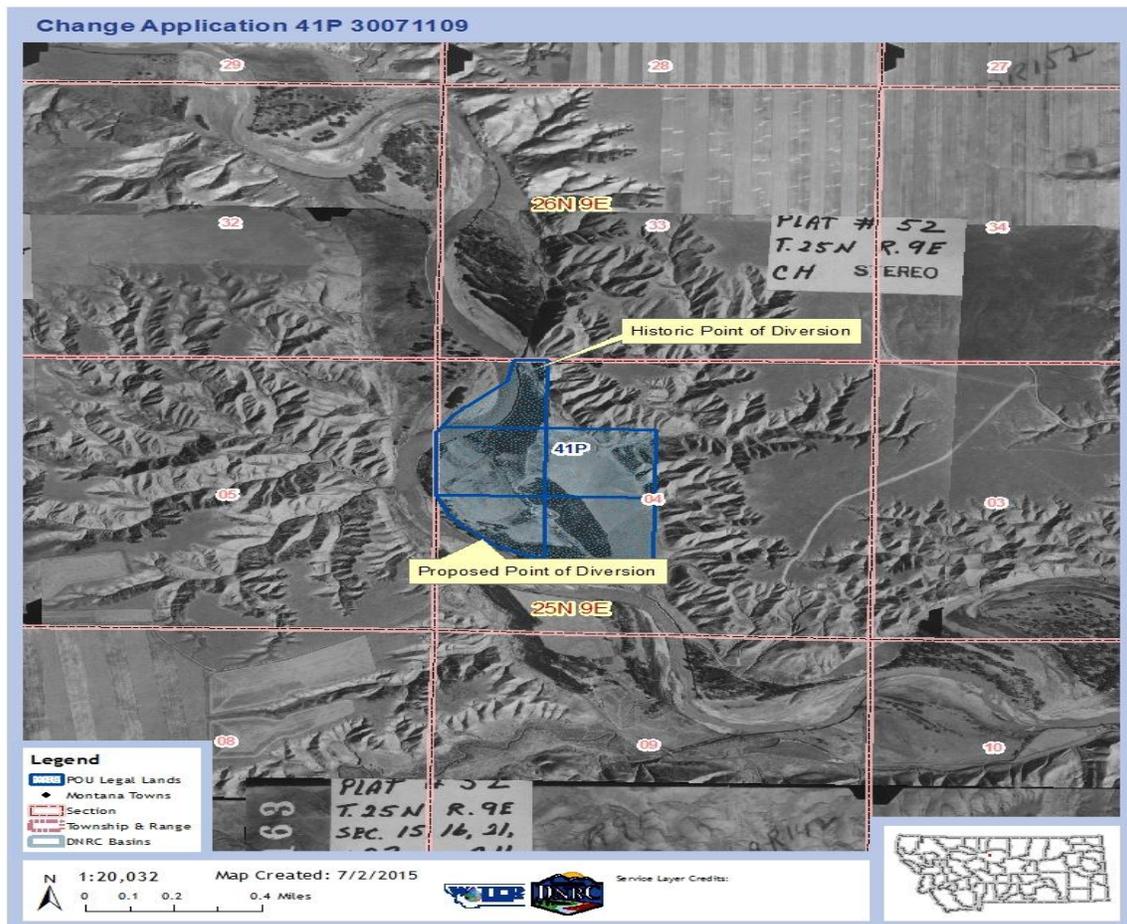
- 1964 Chouteau Water Resources Survey; USGS Map, Study
- Environmental Assessment dated July 10, 2015
- Statement of Claim file number 41P 161027 00
- Pre-Application meetings between Department staff and the Applicant
- Title 85 of Montana Code Annotated

The Department has fully reviewed and considered the Environmental Assessment and evidence and argument submitted with this Application and **preliminarily determines** pursuant to the Montana Water Use Act (Title 85, chapter 2, parts 3 and 4, MCA) as follows.

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

1. Historic elements of Water Right Claim Nos. 41P 161027 claim a priority date of March 1, 1932 and claims a flow rate of 1.67 cubic feet per second (CFS) include a point of diversion consisting of a pump (POD) located in the NENWNW of Section 4, Twp. 25 N, Rge. 9 E. The place of use (POU) consists of 71 flood irrigated acres located generally in the west half of Section 4, Twp. 25 N, Rge. 9 E. The period of diversion and use is May 15 to September 30.
2. The following exhibit depicts where the water right is located and the location of the historic and proposed POD:



CHANGE PROPOSAL

FINDINGS OF FACT

3. Applicant seeks to change the location of the POD and POU of Water Right Claim No. 41P 161027 in order to divert 500 gallons per minute (GPM) (*expressed as 1.11 CFS in this document*) of flow and limited to a total maximum volume of up to 95.88 Acre Feet (AF) from the Marias River for the purpose of center pivot sprinkler irrigation with a priority date of March 1, 1932. The period of diversion and use will remain as May 15 to September 30. The place of use is to be 81 acres of center pivot irrigation also located generally in the west half of Section 4, Twp. 25 N, Rge. 9 E. The point of diversion is a pump located in Lot 7 in the NWSW of Section 4, Twp. 25 N, Rge. 9 E.. The proposed change will include the following condition as to not create an adverse effect through the expansion of acres irrigated within the POU:

IN THE MATTER OF APPLICATION TO CHANGE WATER RIGHT NO. 41P 30071109, THE DEPARTMENT FINDS THE FOLLOWING CONDITIONS ARE NECESSARY TO MEET THE STATUTORY CRITERIA FOR CHANGES OF WATER RIGHT SET FORTH AT § 85-2-402, MCA AND ALLOW FOR ISSUANCE OF THE CHANGE AUTHORIZATION:

THE APPROPRIATOR SHALL INSTALL DEPARTMENT APPROVED IN-LINE FLOW METERS IN THE DELIVERY LINES ASSOCIATED WITH BOTH IRRIGATION SYSTEMS THAT ARE APPURTENANT TO THIS WATER RIGHT. THE LOCATION OF THE FLOW METERS MUST BE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICES ARE IN PLACE AND OPERATING. THE APPROPRIATOR SHALL KEEP A WRITTEN WEEKLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF THE AUTHORIZATION. THE RECORDS MUST BE SENT TO THE HAVRE WATER RESOURCES OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE THE FLOW RATE AND VOLUME ACCURATELY.

SUBMIT RECORDS TO:

HAVRE WATER RESOURCES OFFICE

PO BOX 1828

HAVRE, MT 59501

PHONE: 406-265-5516

THE APPROPRIATOR SHALL PURCHASE A U.S. BUREAU OF RECLAMATION, TEMPORARY WATER SERVICE CONTRACT DURING ANY YEAR THE DIVERTED VOLUME FOR THE PROPOSED 81 ACRE CENTER PIVOT EXCEEDS 95.88 ACRE FEET. THE CONTRACT SHALL ACCOUNT FOR ALL WATER ASSOCIATED WITH THE EXCESS ANNUAL MEASURED DIVERTED VOLUME. THE APPROPRIATOR SHALL KEEP RECORDS OF THE AMOUNT OF WATER DIVERTED TO SATISFY THE CONTRACT, AND MUST KEEP THOSE RECORDS SEPARATELY FROM THE WATER MEASUREMENT RECORDS INDICATED IN THE 1ST CONDITION. RECORDS SHALL BE SUBMITTED TO THE HAVRE WATER RESOURCES OFFICE UPON REQUEST.

§85-2-402, MCA, CRITERIA

GENERAL CONCLUSIONS OF LAW

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

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

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

(b) 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](#) or a temporary change in appropriation right authorization to maintain or enhance streamflows to benefit the fishery resource pursuant to [85-2-408](#) or a change in appropriation right to instream flow to protect, maintain, or enhance streamflows pursuant to [85-2-320](#), the proposed means of diversion, construction, and operation of the appropriation works are adequate.

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

(d) 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](#) or a temporary change in appropriation right authorization pursuant to [85-2-408](#) or a change in appropriation right to instream flow to protect, maintain, or enhance streamflows pursuant to [85-2-320](#), the applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national

forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water.

(e) If the change in appropriation right involves salvaged water, the proposed water-saving methods will salvage at least the amount of water asserted by the applicant.

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.

5. The burden of proof in a change proceeding by a preponderance of evidence is “more probably than not.” Hohenlohe ¶¶ 33, 35.

6. 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); Hohenlohe ¶ 43; 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 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).

7. Montana's change statute simply codifies western water law.¹ 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

¹ 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).

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.

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

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.

8. 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)028708-411 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*).

9. 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.

10. The extent of the historic beneficial use must be determined in a change case. E.g., McDonald; Hohenlohe ¶ 43; 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).

11. 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.

12. 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 adopted by 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) . 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.

13. 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).

14. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge. Admin. R. Mont. (ARM) 36.12.221(4).

Historic Use:

FINDINGS OF FACT

15. 41P 161027 claims 71 acres were historically irrigated prior to the year 1973. Claim File.

16. The Department's examination of the Photo USDA 278-165, dated 7/20/1979 and Chouteau County Water Resource Survey Photo MW-8R-143, dated 8/20/1956 support the 71 irrigated acres as claimed. Furthermore, the USGS topographic map indicates that flood irrigation is feasible across the entire claimed place of use by the conveyance ditch. Claim File and Application Technical Report.

17. The claimed flow rate for the subject SOC is 1.67 cubic feet per second (CFS). Water was diverted using a pump. A pump curve and ditch dimensions were provided by the Applicant as evidence to support the historically diverted 1.67 CFS. Based on pump curve data, the historically diverted flow rate of 1.67 CFS is within the capacity of the pump used to divert water from the point of diversion to the place of use. Change Application Materials and Application Technical Report.

18. The Applicant has agreed to the use of ARM 36.12.1902 (16) to calculate historic consumptive use. The Department determined that: (a) Chouteau County, Loma weather station is the most representative for the historic place of use. (b) identified 22.64 inches as the evapotranspiration component based on the historic flood irrigation. (c) identified 52.5% as the 1964-1973 management factor for Chouteau County which is where the irrigated acres are located; (d) multiply the Irrigation Water Requirements (IWR) estimate by the management factor percentage. The result is the number of inches used per irrigated acre; (e) multiply the number of total acres which is found to be 71 within the historic place of use by the county

adjusted inches used per irrigated acre (calculated in (d) above) to determine the historic consumptive inches for those acres; and (f) divide the cumulative historic consumptive inches by 12 to determine the cumulative historic consumptive acre-feet (volume) for the total acres.

Application Technical Report

19. The Department calculates the historic consumptive volume in acre-feet (HCV AF) to be 76.7 using the variables found in the following Table 1:

Table 1:

Historic Consumptive Volume (HCV) Flood Sprinkler	Chouteau County (Loma Station) Flood or Flood/Sprinkler ET (Inches)	Chouteau County 1964-1973 Management Factor (Percent)	41P 161027 Historic Acres	HCV AF (minus IL)	On-farm Efficiency	Field Application AF	Historic Irrecoverable Losses (IL) Flood 5%	HCV AF (Including IL)
	22.64	52.5%	71	70.3	55%	127.9	6.4	76.7

20. Based on the aforementioned methodology for determining the historic consumption, a historic diverted volume in acre-feet (HDV AF) was calculated. This calculation was based on dividing the HCV AF by the estimated historic on-farm efficiency and adding seasonal conveyance losses such as seepage and vegetative losses in addition to ditch evaporation.

21. The Department calculates the historic diverted volume in acre-feet (HDV AF) to be 160.3 using the variables found in the following Table 2.

Table 2:

Historic Diverted Volume (HDV)	HCV AF (minus IL)	On-farm Efficiency	Seasonal Conveyance Loss Volume (seepage loss + vegetation loss + ditch evaporation)	Total HDV AF	
	70.3	55%	32.4	160.3	
<i>Seepage Loss:</i>	Ditch Wetted Perimeter (Feet)	Ditch Length (Feet)	Ditch Loss Rate (ft3/ft2/day)	Days Irrigated	Seepage Loss (/43560)
	5.01	3000	1.5	60	31.1
<i>Vegetation Loss:</i>	% loss/mile	Historic Flow Rate (HFR) (CFS) =	Days Irrigated	ditch length (miles)	Vegetation Loss (*2)
	0.0075	1.67	60	0.6	0.9
<i>Ditch Evaporation:</i>	Ditch Width (Feet)	Ditch Length (Feet)	Evaporation (Potts)	Ditch Evaporation (/43560)	
	3	3000	2.5	0.5	

22. Based on the gaging station records, the monthly mean flows for the Marias River indicate that in all years for which records were kept, except for 1956 when Tiber Reservoir was being filled, water was historically available at the point of diversion to achieve full service irrigation. It is reasonable to assume the fields were irrigated to full capacity when water was available. Application Technical Report.

23. Based on the claimed flow rate of 1.67 CFS up to 160.30 AF of diverted volume and a consumed volume of 76.7 AF , the Department finds the following historic use for Statement of Claim No. 41P 161027:

WR #	Source	Flow Rate	Total Acres	Consump. Use	Diverted Volume
41P 161027	Marias River	1.67 CFS	71.00	76.70 AF	160.30 AF
Priority Date	Point of Diversion	Place of Use	Period of Diversion	Period of Use	
03/01/1932	NENWNW, of S. 4, Twp. 25 N, Rge. 9 E.	Generally W2 S. 4, Twp. 25 N, Rge. 9 E.	05/15 to 9/30	05/15 to 9/30	

CONCLUSIONS OF LAW

24. 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 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. An applicant can change only that to which it has a perfected right. E.g., McDonald, 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. 139988-40A, 139989-40A, 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).

25. 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, reflecting basic water law principles).

26. 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.

27. 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).

28. The Department has adopted a rule providing for the calculation of historic consumptive use where the applicant proves by a preponderance of the evidence that the acreage was historically irrigated. ARM 36.12.1902 (16)

29. If an applicant seeks more than the historic consumptive use as calculated by ARM 36.12.1902 (16), the applicant bears the burden of proof to demonstrate the amount of historic consumptive use by a preponderance of the evidence. The actual historic use of water could be less than the optimum utilization represented by the calculated duty of water in any particular case. E.g., Application for Water Rights in Rio Grande County 53 P.3d 1165 (Colo., 2002) (historical use must be quantified to ensure no enlargement); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, DNRC Proposal for Decision adopted by 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”).

30. 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)).

31. “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 (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 (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*.

32. 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.

33. 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. (FOF No.18)

34. The Applicant has proven by a preponderance of the evidence the historic use of Water Right Claim No. 41P 161027 of 160.30 AF diverted volume and 1.67 CFS flow rate with a consumptive use of 76.7 AF. (FOF No. 15-23)

Adverse Effect:

FINDINGS OF FACT

35. Applicant seeks to change the location of the POD and POU of Water Right Claim No. 41P 161027 in order to divert 1.11 CFS of flow and will be limited to a total maximum volume of up to 95.87 Acre Feet (AF) from the Marias River. The period of diversion and use will remain as May 15 to September 30. The place of use is to be 81 acres of center pivot irrigation

also to be located generally in the west half of Section 4, Twp. 25 N, Rge. 9 E. The point of diversion is a pump located in Lot 7 in the NWSW of Section 4, Twp. 25 N, Rge. 9 E.

Application Materials.

36. Through the use of ARM 36.12.1902 (16), the Department calculated the proposed consumptive use. The Department determined that: (a) that Chouteau County, Loma weather station is the most representative for the proposed place of use. (b) identified 25.4 inches as the evapotranspiration component based on the proposed pivot irrigation. (c) identified 77.9% as the 1997-2006 management factor for Chouteau County which is where the irrigated acres are located; (d) multiply the Irrigation Water Requirements (IWR) estimate by the management factor percentage. The result is the number of inches used per irrigated acre; (e) multiply the number of total acres to be irrigated which is 81 by the county adjusted inches used per irrigated acre (calculated in (d) above) to determine the historic consumptive inches for those acres; and (f) divide the cumulative historic consumptive inches by 12 to determine the cumulative historic consumptive acre-feet (volume) for the total acres. Application Technical Report.

37. The Department calculates the proposed consumptive volume in acre-feet (PCV AF) to be 152.5 using the variables found in the following Table 3:

Table 3

Proposed Consumptive Volume (PCV) Pivot Sprinkler	Chouteau County (Loma Station) Sprinkler or Sprinkler Pivot ET (Inches)	Chouteau County 1997-2006 Management Factor (Percent)	Proposed New Acres	PCV AF (minus IL)	On-farm Efficiency	Field Application AF	Proposed Irrecoverable Losses (IL) Sprinkler 10%	PCV AF (Including IL)
	25.4	77.9%	81	133.4	70%	190.6	19.1	152.5

38. Based on the aforementioned methodology for determining the proposed consumption, a proposed diverted volume in acre-feet (PDV AF) was calculated. This calculation was based on dividing the PCV AF by the estimated historic on-farm efficiency and adding seasonal conveyance losses such as seepage and vegetative losses in addition to ditch evaporation. In this case, the proposed means of conveyance includes a pipeline. Therefore, there is no conveyance losses to be calculated. Application Technical Report.

39. The Department calculates the PDV to be 190.6 using the variables found in the following Table 4:

Table 4

Proposed Diverted Volume (PDV)	PCV AF (minus IL)	On-farm Efficiency	Seasonal Conveyance Loss Volume (seepage loss + vegetation loss + ditch evaporation)	Total PDV AF	
	133.4	70%	0.0	190.6	
Seepage Loss:	Ditch Wetted Perimeter (Feet)	Ditch Length (Feet)	Ditch Loss Rate (ft3/ft2/day)	Days Irrigated	Seepage Loss (/43560)
	0	0	0	0	0.0
Vegetation Loss:	% loss/mile	Proposed Flow Rate (PFR) (CFS) =	Days Irrigated	ditch length (miles)	Vegetation Loss (*2)
	0.0075	1.11	0	0.0	0.0
Ditch Evaporation:	Ditch Width (Feet)	Ditch Length (Feet)	Evaporation (Potts)	Ditch Evaporation (/43560)	
	0	0	0	0.0	

40. The proposed change will include the following condition as to not create an adverse effect through the expansion of historic use through increased consumptive use. As proposed, the center pivot irrigation project will consume 80% (70% On-farm Efficiency + 10% Irrecoverable Losses) of the amount diverted from the Marias River ($152.50/190.60 = .80$): Therefore, in order not to create an adverse effect though increased consumptive use, the diverted volume of water shall be limited to 20% more than the historic consumptive use which equals 95.88 AF ($95.88 * .8 = 76.70$).

41. Additional water is available for purchase through contract from the United States Bureau of Reclamation’s (US BOR) Lower Marias Unit of the Pick-Sloan Missouri Basin Program.

42. The proposed change will include the following condition as to not create an adverse effect through the expansion of historic use:

IN THE MATTER OF APPLICATION TO CHANGE WATER RIGHT NO. 41P 30071109, THE DEPARTMENT FINDS THE FOLLOWING CONDITIONS ARE NECESSARY TO MEET THE STATUTORY CRITERIA FOR CHANGES OF WATER RIGHT SET FORTH AT § 85-2-402, MCA AND ALLOW FOR ISSUANCE OF THE CHANGE AUTHORIZATION:

THE APPROPRIATOR SHALL INSTALL DEPARTMENT APPROVED IN-LINE FLOW METERS IN THE DELIVERY LINES ASSOCIATED WITH BOTH IRRIGATION SYSTEMS THAT ARE APPURTENANT TO THIS WATER RIGHT. THE LOCATION OF THE FLOW METERS MUST BE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICES ARE IN PLACE AND OPERATING. THE APPROPRIATOR SHALL KEEP A WRITTEN WEEKLY RECORD OF

THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME, RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF THE AUTHORIZATION. THE RECORDS MUST BE SENT TO THE HAVRE WATER RESOURCES OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE THE FLOW RATE AND VOLUME ACCURATELY.

SUBMIT RECORDS TO:

HAVRE WATER RESOURCES OFFICE

PO BOX 1828

HAVRE, MT 59501

PHONE: 406-265-5516

FAX: 406-265-2225

THE APPROPRIATOR SHALL PURCHASE A U.S. BUREAU OF RECLAMATION, TEMPORARY WATER SERVICE CONTRACT DURING ANY YEAR THE DIVERTED VOLUME FOR THE PROPOSED 81 ACRE CENTER PIVOT EXCEEDS 95.88 ACRE FEET. THE CONTRACT SHALL ACCOUNT FOR ALL WATER ASSOCIATED WITH THE EXCESS ANNUAL MEASURED DIVERTED VOLUME. THE APPROPRIATOR SHALL KEEP RECORDS OF THE AMOUNT OF WATER DIVERTED TO SATISFY THE CONTRACT, AND MUST KEEP THOSE RECORDS SEPARATELY FROM THE WATER MEASUREMENT RECORDS INDICATED IN THE 1ST CONDITION. RECORDS SHALL BE SUBMITTED TO THE HAVRE WATER RESOURCES OFFICE UPON REQUEST.

43. Department assessment of the location of historic return flows indicates that the flows entered the Marias River adjacent to the place of use and immediately downstream of the place of use. Return flows entered back into the source prior to the next appropriator, which allows that appropriator and others to have substantially similar, if not better opportunity for appropriations as historically. The Department finds that the change in pattern and timing of return flows will not adversely affect other water users because water will remain in the source and be more readily available to downstream appropriators. Application Technical Report

44. The Department finds the Applicant has proven the proposed change in appropriation right, as conditioned, 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 the expressed water measurement condition. Measuring water and reporting to the Department will prevent the authorized appropriation from being exceeded and prevent adverse effects to other water users. To meet this Finding, Applicant must comply with the conditions imposed in this Order.

CONCLUSIONS OF LAW

45. 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).

46. 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, where 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 deprived the plaintiff of his subsequent right).

47. 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.

48. 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 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); *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).

49. 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 a water right and an appropriator 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, ¶¶ 22, 31,43, *citing Hidden*

Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; see discussion in Hohenlohe, supra.

50. 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., Hohenlohe, supra; *In 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. The level of analysis of return flow will vary depending on the nature of the change application. Hohenlohe ¶¶ 45-46, 55-56.

51. The Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. §85-2-402(2)(b), MCA.(FOF Nos. 35-44)

Beneficial Use

FINDINGS OF FACT

52. The beneficial use under the proposed project is irrigation. The reason for changing the water rights is to change the place of use through conversion from flood to center pivot sprinkler irrigation. The acreage irrigated by 41P 161027 will be 81 acres of center pivot irrigation. Irrigation is identified as a beneficial use of water in §85-2-102(4)(a), MCA.

53. Applicant proposes to use 95.88 AF of diverted volume and 1.11 CFS flow rate. The new center pivot irrigation systems have an estimated efficiency of 80%. 80% of the diverted volume (95.88AF) is consumed (76.70AF). The amount of water to be diverted by the new pivot irrigation system is 1.11 CFS or 500 gallons per minute (GPM) to irrigate the proposed 81 acres; equivalent to 6.17 GPM/acre which is typical for a pivot irrigation system (500/81=6.17). A diverted volume of 95.88 acre-feet; equivalent to 1.18 AF/acre is typical and accepted for a pivot irrigation system irrigating small grain type crops. High consumptive crops such as alfalfa will

require additional water releases from Tiber Dam as provided through water service contracts from the US BOR. Application Technical Report

54. The Department finds that center pivot irrigation of small grains is a beneficial use, and that a flow rate of 1.11 CFS, a diverted volume of 95.88 AF and a consumed volume of 76.70 AF are beneficial uses of water.

CONCLUSIONS OF LAW

55. 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.

56. 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; 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); see also §85-2-312(1) (a), MCA.

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; Toohy. The Department can also consider waste in a change proceeding. Hohenlohe ¶ 71. 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.

57. 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).

58. Applicant proposes to use water for irrigation which is a recognized beneficial use. §85-2-102(4), MCA. Applicant has proven by a preponderance of the evidence irrigation is a beneficial use and that 95.88 AF of diverted volume and 1.11 CFS flow rate of water requested is the amount needed to sustain the beneficial use. §85-2-402(2)(c), MCA (FOF Nos. 52-54)

Adequate Diversion

FINDINGS OF FACT

59. Applicant's center pivot was designed by an irrigation equipment dealer (Frontline Agriculture, Conrad, Montana, an authorized Valley dealer) in accordance with industry standards. A 500 GPM (1.11 CFS) Berkley Model B4Z pump powered by an 80 HP diesel engine will divert water from the Marias River and convey it through 500 feet of 6-8-inch, 80 PSI PVC pipe. One 9-span Valley center pivot with drop hoses and end gun will be used. Application Technical Report.

60. The Department finds the proposed means of diversion, construction and operation of the diversion works to be adequate.

CONCLUSIONS OF LAW

61. 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.

62. 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).

63. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. §85-2-402 (2)(b), MCA. (FOF 59-60).

Possessory Interest

FINDINGS OF FACT

64. The applicant signed and had the affidavit on the application form notarized affirming it 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.

CONCLUSIONS OF LAW

65. Pursuant to §85-2-402(2)(d), 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 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 it has a possessory interest, or the written consent of the

person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water.

66. 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.

67. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. §85-2-402(2)(d), MCA. (FOF No. 64)

Salvage Water

This Application does not involve salvage water.

PRELIMINARY DETERMINATION

68. Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 41P 30071109 should be **granted** to authorize changing the location of the POD and POU of Water Right Claim No. 41P 161027 in order to divert 1.11 CFS of flow and limited to a total maximum

volume of up to 95.88 Acre Feet (AF) from the Marias River for the purpose of center pivot sprinkler irrigation with a priority date of March 1, 1932. The period of diversion and use will remain as May 15 to September 30. The place of use is to be 81 acres of center pivot irrigation also to be located generally in the west half of Section 4, Twp. 25 N, Rge. 9 E. The point of diversion is a pump located in Lot 7 in the NWSW of Section 4, Twp. 25 N, Rge. 9 E. The proposed change will include the following conditions:

IN THE MATTER OF APPLICATION TO CHANGE WATER RIGHT NO. 41P 30071109, THE DEPARTMENT FINDS THE FOLLOWING CONDITIONS ARE NECESSARY TO MEET THE STATUTORY CRITERIA FOR CHANGES OF WATER RIGHT SET FORTH AT § 85-2-402, MCA AND ALLOW FOR ISSUANCE OF THE CHANGE AUTHORIZATION:

THE APPROPRIATOR SHALL INSTALL DEPARTMENT APPROVED IN-LINE FLOW METERS IN THE DELIVERY LINES ASSOCIATED WITH BOTH IRRIGATION SYSTEMS THAT ARE APPURTENANT TO THIS WATER RIGHT. THE LOCATION OF THE FLOW METERS MUST BE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICES ARE IN PLACE AND OPERATING. THE APPROPRIATOR SHALL KEEP A WRITTEN WEEKLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF THE AUTHORIZATION. THE RECORDS MUST BE SENT TO THE HAVRE WATER RESOURCES OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE THE FLOW RATE AND VOLUME ACCURATELY.

SUBMIT RECORDS TO:

HAVRE WATER RESOURCES OFFICE

PO BOX 1828

HAVRE, MT 59501

PHONE: 406-265-5516

FAX: 406-265-2225

THE APPROPRIATOR SHALL PURCHASE A U.S. BUREAU OF RECLAMATION, TEMPORARY WATER SERVICE CONTRACT DURING ANY YEAR THE DIVERTED VOLUME FOR THE PROPOSED 81 ACRE CENTER PIVOT EXCEEDS 95.88 ACRE FEET. THE CONTRACT SHALL ACCOUNT FOR ALL WATER ASSOCIATED WITH THE EXCESS ANNUAL MEASURED DIVERTED VOLUME. THE APPROPRIATOR

SHALL KEEP RECORDS OF THE AMOUNT OF WATER DIVERTED TO SATISFY THE CONTRACT, AND MUST KEEP THOSE RECORD SEPARATELY FROM THE WATER MEASUREMENT RECORDS INDICATED IN THE 1ST CONDITION. RECORDS SHALL BE SUBMITTED TO THE HAVRE WATER RESOURCES OFFICE UPON REQUEST.

NOTICE

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

DATED this 10th day of July 2015

/s/ Matt Miles

Matt Miles, Deputy Regional Manager
Havre Regional Office
Department of Natural Resources and Conservation