

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

**COMBINED APPLICATION FOR
BENEFICIAL WATER USE PERMIT NO. 41K-30047925 AND CHANGE NO. 41K-30047926 BY ELK CREEK COLONY INC)
PRELIMINARY DETERMINATION TO
GRANT COMBINED APPLICATION**

On January 19, 2010, Elk Creek Colony Inc, c/o Dan Hofer, submitted an Application for Beneficial Water Use Permit No. 41K 30047925 and Change No. 41K 30047926 to the Helena Regional Office, Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC). The proposal is to develop a three well water supply system to support domestic, stock and industrial use and to mitigate the effects of these wells by retiring two water rights on 64.8 acres creating a mitigation amount of 49.8 AF/yr. 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 2, 2010. The Applicant responded with information dated March 30, 2010 and May 28, 2010. The additional supplemental information that was submitted on May 28, 2010 was for clarification of information included in their March 30, 2010 response. The Application was determined to be correct and complete as of September 24, 2010. The Department met with the Applicant and Dave Baldwin and Dave Schmidt from Water Right Solutions Inc. on May 25, 2010. An Environmental Assessment for this Application was completed on September 30, 2010.

INFORMATION

The Department considered the following information submitted by the Applicant.

Application as filed:

- Application for Beneficial Water Use Permit, Form 600
- Application for Change in Water Right, Form 606
- Attachments
- Maps:
 - USGS Map, showing vicinity, historic and proposed POU and POD

- Aerial Map of zone of influence (ZOI)
- Aerial Map of Infiltration Trench
- Aerial Map of Historic POU and 64.8 acres to be retired
- Water Survey Map, showing historic acres irrigated
- Aquifer Testing Addendum, ATR pages 1-6
- Basin Closure Addendum & Hydrogeologic Assessment, BCA pages 1-8
- Basin Closure Area-Ground Water-Existing Rights
- Permit Application Appendix A, Change Application Master's Report Appendix

Information Received after Application Filed

- Letter from Applicant to DNRC dated March 30, 2010, Re: Response to March 2, 2010 Deficiency Letter for Beneficial Use Permit Application
- Letter from Applicant to DNRC dated May 28, 2010, Re: Supplemental Information to Deficiency Letter

Information within the Department's Possession/Knowledge

- Consultation with Scott Irvin, Regional Manager Lewistown, on the ground knowledge of area, PPL and Sun River.
- Water Resources Survey
- USGS Flow records for the Sun River
- USGS Map, aerial photos and historical records of use in area

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

BASIN CLOSURE

FINDINGS OF FACT

1. This application is for multiple domestic uses at 28 homes for up to 150 people, stock use of 698.2 AU, and industrial which will include a concrete batch plant and shop use. This application is located within the Upper Missouri River basin closure.

2. Applicant submitted a hydrogeologic assessment determined to be correct and complete.

CONCLUSIONS OF LAW

3. DNRC cannot grant an application for a permit to appropriate water within the upper Missouri River basin until final decrees have been issued in accordance with Title 85, chapter 2, part 2, MCA, for all of the sub-basins of the upper Missouri River basin. § 85-2-343(1), MCA. The upper Missouri River basin consists of the drainage area of the Missouri River and its tributaries above Morony Dam. (§ 85-2-342(4), MCA). The proposed wells are located within the upper Missouri River Basin closure area. This application exception is for a ground water appropriation that complies with the provisions of § 85-2-360, MCA. The application falls under the exceptions for basin closure. § 85-2-343, MCA.

4. Pursuant to § 85-2-363, MCA, a combined application for new appropriations of ground water in a closed basin shall consist of a hydrogeologic assessment with an analysis of net depletion, a mitigation plan or aquifer recharge plan if required, an application for a beneficial water use permit or permits, and an application for a change in appropriation right or rights if necessary. A combined application must be reviewed as a single unit. A beneficial water use permit may not be granted unless the accompanying application for a change in water right is also granted. A denial of either results in a denial of the combined application. § 85-2-363, MCA. ARM 36.12.120.

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

GENERAL CONCLUSIONS OF LAW

5. The Montana Constitution expressly recognizes in relevant part that:
 - (1) All existing rights to the use of any waters for any useful or beneficial purpose are hereby recognized and confirmed.
 - (2) The use of all water that is now or may hereafter be appropriated for sale, rent, distribution, or other beneficial use . . . shall be held to be a public use.
 - (3) All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law.

Mont. Const. Art. IX, §3. While the Montana Constitution recognizes the need to protect senior appropriators, it also recognizes a policy to promote the development and use of the waters of the state by the public. This policy is further expressly recognized in the water policy adopted by the Legislature codified at §85-2-102, MCA, which states in relevant part:

(1) Pursuant to Article IX of the Montana constitution, the legislature declares that any use of water is a public use and that the waters within the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided in this chapter. . . .

(3) It is the policy of this state and a purpose of this chapter to encourage the wise use of the state's water resources by making them available for appropriation consistent with this chapter and to provide for the wise utilization, development, and conservation of the waters of the state for the maximum benefit of its people with the least possible degradation of the natural aquatic ecosystems. In pursuit of this policy, the state encourages the development of facilities that store and conserve waters for beneficial use, for the maximization of the use of those waters in Montana . . .

6. Pursuant to § 85-2-302(1), MCA, except as provided in §§85-2-306 and 85-2-369, MCA, a person may not appropriate water or commence construction of diversion, impoundment, withdrawal, or related distribution works except by applying for and receiving a permit from the Department. See §85-2-102(1), MCA. An applicant in a beneficial water use permit proceeding must affirmatively prove all of the applicable criteria in §85-2-311, MCA. Section §85-2-311(1) states in relevant part:

... the department shall issue a permit if the applicant proves by a preponderance of evidence that the following criteria are met:

(a) (i) there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate; and

(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

(A) identification of physical water availability;

(B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and

(C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

(b) the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. In this subsection (1)(b), adverse effect must be determined based on a consideration of an applicant's plan for the

exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied;

(c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;

(d) the proposed use of water is a beneficial use;

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

(f) the water quality of a prior appropriator will not be adversely affected;

(g) the proposed use will be substantially in accordance with the classification of water set for the source of supply pursuant to 75-5-301(1); and

(h) the ability of a discharge permit holder to satisfy effluent limitations of a permit issued in accordance with Title 75, chapter 5, part 4, will not be adversely affected.

(2) The applicant is required to prove that the criteria in subsections (1)(f) through (1)(h) have been met only if a valid objection is filed. A valid objection must contain substantial credible information establishing to the satisfaction of the department that the criteria in subsection (1)(f), (1)(g), or (1)(h), as applicable, may not be met. For the criteria set forth in subsection (1)(g), only the department of environmental quality or a local water quality district established under Title 7, chapter 13, part 45, may file a valid objection.

To meet the preponderance of evidence standard, “the applicant, in addition to other evidence demonstrating that the criteria of subsection (1) have been met, shall submit hydrologic or other evidence, including but not limited to water supply data, field reports, and other information developed by the applicant, the department, the U.S. geological survey, or the U.S. natural resources conservation service and other specific field studies.” §85-2-311(5), MCA (emphasis added). The determination of whether an application has satisfied the §85-2-311, MCA criteria is committed to the discretion of the Department. Bostwick Properties, Inc. v. Montana Dept. of Natural Resources and Conservation, 2009 MT 181, ¶ 21. The Department is to required grant a permit only if the § 85-2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. Id.

7. Pursuant to § 85-2-312, MCA, the Department may condition permits as it deems necessary to meet the statutory criteria:

(1) (a) The department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used

without waste for the purpose stated in the application. The department may require modification of plans and specifications for the appropriation or related diversion or construction. The department may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria listed in 85-2-311 and subject to subsection (1)(b), and it may issue temporary or seasonal permits. A permit must be issued subject to existing rights and any final determination of those rights made under this chapter.

8. E.g., Montana Power Co. v. Carey (1984), 211 Mont. 91, 96, 685 P.2d 336, 339 (requirement to grant applications as applied for, would result in, “uncontrolled development of a valuable natural resource” which “contradicts the spirit and purpose underlying the Water Use Act.”); see also, *In the Matter of Application for Beneficial Water Use Permit No. 65779-76M by Barbara L. Sowers* (DNRC Final Order 1988)(conditions in stipulations may be included if it further compliance with statutory criteria); *In the Matter of Application for Beneficial Water Use Permit No. 42M-80600 and Application for Change of Appropriation Water Right No. 42M-036242 by Donald H. Wyrick* (DNRC Final Order 1994); Admin R. Mont. 36.12.207.

9. The Montana Supreme Court further recognized in Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starnier (1996), 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080, *superseded by legislation on another issue*:

Nothing in that section [85-2-313], however, relieves an applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.

The Court likewise explained that:

.... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co., 211 Mont. at 97-98, 685 P.2d at 340; see also Mont. Const. art. IX §3(1).

10. An appropriation, diversion, impoundment, use, restraint, or attempted appropriation, diversion, impoundment, use, or restraint contrary to the provisions of §85-2-311, MCA is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized appropriation, diversion, impoundment, use, or other restraint. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to appropriate, divert, impound, use, or otherwise restrain or control waters within the boundaries of this state except in accordance with this §85-2-311, MCA. §85-2-311(6), MCA.

11. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge, as specifically identified in this document. ARM 36.12.221(4).

PROPOSED APPROPRIATION

BENEFICIAL WATER USE PERMIT NO. 41K 30047925

FINDINGS OF FACT

12. The Applicant proposes to divert water from three wells, by means of pumps with well depths of 22, 20 and 18 feet, from January 1 to December 31 at 52 GPM up to 49.8 acre feet (AF) for Multiple Domestic, Stock, and Industrial purposes. A volume of 16.8 AF/yr will be used for Multiple Domestic (28 homes with an estimated 150 people). A volume of 31.0 AF/year will be used for Stock (698.2 AU). The Industrial purpose, with a concrete batch plant and associated shops, will use a volume of 2.0 AF/yr. The period of use for all purposes is January 1 to December 31. The point of diversion of well #1 SENWNE Sec 23, well #2 NWSWSW Sec 24 and well #3 SWSWSW Sec 24 all in T20N R6W . The place of use is generally located: Multiple Domestic and Stock NWNW Sec 25; Industrial S2SW, Sec 24, all T20N R6W Lewis and Clark County. There is a 30,000 gallon storage tank system to store water for domestic use, the pumps will be cycled which will allow for recovery. The wells will be pumped at a lower discharge rate with timing and storage being considered to reduce or eliminate adverse effects to senior water rights. The normalized pumping rate for the requested volume of 49.8 AF per year is 30.87 GPM.

13. The nearest surface water source is Spring Creek and Elk Creek which is a tributary of Sun River.

14. The proposed appropriation requests 52 GPM up to 49.8 AF per year from groundwater. All 49.8 AF is considered consumptive, due to estimated total consumption by domestic and stock uses. The treatment of effluent is done by utilizing sealed lagoons; all water reporting to the lagoons will be evaporated, and therefore, is lost to the Groundwater system. The 49.8 AF will eventually be the value of the total net depletion to surface water.

15. There were two conditions proposed. There are to be meters on each of the three wells for the permit to determine use and there is to be a meter on the entrance to the infiltration trench for the mitigation water.

Physical Availability

FINDINGS OF FACT

16. A forward solution model in AQTESOLV (Duffield, 2006) was used with the median value of 324 ft²/day for transmissivity (T) and 0.15 for Specific yield (Sy) derived from the pumping test of Well #1 to estimate the radius of influence (ROI) from pumping Well #1 and Well #3. Because Well #3 is located along the margin of the alluvium and is locally confined, its T and Sy values were not factored into the median values used. Also, because Well #2 will only be used as backup to Well #3 for stock water it is not considered in the ROI analysis. The ROIs were modeled with a forward projection using the Neuman solution for an unconfined aquifer. The projected ROI to 0.01 feet is 5200 feet for a 10-year pumping period for well #1 and Well#2 is 5600 feet for a 10 year period. The applicant delineates a ZOI that includes the areas within the ROI of each well that is bounded on the north and south by margins of the source aquifer, and extends to the Sun River to the northwest. The ZOI also is identified both as the modified ROI and the potentially affected area. Using Darcy's equation, the aquifer flux is calculated to be 105.8AF. The aquifer flux is the calculated volume of water which flows through the zone of influence. The Applicant showed the physical availability from each well.

17. Well #1 was pumped at 26.5 GPM for 24 hours during the aquifer test. The Applicant will have a 30,000 gallon storage tank system to store pumped domestic water. The well will pump

in cycles, which will allow for recovery. The well was tested in April when the aquifer was at the driest period of the year. Aquifer recharge from spring runoff and precipitation events and recharge from up gradient irrigation is expected to provide sufficient water in the amount requested. The well will be pumped at a lower discharge rate. The normalized pumping rate for the requested volume of 16.8 AF per year is 10.4 GPM. Further, DEQ requires operation of a public water supply at 67% of the 24 hour tested rate. If needed, the Applicant will add subsurface laterals to Well #1 to provide the requested flow rate and volume. The well was pumped intermittently to evaluate cyclic drawdown and recovery response. The cyclic test was conducted from September 19- 28 2009, about three weeks after Colony irrigation had ceased. Water was pumped into a lined lagoon to prevent recharge to the well. Over the 10 days of pumping, a total of 203,487 gallons were pumped at rates of 23.2 to 34.4 GPM during seven pumping cycles ranging from 8.67 to 32.75 hours. Cyclic pumping resulted in less than one foot of drawdown. Because the pumping stressed the aquifer more than the normal expected well usage, the test provides clear evidence of physical availability of water in Well #1.

18. Well #2 was pumped at 33 GPM for 270 minutes before the flow rate had to be reduced to 15 GPM to avoid dewatering. After pumping at 15 GPM from 270 to 810 minutes, the flow rate was increased to 25 GPM from 810 to 1230 minutes. Again the well dewatered. The rate was reduced to 17 GPM for the remainder of the test 1230 to 1440 minutes. The test showed that the discharge rate of Well #2 could not be maintained at 25 GPM or greater, but could be maintained at 17 GPM. Because Well #3 can provide the entire flow rate and volume requested for stock use under the permit application, Well #2 will be used as a backup well for stock use.

19. Well #3 was pumped at 25.5 GPM for 24 hours during the aquifer test. The total well depth is 18 feet with pump intake depth of 14 feet. The test showed that 3.7 feet of water column remained above the pump in well. Total drawdown during pumping test was 3.63 feet. Projecting the pumping water level to the 365 day period of diversion confirms that water is physically available.

20. On February 2, 2010 and again on April 6, 2010 Russell Levens, Department Hydrogeologist evaluated the Elk Creek Colony ground water appropriations for 49.8 AF per

year. After reviewing the information, Mr. Levens determined that the Applicant used accepted methodology for determining physical availability.

21. In addition to the constant discharge tests, the Applicant pumped Well #1 intermittently for three weeks to show it could be operated as proposed. The Applicant demonstrates long term physical availability of the requested appropriation by extrapolating drawdown at the end of the constant rate test of Well #3 for 365 days. This is a conservative assessment because wells #1 and #2 will contribute the majority of the water for the appropriation and Well #3 will be pumped intermittently as needed. Additional information supporting this conclusion can be found in the charts in the application on pages 6-9.

CONCLUSIONS OF LAW

22. Pursuant to §85-2-311(1)(a) (i), MCA, an applicant must prove by a preponderance of the evidence that “there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate.”

23. An applicant must prove that at least in some years there is water physically available at the point of diversion in the amount the applicant seeks to appropriate, and that at least in some years no legitimate calls for water will be made by a senior appropriator.

24. The Applicant has proven by a preponderance of evidence that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate. § 85-2-311(1)(a)(i), MCA. (FOF #s 16-21)

Legal Availability

FINDINGS OF FACT

25. The ground water legal demands within the zone of influence was determined through a calculation of a forward solution model in AQTESOLV (Duffield, 2006) that was used to estimate the extent of the ZOI resulting from pumping Well #1 and Well #3. The Applicant is utilizing three wells and no surface water. The Applicant checked DNRC records and found four existing ground water appropriations with a total annual diversion volume of 9.27 AF (two are stock with no claimed volume calculated by AU at 15 gpd per animal unit) within the ZOI.

Using Darcy’s equation, the aquifer flux is calculated to be 105.8AF. The aquifer flux is the calculated volume of water which flows through the zone of influence.

26. Applicant has addressed legal availability of surface water by providing a mitigation/aquifer recharge plan which proposes to mitigate the depletions to surface water in full. This mitigation/aquifer recharge plan is fully addressed under “Adverse Effect” below.

Existing Legal Demands	Volume
Domestic (Colony) 41K 96231 & 41K216326	1.5 AF
Stock (Colony) 41K 10989 107.5 AU	1.82 AF
Stock (Colony) 41K 13610 350 AU	5.95 AF
Total	9.27 AF
Aquifer Flux	105.8 AF
Legally Available	96.53AF

27. The physical amount of water available is 105.8 AF, and the existing legal demands of ground water totals 9.27 AF. The Applicant is requesting 49.8 AF/yr. The comparison shows that ground water is legally available.

CONCLUSIONS OF LAW

28. Pursuant to §85-2-311(1)(a), MCA, an applicant must prove by a preponderance of the evidence that:

(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

- (A) identification of physical water availability;
- (B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and
- (C) analysis of the evidence on physical water availability and the existing legal demands,

including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

29. It is the applicant's burden to present evidence to prove water can be reasonably considered legal available. E.g., In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC., (DNRC Final Order 2005) (it is the applicant's burden to produce the required evidence.)

30. Pursuant to Montana Trout Unlimited v. DNRC, 2006 MT 72, 331 Mont. 483, 133 P.3d 224, the Department recognizes the connectivity between surface water and ground water and the effect of pre-stream capture on surface water. E.g., In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 and 41H 30013629 By Utility Solutions LLC (DNRC Final Order 2006)(mitigation of depletion required), affirmed, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008); see also Robert and Marlene Takle v. DNRC et al., Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, Opinion and Order (June 23, 1994) (affirming DNRC denial of Applications for Beneficial Water Use Permit Nos. 76691-76H, 72842-76H, 76692-76H and 76070-76H; underground tributary flow cannot be taken to the detriment of other appropriators including surface appropriators and ground water appropriators must prove unappropriated surface water, citing Smith v. Duff, 39 Mont. 382, 102 P. 984 (1909), and Perkins v. Kramer, 148 Mont. 355, 423 P.2d 587 (1966)); In the Matter of Beneficial Water Use Permit No. 80175-s76H by Tintzman (DNRC Final Order 1993)(prior appropriators on a stream gain right to natural flows of all tributaries in so far as may be necessary to afford the amount of water to which they are entitled, citing Loyning v. Rankin (1946), 118 Mont. 235, 165 P.2d 1006; Granite Ditch Co. v. Anderson (1983), 204 Mont. 10, 662 P.2d 1312; Beaverhead Canal Co. v. Dillion Electric Light & Power Co. (1906), 34 Mont. 135, 85 P. 880); In the Matter of Beneficial Water Use Permit No. 63997-42M by Joseph F. Crisafulli (DNRC Final Order 1990)(since there is a relationship between surface flows and the ground water source proposed for appropriation, and since diversion by applicant's well appears to influence surface flows, the ranking of the proposed appropriation in priority must be as against all rights to surface water as well as against all groundwater rights in the drainage.) Because the applicant bears the burden of proof as to legal availability, the applicant must prove that the proposed appropriation will not result in prestream capture or induced infiltration to limit

its analysis to ground water. §85-2-311(a)(ii), MCA. Absent such proof, the applicant must analyze the legal availability of surface water in light of the proposed ground water appropriation. *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 By Utility Solutions LLC* (DNRC Final Order 2007) (permit denied); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009).

31. Where a proposed ground water appropriation depletes surface water, applicant must prove legal availability of amount of depletion of surface water throughout the period of diversion either through a mitigation/aquifer recharge plan to offset depletions or by analysis of the legal demands on and availability of water in the surface water source. Robert and Marlene Takle v. DNRC et al., Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994); *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 By Utility Solutions LLC* (DNRC Final Order 2006)(permits granted), *affirmed*, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (DNRC Final Order 2007)(permit granted), *affirmed*, Montana River Action Network et al. v. DNRC et al., Cause No. CDV-2007-602, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 By Utility Solutions LLC* (DNRC Final Order 2007) (permit denied); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 By Utility Solutions LLC* (DNRC Final Order 2008); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (DNRC Final Order 2009)(permit denied in part for failure to analyze legal availability for surface water for depletion). Applicant may use water right claims of potentially affected appropriators as a substitute for “historic beneficial use” in analyzing legal availability of surface water under §85-2-360(5), MCA.

32. The Applicant has proven by a preponderance of the evidence that ground water can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, the amount requested. (FOF 25-28)

Adverse Effect

FINDINGS OF FACT

33. The Applicant's plan to prevent adverse effect to water rights of prior appropriators is to mitigate net depletion by retiring 64.8 acres to provide 53.1 AF of which 49.8 AF will be used for mitigation to offset the net depletion. The water historically was diverted from Elk Creek and conveyed through the Hogan and Lame ditches. The Applicant will divert 49.8 AF to an infiltration trench in the Spring Creek drainage for 173 days each year at 65.1 GPM using the Sheerer Ditch instead of diverting it to the historic place of use. The trench will be located approximately 3100 feet SSW of Applicant's Well #1 and is designed to be 24 feet by 40 feet and will be excavated 15- 20 feet deep and backfilled with gravel. This location may vary depending upon finding the material needed to make the trench perform as expected. However, the trench will be in the vicinity of Applicant's Well #1 in a NNE down gradient direction. Perforated pipe will be laid on the gravel 3 to 5 feet beneath the surface. In addition, there is a Water commissioner that delivers water from Elk Creek to Hogan Slough then to Lame Ditch. From Lame Ditch water will be conveyed to Sheerer Ditch in the Spring Creek drainage which will convey the designated water into the infiltration trench. The Water commissioner only delivers the water decreed and the Applicant will meter the water diverted into the infiltration trench for mitigation.

34. The Applicant states there is no surface water that is hydraulically connected to ground water within the projected potentially affected area (referred to as the modified ROI by the applicant). However, the Applicant acknowledges that modeling shows net depletion to the Sun River at the confluence of Spring Creek and the Sun River. The rate and timing of Sun River depletion was modeled using an analytical stream depletion model. The modeling shows that Sun River depletion will occur outside of the April 15 to October 4 (173 days) historic period of diversion of the water right proposed for aquifer recharge. Because the depletion is occurring outside of the historic period of diversion, their plan is to recharge the aquifer so that the timing of the aquifer recharge is the same as the timing of their depletions.

35. The proposed appropriation requests up to 49.8 AF/yr from groundwater. All 49.8 AF is considered consumptive and is the total net depletion to surface water that would create an

adverse effect. The Applicant proposes to offset the full amount of depletion through a change application which retires 64.8 acres providing 49.8 AF of water for offsetting the net depletion to surface water.

36. Depletions to Spring Creek, Elk Creek and the Sun River are being offset through an Aquifer Recharge Plan; the recharge water will offset any adverse impact to senior surface water rights.

37. There is only one groundwater source. The Application shows seven senior water rights within the zone of influence, three are owned by the Applicant and two are surface water rights from Spring Creek. The two remaining rights are stock rights from spring groundwater sources. One of the stock rights is located 6800 feet from Well #1 and 7000 feet from well #3. Based on the forward modeling to simulate drawdown after 5 years pumping, drawdown at the POD is expected to be less than 0.01 foot. With the drawdown being less than .01 ft, there will be no adverse effect to any existing ground water rights. The remaining stock water right is a ground water right fed from a groundwater source from the foothills to the southeast and should not be affected because it's source is outside the source aquifer to the proposed well.

38. Dave Baldwin, MS, PG; Sr Hydrogeologist provided the analysis to determine what effects occur to surface water as a result of the ground water appropriation. Because the net depletion that would result in adverse effect will be fully offset, there will be no adverse effect to downstream water rights. In addition Mr. Baldwin in his analysis modeled the effect on surface water by using an analytical stream depletion model. A transmissivity of 324 Ft²/day and specific yield of 0.1 were derived from aquifer testing and used for modeling.

39. The Applicant addressed the issue of seasonal aquifer recharge by using the same parameters used for stream depletion modeling. They compare the timing of modeled depletions and accretions and conclude the values are very similar. The Applicant also provided charts to reflect the results of the modeling.

The pumping rate times the number of days per month totals the 49.8 ac-ft of consumptive use that is being offset. The following is the diversion schedule used for modeling accretions resulting from the aquifer recharge plan.

<u>Month</u>	<u># Days</u>	<u>Monthly Pumping Rate (gpm)</u>
Apr	30	34.7
May	31	65.1
Jun	30	65.1
Jul	31	65.1
Aug	31	65.1
Sep	30	65.1
Oct	31	8.4

The following two tables show model output for both depletion and accretion. The accretion model shows that although the aquifer recharge trench will only be operated during the April 15 through October 4 historic period of diversion of the changed irrigation rights, depletions from the proposed use will be offset throughout the year.

<u>Month</u>	<u>Monthly Depletion 100 Years (AF)</u>	<u>Unit Depletion</u>	<u>EQ Depletion</u>
Jan	1.62	0.0831	4.14
Feb	1.62	0.0831	4.14
Mar	1.62	0.0832	4.14
Apr	1.62	0.0832	4.14
May	1.62	0.0833	4.15
Jun	1.62	0.0833	4.15
Jul	1.62	0.0834	4.15
Aug	1.62	0.0834	4.15
Sep	1.62	0.0834	4.16
Oct	1.62	0.0835	4.16
Nov	1.62	0.0835	4.16
Dec	1.62	0.0836	4.16

(Modeled Depletion)

<u>Month</u>	<u>Monthly Depletion 100 Years(AF)</u>	<u>Unit Depletion</u>	<u>EQ Depletion</u>
Jan	1.61	0.0831	4.14
Feb	1.61	0.0831	4.14
Mar	1.61	0.0832	4.14
Apr	1.61	0.0832	4.14
May	1.61	0.0832	4.14
Jun	1.61	0.0833	4.15
Jul	1.61	0.0834	4.15
Aug	1.61	0.0834	4.15
Sep	1.61	0.0834	4.16
Oct	1.62	0.0836	4.16
Nov	1.61	0.0835	4.16
Dec	1.61	0.0836	4.16

(Modeled Accretion)

40. The Applicant is retiring 64.8 acres of irrigation. There is a water commissioner on Elk Creek, where the water will originate for aquifer recharge; the Applicant can be reasonable certain that this water will be left in Elk Creek. The Applicant will meter the water introduced into the aquifer via their infiltration trench. Portions of water rights 41K 96231 and 41K 216326 are being retired. Based on an historic consumptive use of 0.82 AF/ac and a gross diverted volume of 2.24 AF/ac, there will be 1.42 AF/ac or 92.0 AF that will not be delivered to support the historic irrigated acres. Instead, 49.8 AF of water will be delivered to the Sheerer ditch and used in the infiltration trench for the Aquifer Recharge plan. Because these rights are supplemental, one-half of the 53.1 AF volume removed by retiring the 64.8 historically-irrigated acres would come from each water right. The 64.8 acres being retired for aquifer recharge is supplemental for the same 220 acre place of use. The remaining acres irrigated will be 155.2 acres. The 64.8 acres being retired from both rights is 29.45% of the 1.56 CFS or 206.0 GPM. At a flow rate of 206.0 GPM it would take 58.3 days to divert the proposed 53.1 AF. Thus on 49.8 AF/yr of consumptive use, the Applicant would need to retire 56.6 acres. The Applicant is retiring 64.8 acres. The water rights have not been out of priority nor have they been called, as per discussion with the Applicant, as the priority date for both is April 1, 1939.

41. The infiltration trench used for aquifer recharge is designed to be approximately 25 feet wide by 40 feet long by 15 to 20 feet deep. The Department Hydrogeologist expressed concern that the size of the trench might not be adequate. The concern is whether the proposed trench can accept the proposed amount of aquifer recharge water without ground-water levels mounding into the rooting depth of plants that may surround an open trench or overly a backfilled trench. If ground-water levels mound to the rooting depth plant uptake will reduce the amount of aquifer recharge. Monitoring ground-water levels adjacent to the infiltration trench will be required to ensure ground-water mounding which reduces the amount of recharge does not occur.

42. The plan does not require a DEQ permit.

43. The applicant's aquifer recharge plan if properly conditioned will offset depletions to surface water so that there will be no adverse effect to downstream water rights.

CONCLUSIONS OF LAW

44. Pursuant to § 85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Analysis of adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied. See Montana Power Co. (1984), 211 Mont. 91, 685 P.2d 336 (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users).
45. An applicant must analyze the full area of potential impact under the § 85-2-311, MCA criteria. *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006). While § 85-2-361, MCA, limits the boundaries expressly required for compliance with the hydrogeologic assessment requirement, an applicant is required to analyze the full area of potential impact for adverse effect in addition to the requirement of a hydrogeologic assessment. Id. ARM 36.12.120(8).
46. It is the applicant's burden to produce the required evidence. E.g., In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC., (DNRC Final Order 2005). The Department is required grant a permit only if the § 85-2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. Bostwick Properties, Inc. ¶21.
47. *In the Matter of Beneficial Water Use Permit No. 80175-s76H by Tintzman* (DNRC Final Order 1993); see also *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 By Utility Solutions LLC* (Pre-HB 831, DNRC Final Order 2007) (permit denied for failure to analyze legal availability of surface water in the Gallatin River outside of irrigation season (when the mitigation was in effect). E.g., In the Matter of Application for Beneficial Water Use Permit Nos. 56782-76H and 5830-76H by Bobby D. Cutler (DNRC 1987) (constant call is adverse effect); *In the Matter of Application for Beneficial Water Use Permit No. 80175-s76H by Tintzman* (DNRC 1993) (constant call is adverse effect); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC 1992)(applicant must show that at least in some years no

legitimate call will be made); *In the Matter of Application for Beneficial Water Use Permit No. 76N 30010429 by Thompson River Lumber Company* (DNRC 2006).

48. *In the Matter of Application for Beneficial Water Use Permit No. 76N 30010429 by Thompson River Lumber Company* (DNRC 2006). § 85-2-360, MCA; e.g., *In the Matter of Beneficial Water Use Permit Application Nos. 41H 30012025 and 41H 30013629 by Utility Solutions, LLC*, (DNRC Final Order 2006)(permit conditioned to mitigate/augment depletions to the Gallatin River by use of infiltration galleries in the amount of .55 CFS and 124 AF), *affirmed, Faust v. DNRC et al.*, Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Beneficial Water Use Permit Application Nos. 41H 30019215 by Utility Solutions, LLC*, (DNRC Final Order 2007)(permit conditioned to mitigate 6 GPM up to 9.73 AF of potential depletion to the Gallatin River), *affirmed, Montana River Action Network v. DNRC*, Cause No. CDV-2007-602, Montana First Judicial District Court, (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 By Utility Solutions LLC* (DNRC 2008)(permit conditioned on mitigation of 3.2 GPM up to 5.18 AF of depletion to the Gallatin River); *In the Matter of Application for Beneficial Water Use Permit No. 76H-30028713 by Patricia Skergan and Jim Helmer* (HB 831, DNRC Final Order 2009) (permit denied in part for failure to analyze legal availability for surface water for depletion of 1.31 AF to Bitterroot River)§85-2-360, MCA.

49. The Department has a history of approving new appropriations where applicant will mitigate/augment to offset depletions caused by the new appropriation. *In the Matter of Beneficial Water Use Permit Application No. 41I-104667 by Woods and Application to Change Water Right No 41I-G(W) 125497 by Ronald J. Woods*, (DNRC Final Order 2000); *In The Matter of Application To Change Appropriation Water Right 76GJ 110821 by Peterson and MT Department of Transportation*, DNRC Final Order (2001); *In The Matter of Application To Change Appropriation Water Right No. 76G-3235699 by Arco Environmental Remediation LLC*.(DNRC Final Order 2003) (allows water under claim 76G-32356 to be exchanged for water appropriated out of priority by permits at the wet closures and wildlife to offset consumption). *In The Matter of Designation of the Larsen Creek Controlled Groundwater Area as Permanent, Board of Natural Resources Final Order (1988)*; §85-2-413, MCA Montana case law also provides a history of mitigation, including mitigation by new or untried methods. *See Thompson*

v. Harvey (1974), 154 Mont. 133, 519 P.2d 963; *Perkins v. Kramer* (1966), 148 Mont. 355, 423 P.2d 587. Augmentation/ mitigation is also recognized in other prior appropriation states for various purposes. E.g. C.R.S.A. § 37-92-302 (Colorado); A.R.S. § 45-561 (Arizona); RCWA 90.46.100 (Washington); ID ST § 42-1763B and § 42-4201A (Idaho).

The requirement for aquifer recharge in closed basins has been codified in §85-2-360, *et seq.*, MCA. Section 85-2-360(5), MCA provides in relevant part:

A determination of whether or not there is an adverse effect on a *prior appropriator as the result of a new appropriation right is a determination that must be made by the department based on the amount, location, and duration of the amount of net depletion that causes the adverse effect relative to the historic beneficial use of the appropriation right that may be adversely affected.*

50. In analyzing adverse effect to other appropriators, an applicant may use the water rights claims of potentially affected appropriators as evidence of their “historic beneficial use.” See Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054.

51. For a permit with mitigation: The Department will evaluate whether an applicant’s proposed plan, i.e. mitigation or aquifer recharge, will offset depletions so as to meet §85-2-311(1)(b), MCA, in the permit proceeding. The applicant’s authority to use the water as proposed is assumed for the purposes of the analysis. The authority of the applicant to use the offset water as proposed for the plan is not determined in the permit proceeding but is determined in any required application for change in appropriation. Whether the applicant proves by a preponderance of the evidence that the mitigation/aquifer recharge plan will be effective is determined in the permit proceeding. Thus, the applicant must accurately convey to the Department exactly what it proposes for a mitigation/aquifer recharge plan. E.g., In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 By Utility Solutions LLC (DNRC Final Order 2006), *affirmed*, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008); In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC (DNRC Final Order 2007), *affirmed*, Montana River Action Network et al. v. DNRC et al., Cause No. CDV-2007-602, Montana First

Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 By Utility Solutions LLC* (DNRC Final Order 2008); §85-2-360 *et seq.*

52. Pursuant to §85-2-363, MCA, an applicant whose hydrogeologic assessment conducted pursuant to §85-2-361, MCA, predicts that there will be a net depletion of surface water shall offset the net depletion that results in the adverse effect through a mitigation plan or an aquifer recharge plan.

53. Pursuant to §85-2-362, MCA, an aquifer recharge plan must include: evidence that the appropriate water quality related permits have been granted pursuant to Title 75, chapter 5, and pursuant to §§75-5-410 and 85-2-364, MCA; where and how the water in the plan will be put to beneficial use when and where, generally, water reallocated through exchange or substitution will be required; the amount of water reallocated through exchange or substitution that is required; how the proposed project or beneficial use for which the aquifer recharge plan is required will be operated; evidence that an application for a change in appropriation right, if necessary, has been submitted; a description of the process by which water will be reintroduced to the aquifer; evidence of water availability; and evidence of how the aquifer recharge plan will offset the required amount of net depletion of surface water in a manner that will offset any adverse effect on a prior appropriator.

54. In this case Applicant proposes to offset its full consumptive use under the proposed appropriation using an aquifer recharge plan. This offsets the full depletion of surface waters by the proposed appropriation in amount, location, and duration of the depletion. Because Applicant proposes to offset the full amount of its consumptive use, there is no adverse effect from depletion of surface waters to the historic beneficial use of surface water rights. *E.g., In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 By Utility Solutions LLC* (DNRC Final Order 2008).

55. To ensure the aquifer recharge plan is effective and that the recharge trench accepts the amount of recharge water without ground-water levels mounding into the rooting depth of plants surrounding an open trench or overlying a backfilled trench, the permit must be conditioned to require the applicant to monitor ground-water levels adjacent to the infiltration trench and submit a plan to increase the size of or relocate the trench if ground-water mounding is excessive.

56. The Applicant has proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. § 85-2-311(d), MCA. (FOF 34-44)

Adequate Diversion

FINDINGS OF FACT

57. The domestic Well #1 and Stock Well #2 will both divert water using Gould GT 103 centrifugal pumps equipped with Emerson 1hp, 3450 rpm motors. Well #3 will divert water using a Goulds 18GS07, a ¾ hp submersible pump. From the wells, water will be diverted to four 15,000 gallon PVC storage tanks prior to use. Two storage tanks totaling 30,000 gallons will be utilized for domestic water and two storage tanks totaling 30,000 gallons will be used for stock water and industrial uses. Water will be conveyed from the wells to the storage tanks through a 3 inch PVC line to the storage reservoirs. For the concrete batch plant, water will be conveyed directly from Well #3. From the domestic storage tanks, water will be conveyed to colony buildings through a 3 inch PVC pipe trunk line, which will then be reduced to 2 inch lines that will loop between Colony residential buildings, the church, school, shops and the kitchen. From the stock storage tanks, water will be conveyed to the hog, chicken and dairy barns and to the shops through 3 inch PVC pipe. All wells will be metered to maintain compliance and pumps will be set to not discharge above the allowed amount. DEQ has a requirement for public water supply and operation for public health and safety and this proposal as stated by DEQ is in compliance with those requirements.

CONCLUSIONS OF LAW

58. Pursuant to §85-2-311(1)(c), MCA, an Applicant must demonstrate that the proposed means of diversion, construction, and operation of the appropriation works are adequate. 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.

59. 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. (FOF 57 & 58).

Beneficial Use

FINDINGS OF FACT

60. The purpose of the Application is to provide water for multiple domestic uses in 28 homes for up to 150 people, 698.2 AU which include 600 sows, 200 dairy cows, 25,000 chickens, 1,500 turkeys and 13,248 piglets plus stock operations, and an industrial area which includes a concrete batch plant and shops. The total requested flow rate is 52 GPM, the total requested volume is 49.8 AF/yr for the above listed beneficial use.

Purpose	Units of measurement	AF/yr
Domestic	150 people x 100gal/day	16.8
Stock	631.5 AU x 0.017	10.7
	13,248 piglets x .00146 AF ea	19.3
	Wash down, clean up	1.0
Industrial	Concrete Batch plant	1.0
	Shops (machine, carpenter and plumbing)	1.0
Total		49.8 AF/yr

(The water requirements for piglets come from a document titled "How Much Water do Pigs Need" by Glen W. Almond at the North Carolina State University College of Veterinary Medicine.) The Applicant chose to use the North Carolina document because of the number of piglets and the DNRC guidelines does not differentiate between adult pigs and piglets.

61. The requested volume is within DNRC standards for domestic and shop use. Because of the size of the operation for the stock wash down operation they accounted for 1.0 AF/yr by using the standard for shop. The 1.0 AF/yr is based upon the size of the area, the past water used per cleaning and the number of clean up days in a year. They also equated the shop use to concrete batch plant use. Both stock wash down and the concrete batch plant are not described

in DNRC standards however the water usage is based upon past practices. Domestic, stock and industrial uses are reasonable amount needed to sustain each purpose.

CONCLUSIONS OF LAW

62. Under §85-2-311(1)(d), 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. See also, §§85-2-301 and 402(2)(c), MCA. It is a fundamental premise of Montana water law that beneficial use is the basis, measure, and limit of the use. E.g., McDonald, supra; Toohey v. Campbell (1900), 24 Mont. 13, 60 P. 396.

63. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel, Order on Petition for Judicial Review, Cause No. BDV-2002-519, Montana First Judicial District Court, Lewis and Clark County (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; *In The Matter Of Application For Beneficial Water Use Permit No. 43c 30007297 By Dee Deaterly* (DNRC Final Order), *affirmed other grounds, Dee Deaterly v. DNRC et al*, Cause No. 2007-186, Montana First Judicial District, *Order Nunc Pro Tunc on Petition for Judicial Review* (2009); Worden v. Alexander (1939), 108 Mont. 208, 90 P.2d 160; Allen v. Petrick (1924), 69 Mont. 373, 222 P. 451.

64. Applicant proposes to use water for multiple domestic, stock and industrial purposes, which are recognized beneficial uses. § 85-2-102(4), MCA. Applicant has proven by a preponderance of the evidence domestic, stock and industrial purposes is a beneficial use and that 49.8 AF of diverted volume and 52 GPM of water requested is the amount needed to sustain the beneficial use.(FOF 61 & 62)

Possessory Interest

FINDINGS OF FACT

65. The Applicant 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.

CONCLUSIONS OF LAW

66. Pursuant to § 85-2-311(1)(e), MCA, an applicant must prove by a preponderance of the evidence that it has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit.

67. 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.

68. 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. 66)

CHANGE NO. 41K 30047926
WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

69. The Applicant requests a change in the purpose from irrigation to aquifer recharge and a change in the place of use of a portion of water rights 41K 96231 00 and 41K 216326 00 to offset the net depletion that would create adverse effects of a proposed appropriation from three water supply wells for multiple domestic, stock and industrial use under an associated Application for Beneficial Water Use Permit for Elk Creek Colony. The Place of Use is located approximately 8 miles south and west of Augusta. The place of use for 64.8 acres would change from 14.1 acres in S2 NW and 50.7 acres in SW Section 14, T20N, R6W, Lewis and Clark County to the location of the infiltration trench in SWNW Sec 23, T20N, R06W. The portion of the Sun River expected to be affected by the depletion is in NW Section 8, T20N R5W, Lewis and Clark County. The basis of water rights 41K 96231 00 and 41K 216326 00 are two decreed appropriations by Rachel Thomas, one dated April 15, 1887 and the other December 31, 1885. During Water Court Case 41K-240 (filed March 29, 1999), the Court affirmed the claims as representing incremental development after issuance of the Sun River Decree, changed the claims to use rights, changed the priority dates to April 1, 1939, modified the acres irrigated to 220 and modified the flow rates to 0.52 CFS (41K 96231 00) and 1.04 CFS (41K 216326 00). Water right 41K 216326 00 is an implied use right generated by the Water Court from water right 41K 96232 00. These water rights have a partial supplemental relationship with 41K 96232, but not on the acres being retired under this change application. Therefore, this supplemental right is not a part of this change application. There are no previous changes authorized with these water rights. Alfalfa has historically been grown on the place of use.

70. All water rights based on the Rachel Thomas April 15, 1878 and the December 31, 1885 decreed rights are appurtenant to land owned by the Applicant and all water from these rights is delivered to the place of use first through Hogan Slough (natural carrier) and then through the Lame Ditch.

71. Both rights, 41K 96231 00 and 41K 216326 00, are for irrigation on the same 220 acres and have a partial supplemental relationship with 41K 96232 00 but not on the acres being

retired under this change application. Therefore, this supplemental right is not part of this change application.

WATER RIGHTS PROPOSED FOR CHANGE

W.R. NO.	SOURCE	FLOW	VOLUME	PURPOSE	PERIOD OF USE	PLACE OF USE	POINT(S) OF DIVERSION	PRIORITY DATE
231	Elk Creek	.52 CFS	376 AF/yr	irrigation	Apr 15 to Oct 4	SWSWNE, Sec 30 T20N R6W	SENE Sec 15, S2NW Sec14 SW Sec 14 T20N R6W	Apr 1, 1939
326	Elk Creek	1.04 CFS	723 AF/yr	irrigation	Apr 15 to Oct 4	SWSWNE, Sec30 T20N, R6W	SENE Sec 15, S2NW Sec 14, SW Sec 14 T20N, R6W	Apr 1, 1939

72. The Applicant has sole ownership of the water rights to be changes.

73. There are no other change authorizations on these rights or supplemental to the same place of use.

CHANGE PROPOSAL

FINDINGS OF FACT

74. Under this change, the Applicant would retire 64.8 acres of irrigation to provide 53.1 AF of water of which 49.8 AF would be used for aquifer recharge to fully offset the volume of net depletion that would create an adverse effect under the associated Application for Beneficial Water Use Permit because the water pumped from the source aquifer is ground water tributary to the Sun River, which is closed to new surface water appropriations. The place of use for 64.8 acres would change from 14.1 acres in S2 NW and 50.7 acres in SW Section 14, T20N, R6W,

Lewis and Clark County to the location of the infiltration trench in SWNW Sec 23, T20N, R06W. The portion of the Sun River expected to be affected by the depletion in NW Section 8, T20N R5W, Lewis and Clark County.

75. The proposed change is from the beneficial use of irrigation to aquifer recharge. The old place of use is in S2NW Sec 14 and SW Sec 14 T20N R6W and NW Sec, T20N R5W. The new use is for aquifer recharge to mitigate any net depletion from the proposed wells. The new place of use for aquifer recharge is located in SWNW Section 23, T20N, R06W. The pattern of use will change as the water will be directed to an infiltration trench to become a part of the ground water and to show no depletion to the Sun River, a surface water source. The section of Sun River that is described to possible have a net depletion is located between the confluence of Elk Creek and Spring Creek on the Sun River. The aquifer lies 12 feet below the surface and is about 10 to 12 feet thick.

§85-2-402, MCA, CHANGE CRITERIA

GENERAL CONCLUSIONS OF LAW

76. 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.

77. 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 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).

78. 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 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

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).

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.

79. 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, Final Order (1991); In the Matter of Application for Change Authorization No. G(W)008323-g76L by Starkel/Koester, Final Order (1992); 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).

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

81. Consumptive use of water may not increase when an existing water right is changed. *In the Matter of Application to Change a Water Right No. 40M 30005660 By Harry Taylor II And Jacqueline R. Taylor*, Final Order (2005); *In The Matter of Application to Change a Water Right No. 40A 30005100 by Berg Ranch Co./Richard Berg*, 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*, Proposal For Decision (2003) (Final Order adopted findings of fact and conclusions of law in proposal for decision); see also Quigley.

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.).

82. 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., *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

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

Historic Use

FINDINGS OF FACT

84. Water rights, 41K 96231 00 and 41K 216326 00 have a combined total diverted volume of 491.9 AF and a flow of 1.56 CFS for a 173 day period of diversion (173 days on and a total of 14 days off for two cuttings). The historic type of irrigation is flood on 220 acres.

85. The former Water Commissioner, Lou Wally, turned 7.8 CFS into Hogan Slough for irrigation of the historic Rachel Thomas claims. From Hogan Slough, the same 7.8 CFS was diverted into the Lame Ditch and delivered to the historic place of use. According to Jim Wolfe, current Water Commissioner for Elk Creek the total combined flow of water rights diverted from Elk Creek into Hogan Slough is 28.43 CFS; of the 28.43 CFS, 7.8 CFS is the Applicant's portion under water rights from the two Rachel Thomas rights. The WRS field notes show that this flow rate was delivered and in use in 1956. This information was supplied via an affidavit in the change application.

86. Both rights 41K 96231 00 and 41K 216326 00 are for irrigation on the same 220 acres and have a partial supplemental relationship with 41K 96232 but not on the acres being retired under this change application. Therefore, this supplemental right is not part of this change application. This is supported by the Master's Report located in appendix B of the Change Application. The two water rights being changed were used for irrigation and the method of irrigation was flood with the predominate plant being Alfalfa Hay.

87. Based on the Irrigation Water Requirements software for Augusta, the net irrigation requirement is 1.36 feet (16.3 inches) per acre for flood irrigation in a normal year. A 60.1% management factor gives a historic consumptive use of 0.82 ft per acre. Based on 220 acres of irrigation under water rights, 41K 96231 00 and 41K 216326 00, the historic consumptive volume would be 180.4 AF (0.82 X 220). For the 64.8 acres being retired, the historic consumptive use would be 53.1 AF. For the water rights being retired, 41K 96231 00 contributes 18.05 AF to the consumptive use and 41K 216326 00 contributes 35.05 AF to the consumptive use.

88. The place of use (POU) is described in the Lewis & Clark Water Resources survey (WRS) notes. Those notes describe the irrigation POU as shown on 1956 aerial photos BB-52-20, 52-21, 52-98 and 52-99. Additionally, USDA aerial photo 187-117, dated August 4, 1978 shows full irrigation as does USGS aerial photo GS-VAR-1-222, dated July 24, 1954. These photos show a uniform water application across the POU. The Gouchnour Ranch topographic map shows that the land surface slopes gently to the northeast under irrigation ditches, indicating it

was feasible for irrigation. WRS maps as contained in the application and review of the WRS support the historic acres irrigated.

89. The historic point of diversion is from Elk Creek into Hogan Slough. Both the current Water Commissioner for Elk Creek Jim Wolfe and Lou Wally a former Water Commissioner confirms through written statements made by the Commissioners that full 7.8 CFS flow rate decreed under the two Rachel Thomas use rights is still being fully diverted and delivered to Elk Creek. There is significant detail contained in the document as to the history of the water right being changed. In addition the response to the deficiency letter of March 30, 2010 supports the history of the water rights being changed.

90. The water rights, 41K 96231 00 and 41K 216326 00, being changed are supplemental rights to 41K 96232 00. As stated on the General Abstracts for the two water rights being changed, Water right 41K 216326 lists a flow rate of 1.04 CFS which is a portion of the original used by 41K 96232 00 and water right 41K 96231 00 0.52 CFS which is 20% of the total diverted flow rate of 7.8 CFS.

91. There is no nonuse issues associated with the two water rights. Water Commissioners do affirm that water has been historically used and is confirmed in the affidavit on file. In addition the Applicant conducted a phone interview with Walter Lame of Augusta, Montana a former owner of a portion of the Applicant's property and descendant of Everett and Adida Lame, the owner prior to Walter Lame stated in the interview that there was a consistent and active use of the water being diverted. A portion of the Lame property is the same property the Elk Creek Colony has put to their use.

92. Based upon a personal interview conducted by David Baldwin with Jim Wolfe, current Water commissioner for Elk Creek, water is diverted into Hogan Slough starting in early April when there is spring runoff. However, the Commissioner doesn't start controlling the water until June, and continues through the end of the season in early October. Operationally, the land was irrigated from April to first cutting in late June or early July when irrigation ceased for about seven days. A second cutting was made in Late August when irrigation ceased again for about seven days.

93. Flood irrigation has a long history of use in Montana. Thus, the type of historic use information provided by the Applicant is considered reasonable and typical of the purpose for which it was put to use.

94. I find the following historic use.

WR Claim #	Source	Priority Date	Diverted Volume	Flow Rate	Purpose (Total Acres)	Consump. Use	Place of Use	Point of Diversion
96231	Elk Creek	4/1/1939	164.0 AF	0.52 CFS (233 GPM)	Irrigation 220 acres (Suppl. to 1 right)	90.2 AF	S2NW SEC 14, & SW Sec 14 T20N, R6W	SWSWNE Sec 30, T20N, R6W
216326	Elk Creek	4/1/1939	372.9 AF	1.04 CFS (466.8 GPM)	Irrigation 220 acres, (Suppl. with 1 other right)	90.2AF	S2NW Sec 14 & SW Sec 14, T20N, R6W	SWSWNE Sec 30, T20N, R6W

CONCLUSIONS OF LAW

95. 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; 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; 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; 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).

96. 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).

97. 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 PFD, 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”).

98. 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)).

99. 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 (November 19, 2003) (proposed decision denied change for lack of evidence of historical use; application subsequently withdrawn); 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.*

100. Applicant may proceed under ARM 36.12.1902 (11), 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 its own evidence of historic beneficial use. . (FOF No.85-92)

101. The Applicant has proven by a preponderance of the evidence the historic use of Water Right Claim No. 41K 96331 is 164 AF of diverted volume and diverted flow rate of 0.52 CFS,

233 GPM with a consumed volume of 90.2 AF and 41K 216326 is 372.9 AF of diverted volume and diverted flow rate of 1.04 CFS, 466.8 GPM with a consumed volume of 90.2 AF. There is a total of 436.9 AF of diverted volume with a consumptive use of 90.2 AF from each right for a total of 180.4 AF consumed. (FOF No.83-89)

Adverse Effect

FINDINGS OF FACT

102. The change of the two water rights, 41K 96331 and 41K 216326 from irrigation to aquifer recharge will have no adverse effect to other users. This water has historically been diverted from Elk Creek via Hogan Slough into Lame ditch. That flow rate and volume will instead be diverted from Elk Creek via Hogan Slough into the Scherrer Ditch. These ditches are in sequence and no other users are in between but there are other users down the Scherrer Ditch after water is taken in the allocated amount to the Applicant. The flow rate of water being changed, 69 GPM, is 1.9% of the 7.8 CFS that was historically diverted through the Lame Ditch. Because there are no other water rights using Lame ditch other than the Applicant there can be no adverse effect. (Change application pages 20- 21; response to the deficiency letter of March 30, 2010).

103. The consumptive use of the 64.8 acres being retired is 52.9 AF. The consumptive use of the proposed project in the associated permit applications 49.8 AF. The water rights being changed are providing full mitigation for the consumptive use volume of the proposed project. (Change application page 24).

104. The return flow was estimated by subtracting the consumptive use from the volume of water applied to the field by using the IWR model for flood irrigation and one inch of carryover at the beginning and end of season, the net irrigation requirement was calculated to be 16.30 inches per acre or 1.36 feet per acre. Using the 60.1% management factor for Augusta reduces the net irrigation requirement to 9.80 inches or about 0.816667 feet per year. The net irrigation requirement is therefore 52.9 AF for the 64.8 acres being changed. This leaves an estimated return flow of 37.3 AF (90.2AF -52.9 AF). The Applicant then modeled return flow factors determined using the Glover method, to estimate monthly return flow to the nearest surface

water. The results, shown graphically on page 22 of the Change Application indicate that it takes about 10 years for 90% of the return flow to reach the surface water. In addition to the graph the Applicant produced a chart to describe the return flow of 37.3 AF per month through the irrigation season. (Change application pages 21-24).

105. These are supplemental rights and are monitored by a Water Commissioner. The diversion pattern from Elk Creek will not change. The entire 1.56 CFS combined flow rate for both 96231 and 216326 will continue to be diverted by the Water Commissioner into Hogan Slough. This water has been diverted via Hogan Slough into Lame ditch, that flow rate and volume will instead be diverted into the Scherrer Ditch. The Commissioner has historically monitored the water that is to flow into Lame Ditch. Of the 7.8 CFS historically diverted into Lame Ditch only 0.15 CFS will be diverted in the Scherrer Ditch from Lame Ditch. The only person using water in Lame Ditch is the Applicant. The Applicant has secured permission from Broken O Ranch, the only user of the Scherrer Ditch, to convey that water to the new place of use for mitigation. The Scherrer Ditch is capable of handling the additional water to where it is diverted into the infiltration trench. It must be diverted or as stated by the Applicant it may cause problem with excess water down-ditch. So the Commissioner will know the extra water in Sherrer is for the Applicant and can make sure the Broken O Ranch gets the water it is due. There will also be a monitor at the intake of the infiltration trench to insure the water out of Sherrer gets directed into the infiltration trench. (Change Application pages 23 and 24. March 30, 2010 Memorandum from the Applicant page 3)

106. No other rights are impacted because of the ability for the Applicant to direct the two entire water rights that have been historically used by the Applicant for irrigation. Nothing will change in that the Applicant can make call but the Applicant will not gain the opportunity to make call they did not have before. It is being directed to the new place of use in the infiltration trench. The Applicant will not have access to the water being used for mitigation as it will be directed into groundwater and into the subsurface aquifer. (Change application pages 21-24 and March 30, 2010 deficiency response material)

CONCLUSIONS OF LAW

107. 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.*, Proposal for Decision, adopted by DNRC Final Order (2005).

108. 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).

109. 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; Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002). 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.

110. Consumptive use of water may not increase when an existing water right is changed. E.g., 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. 41H 30002512 by Brewer Land Co, LLC, Proposal For Decision (DNRC 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).

111. 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. The Department defines “return flow” in part as:

"Return flow" means that part of a diverted flow which is applied to irrigated land and is not consumed and returns underground to its original source or another source of water, and to which other water users are entitled to a continuation of, as part of their water right...

ARM 36.12.101(56); 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.

112. 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., 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.

113. 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. 100-104)

Adequate Diversion

FINDINGS OF FACT

114. The same diversion structure and conveyance ditches that have been in use since at least the 1930's will continue to be used for the proposed project. Water will continue to be diverted by the water Commissioner into Hogan Slough, which is a natural carrier. From Hogan Slough, the Water Commissioner will divert 69 GPM into the Scherrer Ditch. The Applicant will divert 69 GPM from the Scherrer Ditch through a secondary diversion structure into an infiltration

trench as described in the associated mitigation plan. The entire 1.56 CFS combined flow rate for the 96231 and 216326 will continue to be diverted by the Water Commissioner into Hogan Slough. From Hogan Slough, the Water commissioner will divert 69 GPM from these rights into the Scherrer Ditch where the water will enter a 4" pipe. There will be no losses from the pipe, so this portion of the system will be 100% efficient. From the pipe, the water will enter a small pond or concrete vault that will act as a sediment trap. From the sediment trap, the water will spill into the infiltration trench. The only potential loss will be from evaporation. Using the Potts evaporation value for Choteau a total evaporation loss is expected to be 0.086 AF/yr. Based on the total changed volume of 52.9 AF the proposed system will have an efficiency of 99.8%.

CONCLUSIONS OF LAW

115. 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).

116. 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. (FOF #111)

Beneficial Use

FINDINGS OF FACT

117. Applicant proposes to use water for aquifer recharge to mitigate the net depletion for water to be used for domestic, stock and industry from three wells. The Applicant proposes to retire acres from irrigation in order to provide water to mitigate for the new appropriation.

118. Applicant proposes to use 49.8 AF diverted volume and 69 GPM flow rate for aquifer recharge. This Change Application is intended to provide mitigation/aquifer recharge water for Application for Beneficial Water Use Permit No.41K 30047925, which requires 48.9 AF of water delivered to an infiltration trench. Based on the total changed volume of 48.9 AF the proposed system will have an efficiency of 99.8%. (Change application page 25)

CONCLUSIONS OF LAW

119. 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.

120. The Department may not approve use of an amount of water more than is requested or more than can be beneficially used without waste for the purpose stated in the application. §85-2-312, MCA; see also, McDonald; Toohey. 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; 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. 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.

121. 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 Proposal for Decision, adopted by DNRC Final Order (2005).

122. Applicant proposes to use water for mitigation which is a recognized beneficial use. § 85-2-102(4), MCA. Applicant has proven by a preponderance of the evidence mitigation is a beneficial use and that 49.8 AF of diverted volume and 69 GPM flow rate of water requested is the amount needed to sustain the beneficial use. (FOF Nos. 114 & 115)

Possessory Interest

FINDINGS OF FACT

123. The Applicant 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. (Department file)

CONCLUSIONS OF LAW

124. 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.

125. 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.

126. 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. 120)

Salvage Water

127. This Application does not involve salvage water.

Discharge Permit

FINDINGS OF FACT

128. A discharge permit from the Department of Environmental Quality is not required.

CONCLUSIONS OF LAW

129. 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 has or has not complied with this requirement.]

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Order, the Department preliminarily determines that this Combined Application for Beneficial Water Use Permit No. 41K 30047925 and Change Application No. 41K 30047926 should be **GRANTED**.

BENEFICIAL WATER USE PERMIT

The Department determines the Applicant may for the purposes of Beneficial Water Use Permit No. 41K 30047925 divert ground water, by means of three wells at a depth of 22, 20 and 18 feet, from January 1 to December 31 at 52 GPM up to 49.8 AF for Multiple Domestic, Stock, and Industrial purposes from points of diversion located in the SENWNE Sec 23 (well #1), NWSWSW Sec 24 (well #2) and SWSWSW Sec 24 (well #3) all in T20N R6W, Lewis & Clark County. The volume for Multiple Domestic of 28 homes (150 people) is 16.8 AF/year. The volume for Stock is 31.0 AF/year, and the volume for Industrial is 2.0 AF/year. The place of use for domestic use is NWNW Sec 25 T20N R6W, place of use for stock is NWNW Sec 25 T25N R6W and the place of use for industrial is S2SW Sec 24 T20N R6W all within Lewis and Clark County.

The application will be subject to the following conditions, limitations or restrictions.

1. Diversion under the permit may not commence until the aquifer recharge plan described in this decision is legally implemented. Diversion under the permit must stop if the aquifer recharge plan as herein required in amount, location and duration ceases in whole or part.
2. The appropriator shall install or cause to be installed meters approved by the Department to record the flow rates and volumetric amounts of all water diverted from ground water at each well. Water must not be diverted until the required measuring devices are in place and operating. On a form provided by the Department, the appropriator shall keep a monthly written record of the flow rate and volume of all water diverted, including the period of time. Records shall be submitted to the Helena Regional Office by November 30 of each year and upon request at other times during the year. Failure to submit reports may be cause for revocation of a permit or change. The appropriator shall maintain the

measuring device so it always operates properly and measures flow rate and volume accurately.

3. The appropriator shall install a piezometer to monitor ground water levels adjacent to the infiltration trench. The appropriator shall develop and submit to the Department a plan to increase the size of their infiltration trench or add an additional infiltration trench if ground water mounding immediately adjacent to the infiltration trench rises within 3 feet of the ground surface. Contents of the plan will discuss at a minimum:
 - a. Design and location of enlargement of the existing trench or development of a second trench,
 - b. Describe the performance standards of initial and additional (if applicable) infiltration trench(s).
4. The appropriator shall manage vegetation surrounding and overlying the infiltration trench, if it is filled in, to prevent plant uptake from the water table. At a minimum, the appropriator shall maintain only grass within 50 feet of the infiltration trench.

AUTHORIZATION OF CHANGE IN APPROPRIATION RIGHT

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 41K 30047926 should be granted subject to the following:

Authorization is GRANTED to change the purpose and place of use. There are two water rights involved in the change, 41K 96231 will contribute 0.51 CFS and 41K 216326 will contribute 1.04 CFS, to be changed from irrigation to aquifer recharge. Under this change, the Applicant would retire 64.8 acres of irrigation to provide 53.1 AF of water of which 49.8 AF will be used for aquifer recharge to fully offset the volume of net depletion that would create an adverse effect under the associated Application for Beneficial Water Use Permit because the water pumped from the three proposed wells. The new place of use for aquifer recharge will be at the infiltration trench located in the SWNW Section 23, T20N, R06W, Lewis and Clark County.

The application will be subject to the following conditions, limitations or restrictions.

1. The appropriator shall install or cause to be installed a measuring device approved by the Department capable of recording the rate and volume of water diverted into the infiltration trench from the Sheerer ditch, and must record monthly the volume of water diverted into the infiltration trench. Records shall be submitted to the Helena regional office by November 30 of each year and upon request at other times during the year. Water must not be diverted until the required measuring device is in place and operating properly. The appropriator shall maintain the measuring device so it always operates properly and measures flow rate and volume accurately.

NOTICE

This Department will provide public notice of this Combined 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 Combined Application pursuant to §§ 85-2-307, and -308, MCA. If this Combined Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Combined Application as herein approved. If this Combined Application receives a valid objection, the Combined 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 a combined application are received and withdrawn with stipulated conditions and the department preliminarily determined to grant the combined application, the department will grant the combined application subject to conditions necessary to satisfy applicable criteria based on the preliminary determination.

DATED this 21st day of December, 2010.

/Original signed by Terry Eccles/

Terry Eccles, Manager

Helena Regional Office

Department of Natural Resources and Conservation