NOTICE AREA

Application No. **76G 30165115** Regional Office # 5

Applicant's Name **Clark Fork Coalition**

Indian Reservation [ ] Yes [x] No If yes, Reservation _____

Irrigation District [ ] Yes [x] No If yes, District _____

Specialist **Russ Gates** Date **6/8/2026**

Public Notice Area

Map Created: 6/4/2026
Author: Russ Gates
Water Resource Specialist

HistoricPOD
Noticed Rights
ProtectedReach
HistoricPOU

Elements depicted on this map are for illustrative purposes and have not been surveyed by the Department. Service Layer Credits: World Hillshade Esri, USGS MSDI PLSS MSL/StateMask Montana State Library County US Bureau of Land Management, Geographic Coordinate

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Water Right Owner	Water Right # (Basin, ID, and Number)
KOHRS & MANNING DITCH CO	76G 91146 00
DOUGLAS W JOHNSON	76G 91467 00
DOUGLAS W JOHNSON	76G 91469 00
DOUGLAS W JOHNSON	76G 91468 00
DOUGLAS W JOHNSON	76G 91466 00
KOHRS & MANNING DITCH CO	76G 91145 00
USA (DEPT OF INTERIOR NATIONAL PARK SERVICE)	76G 162334 00
LORRIE M DUNCAN	76G 9326 00
PUBLISHED: REMARKS:	

**If owner listed twice, only one notice sent*

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

* * * * * * *

APPLICATION TO CHANGE WATER RIGHT NO. 76G 30165115 BY THE CLARK FORK COALITION	**[DRAFT] PRELIMINARY DETERMINATION TO GRANT TEMPORARY CHANGE**

* * * * * * *

On February 17, 2026, The Clark Fork Coalition (Applicant) submitted Application to Change Water Right No. 76G 30165115 to temporarily change water right Statement of Claim (Claim) Nos. 76G 5191-00, 76G 5192-00, 76G 5193-00, and 76G 215144-00 to the Helena Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the Application on its website. A preapplication meeting was held between the Department and the Applicant on January 7, 2025, in which the Applicant designated that the technical analyses for this application would be completed by the Department. The Applicant returned the completed Preapplication Meeting Form on July 9. 2025. The Department delivered the completed Technical Analysis on August 22, 2025. The Application was determined to be correct and complete as of March 9, 2026. An Environmental Assessment for this application was completed on May 5, 2026.

INFORMATION

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

Application as filed:

- Application for Change of Appropriation Water Right, Form 606
- Addenda:
    - Change to Instream Flow Addendum, Form 606-IFA
- Attachments:
    - Description of conveyance system and list of maps
- Maps:
    - Historical Use and Ditch Map
    - Proposed Use Map
    - 606-IFA Map
- Department- completed technical analyses based on information provided in the Preapplication Meeting Form, dated August 22, 2025

Information within the Department's Possession/Knowledge

- Water Resources Survey aerial photo dated August 17, 1947
- USDA aerial photo dated 1979
- 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 Helena Regional Office at 406-444-6999 to request copies of the following documents.
    - Department Memo dated April 1, 2016, regarding Return Flows
    - Department Memo dated September 13, 2012, regarding the development of standardized methodologies to determine Historic Diverted Volume

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).

For the purposes of this document, Department or DNRC means the Department of Natural Resources & Conservation; CFS means cubic feet per second; GPM means gallons per minute; AF means acre-feet; AC means acres; and AF/YR means acre-feet per year.

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

1. Applicant seeks to change the purpose and place of use of the Statements of Claim listed in Table A below in this Application. These Claims are filed for the flow rates listed in the table for the purpose of irrigation from Cottonwood Creek and were diverted via a headgate into the Beaumont Ditch.

Table 1: Water Right(S) Proposed for Change

Water Right No.	Historical Purpose	Priority Date	Period of Diversion and Use	Historical Place of Use	Historical Point of Diversion	Maximum Historical Flow Rate (CFS)	Historically Diverted Volume (AF)
76G 5191-00	Irrigation	April 1, 1886	May 1 – October 1	NWSW, S2SWNW S34 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County	0.28	16.95
76G 5192-00	Irrigation	November 7, 1879	May 1 – October 1	NWSW, S2SWNW S34 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County	0.28	16.95
76G 5193-00	Irrigation	April 1, 1871	May 1 – October 1	NWSW, S2SWNW S34 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County	0.58	34.57
76G 215144-00	Irrigation	June 30, 1973	March 10 – July 10	NWSW, S2SWNW S34 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County	1.99	105.98

2. The Claims proposed for change in this Application are 100% supplemental with each other over the full place of use. No other rights overlap the historical place of use.

CHANGE PROPOSAL

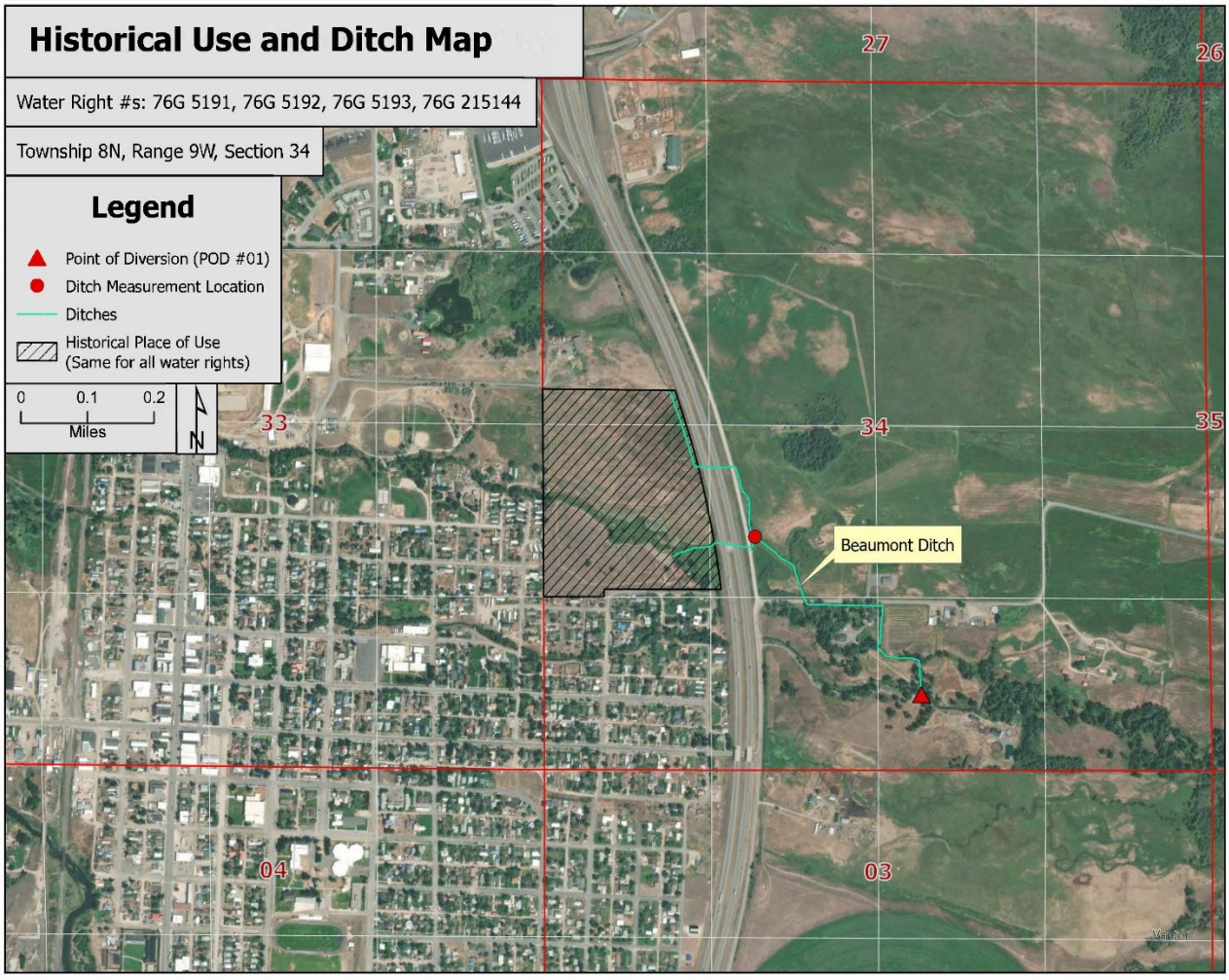
FINDINGS OF FACT

3. The Applicant proposes to temporarily change for a period of 10 years with the option to renew the place of use (POU) and purpose for Statements of Claim 76G 5191-00, 76G 5192-00, 76G 5193-00, and 76G 215144-00. The proposed place of use is the reach of Cottonwood Creek starting at the historical point of diversion (POD) for these Claims in the SWSWSE Section (S) 34 and ending at the confluence with the Clark Fork River in the NWNWSW S33, all Township (T) 8 North (N), Range (R) 9 West (W). The proposed purpose is instream flow for fisheries. The

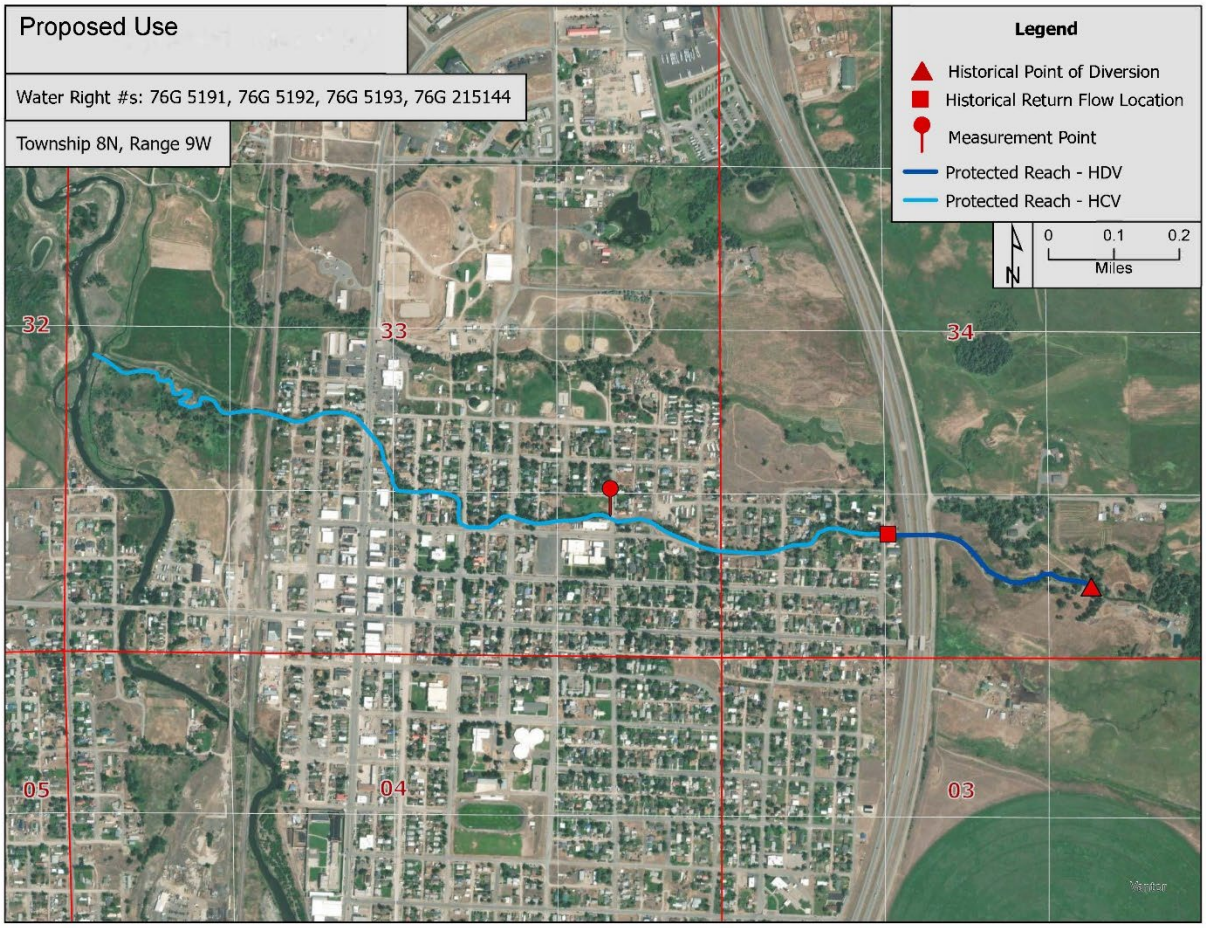
project is in Powell County and the source is Cottonwood Creek. After this change, the Applicant proposes to protect up to 174.45 AF volume at a flow rate of up to 1.99 CFS. The proposed period of diversion and period of use is June 13 to August 10. Maps 1 and 2 show the elements of the proposed change.

4. The Applicant proposes to protect the full historical diverted volume (HDV) of 174.45 AF from the historical POD to the point at which return flows from historical irrigation practices began to accrete to Cottonwood Creek in the NWSESW S34, T8N, R9W, Powell County. Below this point to the confluence with the Clark Fork River, the Applicant proposes to protect the historical consumed volume (HCV) of 31.67 AF.

5. The Applicant proposes to utilize the DNRC real-time stream gage on Cottonwood Creek in the NWSESE S33, T8N, R9W, Powell County to measure flows. If this gage becomes unavailable, the Applicant proposes to measure flows at the same location every two weeks during the period of use using Department approved methods.



Map 1: Historical Use



Map 2: Proposed Use

CHANGE CRITERIA

6. The Department is authorized to approve a change if the Applicant meets its burden to prove the applicable § 85-2-402, 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 probable 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.

7. 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*, ¶¶ 29-31; *Town of Manhattan*, ¶ 8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

8. In addition to the § 85-2-402(2), MCA,[1] an Applicant for a temporary change authorization for instream flow must comply with the requirements and conditions set forth in §§ 85-2-407 and -408, MCA. Section 85-2-408, MCA provides in part:

(1) The department shall accept and process an application for a temporary change in appropriation rights to maintain or enhance instream flow to benefit the fishery resource under the provisions of **85-2-402, 85-2-407,** and this section. The application must:
(a) include specific information on the length and location of the stream reach in which the streamflow is to be maintained or enhanced; and
(b) provide a detailed streamflow measuring plan that describes the point where and the manner in which the streamflow must be measured.

[1] Pursuant to §§ 85-2-402 (2)(b) and -402(2)(d), MCA, the Applicant is not required to prove that the proposed means of diversion, construction, and operation of the appropriation works are adequate and is not required to prove possessory interest in the place of use because this application involves a temporary change in appropriation right for instream flow pursuant to § 85-2-408, MCA.

(2) (a) A temporary change authorization under the provisions of this section is allowable only if the owner of the water right voluntarily agrees to:

(i) change the purpose of a consumptive use water right to instream flow for the benefit of the fishery resource; or

(ii) lease a consumptive use water right to another person for instream flow to benefit the fishery resource.

(3) In addition to the requirements of **85-2-402** and **85-2-407,** an Applicant for a change authorization under this section shall prove by a preponderance of evidence that:

(a) the temporary change authorization for water to maintain and enhance instream flow to benefit the fishery resource, as measured at a specific point, will not adversely affect the water rights of other persons; and

(b) the amount of water for the proposed use is needed to maintain or enhance instream flows to benefit the fishery resource.

(5) The department shall approve the method of measurement of the water to maintain and enhance instream flow to benefit the fishery resource through a temporary change authorization as provided in this section.

. . . .

(8) The maximum quantity of water that may be changed to maintain and enhance streamflows to benefit the fishery resource is the amount historically diverted. However, only the amount historically consumed, or a smaller amount if specified by the department in the lease authorization, may be used to maintain or enhance streamflows to benefit the fishery resource below the existing point of diversion.

9. Pursuant to §§ 85-2-407, and -408, MCA, a temporary change for authorization for instream flow is subject to special conditions which are identified above and addressed in the sections below. 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*, ¶¶ 29-31; *Town of Manhattan*, ¶ 8.

HISTORICAL USE AND ADVERSE EFFECT

FINDINGS OF FACT - Historical Use

10. Table 2 below indicates the priority date and filing status for each of the rights proposed for change in this Application.

Table 2: Water Right Historical Basis

Water Right	Priority Date	Decree Status	Basis for Status
76G 5191-00	April 1. 1866	Decreed	Historical district court decree
76G 5192-00	November 7, 1879	Decreed	Historical district court decree
76G 5193-00	April 1, 1871	Decreed	Historical district court decree
76G 215144-00	June 30, 1973	Use	Filed based on use

11. The Claims proposed for change in this Application claim 56.62 acres of flood irrigation in the NW and SW of S34, T8N, R9W, Powell County. The Department identified 31.07 acres of historical irrigation within the historically claimed POU based on Water Resources Survey aerial photography dated August 17, 1947 and USDA aerial photography from 1979. The historical method of irrigation was wild flood with a field efficiency of 25%. All four claims proposed for change in this Application were 100% supplemental on the same 31.07-acre POU.

12. The Applicant elected to use the methodology set forth in ARM 36.12.1902 for the calculation of historic field application and consumed volumes. Per the IWR values listed under ARM 36.12.1902, the seasonal evapotranspiration (ET) for this area based on the Deer Lodge weather station is 13.14 inches for flood, wheel line, and hand line irrigation. The management factor for Powell County for pre-July 1, 1973, uses is 78%. The Applicant described wild flood

irrigation, and evidence of ditches in historical aerial photos supports this claim. The Department utilized the efficiency value of 25% corresponding to wild flood irrigation. The Department calculates an additional 5% irrecoverable losses from the field application volume for flood irrigation systems. Table 3 summarizes the calculated historical consumptive volume or the 31.07-acre historical place of use.

Table 3: Historic Applied and Consumed Volumes

Irrigation Method	Acres	IWR (in)[1]	Mgmt. Factor[2]	Field Efficiency	Crop Consumption (AF)	Applied Volume (AF)	IL (AF)	Total Consumed Volume (AF)	Field Application Volume (AF)
Flood Irrigation, Wheeline & Handline	31.07	13.14	0.78	0.25	26.4	100.32	5.28	31.67	105.6

[1]Deer Lodge IWR Weather Station
[2]Powell County Historical Use Management Factor 1964 - 1973

13. All four Claims proposed for change in this Application are 100% supplemental on the same 31.07-acre POU. The total historical consumptive volume for the POU was apportioned between each Claim based on the corresponding percentage of the total flow rate contributed by each right as shown in Table 4 below. In the absence of specific knowledge regarding the actual historical timing of diversions between the early priority date claims and the later claims, as well as the possibility of varying timing of diversions depending on the year and conditions, the Department utilized apportionment based on flow rate.

Table 4: Apportionment of Historical Use by Water Right

Water Right No.	Flow Rate (CFS)	Percentage of Flow	Apportioned HCV *(Including IL)* (AF)	Apportioned Field Application Volume (AF)
76G 5191-00	0.28	9	2.83	9.45
76G 5192-00	0.28	9	2.83	9.45
76G 5193-00	0.58	19	5.87	19.57
76G 215144-00	1.99	64	20.14	67.14
Total	**3.13**	**100%**	**31.67**	**105.61**

14. Water was diverted from Cottonwood Creek into the Beaumont Ditch via a headgate in the SWSWSE S34, T8N, R9W, Powell County and conveyed 2,112 ft to the place of use. The

Applicant provided a ditch bottom width of 3 ft and a top width of 5 ft, a depth of 2 ft, a length of 0.4 miles or 2,112 ft, a slope of 0.2%, and a Manning's n value of 0.03. The ditch dimensions result in a Mannings capacity estimate of 18.6 CFS.

15. The historical period of diversion and period of use for Claims 76G 5191-00, 76G 5192-00, and 76G 5193-00 is May 1 through October 1, and March 10 through July 10 for Claim 76G 215144-00. The Applicant states that water was historically diverted for the entire period of diversion for each of the Claims proposed for change.

16. Conveyance losses were calculated based on ARM 36.12.1902(10) and are the sum of seepage loss, vegetative loss, and ditch evaporation. The components are determined by the following variables:

a. Seepage Loss: wetted perimeter, ditch length, ditch loss rate, days of diversion

b. Vegetation Loss: % loss per mile, flow rate, days of diversion, evaporation rate

c. Ditch Evaporation: ditch surface area, evaporation rate

The following equations are used per Department standard practice:

d. $\text{Seepage Loss}^{A} = \frac{\text{wetted perimeter} \times \text{ditch length} \times \text{ditch loss rate} \times \text{days}}{43{,}560\ \text{ft}^2/\text{acre}}$,

e. $\text{Vegetation Loss}^{B} = \left(\%\frac{\text{loss}}{\text{mile}}\right) \times \text{flow rate} \times \text{days} \times \text{ditch length} \times 2\ (\text{unit conversion constant})$,

f. $\text{Ditch Evaporation}^{C} = \frac{\text{ditch surface area} \times \text{evaporation rate}}{43{,}560\ \text{ft}^2/\text{acre}}$.

17. The Applicant provided a ditch bottom width of 3 ft and a top width of 5 ft, a depth of 2 ft, a length of 0.4 miles or 2112 ft, and a slope of 0.2%. The ditch dimensions result in a wetted perimeter value of 7.08 ft. The soil material was identified by the Applicant as loam, which the Department determined has a loss rate of 1.4 ft^3/ft^2/day. The total number of days irrigated was split into three periods: Beaumont A from March 10 to April 30 when only Claim 76G 215144-00 is being used, Beaumont B from May 1 to July 10 when all four Claims are being used, and Beaumont C from July 11 to October 1 when only Claims 76G 5191-00, 76G 5192-00, and 76G 5193-00 are being used. Adjusted net evaporation rates of 2.06 in, 4.97 in, and 11.16 in were applied to each of these periods respectively. The conveyance losses were calculated for each of these time periods, then apportioned as shown in Table 6 to each Claim within these periods based on relative proportion of flow rate for each Claim as shown in Table 4. The Department utilized the procedures outlined in the Department Memo dated September 13, 2012, regarding

the development of standardized methodologies to determine historic diverted volume to calculate the values found in Table 5 below.

Table 5: Conveyance loss apportionment by period of diversion

Ditch Leg	Length (ft)	Flow Rate (CFS)	Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate ($ft^3/ft/day$)	Number of Days Irrigated	Adj. Net Evap (in)	Seepage Loss (AF)	Vegetation Loss (AF)	Evaporative Loss (AF)	Total Conveyance Loss (AF)
Beaumont A	2112	1.99	3	4.24	1.4	76	2.06	21.87	0.91	0.03	22.81
Beaumont B	2112	3.13	3	4.63	1.4	75	4.97	23.57	1.41	0.08	25.06
Beaumont C	2112	1.14	3	3.88	1.4	77	11.16	20.28	0.53	0.16	20.97
Total								65.72	2.84	0.27	68.84

Table 6: Conveyance loss apportionment by water right

Ditch Leg	Water Right Number	Flow Rate (CFS)	Conveyance Loss Volume (by Leg) (AF)	% of Flow	CL Volume (by WR) (AF)
Beaumont A	76G 215144-00	1.99	22.81	100	22.81
Beaumont B	76G 5191-00	3.13	25.06	9	2.26
	76G 5192-00			9	2.26
	76G 5193-00			18	4.51
	76G 215144-00			64	16.03
Beaumont C	76G 5191-00	1.14	20.97	25	5.24
	76G 5192-00			25	5.24
	76G 5193-00			50	10.49
Total			68.84		68.84

18. Per ARM 36.12.1902(10), the historically diverted volume is equal to the sum of the historical field application volume and historical conveyance loss volume. Table 7 below summarizes the historical field applied and conveyance loss volumes as apportioned between each Claim.

Table 7**:** Historic Diverted Volume for each right

Water Right No.	Field Application Apportionment (%)	Apportioned Field Application Volume (AF)	Apportioned Conveyance Loss Volume (AF)	Apportioned HDV (AF)
76G 5191-00	9	9.45	7.50	16.95
76G 5192-00	9	9.45	7.50	16.95
76G 5193-00	19	19.57	15.00	34.57
76G 215144-00	64	67.14	38.84	105.98
Total	100%	105.6	68.84	174.45

19. The Department finds the following historical use, as shown in Table 8.

Table 8: Summary of historical use findings for each right

WR #	Priority Date	Diverted Volume (AF)	Flow Rate (CFS)	Purpose (Total Acres)	Consumptive Use (AF)	Place of Use	Point of Diversion
76G 5191-00	April 1. 1866	16.95	0.28	31.07	2.83	NWSW, S2SWNW S34 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County
76G 5192-00	November 7, 1879	16.95	0.28	31.07	2.83	NWSW, S2SWNW S34 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County
76G 5193-00	April 1, 1871	34.57	0.58	31.07	5.87	NWSW, S2SWNW S34 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County
76G 215144-00	June 30, 1973	105.98	1.99	31.07	20.14	NWSW, S2SWNW S34 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County
Total		174.45			31.67		

ADVERSE EFFECT

FINDINGS OF FACT

20. The Applicant proposes to protect the historical diverted volume of 174.45 AF instream from the historical point of diversion in the SWSWSE S34, T8N, R9W, Powell County to the point at which return flows from historical irrigation practices began to accrete to Cottonwood Creek in the NWSESW S34, T8N, R9W, Powell County. Below this point to the confluence with the Clark Fork River, the Applicant proposes to protect the historical consumed volume of 31.67 AF.

21. The historical consumptive use for the water rights proposed for change in this Application is 31.67 AF, and the proposed use is instream fisheries and does not result in any consumptive use, therefore the proposed change results in a decrease in consumed volume from Cottonwood Creek of 31.67 AF.

22. The Applicant states that by leaving historically diverted and consumed water instream below the historical diversion, other users will not experience a decrease in historically available water in Cottonwood Creek. The Department finds that by leaving historically diverted water instream, the ability of other users to exercise their rights will not be adversely affected.

23. Department Groundwater Hydrologist Evan Norman completed the Surface Water Change Technical Analysis Report Part B. The historical applied but non-consumed volume is 73.93 AF (105.6 AF applied volume – 31.67 AF consumed volume; due to rounding differences the consumed volume listed in the return flow analysis was 31.68 AF, however calculations in this document are based on a consumed volume of 31.67 AF), and the location of historical return flows is Cottonwood Creek downstream of the NWSESW S34, T8N, R9W, Powell County. Historically diverted flows will be left instream in Cottonwood Creek during the historical period of diversion below the point of diversion and where return flows historically returned to the source. Per Department policy as referenced in the April 1, 2016 memo regarding return flows the return flow analysis does not include a monthly breakdown of the rate and time of return flows.

24. The Applicant proposes to protect the historically diverted volume in the reach between the historical POD and the point downstream where return flows from historical practices began to accrete to Cottonwood Creek. Other users within this reach would not historically have had access to the diverted volume proposed for change in this Application, therefore these users will not experience a decrease in availability as a result of the proposed change. The Applicant proposes to protect the historically consumed volume below the point where historical return flows began to accrete, and any users in this reach would not historically have had access to the consumed volume, therefore these users will not experience any decrease in availability as a result of the proposed change. The Department finds that no other water rights will be adversely impacted by the proposed change.

BENEFICIAL USE

FINDINGS OF FACT

25. The Applicant proposes to protect up to 1.99 CFS flow rate and up to 174.45 AF volume for the purpose of instream flow for fisheries in Cottonwood Creek. Cottonwood Creek is listed as a dewatered source by MT Fish, Wildlife, and Parks and the proposed increase in instream flow

is beneficial to fish and other aquatic organisms. The Department finds that protecting the proposed flow rate and volume for instream flow is a beneficial use.

ADEQUATE DIVERSION

FINDINGS OF FACT

26. The proposed change of Water Right Nos. 76G 5191-00, 76G 5192-00, 76G 5193-00, and 76G 215144-00 does not require a means of diversion or conveyance. Per § 85-2-402(2)(b), MCA, a change in appropriation right for instream flow pursuant to § 85-2-408, MCA, is exempt from the adequacy of diversion criterion.

POSSESSORY INTEREST

FINDINGS OF FACT

27. Pursuant to § 85-2-402(2)(d), MCA, the Applicant is not required to prove that they have a possessory interest, or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use because this application involves a change in appropriation right for instream flow per § 85-2-408, MCA.

TEMPORARY PROTECTED REACH/ MEASUREMENT PLAN

FINDINGS OF FACT

28. The Applicant is proposing to temporarily change the purpose and place of use of Claim Nos. 76G 5191-00, 76G 5192-00, 76G 5193-00, and 76G 215144-00 to instream flow for the benefit of the fishery resource in Cottonwood Creek for a period of 10 years with the option to renew. During the term of this temporary change, 31.07 acres will no longer be irrigated. After this change, the Applicant will appropriate 1.99 CFS between June 13 and July 10 in a 0.35-mile reach from the historical POD in the SWSWSE S34, T8N, R9W, Powell County to the point at which return flows from historical irrigation practices began to accrete to Cottonwood Creek in the NWSESW S34, T8N, R9W, Powell County. The total protected volume during this period will be 105.98 AF. From July 11 to August 10 the Applicant will appropriate 1.14 CFS in this same reach, with a protected volume of 68.47 AF. The total combined protected volume for both periods will be 174.45 AF. In the 1.4-mile reach below the point where historical return flows began to accrete to Cottonwood Creek to the confluence with the Clark Fork River in the NWNWSW S33, T8N, R9W, Powell County the Applicant may protect the historical consumed volume of 31.67 AF. The total proposed protected reach length is 1.75 miles.

29. The Applicant will monitor flow rates and volumes appropriated for the instream flow purpose by utilizing the DNRC real-time stream gage on Cottonwood Creek in the NWSESE S33, T8N, R9W, Powell County approximately 0.4 miles below the point where return flows begin to accrete to Cottonwood Creek. If this gage becomes unavailable, the Applicant proposes to measure flows at the same location every two weeks during the period of use using Department approved methods. The change authorization will be subject to the following condition:

FLOW WILL BE PROTECTED INSTREAM UP TO 1.99 CFS BETWEEN JUNE 13 AND JULY 10, AND UP TO 1.14 CFS BETWEEN JULY 11 AND AUGUST 10, UP TO A TOTAL PROTECTED VOLUME OF 174.45 AF. THE APPLICANT OR DESIGNEE SHALL MEASURE THE FLOWS AT THE DNRC GAGE BELOW THE HISTORICAL POD. MEASUREMENTS WILL BE TAKEN MONTHLY DURING THE PERIOD OF USE FOR INSTREAM FLOW USING DEPARTMENT APPROVED MEASURING DEVICES. ALL MEASUREMENTS WILL BE REPORTED TO THE DNRC HELENA REGIONAL OFFICE BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR DURING THE TEMPORARY CHANGE AUTHORIZATION. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A CHANGE.

30. The Department finds the Applicant has met the additional criteria for a temporary change in appropriation right to maintain or enhance instream flow to benefit a fishery resource under the provisions of § 85-2-408, MCA.

CONCLUSIONS OF LAW

HISTORICAL USE AND ADVERSE EFFECT

31. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one may change only that to which he or she has the right based upon beneficial use. A change to an existing water right may not expand the consumptive use of the underlying right or remove the well-established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. *McDonald v. State*, 220 Mont. 519, 530, 722 P.2d 598, 605 (1986) (beneficial use constitutes the basis, measure, and limit of a water right); *Featherman v. Hennessy*, 43 Mont. 310, 316-17, 115 P. 983, 986 (1911) (increased consumption associated with expanded use of underlying right amounted to new appropriation rather than change in use); *Quigley v. McIntosh*, 110 Mont. 495, 103 P.2d 1067, 1072-74 (1940) (appropriator may not expand a water right through the guise of a change – expanded use constitutes a new use with a new priority date junior to intervening water uses); *Allen v. Petrick*, 69 Mont. 373, 222 P. 451(1924)

("quantity of water which may be claimed lawfully under a prior appropriation is limited to that quantity within the amount claimed which the appropriator has needed, and which within a reasonable time he has actually and economically applied to a beneficial use. . . . it may be said that the principle of beneficial use is the one of paramount importance . . . The appropriator does not own the water. He has a right of ownership in its use only"); *Town of Manhattan*, ¶ 10 (an appropriator's right only attaches to the amount of water actually taken and beneficially applied).[2]

32. 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*, ¶¶ 43-45.[3]

33. 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*, ¶10 (recognizing that the Department's obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change 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 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.[4] 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

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[2] DNRC decisions are available at: https://dnrc.mt.gov/Directors-Office/HearingOrders

[3] *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).

[4] A claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The 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. Section 85-2-234, MCA

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*, ¶ 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).[5]

34. 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

[5] Other western states likewise rely upon the doctrine of historic use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District, 717 P.2d 955, 959 (Colo. 1986)("[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."); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo.,1999); 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); Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (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.); 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.)

water leaves the control of the original appropriator, the original appropriator has no right to its use and the water is subject to appropriation by others. *E.g., Hohenlohe*, ¶ 44; *Rock Creek Ditch & Flume Co. v. Miller*, 93 Mont. 248, 17 P.2d 1074, 1077 (1933); *Newton v. Weiler*, 87 Mont. 164, 286 P. 133 (1930); *Popham v. Holloron*, 84 Mont. 442, 275 P. 1099, 1102 (1929); *Galiger v. McNulty*, 80 Mont. 339, 260 P. 401 (1927); *Head v. Hale*, 38 Mont. 302, 100 P. 222 (1909); *Spokane Ranch & Water Co.*, 37 Mont. at 351-52, 96 P. at 731; *Hidden Hollow Ranch v. Fields*, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; 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).[6]

35. 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 ¶¶ 45-46 and 55-6; *Spokane Ranch & Water Co.*, 37 Mont. at 351-52, 96 P. at 731.

36. In *Royston*, the Montana Supreme Court confirmed that an Applicant is required to prove lack of adverse effect through comparison of the proposed change to the historic use, historic consumption, and historic return flows of the original right. 249 Mont. at 431, 816 P.2d at 1059-60. More recently, 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

[6] The Montana Supreme Court 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, 198 P.3d 219,(*citing Hidden Hollow Ranch v. Fields*, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

> 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 past beneficial use.

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

37. 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 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.

38. 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 with limited exception, no changes could have been made to those rights after that date without the Department's approval. Analysis of adverse effect in a change to an "existing water right" requires evaluation of what the water right looked like and how it was exercised prior to July 1, 1973. In *McDonald v. State*, the Montana Supreme Court explained:

> The foregoing cases and many others serve to illustrate that what is preserved to owners of appropriated or decreed water rights by the provision of the 1972 Constitution is what the law has always contemplated in this state as the extent of a water right: such amount of water as, by pattern of use and means of use, the owners or their predecessors put to beneficial use. . . . the Water Use Act contemplates that all water rights, regardless of prior statements or claims as to amount, must nevertheless, to be recognized, pass the test of historical, unabandoned beneficial use. . . . To that extent only the 1972 constitutional recognition of water rights is effective and will be sustained.

220 Mont. at 529, 722 P.2d at 604; *see also Matter of Clark Fork River Drainage Area*, 254 Mont. 11, 17, 833 P.2d 1120 (1992).

39. 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*, 295 Mont. 447, 453, 984 P.2d 151, 155 (1999) (Water Resources Survey used as evidence in adjudicating of water rights); *Wareing v. Schreckendgust*, 280 Mont. 196, 213, 930 P.2d 37, 47 (1996) (Water Resources Survey used as evidence in a prescriptive ditch easement case); *Olsen v. McQueary*, 212 Mont. 173, 180, 687 P.2d 712, 716 (1984) (judicial notice taken of Water Resources Survey in water right dispute concerning branches of a creek).

40. 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; *Trail's End Ranch, L.L.C. v. Colorado Div. of Water Resources*, 91 P.3d 1058, 1063 (Colo., 2004).

41. 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.12)

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

43. Based upon the Applicant's evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of Statement of Claim 76G 5191-00 to be a

diverted volume of 16.95 AF, a historically consumed volume of 2.83 AF, and flow rate of 0.28 CFS. The historic use of Statement of Claim 76G 5192-00 is a diverted volume of 16.95 AF, a historically consumed volume of 2.83 AF, and flow rate of 0.28 CFS. The historic use of Statement of Claim 76G 5193-00 is a diverted volume of 34.57 AF, a historically consumed volume of 5.87 AF, and flow rate of 0.58 CFS. The historic use of Statement of Claim 76G 215144-00 is a diverted volume of 105.98 AF, a historically consumed volume of 20.14 AF, and flow rate of 1.99 CFS. (FOF Nos. 10-19)

44. 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. Section 85-2-402(2)(a), MCA. (FOF Nos. 20-24)

BENEFICIAL USE

45. A change Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. Sections 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. The amount of water that may be authorized for change 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 (Mont. 1st Jud. Dist. Ct.) (2003) (*affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518); *Worden v. Alexander*, 108 Mont. 208, 90 P.2d 160 (1939); *Allen v. Petrick*, 69 Mont. 373, 222 P. 451(1924); *Sitz Ranch v. DNRC*, DV-10-13390,, *Order Affirming DNRC Decision*, Pg. 3 (Mont. 5th Jud. Dist. Ct.) (2011) (citing *BRPA v. Siebel*, 2005 MT 60, and rejecting Applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet); *Toohey v. Campbell*, 24 Mont. 13, 60 P. 396 (1900) ("The policy of the law is to prevent a person from acquiring exclusive control of a stream, or any part thereof, not for present and actual beneficial use, but for mere future speculative profit or advantage, without regard to existing or contemplated beneficial uses. He is restricted in the amount that he can appropriate

to the quantity needed for such beneficial purposes."); § 85-2-312(1)(a), MCA (DNRC is statutorily prohibited from issuing a permit for more water than can be beneficially used).

46. Applicant proposes to use water for instream flow which is a recognized beneficial use. Section 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence instream flow is a beneficial use and that 174.45 acre-feet of diverted volume and 3.13 CFS flow rate of water requested is the amount needed to sustain the beneficial use. Section 85-2-402(2)(c), MCA (FOF No. 25).

ADEQUATE MEANS OF DIVERSION

47. Pursuant to § 85-2-402 (2)(b), MCA, the Applicant is not required to prove that the proposed means of diversion, construction, and operation of the appropriation works are adequate because this application involves a change in appropriation right for instream flow pursuant to §§ 85-2-408, MCA.

48. 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. 26)

POSSESSORY INTEREST

49. Pursuant to § 85-2-402(2)(d), MCA, the Applicant is not required to prove that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use because this application involves a change in appropriation right for instream flow pursuant to §§ 85-2-408, MCA.

50. 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 No. 27).

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to temporarily Change Water Right No. 76G 30165115 should be GRANTED subject to the following.

The Applicant is authorized to temporarily change the purpose and place of use of Claim nos. 76G 5191-00, 76G 5192-00, 76G 5193-00, and 76G 215144-00 to instream flow for the benefit of the fishery resource in Cottonwood Creek for a period of 10 years with the option to renew. During the term of this temporary change, 31.07 acres will no longer be irrigated. After this change, the

Applicant will appropriate up to 1.99 CFS flow rate in the proposed 1.75 -mile instream place of use in Cottonwood Creek, which will extend from SWSWSE S34, T8N, R9W, Powell County to the NWNWSW S33, T8N, R9W, Powell County. The proposed period of use is June 13 to August 10. The total volume available to be appropriated instream is 174.45 AF.

Conditions

FLOW WILL BE PROTECTED INSTREAM UP TO 1.99 CFS BETWEEN JUNE 13 AND JULY 10, AND UP TO 1.14 CFS BETWEEN JULY 11 AND AUGUST 10, UP TO A TOTAL PROTECTED VOLUME OF 174.45 AF. THE APPLICANT OR DESIGNEE SHALL MEASURE THE FLOWS AT THE DNRC GAGE BELOW THE HISTORICAL POD. MEASUREMENTS WILL BE TAKEN MONTHLY DURING THE PERIOD OF USE FOR INSTREAM FLOW USING DEPARTMENT APPROVED MEASURING DEVICES. ALL MEASUREMENTS WILL BE REPORTED TO THE DNRC HELENA REGIONAL OFFICE BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR DURING THE TEMPORARY CHANGE AUTHORIZATION. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A CHANGE.

NOTICE

The Department will provide a notice of opportunity for public comment on this Application and the Department's Draft Preliminary Determination to Grant pursuant to § 85-2-307, MCA. The Department will set a deadline for public comments to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives public comment, the Department shall consider the public comments, respond to the public comments, and issue a preliminary determination to grant the application, grant the application in modified form, or deny the application. If no public comments are received pursuant to § 85-2-307(4), MCA, the Department's preliminary determination will be adopted as the final determination.

Dated this 8th day of May, 2026.

_____

Jennifer Daly, Manager
Helena Regional Office
Montana Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the [DRAFT] PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 8th day of May, 2026, by first class United States mail.

CLARK FORK COALITION
140 S 4TH ST W #1
MISSOULA, MT 59801

_____

Helena Regional Office, (406) 444-6999

DNRC Helena Regional Office
PO Box 201601

May 8, 2026

Clark Fork Coalition

140 S 4th St W #1

Missoula, MT 59801

Subject: Draft Preliminary Determination to Grant Water Right Change Application No. 76G 30165115

Dear Applicant,

The Department of Natural Resources and Conservation (Department or DNRC) has completed a preliminary review of your application. This review consists of an evaluation of the criteria for issuance of a change authorization found in §85-2-402, MCA. The Department has preliminarily determined that the criteria are met, and this application should be granted. A copy of the Draft Preliminary Determination to Grant your application is attached.

You have the opportunity to request an extension of time to submit additional information for the Department to consider in the decision, within 15 business days of the date of this letter. If no written request for an extension is received by June 1, 2026, the Department will prepare a notice of opportunity to provide public comment per §85-2-307(4), MCA.

Please note that if you are granted an extension of time to submit additional information to the Department, additional information may be considered an amendment to your application, which may reset application timelines pursuant to ARM 36.12.1401.

Please let me know if you have any questions.

Russ Gates

Hydrologist/Water Resource Specialist

Helena Regional Office

406-44-6602

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address:

   Clark Fork Coalition
   140 S 4th St W #1
   Missoula, MT 59801

2. Type of action: Water Right Change Application 76G 30165115, for Water Rights 76G 5191-00, 76G 5192-00, 76G 5193-00, and 76G 215144-00

3. Water source name: Cottonwood Creek

4. Location affected by project: Cottonwood Creek starting at the historical point of diversion (POD) for these Claims in the SWSWSE Section (S) 34 and ending at the confluence with the Clark Fork River in the NWNWSW S33, all Township (T) 8 North (N), Range (R) 9 West (W).

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

   The Applicant proposes to temporarily change the place of use (POU) and purpose for Statements of Claim 76G 5191-00, 76G 5192-00, 76G 5193-00, and 76G 215144-00. The proposed place of use is the reach of Cottonwood Creek starting at the historical point of diversion (POD) and ending at the confluence with the Clark Fork River. The proposed purpose is instream flow for fisheries. The project is in Powell County and the source is Cottonwood Creek. After this change, the Applicant proposes retire 31.07 acres of irrigation to protect up to 174.45 AF volume at a flow rate of up to 1.99 CFS instream. The proposed period of diversion and period of use is June 13 – August 10.

6. Agencies consulted during preparation of the Environmental Assessment: None

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity **-** *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: No detrimental impact. The proposed action will result in historically diverted water being left in Cottonwood Creek.

Water quality **-** *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: No detrimental impact. The proposed action is to increase the water in the source by eliminating an irrigation diversion.

Groundwater **-** *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: No impact. The proposed action does not involve groundwater and will leave more surface water in the natural channel than under historical practices.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: No impact. The proposed action will eliminate an irrigation diversion and leave formerly diverted water instream.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species **-** *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: No impact. The proposed action will cease irrigation on the historical place of use, increase stream flows in Cottonwood Creek, and generally return the project area to natural conditions.

Wetlands **-** *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: No impact. The proposed action does not involve wetlands.

Ponds **-** *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: No impact. The proposed project does not involve ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: No impact. The proposed project is to cease diversion and irrigation and leave water instream.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: No impact. The proposed project is to cease diversion and irrigation and leave water instream.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No impact. The proposed project is to cease diversion and irrigation and leave water instream.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: NA – project is not located on State or Federal lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No impact.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: The proposed action is consistent with stream restoration goals.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: The proposed action will lead to improved fisheries habitat and increased water availability downstream.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No impact.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No_**X**__ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* No impact.

(b) *Local and state tax base and tax revenues?* No impact.

(c) *Existing land uses?* No impact.

(d) *Quantity and distribution of employment?* No impact.

(e) *Distribution and density of population and housing?* No impact.

(f) *Demands for government services?* No impact.

(g) *Industrial and commercial activity?* No impact.

(h) *Utilities?* No impact.

(i) *Transportation?* No impact.

(j) *Safety?* No impact.

(k) *Other appropriate social and economic circumstances?* No impact.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts None identified.

Cumulative Impacts None identified.

3. ***Describe any mitigation/stipulation measures:*** No mitigation or stipulations are necessary.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** The no action alternative would result in decreased stream flows and continued departure from natural conditions.

PART III. Conclusion

1. Preferred Alternative No preferred alternatives identified.

2 Comments and Responses None at this time.

3. ***Finding:***
*Yes___ No_**X**__ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

An Environmental Assessment is the appropriate level of analysis because no significant adverse impacts were identified for the proposed project.

Name of person(s) responsible for preparation of EA:

Name: Russ Gates
Title: Hydrologist/Water Resource Specialist
Date: 5/5/2026

DNRC Helena Regional Office
PO Box 201601

March 9, 2026

Clark Fork Coalition

140 S 4th St W #1

Missoula, MT 59801

Subject: Correct and Complete Application for Change No. 76 30165115

Dear Applicant,

The Department of Natural Resources and Conservation (Department) has determined that your application is correct and complete pursuant to ARM 36.12.1601. Please remember that correct and complete **does not mean that your application will be granted.** The purpose of this letter is to indicate that the Department has enough information to analyze your water right application.

The Department will issue a Draft Preliminary Determination within 60 days of the date of this letter per §85-2-307(2)(b), MCA.

Following issuance of the Draft Preliminary Determination, you (Applicant) will have 15 business days to request an extension of time to submit additional information, if desired pursuant to §85-2-307(3)(a), MCA.

If no extension of time is requested and the Draft Preliminary Determination decision is to grant your application or grant your application in modified form, the Department will prepare a notice of opportunity to provide public comment, per §85-2-307(4)(a), MCA.

If no extension of time is requested and the Draft Preliminary Determination decision is to deny your application, the Department will adopt the Draft Preliminary Determination as the final determination per §85-2-307(3)(d)(ii), MCA.

If you have any questions or concerns about the application process, please contact me.

Russ Gates

Hydrologist/Water Resource Specialist

Helena Regional Office

406-44-6602

APPLICATION TO CHANGE A WATER RIGHT

§ 85-2-302, MCA

Form No. 606 *(Revised 10/2025)*

For Department Use Only

RECEIVED

FEB 17 2026

DNRC-HRO

Application # 30165115 Basin 76G

Priority Date _____ Time _____ AM/PM

Rec'd By RG

Fee Rec'd $ 100000 Check # NRDP transfer

Deposit Receipt # _____

Payor _____

Refund $ _____ Date _____

FILING FEE

$2500/$1500 – Without/with filing fee reduction.

$400 – ***(The following types do not qualify for a filing fee reduction)***

- **Replacement well greater than 200 feet from original**
- **Replacement reservoir on the same source**

INFORMATION

An application will be eligible for a filing fee reduction and expedited timelines if the applicant completes a preapplication meeting with the Department (ARM 36.12.1302(1)), which includes submitting any follow-up information identified by the Department (ARM 36.12.1302(3)(c)) and receiving either Department-completed technical analyses or Department review of applicant-submitted technical analyses (ARM 36.12.1302(4) and (5)). An application for the proposed project also must be submitted within 180 days of delivery of Department technical analyses or scientific credibility review and no element on the submitted application can be changed from the completed preapplication meeting form (ARM 36.12.1302(6)). If application is eligible for a filing fee reduction, $500 paid for Form 606P-B will be credited toward filing fees shown above.

Applicant Information: *Add more as necessary.*

Applicant Name Clark Fork Coalition

Mailing Address 140 S 4th St W #1 City Missoula State MT Zip 59801

Phone Numbers: Home _____ Work 406-542-0539 Cell _____

Email Address _____

Applicant Name _____

Mailing Address _____ City _____ State _____ Zip _____

Phone Numbers: Home _____ Work _____ Cell _____

Email Address _____

Applicant Name _____

Mailing Address _____ City _____ State _____ Zip _____

Phone Numbers: Home _____ Work _____ Cell _____

Email Address _____

Contact/Representative Information: *Add more as necessary.*

Contact/Representative is: ☑ Applicant ☑ Consultant ☐ Attorney ☐ Other

Contact/Representative Name Eric Hull

Mailing Address 140 S 4th St W #1 City Missoula State MT Zip 59801

Phone Numbers: Home 406-274-0411 Work _____ Cell _____

Email Address eric@clarkfork.org

NOTE: *If a contact person is identified as an attorney, all communication will be sent only to the attorney unless the attorney provides written instruction to the contrary (ARM 36.12.122(2)). If a contact person is identified as a consultant, employee, or lessee, the individual filing the water right form or objection form will receive all correspondence and a copy may be sent to the contact person (ARM 36.12.122(3)).*

APPLICATION TO
CHANGE A WATER RIGHT

§ 85-2-302, MCA
Form No. 606 *(Revised 10/2025)*

For Department Use Only

Application # _____ Basin _____
Priority Date _____ Time _____ AM/PM
Rec'd By _____
Fee Rec'd $ _____ Check # _____
Deposit Receipt # _____
Payor _____
Refund $ _____ Date _____

FILING FEE

$2500/$1500 – Without/with filing fee reduction.
$400 – ***(The following types do not qualify for a filing fee reduction)***

- **Replacement well greater than 200 feet from original**
- **Replacement reservoir on the same source**

INFORMATION

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Applicant Information: *Add more as necessary.*

Applicant Name Clark Fork Coalition
Mailing Address 140 S 4th St W #1 City Missoula State MT Zip 59801
Phone Numbers: Home _____ Work 406-542-0539 Cell _____
Email Address _____

Applicant Name _____
Mailing Address _____ City _____ State _____ Zip _____
Phone Numbers: Home _____ Work _____ Cell _____
Email Address _____

Applicant Name _____
Mailing Address _____ City _____ State _____ Zip _____
Phone Numbers: Home _____ Work _____ Cell _____
Email Address _____

Contact/Representative Information: *Add more as necessary.*

Contact/Representative is: ☑ Applicant ☑ Consultant ☐ Attorney ☐ Other
Contact/Representative Name Eric Hull
Mailing Address 140 S 4th St W #1 City Missoula State MT Zip 59801
Phone Numbers: Home 406-274-0411 Work _____ Cell _____
Email Address eric@clarkfork.org

NOTE: *If a contact person is identified as an attorney, all communication will be sent only to the attorney unless the attorney provides written instruction to the contrary (ARM 36.12.122(2)). If a contact person is identified as a consultant, employee, or lessee, the individual filing the water right form or objection form will receive all correspondence and a copy may be sent to the contact person (ARM 36.12.122(3)).*

Answer every question and applicable follow-up questions. Use the checkboxes to denote yes ("Y"), no ("N"), or not applicable ("NA"). Questions that require items to be submitted to the Department have a submitted ("S") checkbox, which is marked when the required item is attached to the Application. Label all submitted items with the question number for which they were submitted. Narrative responses that are larger than the space provided can be answered in an attachment. If an attachment is used, specify "see attachment" on this form, and label the attachment with the question number. Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Responses in the form of a table may be entered into the table provided on this form or in an attachment. If an attachment is used, the table must have the exact headings found on this form, and "see attachment" must be entered as a response to the relevant question. Clearly label all units in tables and narrative responses.

PREAPPLICATION AND TECHNICAL ANALYSES INFORMATION

1. ☑ **Y** ☐ **N** Do you elect for Department technical analyses to be used for criteria assessment?

2. ☑ **Y** ☐ **N** Did you have a preapplication meeting AND complete a Change Preapplication Meeting Form Part A and Part B (Form 606P-A and 606P-B)?

IF QUESTION 2 IS NO, answer 2.a and 2.b:

2.a. ☐ **S** Submit the Technical Analyses Addendum (Form 606-TAA).

2.b. ☐ **S** ☐ **NA** Submit the technical analyses, if you elected in question 1 for Applicant technical analyses to be used for criteria assessment. Select "NA" if you elected for Departmental technical analyses.

IF QUESTION 2 IS YES, answer 2.c, 2.d, and 2.e:

2.c. ☐ **Y** ☑ **N** Has any element of the project described in this application changed from the mandatory elements of the project described in the completed Form 606P? **If yes,**

2.c.i. Please explain.

_____

_____

_____

_____

_____

_____

2.c.ii. ☐ **S** Submit the Technical Analyses Addendum (Form 606-TAA).

2.d. ☑ **Y** ☐ **N** Are the technical analyses to be used for criteria assessment exactly the same as those completed during the preapplication process? **If no:**

2.d.i. Please explain.

_____

_____

_____

_____

_____

2.d.ii. ☐ **S** Submit the Technical Analyses Addendum (Form 606-TAA).

2.e. ☑ **Y** ☐ **N** Did you elect in question 1 for Department technical analyses to be used for criteria assessment? **If no:**

2.e.i. ☐ **S** Submit the technical analyses.

APPLICATION ADDENDA AND REVIEW

3. ☐ **S** ☑ **NA** If the proposed change involves one or more places of storage, submit a Change Storage Addendum (Form 606-SA). This does not include reservoirs, pits, pit-dams, or ponds with a capacity less than 0.1 AF; water tanks; or cisterns (ARM 36.12.113(6)).

4. ☐ **S** ☑ **NA** If the project involves an appropriation that is greater than 5.5 CFS and 4,000 acre-feet, submit a Reasonable Use Addendum (Form 606-B).

5. ☐ **S** ☑ **NA** If the project involves out-of-state water use, submit an Out-of-State Use Addendum (Form 600/606-OSA).

6. ☐ **S** ☑ **NA** If the proposed purposes include marketing or selling water, submit a Water Marketing Purpose Addendum (Form 600/606-WMA). This doesn't include marketing for mitigation/aquifer recharge.

7. ☑ **S** ☐ **NA** If the proposed purpose includes instream flow, submit a Change to Instream Flow Addendum (Form 606-IFA).

8. ☐ **S** ☑ **NA** If the proposed purposes include mitigation, aquifer recharge, or marketing for mitigation/ aquifer recharge, submit a Mitigation Purpose Addendum (Form 606/606-MIT).

9. ☐ **S** ☑ **NA** If the project is in designated sage grouse habitat, submit a review letter from the Montana Sage Grouse Habitat Conservation Program.

10. ☐ **S** ☑ **NA** If you propose to add a point of diversion or place of use on State of Montana Trust Land, submit documentation of consent from DRNC Trust Lands Management Division. If you propose to add a place of use on Trust Land with all points of diversion on private land, then, at a minimum, that component of the change authorization will be temporary for the duration of the lease term (§ 85-2-441, MCA).

11. ☐ **Y** ☑ **NA** You must provide a written notice of the application to each owner of an appropriation right sharing a point of diversion or means of conveyance (e.g., canal, ditch, flume, pipeline, or constructed waterway) pursuant to § 85-2-302(4)(c), MCA. Submit a copy of this notice and the recipient list.

See Note for question 11. on attachment titled "Attachment - DNRC Form No. 606"

APPLICATION DETAILS

12. How many change applications will be needed for this project? Refer to ARM 36.12.1305 for more information. 1

13. Fill out the table below for the water rights proposed for change.

Water Right No.	**Current Authorized Flow Rate**			**Flow Rate Needed for Project**			**Means of Diversion**
	Flow	*GPM*	*CFS*	*Flow*	*GPM*	*CFS*	
76G 5191-00	0.28	☐	☑	0.28	☐	☑	Headgate, Flood and Dike
76G 5192-00	0.28	☐	☑	0.28	☐	☑	Headgate, Flood and Dike
76G 5193-00	0.58	☐	☑	0.58	☐	☑	Headgate, Flood and Dike
76G 215144-00	1.99	☐	☑	1.99	☐	☑	Headgate, Flood and Dike
		☐	☐		☐	☐	

14. Is the source surface water or groundwater? Surface

15. What is the source name? Cottonwood Creek

16. Identify the water right elements proposed for change, with a checkmark, for each water right proposed for change.

Water Right No.	76G 5191-00	76G 5192-00	76G 5193-00	76G 215144-00	
Point of Diversion	☐	☐	☐	☐	☐
Place of Use	☑	☑	☑	☑	☐
Purpose of Use	☑	☑	☑	☑	☐
Place of Storage	☐	☐	☐	☐	☐

17. ☑ **S** Submit a historical use map created on an aerial photograph or topographic map that shows the following: section corners, township and range, scale bar, north arrow, all historical points of diversion (POD) labeled with a unique POD ID ("H" followed by a number), all historical places of use (POU), all historical conveyance structures, all historical places of storage, and historical place of use for all overlapping water rights. More than one map may be submitted, if necessary, to clearly convey all required information.

18. ☑ **S** Submit a proposed use map created on an aerial photograph or topographic map that shows section corners, township and range, scale bar, north arrow, and the following elements: points of diversion labeled with a unique POD ID ("P" followed by a number), places of use, conveyance structures, places of storage, and place of use for all overlapping water rights. Include all elements that will be on the water rights after the proposed change, regardless of whether the element will be modified by the change. The map should fully depict the water rights, as proposed, after the change. More than one map may be submitted, if necessary, to clearly convey all required information.

19. ☐ **Y** ☑ **N** Does the proposed change involve a change in point of diversion?

IF YES,

19.a. Describe the location for all *new* and *unchanged* points of diversion to the nearest 10 acres. Label POD ID with the same POD ID number assigned for the proposed use map (question 18).

POD ID	¼	¼	¼	**Sec.**	**Twp.**	**Rge.**	**County**	**Lot**	**Block**	**Tract**	**Subdivision**	**Gov. Lot**	**New or Unchanged**

19.b. ☑ **NA** Describe the location of all historical PODs you propose to *retire*. Label POD ID with the same POD ID assigned for the historical use map (question 17). If none are proposed for retirement, select "NA" checkbox.

POD ID	¼	¼	¼	Sec.	Twp.	Rge.	County	Lot	Block	Tract	Subdivision	Gov. Lot

19.c. What is the means of diversion for all *new* PODs? Means of diversion for surface water includes headgate, pump, dam, and others. Means of diversion for groundwater includes well, developed spring, pit pond, and others.

_____

_____

_____

20. ☑ **Y** ☐ **N** Does the proposed change involve a change in place of use?

IF YES,

20.a. What are the geocodes of the proposed place of use?

n/a - Instream Flow	

20.b. Describe the legal land description of the proposed place of use, and if the water rights being changed will have an irrigation or lawn and garden purpose, list the number of irrigated acres.

Acres	Gov't Lot	¼	¼	¼	Sec.	Twp.	Rge.	County
0	n/a	N2	SE	SW	34	8N	9W	Powell
0	n/a	N2	SW	SW	34	8N	9W	Powell
0	n/a	N2	SE	SE	33	8N	9W	Powell
0	n/a	N2	SW	SE	33	8N	9W	Powell
0	n/a	SW	NW	SE	33	8N	9W	Powell
0	n/a		NE	SW	33	8N	9W	Powell
0	n/a	N2	NW	SW	33	8N	9W	Powell
0	***Total***							

21. ☑ **Y** ☐ **N** Does the proposed change involve a change in place of use or purpose?

IF YES,

21.a. ☑ **Y** ☐ **N** Do other water rights supplement or overlap the proposed place of use?

IF YES,

21.a.i. How will the water rights be operated to serve the proposed purposes?

All four water rights in this application are supplemental and have an identical historic place of use; we are proposing to put the full flow and volume of all four water rights to instream use. See question 5. on the attached Form 606-IFA for details of the proposed operation plan.

21.a.ii. For each supplemental or overlapping water right, please list the average period of diversion and use (MM/DD-MM/DD), flow rate (GPM or CFS), and the volume of water (AF) contributed.

Water Right No.	**Avg. Period of Diversion**	**Avg. Period of Use**	**Flow Rate**			**Volume Contributed**
	MM/DD-MM/DD	*MM/DD-MM/DD*	*Flow*	*GPM*	*CFS*	*AF*
76G 5191	05/01-10/01	05/01-10/01	0.28	☐	☑	16.95
76G 5192	05/01-10/01	05/01-10/01	0.28	☐	☑	16.95
76G 5193	05/01-10/01	05/01-10/01	0.58	☐	☑	34.57
76G 215144	03/10-07-10	03/10-07/10	1.99	☐	☑	105.98

22. ☐ **Y** ☑ **N** Are you filing on behalf of another entity? If yes, describe.

23. ☐ **Y** ☑ **N** Do you own the entire historical place of use for all water rights proposed for change?

IF QUESTION 23 IS NO,

23.a. ☐ **Y** ☑ **N** Was the water historically used for sale, rental, distribution, municipal use, or any other context in which water is being supplied to another and it is clear that the ultimate user would not accept the supply without consenting to the use of water on the user's place of use?

IF QUESTION 23.a IS NO,

23.a.i. ☑ **Y** ☐ **N** List the water rights for which you do not own the entire historical place of use.

All: 76G 5191, 5192, 5193, 215144

23.a.ii. ☑ **Y** ☐ **N** Are the water rights listed in question 23.a.i severed from the historical place of use?

IF QUESTION 23.a.ii IS YES,

23.a.ii.1. ☑ **Y** ☐ **N** Do you own the entirety of the severed water rights proposed for change? If yes, skip to question 24. If no, answer question 23.a.iii.

IF QUESTION 23.a.ii OR 23.a.ii.1 IS NO,

23.a.iii. ☐ **Y** ☐ **N** ☑ **NA** Are all owners of the historical place of use or, if applicable, owners of the severed water rights, willing to sign the application?

IF QUESTION 23.a.iii IS NO,

23.a.iii.1. ☐ **S** Submit a Form 641 or 642 to split the water rights being changed for which all owners will not sign.

ADVERSE EFFECT

24. Explain how you can control your diversion in response to a call being made.

Water will be left instream, so no action would be necessary if a call was made.

25. Describe any plans you have for ensuring existing water rights will be satisfied during times of water shortage.

Water will be left instream, so water would be available and there would be no additional impact on any downstream senior water rights during times of water shortage.

26. ☐ **Y** ☑ **N** Are you aware of any calls that have been made on the source of supply or, if groundwater, on nearby surface water sources?

26.a. If yes, explain.

27. Describe how the proposed change will or will not affect your ability to make call.

We will monitor flows as described in the attached Form 606-IFA, which will perpetuate our ability to make call.

28. ☑ **Y** ☐ **N** Does a water commissioner distribute water or oversee water distribution on your proposed source, or if groundwater, on nearby surface water sources?

28.a. If yes, list the sources.

Cottonwood Creek

29. When was the last time each water right proposed for change was appropriated and used beneficially?

2023

IF THERE HAS BEEN A PERIOD OF NONUSE,

29.a. Why was the water right not used?

Land sold to developer, water rights severed and conveyed to Clark Fork Coalition.

29.b. Why will a resumption of use not adversely affect other water users?

The purpose is being changed to instream flow, so water will remain in the source and will not adversely affect other water users.

29.c. ☐ **Y** ☑ **N** Is the period of nonuse greater than 10 years for any of the water rights proposed for change? If yes, list which water rights.

29.d. ☐ **Y** ☑ **N** Have new water rights been authorized to use the source during the period of nonuse for any of the water rights proposed for change? If yes, explain.

30. ☐ **Y** ☑ **N** Do you propose to add one or more points of diversion or use new or existing conveyance infrastructure that will be shared with one or more existing water rights?

30.a. If yes, describe how the capacity of the shared points of diversion and/or conveyance infrastructure is sufficient for all water rights and how the proposed project will not adversely affect these water rights.

_____
_____
_____
_____
_____
_____

31. ☑ **NA** Answer questions 31.a to 31.b for point of diversion changes. If you do not propose a point of diversion change, mark "NA" instead.

31.a. Are the proposed points of diversion upstream or downstream of the historical points of diversion?

_____
_____
_____

31.b. ☐ **Y** ☐ **N** Are there intervening water users between the historical and proposed points of diversion?

31.b.i. If yes, list the water rights.

_____
_____

ADEQUATE MEANS OF DIVERSION AND OPERATION

32. ☑ **S** Submit a diagram of how you will operate your system from all proposed points of diversion to all proposed places of use.

33. Describe specific information about the capacity of all proposed diversionary structures. This may include, where applicable: pump curves and total dynamic head calculations, headgate design specifications, and dike or dam height and length.

N/A - Instream Flow

34. Describe the size, materials, capacity, and configuration of infrastructure to convey water from all proposed points of diversion to all proposed places of use.

N/A - Instream Flow

35. ☐ **Y** ☑ **N** Does the proposed conveyance require easements?

35.a. If yes, explain.

36. Describe your plan of operations, including specific information about how water is delivered within the place of use. This may include, where applicable, the range of flow rates needed for a pivot.

Water will be left instream; see measurement and operation plans in attached Form 606-IFA.

37. ☐ **Y** ☐ **N** ☑ **NA** If you propose to add one or more points of diversion, do you own the land where all proposed points of diversion are located? If you do not propose to add one or more points of diversion, mark "NA" instead.

37.a. ☐ **S** If no, submit documentation to show you have the right to use all points of diversion located on each property you do not own. This may include, but is not limited to, a well agreement, an easement, or permission of the party that owns the property where the proposed point(s) of diversion are located.

38. ☐ **Y** ☑ **N** Will your system be designed to discharge water from the project?

38.a. If yes, explain the wastewater disposal method.

38.b. ☐ **Y** ☐ **N** ☑ **NA** Have the necessary permits been obtained to comply with §§ 75-5-410 and/or 85-2-364, MCA?

39. ☐ **Y** ☑ **N** Is the means of diversion for any proposed point of diversion a well?

IF YES,

39.a. ☐ **Y** ☐ **N** Have all wells been drilled?

39.b. For all wells that have been drilled, what is the name of the well driller and, if available, what is their license number?

39.c. ☐ **Y** ☐ **N** ☐ **NA** For all wells yet to be drilled, will a licensed well driller construct the wells? If no wells are yet to be drilled, mark "NA" instead.

39.d. ☐ **S** ☐ **NA** Submit any well logs not yet submitted to the Department, such as for wells drilled after submittal of Form 606P. If all well logs have been submitted to the Department, mark "NA."

BENEFICIAL USE

40. ☐ **Y** ☑ **N** Does the Department have a standard period of diversion, period of use, flow rate, and/or volume for any of the purposes for which water is used? Department standards can be found in the DNRC Water Calculation Guide, ARM 36.12.112, ARM 36.12.115, and ARM 36.12.1902.

40.a. If yes, list the purposes for which the Department has a standard and note whether the water use falls within or outside the standard.

40.b. For any of the purposes with no Department standard or with proposed beneficial use that falls outside of Department standards, explain how the use is reasonable for that purpose.

There is no Department standard for instream flow. Cottonwood Creek is listed as a dewatered stream by MT Fish, Wildlife & Parks, so protecting even a minimal amount of flow will help address dewatering while providing connectivity within Cottonwood Creek and to the Upper Clark Fork. Protecting instream flow will also provide resiliency for fish and other aquatic organisms.

41. ☐ **Y** ☑ **N** Will your proposed project be subject to Montana Department of Environmental Quality (DEQ) requirements for a public water supply (PWS) system or Certificate of Subdivision Approval (COSA)?

42. ☐ **Y** ☑ **N** Are you proposing to use surface water for in-house domestic use?

42.a. ☐ **Y** ☐ **N** If yes, does a COSA exist for the proposed place of use?

42.a.i. ☐ **S** If yes, submit the COSA.

POSSESSORY INTEREST

43. ☑ **Y** ☐ **N** Do you meet one of the exceptions to possessory interest requirements, pursuant to ARM 36.12.1802 and § 85-2-402(2)(d), MCA? Exceptions include cases 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, and applications for the purposes of instream flow, mitigation, and marketing for mitigation.

43.a. If yes, explain.
The purpose is being changed to instream flow, which is an exception to possessory interest requirements per MCA 85-2-402(2)(d)(ii).

44. ☐ **Y** ☐ **N** ☑ **NA** Do you own all proposed places of use? Mark "NA" if you meet one of the exceptions to the possessory interest requirement.

44.a. ☐ **S** If no, explain and submit documentation that shows you either have possessory interest or written permission of the parties with possessory interest of the proposed place of use.

PROPOSED COMPLETION PERIOD

45. How many years will be needed to complete this project and to submit to the DNRC a Project Completion Notice (Form 618)? 10 years

46. Describe why this amount of time is needed to complete this project.
10 years is the maximum amount of time that a temporary change to instream flow purpose can be authorized.

AFFIDAVIT & CERTIFICATION

Read carefully before you sign and review with legal counsel if you have any questions. All owners (or trustees) must sign the form. ***If the owner is a business or trust, include the title of the representative(s) signing the form (i.e., president, trustee, managing partner, etc.) and provide documentation that establishes the authority of the representative to sign the application.*

I affirm the information provided for this application is to the best of my knowledge true and correct. If a preapplication meeting form was submitted, I am aware that my application for this project will not qualify for a discounted filing fee and expedited timelines if upon submittal of the application to the Department, I changed any element of the proposed application from the preapplication meeting form and follow-up materials (ARM 36.12.1302(6)(a)).

I affirm I have 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, unless this application meets an exception to the possessory interest requirements in ARM 36.12.1802(1)(b).

I understand that making a false statement under oath or affirmation in this application and official proceedings throughout the examination of my application may subject me to prosecution under § 45-7-202, MCA, a misdemeanor punishable by a jail term not to exceed 6 months or a fine not to exceed $500, or both. I have read this Affidavit and understand the terms and conditions.

I declare under penalty of perjury and under the laws of the state of Montana that the foregoing is true and correct.

Printed Name Eric Hull

Applicant Signature _____ Date: 2/13/26

Printed Name _____

Applicant Signature _____ Date: _____

Printed Name _____

Applicant Signature _____ Date: _____

Attachment – DNRC Form No. 606

Application #30165115 – Clark Fork Coalition

Water Right #s: 76G 5191, 76G 5192, 76G 5193, 76G 215144

11. The means of conveyance for all four water rights was Beaumont Ditch; no other water rights share a point of diversion or means of conveyance. Note that there is another ditch in the area called the Beck-Beaumont-Elberson Ditch, but it is separate from Beaumont Ditch and has a different point of diversion.

17. See attached historical use map titled “17. Historical Use Map.”

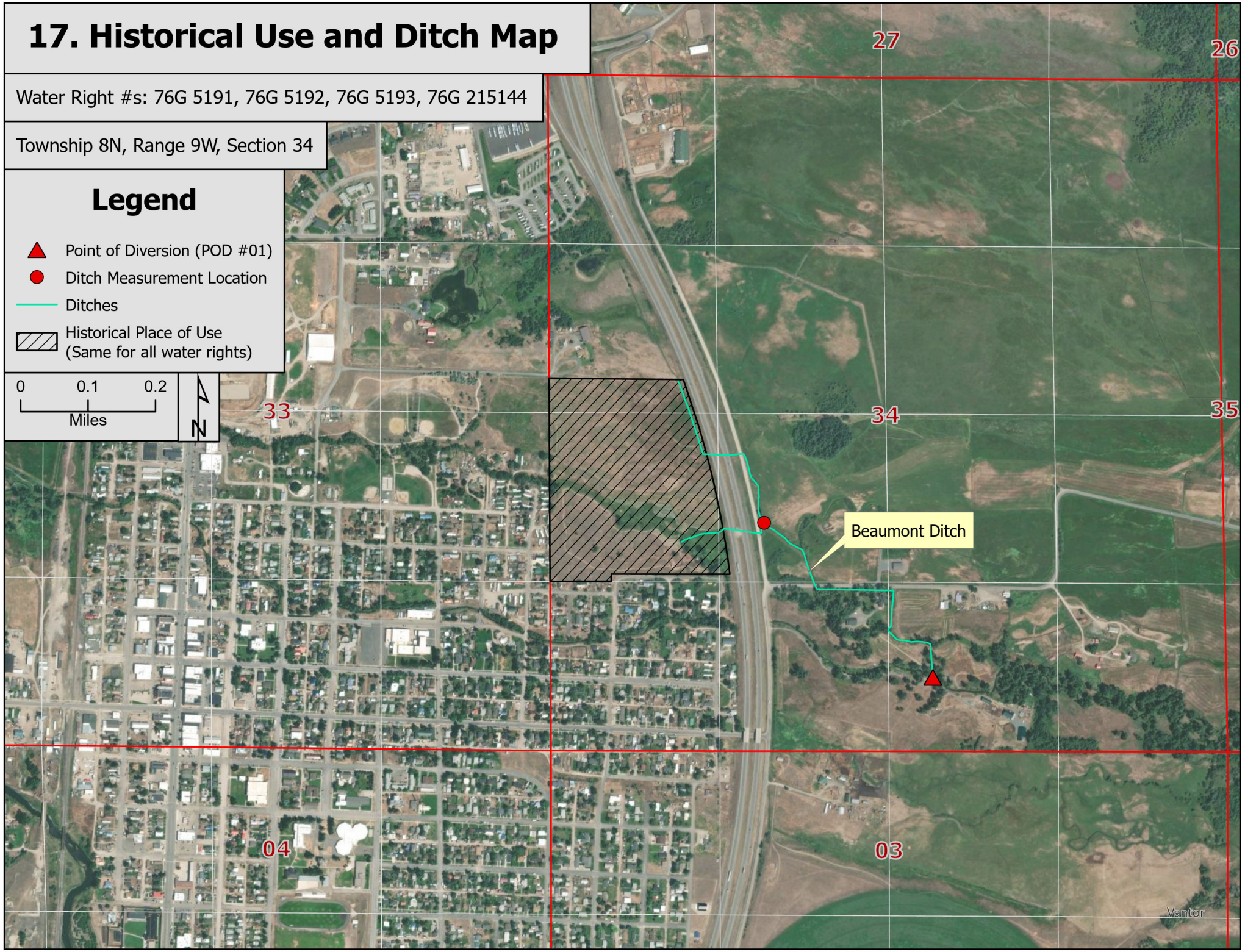
18. See attached proposed use map titled “18. Proposed Use Map.”

32. See proposed use map from question 18 and map attached to Form 606-IFA titled “606-IFA Map.”

17. Historical Use and Ditch Map

Water Right #s: 76G 5191, 76G 5192, 76G 5193, 76G 215144

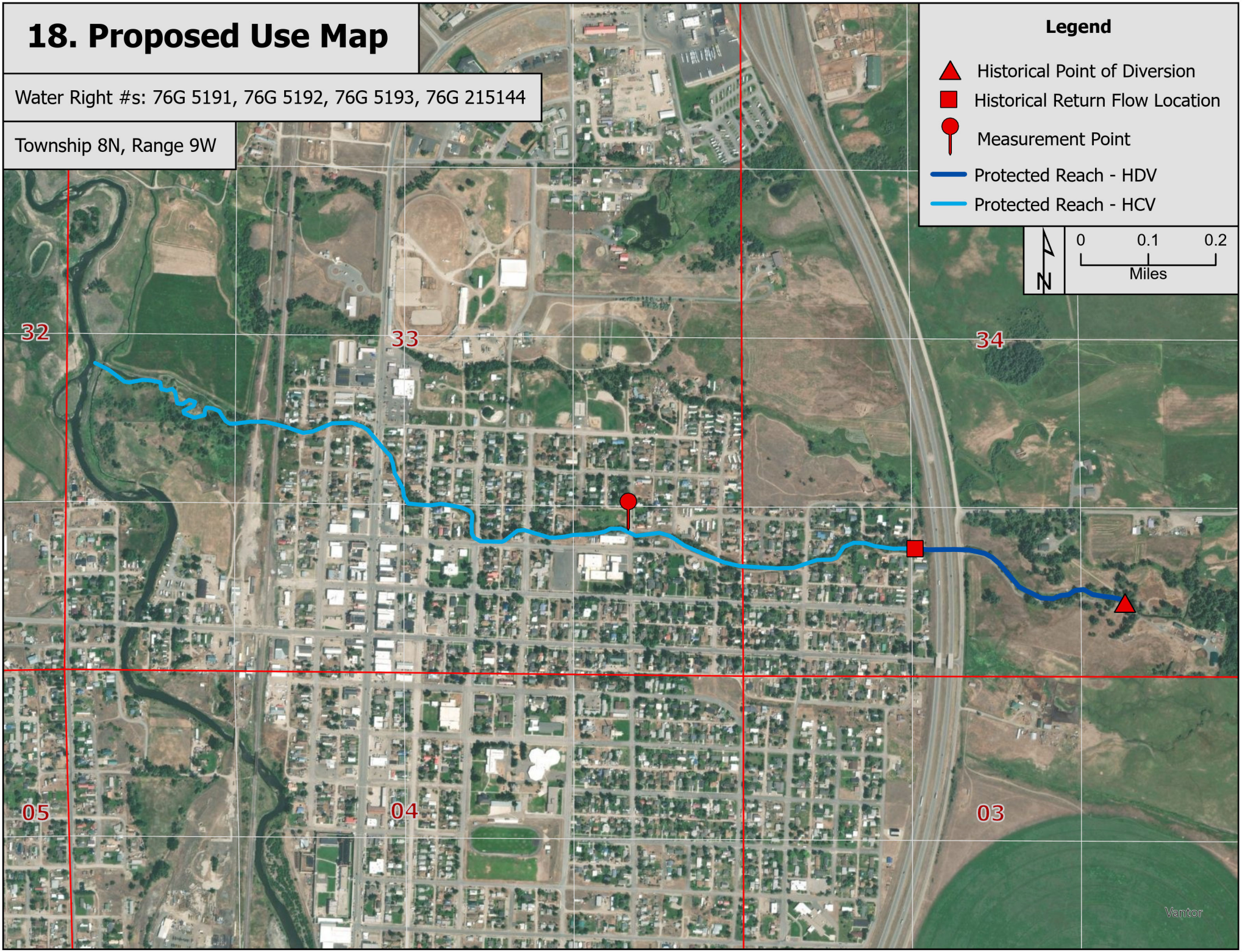
Township 8N, Range 9W, Section 34



18. Proposed Use Map

Water Right #s: 76G 5191, 76G 5192, 76G 5193, 76G 215144

Township 8N, Range 9W



Form No. 606-IFA *(02/2025)* **Applicant Name** Clark Fork Coalition (c/o Eric Hull)

APPLICATION TO CHANGE A WATER RIGHT
CHANGE TO INSTREAM FLOW ADDENDUM
§§ 85-2-402, 85-2-436, MCA

It is highly recommended that Technical Analyses are complete before filling out this addendum. The operation plan must define the flow rate(s) and volume(s) protected instream over specific time intervals. The maximum quantity of water that can be changed to instream flow protected at the historical point of diversion, or the point where return flow historically accrued, is the amount historically diverted. However, only the amount historically consumed from the source, or a smaller amount if specified by the department, may be used to protect, maintain, or enhance streamflow below the historical point of diversion or the point where return flows historically accrued. The protected flow rate may be no higher than the historical flow rate at the historical point of diversion. The flow rate protected downstream of the historical point of diversion, when protected over the time interval defined for protection, cannot result in a volume that is higher than the protectable volume. The measurement plan should include one or more measurement points, sufficient to show beneficial use and lack of adverse effect. Ideally, measurement points are located as close as possible to the start and end of the protected reach.

Answer every question and applicable follow-up questions. Use the checkboxes to denote yes ("Y") or no ("N"). Questions that require items to be submitted to the Department have a submitted ("S") checkbox, which is marked when the required item is attached to the Technical Analyses Addendum. Label all submitted items with the question number for which they were submitted. Narrative responses that are larger than the space provided can be answered in an attachment. If an attachment is used, mark the "see attachment" on this form and label the attachment with the question number. Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label all units in narrative responses.

---

1. ☑ **S** Submit a map labeling all historical points of diversion, the protected reach, the locations where historical return flows accrued, and all water rights diverted from the source between the upstream-most historical point of diversion and the end of the protected reach.

2. ☑ **Y** ☐ **N** ☐ **NA** Do all historical return flows go back to the source of supply?

   If no,

   2.1. What is the name of the other sources where historical return flows accrued?

   _____

   2.2. What are the monthly volumes of return flows that do not return to the source of supply?

   _____

   2.3. ☐ **Y** ☐ **N** Are any water rights diverted from the sources identified in question 2.1 within the Area of Potential Adverse Effect identified in the Extended Return Flow Analysis: Evaluation of Impacts to Identified Water Rights? **If yes**, add these water rights to the map submitted for question 1.

3. Explain how this change will not adversely affect the water rights identified on the map submitted for question 1, which include, if applicable, all water rights 1) diverted from the source between the upstream-most historical point of diversion and the end of the protected reach and 2) diverted from other sources where historical return flows accrued that are located within the Area of Potential Adverse Effect identified in the Extended Return Flow Analysis: Evaluation of Impacts to Identified Water Rights.

Based on the DNRC Water Rights Query System and Water Mapper application, there are nine surface water rights sourced from Cottonwood Creek downstream of the historical point of diversion.

~~Four of the water rights (76G 9326, 76G 91466, 76G 91467, and 76G 91468) are junior water rights whose points of diversion are located upstream of the point where return flows accrued, so the protected volume would not have been available to serve these water rights and thus will not be adversely affected.~~

~~Three of the water rights (76G 91144, 76G 91145 and 76G 91146) have a point of diversion located within the protected reach where we are proposing to protect only the consumed volume. Since the protected volume was historically consumed, the volume was not available to serve the water rights and thus will not be adversely affected.~~

The final two surface water rights downstream of the historical point of diversion, 76G 91469 and 76G 162334, are stock water right direct from the source. These water rights will not be adversely affected because water will be available instream, and we do not plan to make call on stock water rights that are used direct from the source.

4. Provide a detailed measurement plan, which includes the point(s) where measurements occur, the interval of measurement, the methods and equipment used, and explain how this plan is sufficient to evaluate for adverse effect and show beneficial use.

We plan to utilize the DNRC gage recently installed on Cottonwood Creek within the city limits of Deer Lodge to measure and enforce these water rights up to the historically diverted volume within the ~~Protected Reach - HDV (as shown on attached map titled "606-IFA Map") once changed to an instream flow purpose.~~

Real time flow data is recorded at 15-minute intervals and is publicly available online throughout the irrigation season. If the DNRC gage is discontinued at any point, CFC will measure flows at least every ~~two weeks using a Department approved method at the same location as the DNRC gage during the period of use.~~

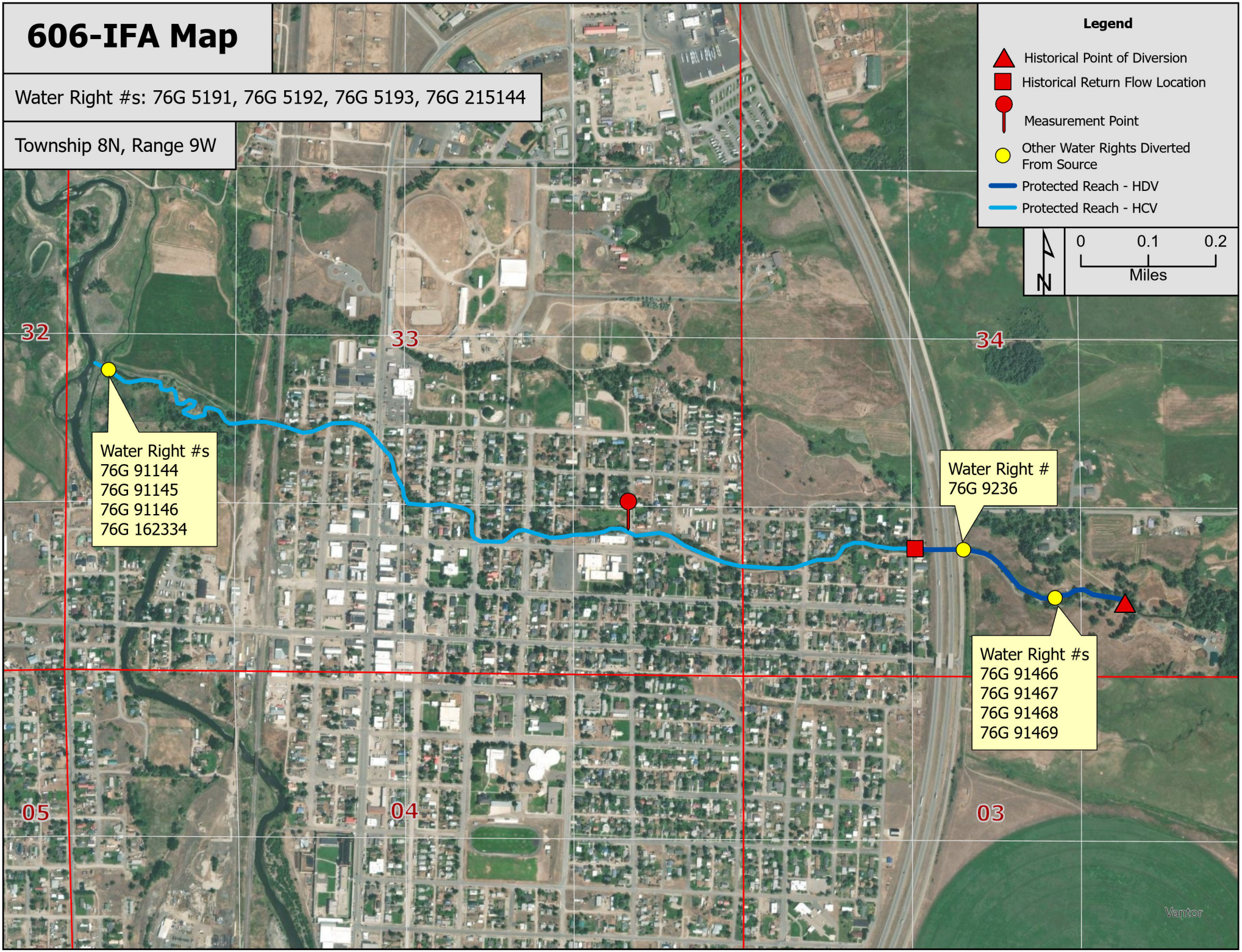
We will only enforce our water rights up to the protectable volume and during the period of use which will ensure no adverse affect as described above. We will show beneficial use by submitting all monitoring records annually to DNRC.

5. Provide details about an operation plan, which include the proposed flow rate (GPM or CFS) to be protected up to the proposed volume (AF) and the period when protection is to occur. If there is a "trigger flow" associated with your operation plan, please explain.

For the operation plan, we propose separating the protected volume between the junior water right (76G 215144) and the senior water rights (76G 5191, 76G 5192, and 76G 5193) according to the apportioned HDV from Table 5 of the DNRC technical analysis. Specifically, 105.98 AF will be protected under the junior water right and a combined total of 68.47 AF will be protected under the three senior water rights, equaling the total HDV of 174.45 AF.

The junior water right has a flow rate of 1.99 cfs, equal to 3.94 AF/day, allowing us to protect flow at this rate for approximately 27 days before the protectable volume of 105.98 AF is reached. Since the junior water right has a historic period of use that ended on July 10, we propose starting to protect flows 27 days prior, beginning on June 13.

We propose then switching to the protectable volume attributed to the senior water rights on July 11. Combined, the senior water rights have a flow rate of 1.14 cfs, equal to 2.26 AF/day. Protecting flows at this rate yields 30 days of instream flow protection before the protectable volume of 68.47 AF is reached, ending protections on approximately August 10.


606-IFA Map
Water Right #s: 76G 5191, 76G 5192, 76G 5193, 76G 215144
Township 8N, Range 9W
Legend
Historical Point of Diversion
Historical Return Flow Location
Measurement Point
Other Water Rights Diverted From Source
Protected Reach - HDV
Protected Reach - HCV
N
0
0.1
0.2
Miles
32
33
34
05
04
03
Water Right #s
76G 91144
76G 91145
76G 91146
76G 162334
Water Right #
76G 9236
Water Right #s
76G 91466
76G 91467
76G 91468
76G 91469
Vantor

Surface Water Change Technical Analyses Report – Part A

Department of Natural Resources and Conservation (DNRC or Department)
Water Resources Division
Russ Gates, Hydrologist/Water Resource Specialist, Helena Regional Office

Application No.	76G 30165115	**Proposed Point of Diversion**	SWSWSE Section 34, T8N, R9W, Powell County
Applicant	Clark Fork Coalition		

Overview

This report is Part A of a two-part publication which analyzes data submitted by the Applicant in support of the above-mentioned water right application. This report provides technical analyses as required under the Administrative Rules of Montana (ARM) 36.12.1303 in support of the water rights criteria assessment as required in §85-2-402 Montana Code Annotated (MCA).

* Calculated values in the tables found throughout this document may include rounding differences that could result in slight variation of final values depending on the point at which intermediate values are calculated.

This Surface Water Change Technical Analyses Report – Part A contains the following sections:

1.0 Application Details

The Applicant proposes to change the place of use (POU) and purpose for Statements of Claim 76G 5191-00, 76G 5192-00, 76G 5193-00, and 76G 215144-00. The proposed place of use is the reach of Cottonwood Creek starting at the historical point of diversion (POD) for these claims in the SWSWSE Section (S) 34 and ending at the confluence with the Clark Fork River in the NWNWSW S33, all Township (T) 8 North (N), Range (R) 9 West (W). The project is in Powell County and the source is Cottonwood Creek.

Figure 1: Historic use map

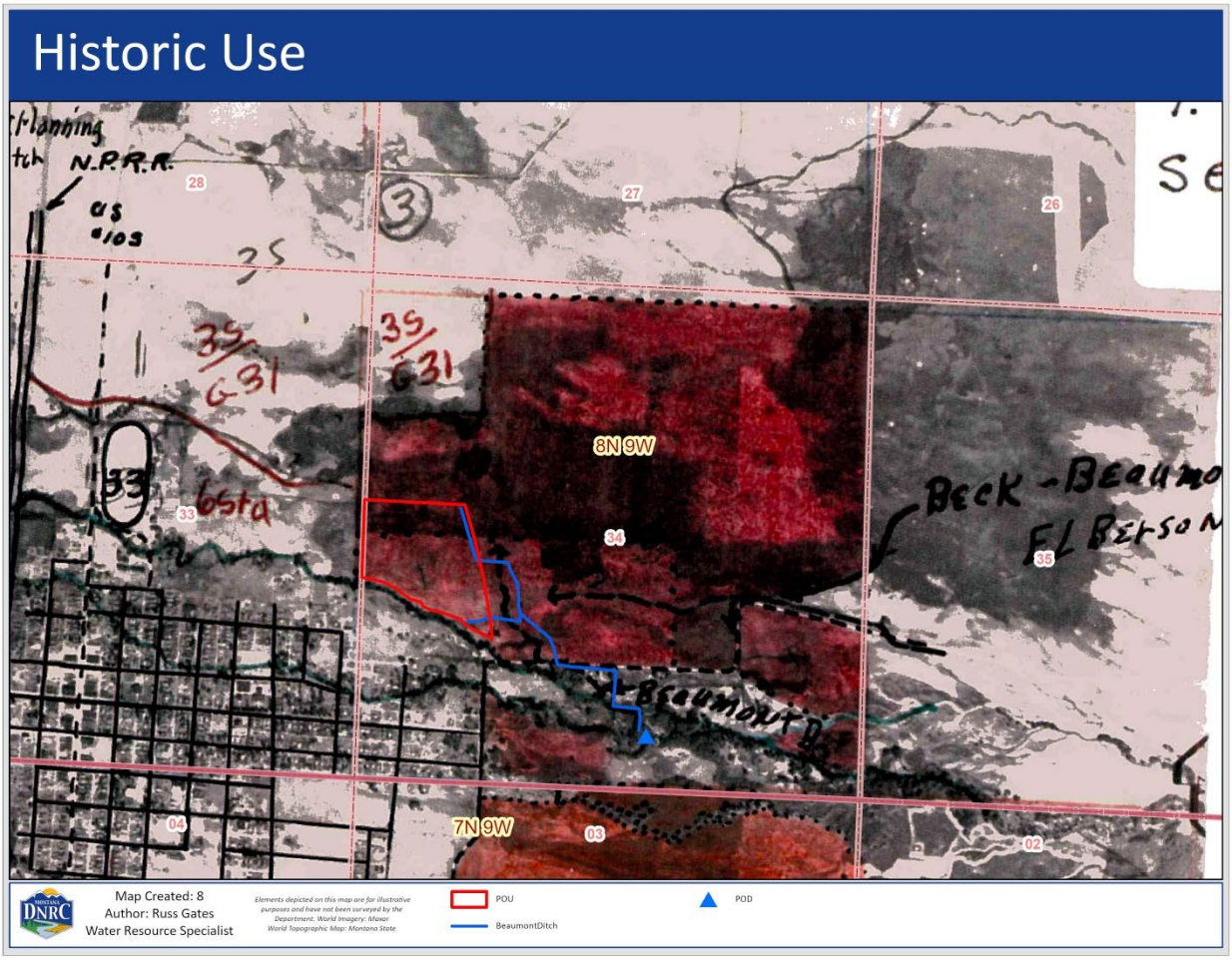
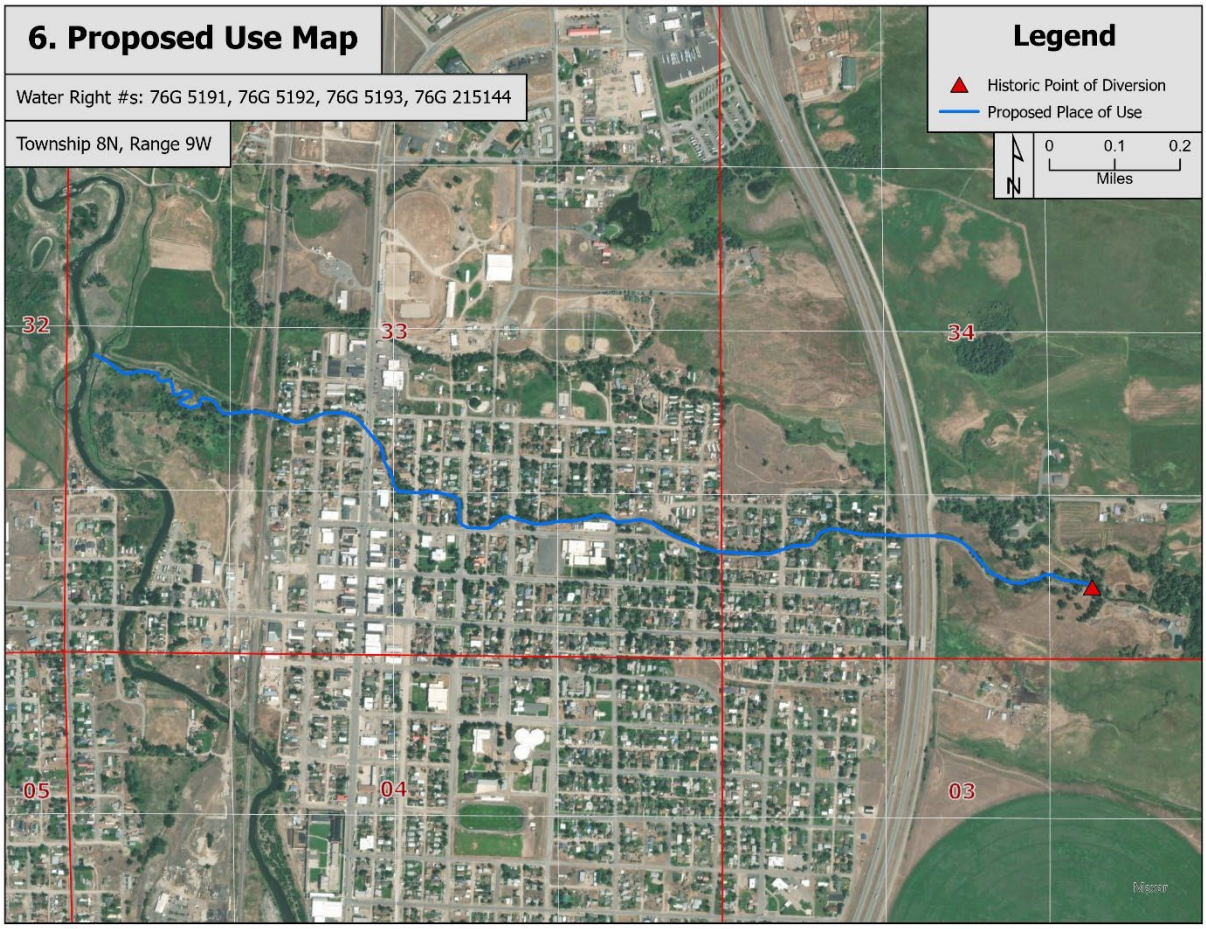


Figure 2: Map of the Applicant's proposed POD on the source and proposed place of use.



2.0 Historical Use Technical Analysis

2.1 Historical Field Consumed and Applied Volumes

The consumed volume for irrigation is based on the net irrigation requirement (NIR) from USDA Natural Resources Conservation Service Irrigation Water Requirements (IWR) at a representative weather station. The NIR is multiplied by a county-wide management factor (from ARM 36.12.1902) to produce an adjusted NIR representative of actual crop yields in Montana. Crop consumption is determined by multiplying the adjusted NIR by the number of acres of irrigation. Crop consumption is then divided by the field efficiency identified from the irrigation method and ARM 36.12.115. Irrecoverable losses (IL) are 5% of the field applied volume for flood irrigation or 10% for sprinkler irrigation. The total consumed volume for irrigation is the crop consumption plus irrecoverable losses. The total non-consumed volume is the field applied volume minus the total consumed volume.

The water rights proposed for change in this Application claim 56.62 acres of flood irrigation in the NW and SW of S34, T8N, R9W, Powell County. The Department identified 31.07 acres of

historical irrigation within the historically claimed POU based on Water Resources Survey aerial photography dated August 17, 1947 and USDA aerial photography from 1979. Water was diverted from Cottonwood Creek into the Beaumont Ditch via a headgate in the SWSWSE S34, T8N, R9W and conveyed 2112 ft to the place of use. The historical method of irrigation was wild flood with a field efficiency of 25%. All four claims proposed for change in this application were 100% supplemental on the same 31.07 acre POU.

The historical consumed and field applied volumes have been calculated with the inputs shown in Table 1 following the methods described above and in ARM 36.12.1902.

Table 1: Historical use.

Irrigation Method	Acres	IWR (in)[1]	Mgmt. Factor[2]	Field Efficiency	Crop Consumption (AF)	Applied Volume (AF)	IL (AF)	Total Consumed Volume (AF)	Field Application Volume (AF)
Flood Irrigation, Wheeline & Handline	31.07	13.14	0.78	0.25	26.4	100.32	5.28	31.68	105.6

[1]Deer Lodge IWR Weather Station
[2]Powell County Historical Use Management Factor 1964 - 1973

All four water rights proposed for change in this application are 100% supplemental on the same 31.07-acre POU. The total historical consumptive volume for the POU was apportioned between each claim based on the corresponding percentage of the total flow rate contributed by each right as shown in Table 2 below:

Table 2: Apportionment of historical use by water right

Water Right No.	Flow Rate (CFS)	Percentage of Flow	Apportioned HCV *(Including IL)* (AF)	Apportioned Field Application Volume (AF)
76G 5191-00	0.28	9	2.83	9.45
76G 5192-00	0.28	9	2.83	9.45
76G 5193-00	0.58	19	5.87	19.57
76G 215144-00	1.99	64	20.14	67.14
Total	**3.13**	**100%**	**31.67**	**105.61**

2.2 Historical Conveyance Losses

Per ARM 36.12.1902(10), the historical conveyance loss volume is equal to the sum of the historical seepage loss, vegetation loss, and ditch evaporation volumes.

The Applicant provided a ditch bottom width of 3 ft and a top width of 5 ft, a depth of 2 ft, a length of 0.4 miles or 2112 ft, and a slope of 0.2%. The ditch dimensions result in a wetted perimeter value of 7.08 ft. The soil material was identified by the Applicant as loam, which the Department determined has a loss rate of 1.4 ft^3/ft^2/day. The total number of days irrigated was split into three periods: Beaumont A from March 10 to April 30 (76 days) when only Claim 76G 215144-

00 is being used, Beaumont B from May 1 to July 15 (75 days) when all four claims are being used, and Beaumont C from July 16 to October 1 (77 days) when only Claims 76G 5191-00, 76G 5192-00, and 76G 5193-00 are being used. Adjusted net evaporation rates of 2.06 in, 4.97 in, and 11.16 in were applied to each of these periods respectively. The conveyance losses were calculated for each of these time periods, then apportioned to each right within these periods based on relative proportion of flow rate for each right as shown in Table 3 and Table 4. The Department utilized the procedures outlined in the Department Memo dated September 13, 2012, regarding the development of standardized methodologies to determine Historic Diverted Volume to calculate the values found in Table 3 below.

Table 3: Conveyance loss apportionment by period of diversion

Ditch Leg	Length (ft)	Flow Rate (CFS)	Width (ft)	Wetted Perimeter (ft)	Ditch Loss Rate (ft3/ft/day)	Number of Days Irrigated	Adj. Net Evap (in)	Seepage Loss (AF)	Vegetation Loss (AF)	Evaporative Loss (AF)	Total Conveyance Loss (AF)
Beaumont A	2112	1.99	3	4.24	1.4	76	2.06	21.87	0.91	0.03	22.81
Beaumont B	2112	3.13	3	4.63	1.4	75	4.97	23.57	1.41	0.08	25.06
Beaumont C	2112	1.14	3	3.88	1.4	77	11.16	20.28	0.53	0.16	20.97
Total								65.72	2.84	0.27	68.84

Table 4: Conveyance loss apportionment by water right

Ditch Leg	Water Right Number	Flow Rate (CFS)	Conveyance Loss Volume (by Leg) (AF)	% of Flow	CL Volume (by WR) (AF)
Beaumont A	76G 215144-00	1.99	22.81	100	22.81
Beaumont B	76G 5191-00	3.13	25.06	9	2.26
	76G 5192-00			9	2.26
	76G 5193-00			18	4.51
	76G 215144-00			64	16.03
Beaumont C	76G 5191-00	1.14	20.97	25	5.24
	76G 5192-00			25	5.24
	76G 5193-00			50	10.49
Total			68.84		68.84

2.3 Historical Diverted Volume

Per ARM 36.12.1902(10), the historically diverted volume is equal to the sum of the historical field application volume and historical conveyance loss volume. Table 5 below summarizes the historical field applied and conveyance loss volumes.

Table 5: Historic Diverted Volume for each right

Water Right No.	Field Application Apportionment (%)	Apportioned Field Application Volume (AF)	Apportioned Conveyance Loss Volume (AF)	Apportioned HDV (AF)
76G 5191-00	9	9.45	7.50	16.95
76G 5192-00	9	9.45	7.50	16.95
76G 5193-00	19	19.57	15.00	34.57
76G 215144-00	64	67.14	38.84	105.98
Total	**100%**	**105.6**	**68.84**	**174.45**

The Applicant has established a gaging site based on a stage-discharge relationship downstream of the historical point of diversion. The Applicant submitted 2024 hourly stage and discharge data from May 30 through October 17, and four measured discharge readings along with the rating curve for the site. Average daily flow from the Applicant's data can be found in Appendix B. The discharge measurements can be found in Table 6 below.

Table 6: Applicant supplied discharge measurements

Date:	Time of Measurement:	Flow (CFS):	Staff gauge (ft):
5/30/2024	10:08 AM	4.91	0.99
6/11/2024	3:12 PM	10.8	1.19
7/25/2024	1:56 PM	2.061	0.83
9/24/2024	2:30 PM	2.099	0.82

2.4 Summary of Historical Use

The Department will consider the following values from Table 7 when evaluating the historical use of the water rights proposed for change in this application for the adverse effect criterion:

Table 7: Summary of historical use

Water Right No.	Historical Purpose	Maximum Historical Acres/ Au	Historical Place of Use	Historical Point of Diversion	Maximum Historical Flow Rate (CFS)	Historically Consumed Volume (AF)	Historically Diverted Volume (AF)
76G 5191-00	Irrigation	31.07	NWSW, S2SWNW S34 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County	0.28	2.83	16.95
76G 5192-00	Irrigation	31.07	NWSW, S2SWNW S34 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County	0.28	2.83	16.95
76G 5193-00	Irrigation	31.07	NWSW, S2SWNW S34 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County	0.58	5.87	34.57
76G 215144-00	Irrigation	31.07	NWSW, S2SWNW S34 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County	1.99	20.14	105.98

3.0 Analysis of Impacted Surface Water Sources

3.1 Summary of Proposed Use

The Applicant proposes to protect historically diverted water instream. The historically diverted volume of 174.45 AF can be protected in the upper reach above the point where historical return flows began to accrete to Cottonwood Creek in the NWSESW S34 T8N R9W, and the historically consumed volume of 31.67 AF can be protected in the lower reach below this point.

Table 8: Summary of the proposed use.

Water Right No.	Proposed Purpose	Proposed Place of Use	Proposed Point of Diversion	Proposed Flow Rate (CFS)	Proposed Consumptive Volume (AF)	Proposed Upper Reach Protected Volume (AF)	Proposed Lower Reach Protected Volume (AF)
76G 5191-00	Instream	W2SWSE, N2S2SW S34, S2 S35 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County	0.28	0	16.95	2.83
76G 5192-00	Instream	W2SWSE, N2S2SW S34, S2 S35 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County	0.28	0	16.95	2.83
76G 5193-00	Instream	W2SWSE, N2S2SW S34, S2 S35 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County	0.58	0	34.57	5.87
76G 215144-00	Instream	W2SWSE, N2S2SW S34, S2 S35 T8N R9W Powell County	SWSWSE S34 T8N R9W Powell County	1.99	0	105.98	20.14
Total				3.13	0	174.45	31.67

Table 9: Comparison of volumes associated with historical and proposed use.

Purpose	Historically Consumed Volume (AF)	Proposed Consumptive Volume (AF)	Historically Diverted Volume (AF)	Proposed Protected Volume (AF)
Irrigation	31.68	0	174.45	0
Instream	0	0	0	174.45
Total	31.68	0	174.45	174.45

3.2 Impacted Surface Water Sources

The Department has considered an area of potential adverse effect on the source of supply. This reach was determined by accounting for the location of the proposed and historical point of diversion. This reach extends from the historical point of diversion in the SWSWSE S34 T8N R9W Powell County downstream to the confluence with the Clark Fork River in the NWNWSW S33 T8N R9W Powell County.

Department Groundwater Hydrologist Evan Norman completed the attached Surface Water Change Technical Analysis Report Part B. The historical non-consumed volume is 73.92 AF, and the location of historical return flows is to Cottonwood Creek downstream of the NWSESW S34 T8N R9W Powell County. Historically diverted flows will be left instream in Cottonwood Creek during the historical period of diversion below the point of diversion and where return flows historically returned to the source. Therefore, the return flow analysis does not include a monthly breakdown of the rate and time of return flows.

Review

This document has been reviewed by the Department on August 20, 2025.

References

Department Standard Practice for Determining Historical Use
Department Standard Practice to Analyze Return Flows
Department Surface Water Change Technical Analysis Report Part B

Appendix A: Water Rights within the Area of Potential Adverse Effect

Water Right	Owner	Priority Date	Flow Rate
76G 91146 00	KOHRS & MANNING DITCH CO	12/31/1868	8 CFS
76G 91467 00	DOUGLAS W JOHNSON	4/1/1877	337 GPM
76G 91469 00	DOUGLAS W JOHNSON	4/1/1877	n/a
76G 91468 00	DOUGLAS W JOHNSON	8/1/1894	170.54 GPM
76G 91466 00	DOUGLAS W JOHNSON	3/3/1906	3.87 CFS
76G 91145 00	KOHRS & MANNING DITCH CO	12/17/1931	40 CFS
76G 162334 00	USA (DEPT OF INTERIOR NATIONAL PARK SERVICE)	8/5/1940	n/a
76G 9326 00	LORRIE M DUNCAN	3/1/1944	40 GPM

Appendix B: Average Daily Discharge for Gaging Station Established by Applicant

Date	Average Discharge
30-May	5.4
31-May	5.2
1-Jun	4.9
2-Jun	4.8
3-Jun	7.3
4-Jun	16.6
5-Jun	11.6
6-Jun	12.3
7-Jun	13.0
8-Jun	13.7
9-Jun	11.6
10-Jun	22.8
11-Jun	12.6
12-Jun	7.0
13-Jun	5.5
14-Jun	5.1
15-Jun	4.6
16-Jun	4.9
17-Jun	4.9
18-Jun	4.6
19-Jun	4.0
20-Jun	3.6
21-Jun	3.3
22-Jun	3.1
23-Jun	3.1
24-Jun	2.8
25-Jun	2.9
26-Jun	2.8
27-Jun	6.4
28-Jun	6.8
29-Jun	6.0
30-Jun	5.3

1-Jul	5.3
2-Jul	5.1
3-Jul	4.8
4-Jul	6.3
5-Jul	5.2
6-Jul	4.7
7-Jul	4.6
8-Jul	3.9
9-Jul	3.5
10-Jul	3.9
11-Jul	4.1
12-Jul	3.8
13-Jul	3.6
14-Jul	3.5
15-Jul	3.9
16-Jul	3.8
17-Jul	3.5
18-Jul	3.2
19-Jul	3.1
20-Jul	3.0
21-Jul	2.8
22-Jul	2.8
23-Jul	2.7
24-Jul	2.6
25-Jul	2.5
26-Jul	2.4
27-Jul	2.3
28-Jul	2.3
29-Jul	2.2
30-Jul	2.3
31-Jul	2.3
1-Aug	2.2
2-Aug	2.1
3-Aug	2.0
4-Aug	2.0
5-Aug	2.1
6-Aug	2.1
7-Aug	2.2
8-Aug	2.1
9-Aug	2.1

10-Aug	2.2
11-Aug	2.3
12-Aug	2.2
13-Aug	2.2
14-Aug	2.3
15-Aug	2.2
16-Aug	2.1
17-Aug	2.0
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28-Aug	1.9
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31-Aug	1.7
1-Sep	1.7
2-Sep	1.6
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17-Sep	2.0
18-Sep	2.0

19-Sep	1.9
20-Sep	1.9
21-Sep	2.0
22-Sep	2.0
23-Sep	2.0
24-Sep	2.0
25-Sep	1.9
26-Sep	1.9
27-Sep	2.0
28-Sep	2.0
29-Sep	2.2
30-Sep	2.3
1-Oct	2.4
2-Oct	2.4
3-Oct	2.6
4-Oct	2.5
5-Oct	2.8
6-Oct	2.7
7-Oct	2.5
8-Oct	2.4
9-Oct	2.4
10-Oct	2.6
11-Oct	2.7
12-Oct	2.7
13-Oct	2.8
14-Oct	2.9
15-Oct	2.8
16-Oct	2.9
17-Oct	3.1

Surface Water Change Technical Analyses Report - Part B

Department of Natural Resources and Conservation (DNRC)
Water Resource Division
Evan Norman, Groundwater Hydrologist, Water Sciences Bureau

Applicant	Clark Fork Coalition	**Point of Diversion Legal Land Description**	SWSWSE Section 34, Township 08 North Range 09 West, Powell County
Application No.	76G 30165115		

Overview

This report is Part B of a two-part publication which analyzes data submitted by the Applicant in support of the above-mentioned water right change application. This report provides technical analyses as required under the Administrative Rules of Montana (ARM) 36.12.1303 in support of the water rights criteria assessment as required in §85-2-402, Montana Code Annotated (MCA). For applications in closed basins, this report fulfills the requirements of MCA 85-2-361.

This Surface Water Change Technical Analyses Report – Part B contains the following sections:

1.0 Executive Summary

Water Right Details

The Applicant requests to change the purpose and place of use of Statement of Claim Nos. 76G 5191-00, 76G 5192-00, 76G 5193-00 and 76G 215144-00 from irrigation to an instream flow purpose on Cottonwood Creek. The four water rights proposed for change were supplemental and historically used for flood irrigation of 31.07 acres with a cumulative flow rate of 3.13 cubic feet per second (cfs). Water was diverted from Cottonwood Creek via a headgate and into the Beaumont Ditch. The total diverted volume for the supplemental water rights associated with the place of use is 174.45 acre-feet (AF). The period of diversion and period of use for Statement of Claim Nos. 76G 5191-00, 76G 5192-00 and 76G 5193-00 is May 1 to October 1. The period of diversion and period of use for Statement of Claim No. 76G 215144-00 is March 15 to July 15.

WSB Technical Analysis Findings

Based on information submitted, the WSB quantified the historical non-consumed volume and location of historical return flows. These analyses are in support of the following criteria assessment: adverse effect. A summary of WSB findings described in subsequent sections are listed below.

TECHNICAL ANALYSES FINDINGS

ADVERSE EFFECT (RETURN FLOWS)	The historical non-consumed volume is 73.92 AF, and the location of historical return flows as identified in **Figure 1** is to Cottonwood Creek downstream of the NWSESW Section 34, Township 08 North, and Range 09 West, Powell County.

2.0 Methodology

DNRC will analyze the change to determine if:

a. Return flows will enter back into the source where they have historically returned upstream of or at the location of the next downstream appropriator; or,
b. Water is left instream so historically diverted flows are available during the historical period of diversion either below the point of diversion or where return flows historically returned to the source.

If the change in return flows impacts existing water rights, the return flow analysis must include a monthly breakdown of the rate and timing of return flows and evaluate impacts to the identified rights.

Return flows are evaluated by determining the volume of water that infiltrates past the root zone and identifying the likely receiving stream(s). The assumption is made that water applied for irrigation that is not consumed by a crop infiltrates to groundwater becoming return flow and does not run off. The amount of water not consumed is the difference between the amount of water consumed and the amount of water applied to a field. The receiving stream is determined

by proximity and evidence of hydraulic connection to groundwater and generally does not depend on groundwater flow direction or land slope (Leake, 2011).

Historical consumed volumes for irrigation are calculated following the procedures described in DNRC consumptive use rules in ARM 36.12.1902. The amount of water consumed at the field is equal to crop consumption plus irrecoverable losses calculated as a percent of applied amounts. The amount of water applied to a field is determined from estimates of application efficiency and crop consumption. The amount of water not consumed is the difference between the amount of water consumed and the amount of water applied to a field.

Historically diverted flows will be left instream on Cottonwood Creek during the historical period of diversion below the point of diversion and where return flows historically returned to the source. Therefore, the return flow analysis does not include a monthly breakdown of the rate and time of return flows.

3.0 Adverse Effect – Return Flow Analysis

3.1. Non-Consumed Volume

The consumed volume for irrigation is based on the net irrigation requirement (NIR) from USDA Natural Resources Conservation Service Irrigation Water Requirements (IWR) at a representative weather station. The NIR is multiplied by a county-wide management factor (from ARM 36.12.1902) to produce an adjusted NIR representative of actual crop yields in Montana. Crop consumption is determined by multiplying the adjusted NIR by the number of acres of irrigation. Crop consumption is then divided by the field efficiency identified from the irrigation method and ARM 36.12.115. Irrecoverable losses (IL) are 5% of the field applied volume for flood irrigation or 10% for sprinkler irrigation. The total consumed volume for irrigation is the crop consumption plus irrecoverable losses. The total non-consumed volume is the field applied volume minus the total consumed volume.

The historical consumed and non-consumed volumes have been calculated with the inputs shown in **Table 2.** The proportion of volumes assigned to the supplemental water rights are the contribution of each water right flow rate to the maximum flow rate of 3.13 cfs shown in **Table 1**.

Table 1: Proportion of total flow rate for supplemental water rights associated with Application No. 76G 30165115.

Water Right No.	Flow Rate (CFS)	Supplemental Proportion
76G 5191-00	0.28	0.09
76G 5192-00	0.28	0.09
76G 5193-00	0.58	0.19
76G 215144-00	1.99	0.64
Total	3.13	1.0

Table 2: Historical use for the 31.07 acres of flood irrigation.

Statement of Claim Nos. (76G)	Acres	IWR (in)[1]	Mgmt. Factor[2]	Field Efficiency (%)	Crop Consumption (AF)	Field Applied Volume (AF)	IL (AF)	Total Consumed Volume (AF)	Non-Consumed Volume (AF)
5191-00	31.07	13.14	0.776	25	2.36	9.45	0.47	2.83	6.61
5192-00	31.07	13.14	0.776	25	2.36	9.45	0.47	2.83	6.61
5193-00	31.07	13.14	0.776	25	4.89	19.57	0.98	5.87	13.70
215144-00	31.07	13.14	0.776	25	16.79	67.14	3.36	20.14	47.00
Total	31.07	---	---	---	26.40	105.60	5.28	31.68	73.92

[1]Deer Lodge IWR Weather Station
[2] Powell County Historical Use Management Factor

3.2 Hydraulically Connected Surface Water(s)

Potentially affected surface waters in return flow evaluation are identified by their hydraulic connection, both direct and indirect, to the aquifer below the irrigation place of use. Hydraulic connection depends on the depth to groundwater beneath the beds of surface waters, connection between deep and overlying shallow aquifers, vertical gradients, and can vary along a reach and with time of year.

Procedures for evaluating hydraulic connection and identifying one or more potentially affected surface water(s) for return flow analyses can be found in DNRC (2018) and DNRC (2019), respectively. Return flows are apportioned between multiple potentially affected surface waters generally following procedures described in Section 3.2 of a guidance document developed by the Province of British Columbia (2016). Not all data may be available for each project and is noted as "NA" when that occurs.

As shown in **Figure 1**, DNRC identifies Cottonwood Creek and Johnson Creek as the closest surface water sources to the historical place of use and potential sources to receive return flows. Following protocols in DNRC (2018), **Table 3** identifies published information used to assess hydraulically connected surface water(s). Based on the information in **Table 3**, Cottonwood Creek is the only perennial surface water source that will receive the full return flow volume.

Table 3: Published information used to identify hydraulically connected surface water(s).

Published Information	Surface Water Source	Surface Water Source
	Cottonwood Creek	Johnson Creek
USGS National Hydrographic Dataset (NHD)[1]	Perennial at Interstate-90	Intermittent
USGS PROSPER SPP Rating[2]	0.47 (Nonperennial) (less confident)	0.0 (Nonperennial) (more confident)
MBMG GWIC wells, less than 50 ft deep, within 1,000 ft of surface water, static water levels above or within 10 ft of elevation of stream bed (DNRC, 2018)[3]	GWIC IDs 57431, 252522, 57437, 57436, 57443	GWIC IDs 57431, 57446, 57449, 57447, 57448
Published Water Table Maps, Publications, Previous Water Rights, etc.[4]	Waren and LaFave (2011)	Waren and LaFave (2011)
Gridded National Soil Survey Geographic Database[5]	Hydric conditions mapped along source (**Figure 1**)	Hydric conditions mapped along source (**Figure 1**)
Aerial imagery	Wet channel (NAIP 2013-2023)	Dry/wet channel (NAIP 2013-2023)
Affidavits, photographs, etc.	DNRC stream gage ID 76G 04000 (**Figure 1**); stream gage site visits.	Applicant states that source only flows during runoff and historically operated as a ditch.

[1] Review of NHD to identify perennial, intermittent, and ephemeral classifications for surface water sources most proximal to the proposed diversion(s).

[2] USGS PROSPER streamflow permanence probability (SPP) ratings greater than 0.5 suggest a perennial location, lower than 0.5 suggest a non-perennial location, values close to 0.5 are subject to error.

[3] Per DNRC (2018) and DNRC (2019) hydraulic connection of individual stream reaches to ground water is evaluated by comparing streambed elevations to static ground water elevations measured in MBMG GWIC wells less than 50 ft deep and within 1,000 ft of surface water or from published water table maps. Surface water within that area is considered hydraulically connected to the unconfined aquifer if static ground water elevations are above or within 10 ft of the elevation of the stream bed.

[4]Water table maps from Waren and LaFave (2011) suggest groundwater discharge to Cottonwood Creek west of Interstate-90, and groundwater flow that is parallel to Johnson Creek along its entirety.

[5] Review of Gridded National Soil Survey Geographic Database (SSURGO (NRCS, 2025)) to identify hydric soils or shallow water tables near surface water sources.

WSB Scientific Findings

Based on the review of the published information in **Table 3**, Cottonwood Creek is the nearest hydraulically connected surface water source. Johnson Creek, a nearby intermittent source, is not considered hydraulically connected surface water source.

3.3 Location of Return Flows

The location of return flows from 31.07 acres of historical irrigation is Cottonwood Creek downstream of NWSESW Section 34, Township 08 North, Range 09 West, Powell County (**Figure 1**). The Applicant proposes to leave the total diverted volume of water used for historical irrigation of 31.07 acres instream at the historical point of diversion located in the SWSWSE Section 34, Township 08 North, Range 09 West.

As identified in **Figure 1** the starting point of return flow is to NWSESW Section 34, Township 08 North, Range 09 West, Powell County.

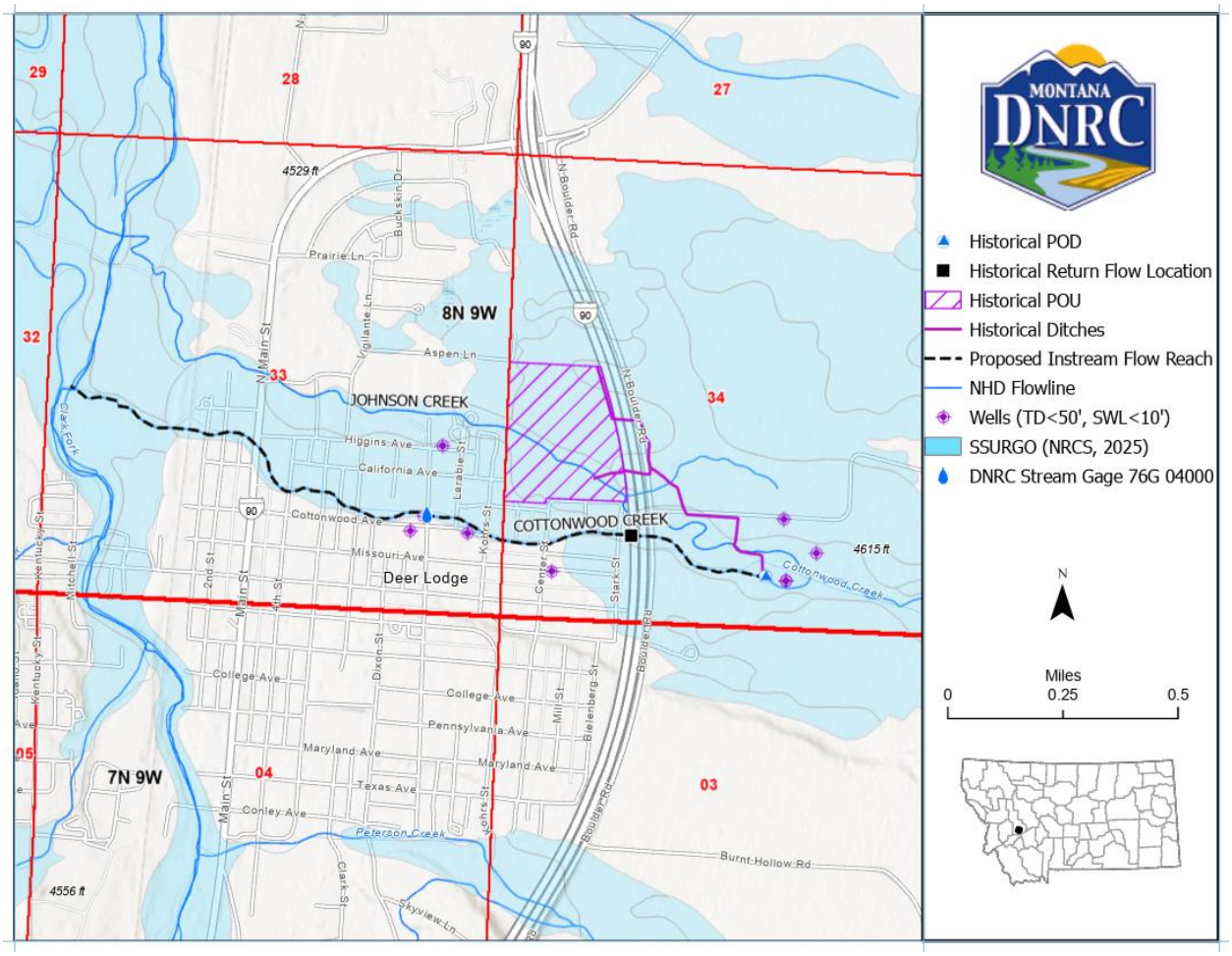

Figure 1: Historical and proposed project information, and data used to identify hydraulic connection.

Review

This document has been reviewed on August 11, 2025 in accordance with Category 7 of DNRC's Water Sciences Bureau Minimum Standards of Review, Version 2, February 2024.

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