

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

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<b>APPLICATION TO CHANGE WATER RIGHT ) NO. 40EJ 30121309 BY SAND CREEK ) RANCH LLC )</b>	<b>PRELIMINARY DETERMINATION TO GRANT TEMPORARY CHANGE</b>
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On April 8, 2019, Sand Creek Ranch LLC (Applicant) submitted Application to Change Water Right No. 40EJ 30121309 to the Havre Regional Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC) to temporarily change the purpose and place of use for Water Right Claim Nos. 40EJ 175817-00, 40EJ 175819-00, and 40EJ 175820-00 to fisheries in Cow Creek Reservoir. The Department published receipt of the Application on its website. The Department sent Applicant a deficiency letter per §85-2-302, Montana Code Annotated (MCA), dated September 13, 2019. The Applicant responded with information dated November 22, 2019. The Application was determined to be correct and complete as of August 3, 2020. An Environmental Assessment for this Application was completed on November 19, 2020.

**I. SUMMARY OF THE APPLICATION**

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

Application as filed:

- Application to Change Water Right, Form 606
- Change in Purpose Addendum
- Temporary Change Addendum

Information Received after Application Filed

- Email Correspondence between Applicant and DNRC
- Response to Department’s Letter from Applicant, received November 22, 2019

Information within the Department’s Possession/Knowledge

- Statement of Claim files 40EJ 175817-00, 40EJ 175819-00 & 40EJ 175820-00
- 1967 Blaine County Water Resource Survey, associated field notes and aerial photos
- USDA late 1970's early 1980's aerial photos
- Department's Technical Report dated August 3, 2020 (numbers in Technical Report are 3.6 AF more due to an error in the surface acres of Cow Creek Reservoir 87.5 AC verse 85.7 AC resulting in 3.6 AF less evaporation)
- Department Return Flow Report, by DNRC Water Management Bureau (WMB) Groundwater Hydrologist, Attila Felnagy dated July 21, 2020
- Email correspondence with Applicant, various dates

The Department also routinely considers the following information. The following information is not included in the administrative file for this Application but is available upon request. Please contact the Havre Regional Office at 406-265-5516 to request copies of the following documents.

- DNRC Return Flow Memo, dated April 1, 2016
- DNRC Historic Diverted Volume Memo, dated September 13, 2012
- DNRC Instream Flow Memo, dated January 23, 2008
- DNRC Ponds and Wetland Evaporation/Evapotranspiration, dated November 8, 2019

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

*A. Change Proposal and Water Rights to be Changed*

1. The Applicant is proposing to temporarily change the purpose and place of use for irrigation Claims 40EJ 175817-00, 40EJ 175819-00, and 40EJ 175820-00 for a period of 10 years. The proposed change in purpose will be from irrigation to fishery in Cow Creek Reservoir. The proposed change in place of use will be from historically irrigated acres to Cow Creek Reservoir. Cow Creek Reservoir Dam is the E2NW Section 21, T27N, R19E, Blaine County, and the Reservoir extends into the rest of the N2NW of Section 21 and the N2NE Section

20. The Applicant proposes to leave 1,129.4 acre-feet (AF) in Cow Creek Reservoir with Claims 40EJ 175817-00 (522.4 AF), 40EJ 175819-00 (218.7 AF), and 40EJ 175820-00 (388.3 AF) year-round to benefit the fishery resource. The remaining portion of Claims 40EJ 175817-00 and 40EJ 175819-00 are also proposed to be temporarily changed concurrently with Application 40EJ 30121308 for instream flow in Cow Creek above the Reservoir. The elements of the Statements of Claim being changed are shown below in Table 1.

**Table 1:**

WR Number	Purpose	Volume AF	Period of Use	Point of diversion	Place of use	Priority date	Acres
40EJ 175817-00	Irrigation	1,402	4/01 - 10/31	N2NW Sec. 21 27N 19E Blaine	See Below	5/1/1889	375
40EJ 175819-00	Irrigation	561	4/01 - 10/31	N2NW Sec. 21 27N 19E Blaine	See Below	3/28/1889	375
40EJ 175820-00	Irrigation	1,389	4/01 - 10/31	N2NW Sec. 21 27N 19E Blaine	See Below	11/30/1972	365.7

**Place of Use 40EJ 175817-00 & 40EJ 175819-00: 375 acres total**

Acres	Qrt Sec.	Sec.	Twp	Rge
8.3	SWSE	13	27N	19E
0.8	SWNWSW	13	27N	19E
33.9	S2SW	13	27N	19E
8.4	S2N2S2	14	27N	19E
124.7	S2S2	14	27N	19E
98.8	S2S2	15	27N	19E
0.1	SENESE	15	27N	19E
17.4	N2N2	22	27N	19E
82.6	N2N2	23	27N	19E

**Place of Use 40EJ 175820-00: 365.7 acres total**

Acres	Qrt Sec.	Sec.	Twp	Rge
8.3	SWSE	13	27N	19E
33.9	S2SW	13	27N	19E
124.7	S2S2	14	27N	19E
98.8	S2S2	15	27N	19E
0.1	SENESE	15	27N	19E
17.4	N2N2	22	27N	19E
82.6	N2N2	23	27N	19E

2. There are no water rights supplemental to the rights being changed. There have been no previous Change Authorizations issued for Statement of Claim Nos. 40EJ 175817-00, 40EJ 175819-00, and 40EJ 175820-00 other than the concurrent Application 40EJ 30121308 that is currently being processed to change the remaining portions of 40EJ 175817-00 and 40EJ 175819-00.

*B. Change Criteria*

3. The Department is authorized to approve a temporary change if the applicant meets its burden to prove the applicable §§ 85-2-402, and -407, MCA, criteria by a preponderance of the evidence. Matter of Royston, 249 Mont. 425, 429, 816 P.2d 1054, 1057 (1991); Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 33, 35, and 75, 357 Mont. 438, 240 P.3d 628 (an applicant's burden to prove change criteria by a preponderance of evidence is "more probably than not."); Town of Manhattan v. DNRC, 2012 MT 81, ¶8, 364 Mont. 450, 276 P.3d 920. Under this Preliminary Determination, the relevant change criteria in §85-2-402(2), MCA, are:

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

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

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

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

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

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

4. In addition to the §85-2-402(2), MCA, an application for a temporary change must comply with the requirements and conditions set forth in § 85-2-407, MCA.

5. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. *E.g.*, Hohenlohe, at ¶¶ 29-31; Town of Manhattan, at ¶8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

## II. FINDINGS OF FACT

### A. Historical Use

6. Statement of Claim Nos. 40EJ 175817-00 and 40EJ 175819-00 are respectively based on March 28, 1889 and May 1, 1889 appropriations decreed to Thomas Marlow for 400 and 1000 Miners Inches (10 CFS and 25 CFS) from Cow Creek in a February 28, 1910 District Court case. Water was diverted from Cow Creek into a large capacity ditch (TU Ditch) in Section 18 and conveyed to the TU reservoir located on an unnamed tributary to Hedges Creek. The TU Ditch also provided water directly to part of the place of use and to fill the TU reservoir. There were two other smaller diversion below in Sections 20 and 22 that provided water directly to irrigated acres closer to the creek bottom. When these claims were filed in 1982, they claimed irrigation of 365 acres.

7. In the early 1970s, the owner of the water rights proposed for change (General Agriculture Corporation at the time) began changes to the points of diversion and the place of use. The plans were to greatly increase the number of irrigated acres, install pumps, and build two new reservoirs. In 1972, General Agriculture Corporation filed a Petition and Complaint in the District Court

requesting the Court adjudicate the rights on Cow Creek so that they could appropriate unappropriated waters in addition to their existing water rights and to increase irrigated acres with the new reservoirs. Defendants of the suit sought dismissal of the case due to the passage of the Water Use Act with the effective date of July 1, 1973. The suit was dismissed at the District Court level, however the decision was reversed by the Montana Supreme Court and remanded back to the District Court. For unknown reasons, the District Court never rendered a decision on the Petition which became the basis for the filing of Water Right 40EJ 175820-00.

8. Although a final decision on the Petition was never rendered, the plans set forth in the Petition had commenced. The construction of Cow Creek Reservoir and Low Cow Creek Reservoir commenced, several pumps and pipelines were installed, and irrigated acreage was expanded. General Agriculture Corporation in agreement with the State of Montana began development of the project which included the installation of several pivots on State Trust Lands, even though a water right had not been established through the District Court. The cost of pumping and poor soil on the upper benches deemed the project too costly and the pivots were removed. The two reservoirs that were constructed were filed on in 1982 with Claim 40EJ 175820-00 which has a November 30, 1972 priority date.

9. When the Montana Water Court adjudicated Claims 40EJ 175817-00 and 40EJ 175819-00 in 2016, it was determined the change in points of diversion and place of use occurred prior to July 1, 1973, so these water rights were decreed with the dam on Cow Creek Reservoir as a primary point of diversion and a 375 irrigated-acre place of use. The Lower Cow Creek Reservoir Dam point of diversion and two secondary diversions were also decreed on the water rights. Claim 40EJ 175820-00 was decreed with the same points of diversion (dam) and 365.7 irrigated acres.

10. There are four reservoirs associated with the water rights proposed for change. Table 2 shows the reservoir specifications as decreed by the Montana Water Court in 2016.

**Table 2: Reservoir Details**

Name	Depth (Feet)	Surface Area (Acres)	Capacity (AF)
Cow Creek	45	85.7	1,543
Lower Cow Creek	10	5	20
TU	20	48.4	390
Diversion	10	1	4

11. The Blaine County Water Resource Survey (WRS) field notes indicate active irrigation on 323 acres at the time of the field survey (June 11, 1966). Although there appears to be an error on the source name in the field notes, Hedges Creek is listed for the March 28 appropriation and Cow Creek for an April 15 appropriation. The Department finds the Blaine County WRS supports irrigation of 323 acres under these appropriations.

12. The USDA aerial imagery from October 8, 1980 supports irrigation on more acres (~400 acres) than the decreed 375 acres. The Department cannot find more acres than what is decreed by the Water Court, therefore the Department finds the claimed 375 acres were historically irrigated for 40EJ 175817-00 and 40EJ 175819-00, and 365.7 acres for 40EJ 175820-00.

13. Per ARM 36.12.1902, the consumptive volume for 375 irrigated acres in Blaine County was calculated using the Chinook weather station irrigation requirement of 20.8 inches and a management factor (MF) of 58.7% and equals 381.55 AF  $((375 \text{ acres} \times 20.8 \text{ in})/1\text{ft}/12\text{in}) \times 0.587$   $\text{MF} = 381.55 \text{ AF}$ ). Per ARM 36.12.1902(17)(b), the Department also considers 10% irrecoverable losses at the field for sprinkler irrigation as part of the consumptive use, which is calculated to be 54.51 AF  $(381.55 \text{ AF} / 0.70 \text{ field efficiency}) \times 0.10 = 54.51 \text{ AF}$ ). Since the Applicant is retiring all historically irrigated acres as well as the historical ditches during the term of this temporary change, ditch evaporation and vegetative losses are also considered part of the total consumed volume. The Applicant provided the calculations for ditch evaporation (0.86 AF) and vegetative losses (0.73 AF), which the Department finds reasonable. The Department finds the total historic consumptive volume, not including the evaporation from the reservoirs, to be 437.65 AF  $(381.55 + 54.51 + 0.86 + 0.73)$ .

14. In order to calculate what portions of the historic consumptive volume are attributable to each water right, the Department used the historically decreed flow rates and percentages the Applicant provided in the Application materials. The amount of water per acre irrigated  $(375/437.65 = 1.16 \text{ AF/AC})$  was used with the Applicant's assertion that Claim 40EJ 175817-00 provided 71.4% and Claim 40EJ 175819-00 provided 28.6% based on the claimed historical flow rates. The flow rates historically decreed were 25 CFS and 10 CFS, however the Applicant

changed the historical point of diversion in Section 18 to the dam on Cow Creek Reservoir prior to July 1, 1973, therefore the Water Court did not decree a flow rate. The consumed volume for the acreage not supplementally irrigated with Claim 40EJ 175820-00 (9.3 acres) is 10.86 AF, of which 7.75 AF are attributed to Claim 40EJ 175817-00 and 3.11 AF to Claim 40EJ 175819-00. For the 365.7 acres irrigated with all three rights, the Department attributed 1/3 to Claim 40EJ 175820-00, 71.4% of the remaining 2/3 to Claim 40EJ 175817-00 and the remaining 28.6% of the 2/3 to Claim 40EJ 175819-00. These amounts were added together to determine the percentage of consumption and to estimate the evaporation volumes attributable to each water right (Table 3).

**Table 3: Historic Consumptive Use Volume**

Water Right	9.3 Acres	365.7 Acres	Reservoir Evap.	<i><b>Total</b></i>
40EJ 175817	7.75 (71.4%)	203.2 (71.4 % of 2/3)	88 (48%)	299
40EJ 175819	3.11 (28.6%)	81.3 (28.6% of 2/3)	36.7 (20%)	121.1
40EJ 175820	NA	142.3 (1/3)	58.7 (32%)	201
<b>Total:</b>	10.86 AF	426.9 AF	183.4 AF	<b>621.2 AF*</b>

\*Due to rounding and decimals, numbers may not add up exactly

15. Per the Department’s November 8, 2019 Memorandum: Pond and Wetland Evaporation/Evapotranspiration, the net (rather than gross) evaporation will be calculated for the reservoirs. The Department used monthly gross evaporation and average monthly precipitation values collected at the Chinook Weather Station (#241722) between 1981 to 2010 as indicated in the Penman/Linacre procedure described in Potts (1988) to calculate an annual net evaporation value equal to 24.0 inches. The calculated annual net evaporation rate for a surface area of 91.7 acres associated with all three existing reservoirs is 183.4 AF. The TU reservoir will continue to be used by the other water rights associated with it and will therefore not be included in the Department’s consumptive volume calculations. The net evaporation is for the fisheries use component of this Application and is distributed monthly in Table 4 based on the monthly rate generated from the Penman/Linacre procedure.

**Table 4: Net Reservoir Evaporation calculation\***

	Evap. (Chinook Station) (in.)	Precip. (Chinook Station) (in.)	Net Evap (in.)	Net Reservoir Evaporation (AF)
January	0.65	0.49	0.16	1.2
February	0.92	0.40	0.52	4.0
March	1.87	0.61	1.26	9.6
April	2.97	0.91	2.06	15.8
May	4.03	2.25	1.78	13.6
June	4.91	2.35	2.56	19.6
July	6.14	1.74	4.40	33.6
August	5.98	1.22	4.76	36.4
September	4.33	1.41	2.92	22.3
October	3.00	0.71	2.29	17.5
November	1.56	0.55	1.01	7.7
December	0.75	0.48	0.27	2.1
<b>Total</b>	37.12	13.12	24.00	183.4

\*Net Evaporation calculated per Department memo dated November 8, 2019

16. The Department calculated the historical diverted volume using ARM 36.12.1902(10), information provided in the Application, and evaporation calculated by the Department. The Department used the applied volume, conveyance losses and reservoir seepage values as calculated by the Applicant, and Department calculated reservoir evaporation to find a historically diverted volume of 1,213.4 AF.

- Irrigation applied volume: 545.01 AF (381.55 AF ÷ 0.7 field eff.)
- Ditch seepage: 84.5 AF (calculated by applicant)
- Ditch evaporation: 0.86 AF (calculated by applicant)
- Ditch vegetative loss: 0.73 AF (calculated by applicant)
- Reservoir Evaporation: 183.4 AF
- Seepage from Cow Creek Reservoir: 398.85 AF (calculated by applicant)
- Total: 1,213.4 AF (545.01+84.5+0.86+0.73+183.4+398.85=1,213.4 AF)

17. The Applicant measured a flow of 0.73 CFS in Cow Creek below the reservoir while the reservoir was at full pool and no water was spilling. This would calculate to 528.37 AF of seepage per year. The Applicant asserts that the reservoir is drawn down 5 feet during the winter months and estimated an 11% reduction in reservoir pool level and seepage. This results in approximately 499 AF of seepage per year. Since the seepage water fills the lower reservoir, which is also used

for irrigation, the Applicant subtracted approximately 100 AF from the calculated seepage for a total seepage value of 398.85 AF. The Applicant also provided calculations for ditch seepage, ditch evaporation and ditch vegetative loss which along with reservoir seepage is found to be reasonable by the Department (see application materials and deficiency response).

18. The percentages used to identify the consumptive volume per water right (FOF 14) were also used to attribute the diverted volume to each right. The Department finds the following historic use including diverted and consumed volume per water right in Table 5.

**Table 5: The Department finds the following Historic Use:**

Water Rights	Diverted Volume	Consumptive Volume	Acres Irrigated	Priority Date	Period of Use	Period & Points of Diversion
40EJ 175817 (48%)	582.4 AF	299 AF	375	5/1/1889	4/1 – 10/31	1/1 to 12/31 Cow Creek Reservoir Sec.21 T27N R19E
40EJ 175819 (20%)	242.7 AF	121.1 AF	375	3/28/1889	4/1 – 10/31	
40EJ 175820 (32%)	388.3 AF	201 AF	365.7	11/30/1972	4/1 – 10/31	
Total	1,213.4 AF	621.2 AF	375			Lower Cow Creek Reservoir Sec. 23 T27N R19E

*B. Adverse Effect*

19. The Applicant proposes to temporally change 1,129.4 AF of the 1,213.4 AF diverted volume to the purpose of fisheries in Cow Creek Reservoir; the remaining diverted volume is being changed concurrently with Application 40EJ 30121308 to instream flow in Cow Creek above the reservoir. All of the historically irrigated acres will be retired for a period of 10 years during the terms of the two temporary changes with the option to renew. The historic consumptive volume associated with the evaporation on Cow Creek Reservoir will not change, and the remaining historic consumptive volume will be left in the source during the temporary changes.

20. According to the Return Flow Report by Department Water Management Bureau Groundwater Hydrologist Attila Fohnagy, dated July 21, 2020, for Application to Change Water Right Nos. 40EJ 30121308 and 40EJ 30121309, return flows historically accreted in Cow Creek

and Hedges Creek. Return flows begin accreting at the upstream extent of the historic place of use and gradually increase to the total relative amounts in Cow Creek downstream of Hedges Creek. Table 6 below shows the calculated return flow amounts associated with the 375 historically irrigated place of use that will be temporarily retired during the term of this change.

**Table 6: Total return flows for irrigation of 375 acres at the historic POU upstream of the confluence of Cow Creek and Hedges Creek**

	NIR (in)	Net Reservoir Evaporation (AF)	Applied (AF)	Crop Consumed (AF)	Not Consumed (AF)	Return Flows (AF)	
						Cow Creek	Hedges Creek
January	0.00	1.2	0.0	0.0	0.0	5.8	3.2
February	0.00	4.0	0.0	0.0	0.0	5.8	3.2
March	0.00	9.8	0.0	0.0	0.0	5.8	3.2
April	0.00	16.1	0.0	0.0	0.0	5.8	3.2
May	1.39	13.9	61.8	49.5	12.4	5.8	3.2
June	3.02	19.9	134.7	107.8	26.9	5.8	3.2
July	3.89	34.3	173.5	138.8	34.7	5.8	3.3
August	3.33	37.1	148.6	118.9	29.7	5.8	3.3
September	0.59	22.7	26.5	21.2	5.3	5.8	3.3
October	0.00	17.9	0.0	0.0	0.0	5.8	3.3
November	0.00	7.9	0.0	0.0	0.0	5.8	3.3
December	0.00	2.1	0.0	0.0	0.0	5.8	3.3
<b>Total</b>	<b>12.21</b>	<b>187.0</b>	<b>545.1</b>	<b>436.1</b>	<b>109.0</b>	<b>70.0</b>	<b>39.0</b>

21. The Department’s Return Flow Report also included calculations for the net effect of losses of historical return flows in Cow Creek and Hedges Creek both upstream and downstream of the confluence of the two creeks resulting from the retirement of the historically irrigated 375-acre place of use. Table 7 shows the monthly breakdown of the net effect on both Hedges and Cow Creeks.

**Table 7: Net effect on flows in Hedges Creek and Cow Creek both upstream and downstream of its confluence with Hedges Creek**

	Net Effect on Stream Flows (AF)		
	Hedges Creek	Cow Creek	
		Upstream	Downstream
January	-3.2	-5.8	-9.1
February	-3.2	-5.8	-9.1
March	-3.2	-5.8	-9.1
April	-3.2	-5.8	-9.1
May	-3.2	6.5	3.3
June	-3.2	21.1	17.9
July	-3.3	28.9	25.6
August	-3.3	23.9	20.6
September	-3.3	-0.5	-3.8
October	-3.3	-5.8	-9.1
November	-3.3	-5.8	-9.1
December	-3.3	-5.8	-9.1
	-39.0	39.0	

22. Claims 40EJ 137788 and 40EJ 137787 are livestock (direct from source) water rights located in the reach of Hedges Creek where return flows historically accreted. Hedges Creek is considered a perennial stream; however, review of several aerial photos shows pooling at various times throughout the year. Although there is pooling and the source may not always flow year-round, it is more likely than not that livestock are able to drink and the rights can be actively exercised without adverse effect.

23. The Applicant provided a list of downstream water rights on Cow Creek, all of which are junior to the water rights proposed for change. Although the proposed change will create a negative net effect downstream on Cow Creek (Table 7), the seepage from Cow Creek will more than offset any adverse effect resulting from the elimination of return flows associated with the historically irrigated acres that will be retired. The Applicant asserts irrigation has not occurred since 1997. The Department finds that the Applicant’s proposed change to temporary fishery in Cow Creek Reservoir does not create an adverse effect.

C. Beneficial Use

24. The Applicant proposes to use 1,129.4 AF of water for temporary fishery purposes in Cow Creek Reservoir. Montana Fish, Wildlife & Parks (FWP) provided stocking records for the amount of fish they stock in Cow Creek Reservoir. FWP further explained in the Application materials that their fisheries biologist use the amount of reservoir habitat available to determine the number and size of fish to stock. They also attempt to reach a balance between number of fish and the size of fish people like to catch, with the available habitat. The Department finds the Applicant's proposed change of 1,129.4 AF to temporary fishery in Cow Creek Reservoir be a beneficial use of water.

D. Adequate Diversion

25. The Applicant proposes to change the purpose and place of use from irrigation to fisheries in Cow Creek Reservoir. The location of the primary point of diversion at Cow Creek Reservoir Dam will not be changing. The Dam and Reservoir have been in use since the early 1970s, further proving it is adequate to divert and impound the proposed amount. Water can be released from the Reservoir by a control valve at ground level in the outlet pipe or through the spill way.

E. Possessory Interest

26. The Applicant signed the affidavit on the application form affirming the Applicant has possessory interest in the property where the water is to be put to beneficial use.

**III. CONCLUSIONS OF LAW**

A. Historic Use and Adverse Effect

27. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one may change only that to which he or she has the right based upon beneficial use. A change to an

existing water right may not expand the consumptive use of the underlying right or remove the well-established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. Town of Manhattan, at ¶ 10 (an appropriator's right only attaches to the amount of water actually taken and beneficially applied).<sup>1</sup>

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

29. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the "historic use" of the water right being changed. Town of Manhattan, at ¶10 (recognizing that the Department's obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). In this case, the Applicant seeks to change existing water rights represented by its Water Right Statement of Claim. Therefore, analysis of historic use and adverse effect in requires evaluation of what the water right looked like and how it was exercised prior to July 1, 1973. A change

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<sup>1</sup> DNRC decisions are available at:

[http://www.dnrc.mt.gov/wrd/water\\_rts/hearing\\_info/hearing\\_orders/hearingorders.asp](http://www.dnrc.mt.gov/wrd/water_rts/hearing_info/hearing_orders/hearingorders.asp)

<sup>2</sup> See also Holmstrom Land Co., Inc., v. Newlan Creek Water District, 185 Mont. 409, 605 P.2d 1060 (1979); Lokowich v. Helena, 46 Mont. 575, 129 P. 1063(1913); Thompson v. Harvey, 164 Mont. 133, 519 P.2d 963 (1974)(plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); McIntosh v. Graveley, 159 Mont. 72, 495 P.2d 186 (1972)(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, 38 Mont. 302, 100 P. 222 (1909)(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); and, Gassert v. Noyes, 18 Mont. 216, 44 P. 959(1896)(change in place of use was unlawful where reduced the amount of water in the source of supply available which was subject to plaintiff's subsequent right).

applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a statement of Statement of Claim, permit, or decree may not include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.<sup>3</sup> A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. Quigley, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right); Royston, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record could not sustain a conclusion of no adverse effect because the applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); Hohenlohe, at ¶44-45; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); Matter of Application For Beneficial Water Use Permit By City of Bozeman, *Memorandum*, Pgs. 8-22 (Adopted by DNRC *Final Order* January 9, 1985)(evidence of historic use must be compared to the proposed change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).

30. An applicant must also analyze the extent to which a proposed change may alter historic return flows for purposes of establishing that the proposed change will not result in adverse effect. The requisite return flow analysis reflects the fundamental tenant of Montana water law that once water leaves the control of the original appropriator, the original appropriator has no right to its

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<sup>3</sup>A Statement of Claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The Statement of Claim does not constitute *prima facie* evidence of historical use in a change proceeding under §85-2-402, MCA. For example, most water rights decreed for irrigation are not decreed with a volume and provide limited evidence of actual historic beneficial use. §85-2-234, MCA

use and the water is subject to appropriation by others. E.g., Hohenlohe, at ¶44 ARM 36.12.101(56)(Return flow - that part of a diverted flow which is not consumed by the appropriator and returns underground to its original source or another source of water - is not part of a water right and is subject to appropriation by subsequent water users).<sup>4</sup>

31. Although the level of analysis may vary, analysis of the extent to which a proposed change may alter the amount, location, or timing return flows is critical in order to prove that the proposed change will not adversely affect other appropriators who rely on those return flows as part of the source of supply for their water rights. Royston, 249 Mont. at 431, 816 P.2d at 1059-60; Hohenlohe, at ¶¶ 42-6 and 55-6; Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 731.

32. the Montana Supreme Court explained the relationship between the fundamental principles of historic beneficial use, return flow, and the rights of subsequent appropriators as they relate to the adverse effect analysis in a change proceeding in the following manner:

The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the “amount historically consumed” and the water that re-enters the stream as return flow. . . .

An appropriator historically has been entitled to the greatest quantity of water he can put to use. The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. This limitation springs from a fundamental tenet of western water law-that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator “is entitled to have the water flow in the same manner as when he located,” and the appropriator may insist that prior appropriators do not affect adversely his rights.

This fundamental rule of Montana water law has dictated the Department’s determinations in numerous prior change proceedings. The Department claims that historic consumptive use, as quantified in part by return flow analysis, represents a key element of proving historic beneficial use.

We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his

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<sup>4</sup> The Montana Supreme Court 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).

past beneficial use.

Hohenlohe, at ¶¶ 42-45 (internal citations omitted).

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

34. 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., DNRC Proposal for Decision adopted by Final Order (2005). 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. See MacDonald, 220 Mont. at 529, 722 P.2d at 604; Featherman, 43 Mont. at 316-17, 115 P. at 986.

35. The Department has adopted a rule providing for the calculation of historic consumptive use where the applicant proves by a preponderance of the evidence that the acreage was historically irrigated. ARM 36.12.1902 (16). In the alternative an applicant may present its own evidence of historic beneficial use. In this case Applicant has elected to proceed under ARM 36.12.1902. (FOF No.13-14).

36. Accordingly, the Applicant was required to prove the historic consumptive use by a preponderance of the evidence for each of the water rights being changed. 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., supra; 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”).

37. Based upon the Applicant’s evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of Water Right Statement of Claim No. 40EJ 175817-00 of 582.4 AF diverted volume with a consumptive use of 299 AF, Water Right Statement of Claim No. 40EJ 175819-00 of 242.7 AF diverted volume with a consumptive use of 121.1 AF and Water Right Statement of Claim No. 40EJ 175820-00 of 388.3 AF diverted volume with a consumptive use of 201 AF. (FOF Nos. 6-18)

38. Based upon the Applicant’s comparative analysis of historic water use and return flows to water use and return flows under the proposed change, the Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. §85-2-402(2)(a), MCA. (FOF Nos. 19-23)

*B. Beneficial Use*

39. A change applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. §§85-2-102(5) and -402(2)(c), MCA. Beneficial use is and has always been the hallmark of a valid Montana water right: “[T]he amount actually needed for beneficial use within the appropriation will be the basis, measure, and the limit of all water rights in Montana . . .” McDonald, 220 Mont. at 532, 722 P.2d at 606. The analysis of the beneficial use criterion is the same for change authorizations under §85-2-402, MCA, and new beneficial permits under §85-2-311, MCA. ARM 36.12.1801.

40. The Applicant proposes to use water for the purpose of fisheries in Cow Creek Reservoir. Fish and wildlife is a recognized beneficial use. §85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence that 1,129.4 AF of water requested for temporary change to fisheries in Cow Creek Reservoir is a beneficial use. (FOF No. 24)

*C. Adequate Means of Diversion*

41. Pursuant to §85-2-402 (2)(b), 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. This codifies the prior appropriation principle that the means of diversion must be reasonably effective for the contemplated use and may not result in a waste of the resource. Crowley v. 6<sup>th</sup> Judicial District Court, 108 Mont. 89, 88 P.2d 23 (1939); 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).

42. Pursuant to §85-2-402 (2)(b), MCA, 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 No. 25)

*D. Possessory Interest*

43. Pursuant to §85-2-402(2)(d), 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. See also ARM 36.12.1802

44. 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. (FOF 26)

#### **IV. PRELIMINARY DETERMINATION**

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 40EJ 30121309 should be granted subject to the following.

The Applicant is authorized to temporarily change the purpose and place of use of Claims 40 EJ 175817-00, 40EJ 175819-00, and 40EJ 175820-00. The new place of use for these claims will be temporarily listed as Cow Creek Reservoir, and the temporary purpose for these claims will be listed as fisheries in the amount of 1,129.4 AF (522.4 AF for Claim 40EJ 175817-00, 218.7 AF for Claim 40EJ 175819-00, and 388.3 AF for Claim 40EJ 175820-00). Cow Creek Reservoir is located in the N2NW and SENW of Section 21 and the N2NE of Section 20, T27N, R19E, Blaine County. The periods of use and diversion will be January 1 to December 31. The remaining volumes associated with Statement of Claim Nos. 40EJ 175817-00 and 40EJ 175819-00 are proposed for temporary change for instream flow in Cow Creek under Application 40EJ 30121308.

## NOTICE

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

DATED this 24th day of November 2020.

*/Original signed by Matt Miles/*  
Matt Miles, Regional Manager  
Havre Regional Office  
Department of Natural Resources  
and Conservation

**CERTIFICATE OF SERVICE**

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 24th day of November 2020, by electronic mail (email).

MONTANA STATE OF DEPT OF FISH WILDLIFE & PARKS  
% ANDY BRUMMOND  
(VIA EMAIL)

HOLLY FRANZ, ATTORNEY AT LAW  
FOR SAND CREEK RANCH LLC  
(VIA EMAIL)

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Havre Regional Office, (406) 265-5516