DNRC Helena Regional Office
PO Box 201601
Helena, MT 59620-601

November 13, 2026

Big Hole River Preserve LLC
117 W. Patrick St STE 200
Frederick, MD 21701-5798

Subject: Correct and Complete Application for Change 41D 30174940

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
Water Resources Division
406-444-6602
rgates@mt.gov

cc: Andy Brummond, MT DFWP (e-mail)

APPLICATION TO CHANGE A WATER RIGHT

§ 85-2-302, MCA

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

For Department Use Only

RECEIVED

OCT 02 2026

DNRC-HRO

payment rec'd 10/02/2026

Application # 30174940 Basin 41D

Priority Date _____ Time _____ AM/PM

Rec'd By RG

Fee Rec'd $ 1000 Check # Inter-unit

Deposit Receipt # IUT2707859

Payor MT DFWP

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 Big Hole River Preserve LLC

Mailing Address 117 W Patrick St. Ste. 200 City Frederick State MD Zip 21701-5798

Phone Numbers: Home _____ Work _____ Cell 301-676-8444

Email Address cre@atlasrealestateco.com & admin@atlasrealestateco.com

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 Andy Brummond, Montana Fish, Wildlife & Parks

Mailing Address PO BOX 938 City Lewistown State MT Zip 59457

Phone Numbers: Home _____ Work 406-708-7223 Cell _____

Email Address abrummond@mt.gov

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.

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*	
41D 93270-00	15.0	☐	☑	15.0	☐	☑	Headgate
		☐	☐		☐	☐	
		☐	☐		☐	☐	
		☐	☐		☐	☐	
		☐	☐		☐	☐	

14. Is the source surface water or groundwater? Surface Water

15. What is the source name? Johnson Creek

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

Water Right No.	41D 93270-00				
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
P1	sw	ne	nw	19	1N	11W	Silver Bow						Unchanged
P2	se	sw	se	13	1N	12W	Silver Bow						New

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
NW	NE	NE	NW	19	1N	11W	Silver Bow					

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.

Headgate - Water is directed into the Mallon Ditch by a riffle in the Big Hole River.

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?

No acres will be added - no change in geocode	
Acres being retired are within existing geocode	

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
See	Attached							
	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?
Claim 41D 93721-00 from the Big Hole River irrigates the same area as the claim except for 6 ac. The Big Hole River point of diversion will be added to the Johnson Creek claim being changed to reduce the amount of water diverted directly from Johnson Creek and instead divert it from the Big Hole River.

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*
41D 93271-00	5/15	9/30	9.55	☐	☑	1,224.1AF
				☐	☐	
				☐	☐	
				☐	☐	

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.

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.
Both diversion will have functioning headgates that will effectively reduce or cease diversion when a valid call is made.

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

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.
The proposed change will not affect the ability to make call. The flow rate and volumes diverted will not exceed the historic amounts so the demand other water users will remain unchanged and hence the ability to call other water users will remain unchanged.

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.

29. When was the last time each water right proposed for change was appropriated and used beneficially?
2026

IF THERE HAS BEEN A PERIOD OF NONUSE,

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

29.b. Why will a resumption of use 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.

The Mallon Ditch diverting from the Big Hole River has sufficient capacity to divert the existing water right 41D 93271-00 owned by the applicant and 10.0 cfs from Claim 41D 93270-00. See attached App #30.a Additional Information - Mallon Ditch

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?

The proposed point of diversion is an existing diversion on the Big Hole River upstream of the confluence of Johnson Creek with the Big Hole River.

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.

Water Reservation 41D 30017409, Statement of Claim 41D 93288-00, Statement of Claim 41D 93265-00, Statement of Claim 41D 93290-00 Please attached consent from FWP.

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.

The South Johnson Ditch diversion will be replaced with a new step pool diversion and 48" wide x 24" high slide gate. The Mallon Ditch diversion from the Big Hole River will remain unchanged, retaining the 10' wide x 3.5 ft. high pin and plank headgate. Additional information is attached.

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.

The existing Mallon Ditch and South Johnson Ditch as previously described will continue to be used to convey water from the points of diversion to the place of use.

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

35.a. If yes, explain.

The ditches are already in place. The additional point of diversion for claim 41D 93270-00 added for the Mallon Ditch from the Big Hole River would not increase the diversion or ditch size as they are already sufficient and would not physically enlarge the scope of the existing prescriptive easement.

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.

The use of claim 41D 93270-00 will be limited to the historic total flow rate of 15.0 cfs and volume of 327.8 AF of which the diversion from Johnson Creek will be limited to 5.0 cfs and the diversion from the Big Hole River limited to10.0 cfs under this right. An additional 9.55 cfs will be diverted from the Big Hole River under claim 41d 93271-00.

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.
Wild Flood Irrigation - Climatic Area 5, Period of Use May 15- September 30 is within standard.
Please see attachment for additional information.

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.

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.

_____

_____

_____

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)? 5 years

46. Describe why this amount of time is needed to complete this project.

While it is hoped the project will be completed quickly, potential delays in contracting, construction and funding requires up to 5 years to complete the project.

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 Edward D. Scott

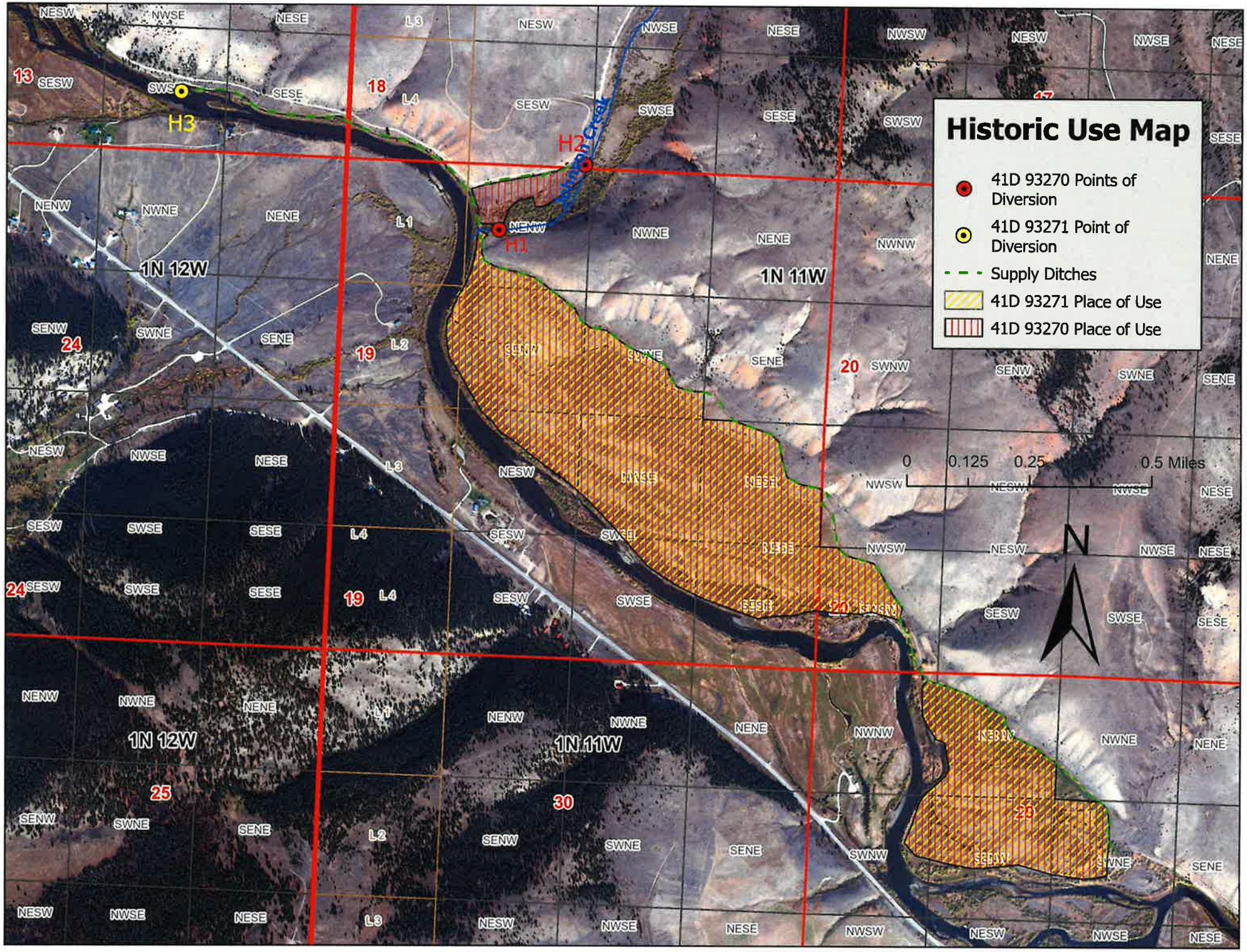
Applicant Signature _____ Date: 9/23/2026

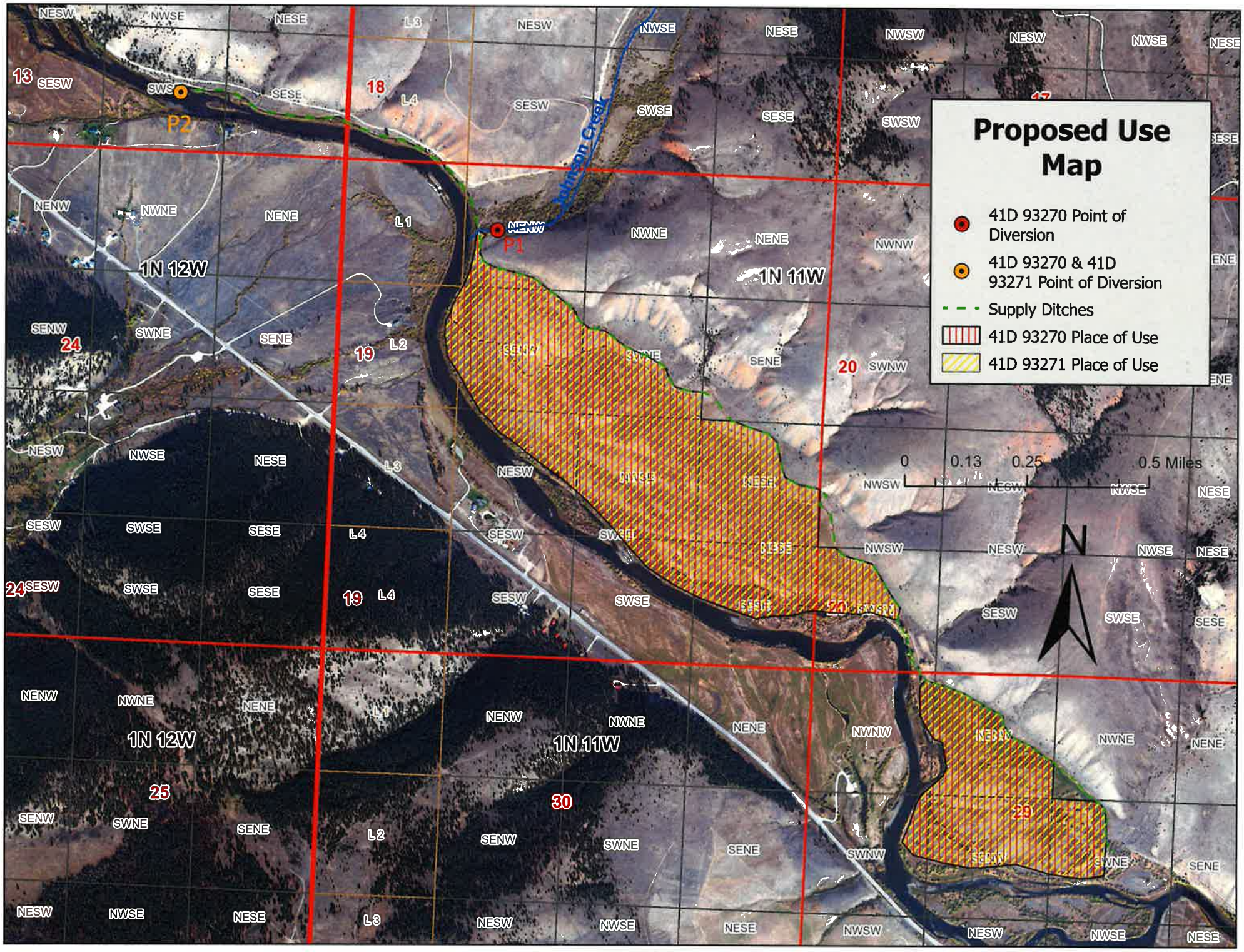
Printed Name _____

Applicant Signature _____ Date: _____

Printed Name _____

Applicant Signature _____ Date: _____


Historic Use Map
41D 93270 Points of Diversion
41D 93271 Point of Diversion
Supply Ditches
41D 93271 Place of Use
41D 93270 Place of Use
H1
H2
H3
Willow Creek
1N 12W
1N 11W
0
0.125
0.25
0.5 Miles
N


Proposed Use Map
41D 93270 Point of Diversion
41D 93270 & 41D 93271 Point of Diversion
Supply Ditches
41D 93270 Place of Use
41D 93271 Place of Use
0 0.13 0.25 0.5 Miles
N
Johnson Creek
P1
P2
1N 12W
1N 11W
13
18
19
20
24
25
29
30

App #20.b

Place of Use:

ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1	18.00		SWNE	19	1N	11W	SILVER BOW
2	4.00		S2NENW	19	1N	11W	SILVER BOW
3	37.00		SENW	19	1N	11W	SILVER BOW
4	6.00		E2SWNW	19	1N	11W	SILVER BOW
5	94.00		SE	19	1N	11W	SILVER BOW
6	13.00		NESW	19	1N	11W	SILVER BOW
7	11.50		W2SW	20	1N	11W	SILVER BOW
8	8.00		NWSWNE	29	1N	11W	SILVER BOW
9	44.00		E2NW	29	1N	11W	SILVER BOW
10	5.00		E2W2NW	29	1N	11W	SILVER BOW

Total: 240.50

App #25

Diversion under claim 41D 93270-00 will be limited to 327.8 AF, the amount of historic use found in DNRC's Technical Analysis. As this amount is the limit of the right and will be found on the water right abstract as changed, there is no need to include a special condition on the change authorization limiting the volume diverted to that displayed on the water right abstract. As with any other water right, it will be restricted to the volume approved. No special circumstances exist beyond that which exist for any other water right that would require this water use to be measured to prevent adverse effects to other water users. Like other rights, measurement would occur if a water commissioner were appointed.

The balance of the water needed for irrigation will be provided by claim 41D 93271-00 from the Big Hole River supplying its historic flow rate of 9.55 cfs up to a diverted volume of 1,224.1 AF. The diverted volume consists of 539.1 AF applied to the field as found in Table 11 of the Technical Analysis and 685.0 AF of conveyance loss which was calculated using the ditch attributes for conveying 9.55 cfs and the loss coefficients found in Table 13 over 139 days.

Water will be measured in Johson Creek at the DNRC gage site Johnson Creek nr BLM Boundary 41D 08100, upstream of the South Johnson Diversion. The South Johnson Diversion will be measured using a staff gage in the pool, headgate opening and submerged orifice equation to determine the flow rate diverted. The flow rate diverted from Johnson Creek will be subtracted from the flow at the upstream gage site to calculate the flow reaching the Big Hole River. Diversion under 41D 93270-00 from the Big Hole River will be limited to this amount up to 10.0 cfs.

Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, Jan 6 2026

RIVER DITCH STA: 4+04

User-defined

Invert Elev (ft)	= 5676.79
Slope (%)	= 0.05
N-Value	= Composite

Calculations

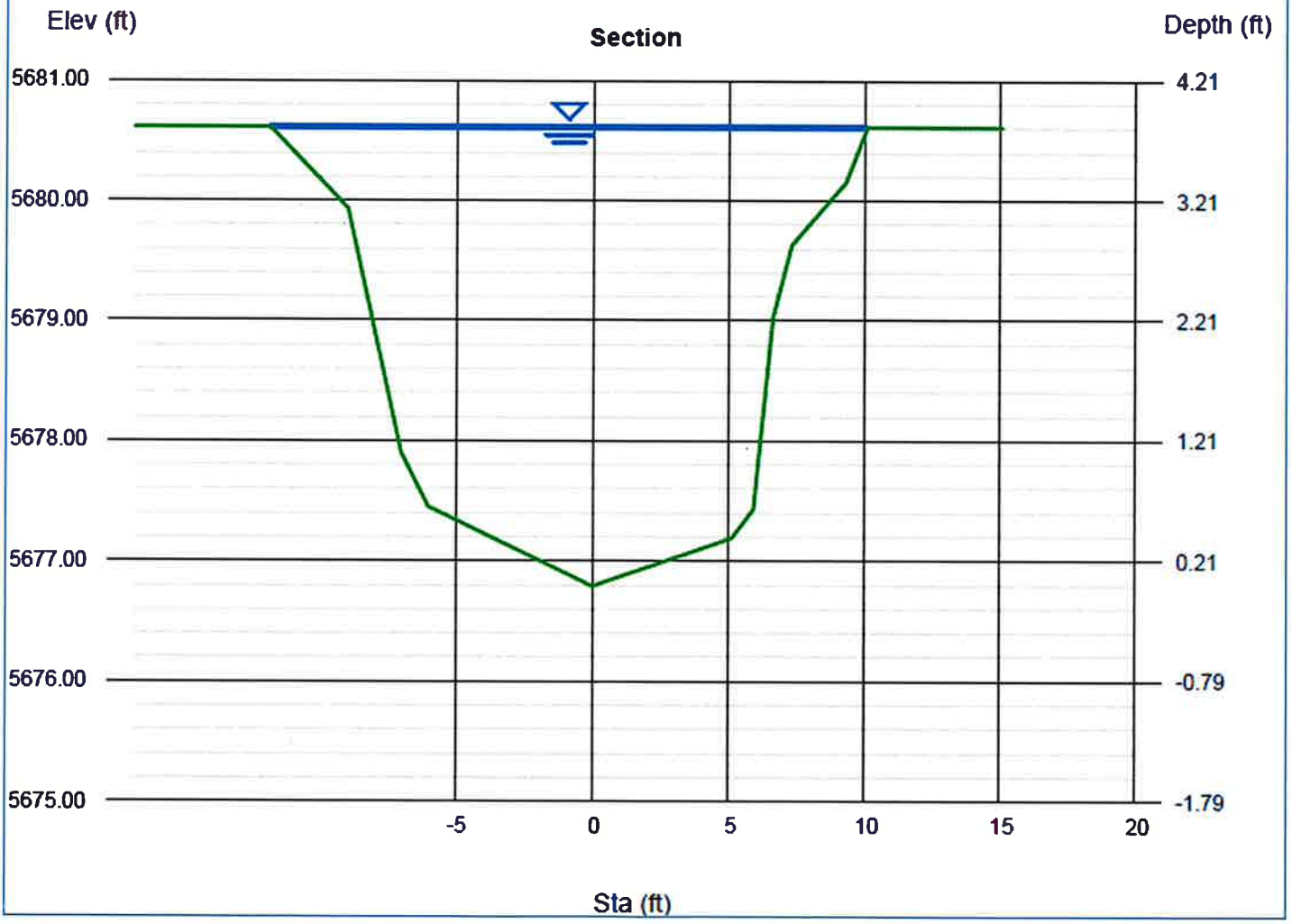
Compute by:	Q vs Depth
No. Increments	= 10

Highlighted

Depth (ft)	= 3.82
Q (cfs)	= 43.20
Area (sqft)	= 53.86
Velocity (ft/s)	= 0.80
Wetted Perim (ft)	= 24.58
Crit Depth, Yc (ft)	= 1.04
Top Width (ft)	= 22.00
EGL (ft)	= 3.83

(Sta, El, n)-(Sta, El, n)...

(-11.91, 5680.61)-(5.14, 5677.19, 0.070)-(5.95, 5677.43, 0.070)-(6.85, 5679.03, 0.070)-(7.33, 5679.63, 0.070)-(9.31, 5680.15, 0.070)-(10.09, 5680.61, 0.070)



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Jan 15 2026

RIVER DITCH STA: 4+04

User-defined

Invert Elev (ft)	= 5676.79
Slope (%)	= 0.05
N-Value	= 0.070

Calculations

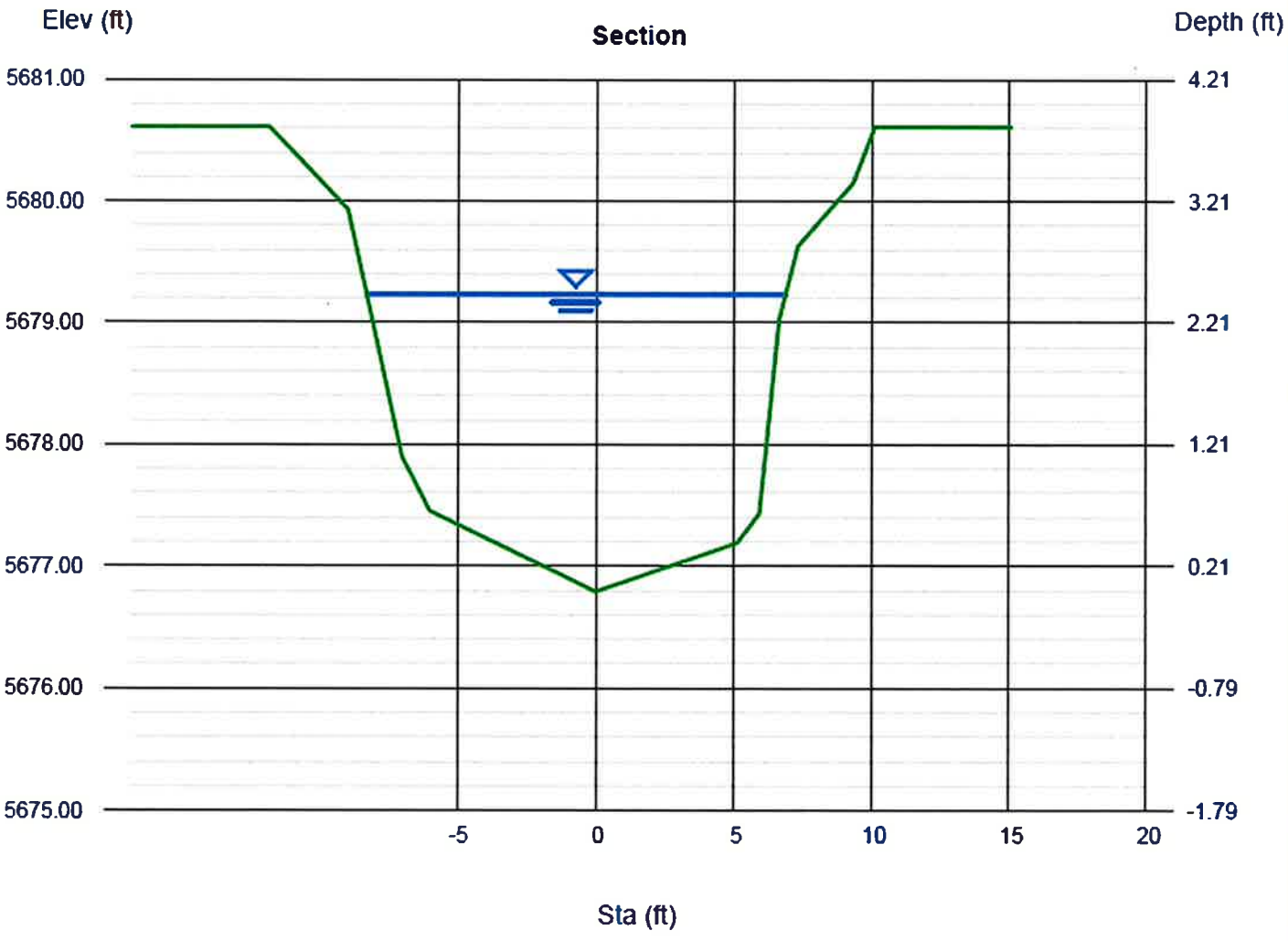
Compute by:	Known Q
Known Q (cfs)	= 19.55

Highlighted

Depth (ft)	= 2.44
Q (cfs)	= 19.55
Area (sqft)	= 29.01
Velocity (ft/s)	= 0.67
Wetted Perim (ft)	= 17.11
Crit Depth, Yc (ft)	= 0.73
Top Width (ft)	= 15.24
EGL (ft)	= 2.45

(Sta, El, n)-(Sta, El, n)...

(-11.91, 5680.61)-(5.14, 5677.19, 0.070)-(5.95, 5677.43, 0.070)-(6.65, 5679.03, 0.070)-(7.33, 5679.63, 0.070)-(9.31, 5680.15, 0.070)-(10.09, 5680.61, 0.070)



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Jan 15 2026

RIVER DITCH STA: 4+04

User-defined

Invert Elev (ft)	= 5676.79
Slope (%)	= 0.05
N-Value	= 0.070

Calculations

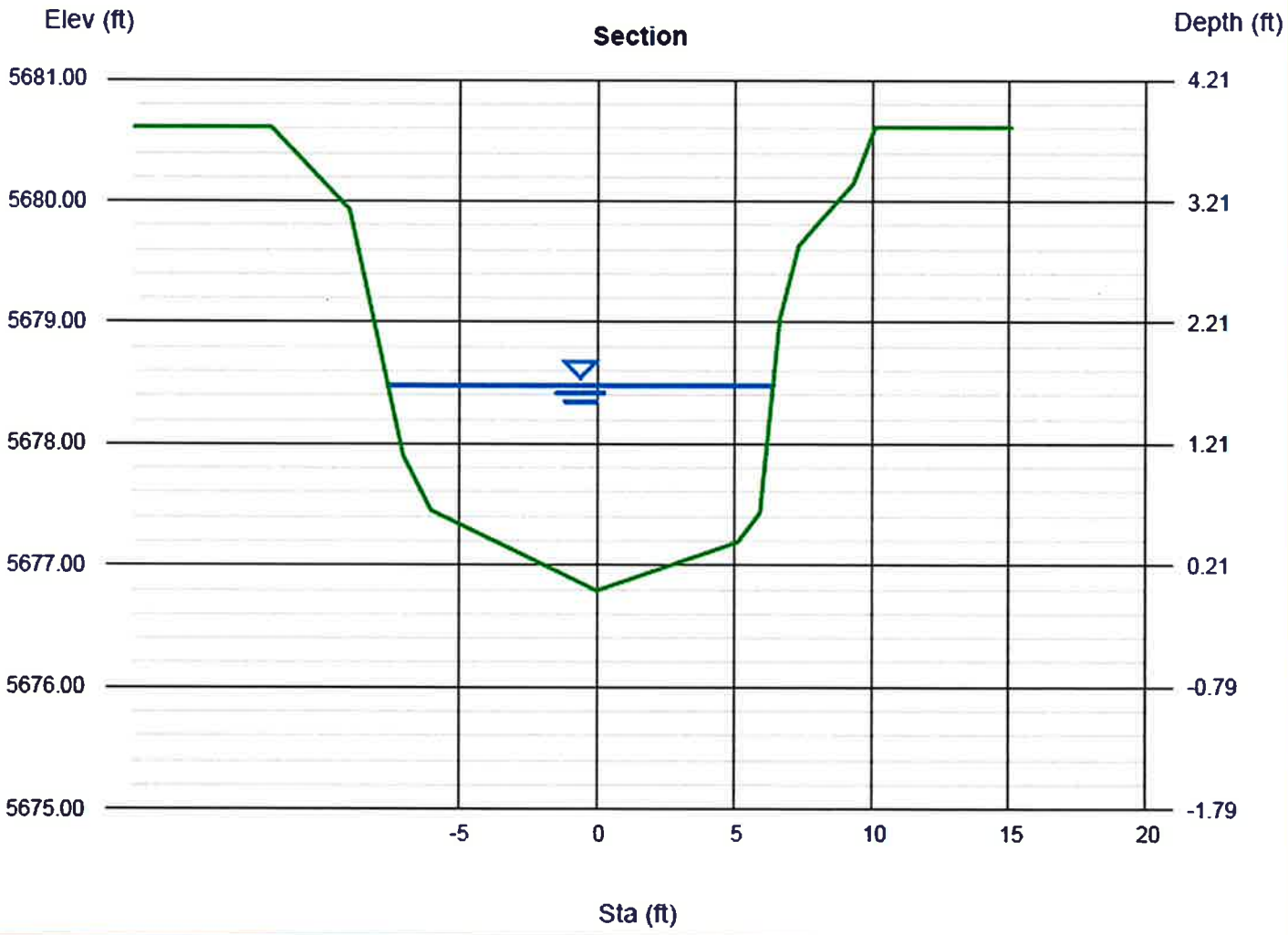
Compute by:	Known Q
Known Q (cfs)	= 9.55

Highlighted

Depth (ft)	= 1.69
Q (cfs)	= 9.550
Area (sqft)	= 18.07
Velocity (ft/s)	= 0.53
Wetted Perim (ft)	= 15.16
Crit Depth, Yc (ft)	= 0.54
Top Width (ft)	= 14.05
EGL (ft)	= 1.69

(Sta, El, n)-(Sta, El, n)...

(-11.91, 5680.61)-(5.14, 5677.19, 0.070)-(5.95, 5677.43, 0.070)-(6.65, 5679.03, 0.070)-(7.33, 5679.63, 0.070)-(9.31, 5680.15, 0.070)-(10.09, 5680.61, 0.070)



The Montana Department of Natural Resources & Conservation

For Department Use Only

Consent to Approval of Application

85-2-311, -320, -360, -402, -407, & -408, MCA
Form No. 670 (*Revised 10/2025*)

Application # _____ Basin _____
Received Date _____
Received By _____

INFORMATION

Use this form to provide written consent to approval of an application for a permit pursuant to 85-2-311, MCA or change authorization pursuant to 85-2-402, MCA (application types 600 and 606, respectively).

The applicant will not be required to prove a lack of adverse effect for any water right(s) identified in this Consent to Approval of Application. When the Department conducts their criteria assessment for the application, they will not conduct an adverse effect analysis for any water right(s) identified in this Consent to Approval of Application.

If a water right has more than one owner, all owners must submit a Consent to Approval of Application for the Consent to Approval to take effect for a given water right. Owners may submit separate forms if desired.

You may submit additional information on a separate sheet if the space provided below is insufficient.

---

1. **Water Right Owner Information**

Name State of Montana, Department of Fish, Wildlife & Parks

Mailing Address P.O. Box 200701

City Helena State MT Zip 59620-0701

Phone _____ Email _____

Name _____

Mailing Address _____

City _____ State _____ Zip _____

Phone _____ Email _____

2. **The individuals listed in subsection 1 hereby consent to excluding the water rights listed herein from evaluation of adverse effect for the application listed in subsection 3 of this Consent to Approval of Application.**

Water Right # Water Reservation 41D 30017409 (see addendum)

Water Right # _____

Water Right # _____

Water Right # _____

3. **Identify the application for which this Consent to Approval of Application is being submitted.**

Application # Change Application 41D 30174940

Signatures

I DECLARE UNDER PENALTY OF PERJURY AND UNDER THE LAWS OF THE STATE OF MONTANA THAT THE FOREGOING IS TRUE AND CORRECT.

Water Right Owner Signature Christy Clark Date 5/18/2026

Printed Name Christy Clark, Director of Montana Fish, Wildlife & Parks

Water Right Owner Signature _____ Date _____

Printed Name _____

Water Right Owner Signature _____ Date _____

Printed Name _____

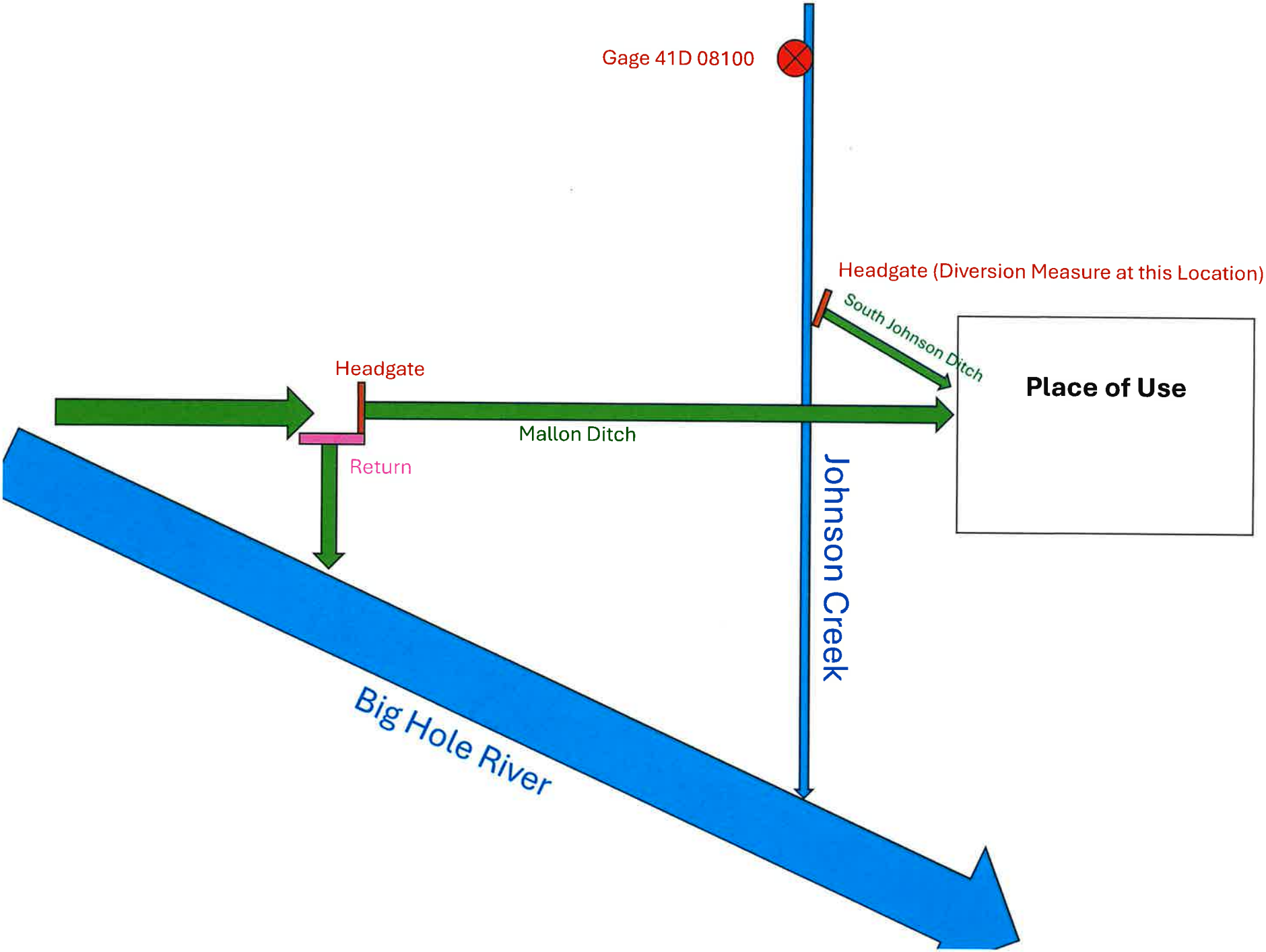
Water Right Owner Signature _____ Date _____

Printed Name _____

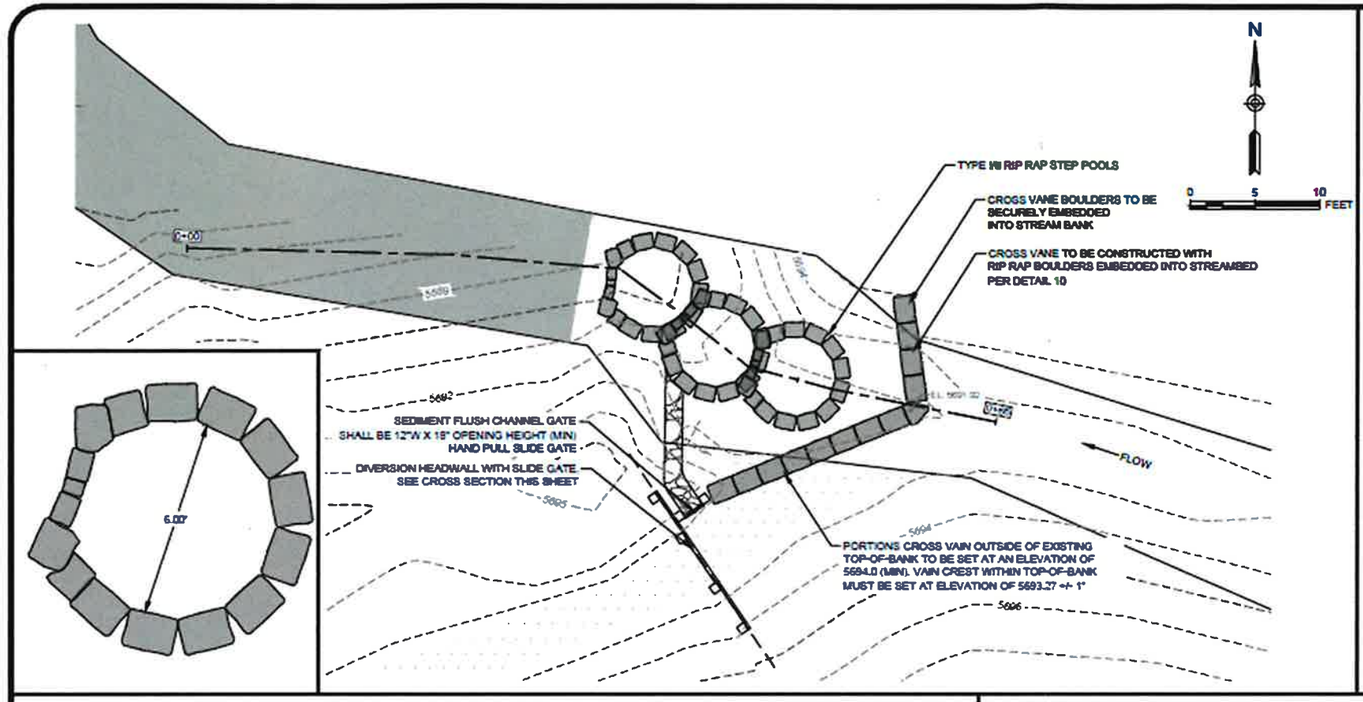
ADDENDUM TO DNRC FORM 670
(Change Application 41D 30174940 – Johnson Creek)

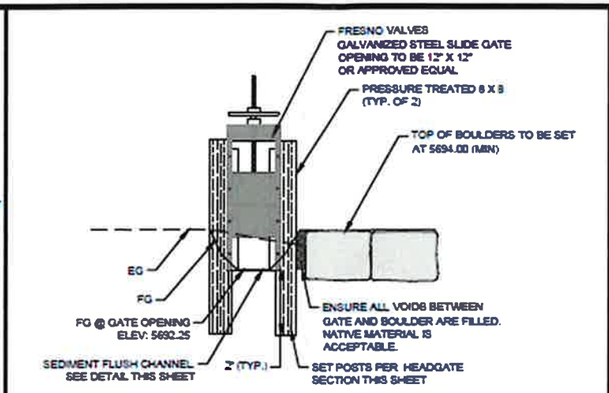
Montana Department of Fish, Wildlife & Parks' consent to approve Change Application 41D 30174940 is expressly contingent on Big Hole River Preserve, LLC limiting diversion of water from Johnson Creek to no more than 5.0 cfs under Statement of Claim 41D 93270-00, as proposed in the change application submitted.

App #32 Operational Diagram

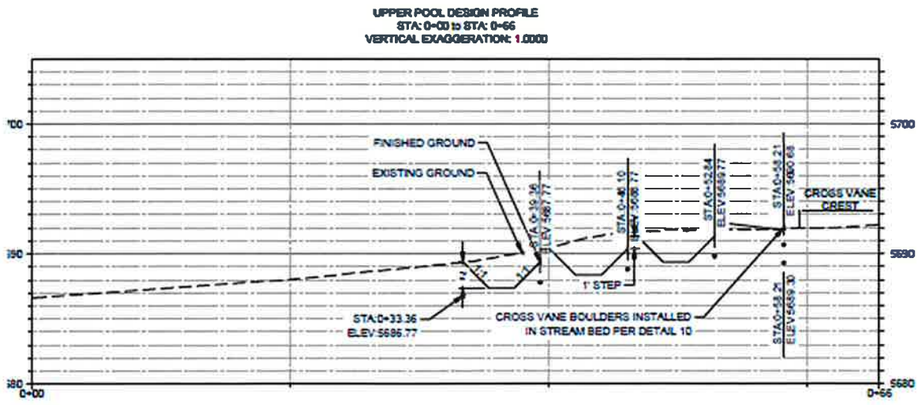


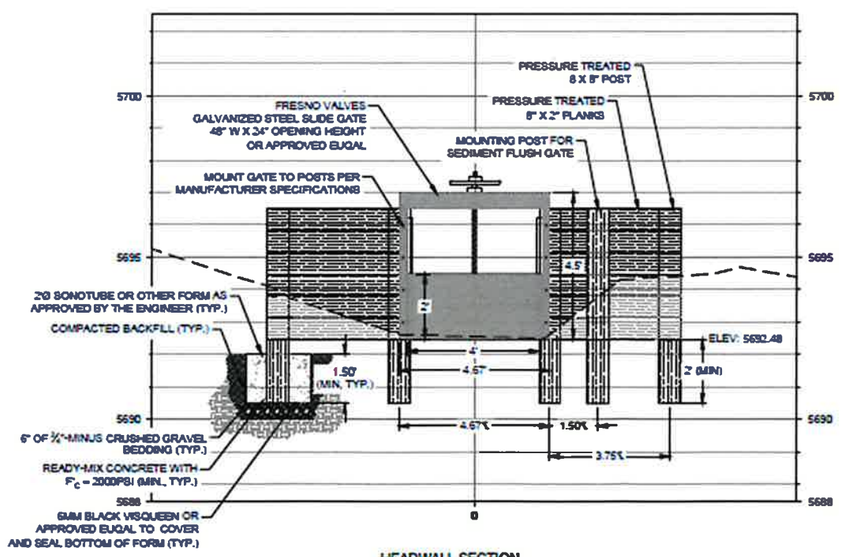
App# 33 Additional Information – Johson Creek Diversion H1 / P1





SEDIMENT FLUSH GATE AND CHANNEL
SCALE: NTS





HEADWALL SECTION
SCALE: 1"=2'

PRELIMINARY
NOT FOR CONSTRUCTION

99% DESIGN

UPPER STEP POOLS

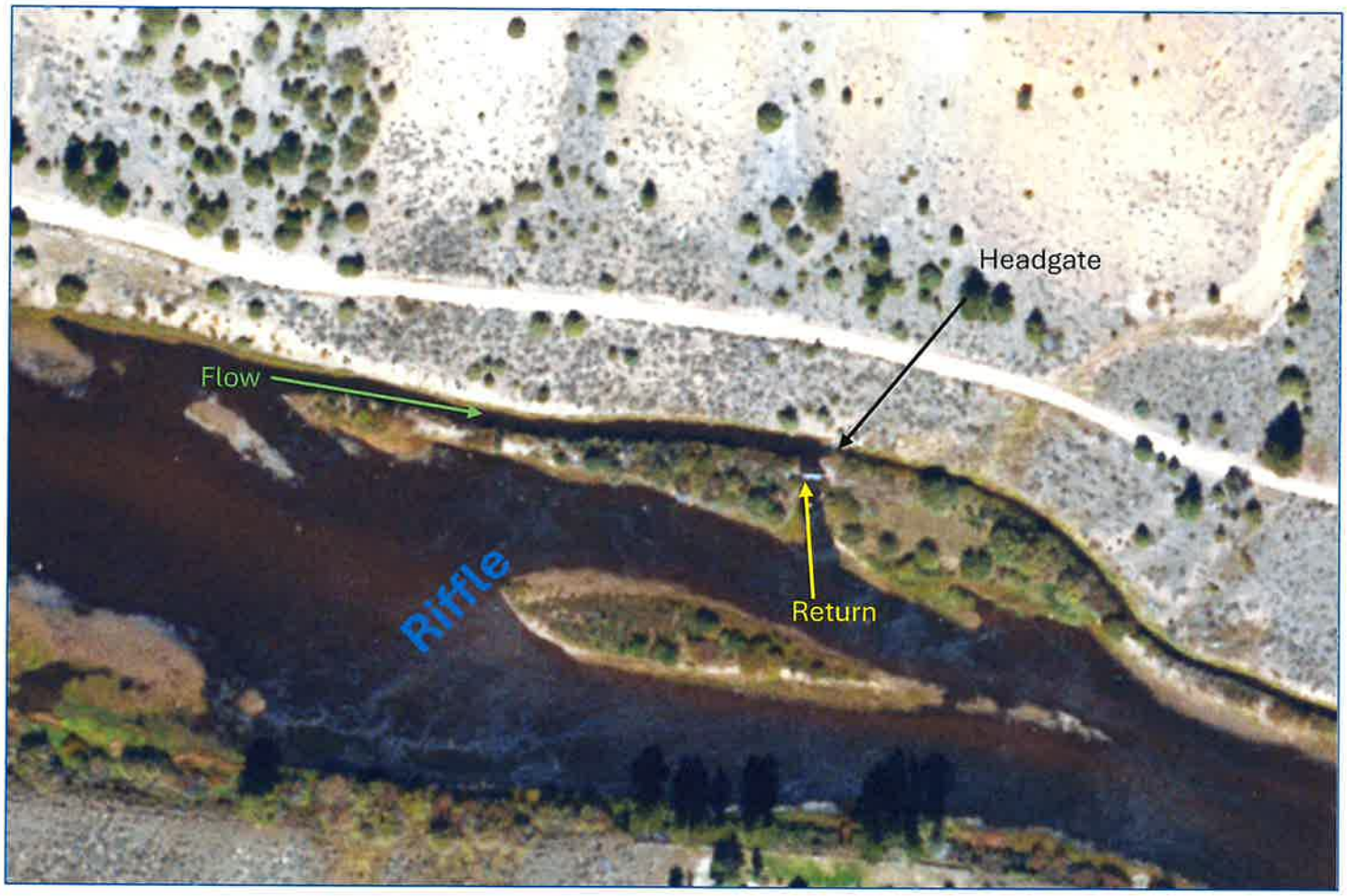
PROJECT NAME: JOHNSON CREEK FISH PASSAGE
LOCATION: BUTTE-SILVER BOW COUNTY, MONTANA
FILE NO: SC-P001-MTFWP(M07)(xxx)

JOB NO: MTFWP(M07)
DATE: 2/25/21
DRAFTER: SB
CHECKED BY: SF
SHEET
C8

M:\MTFWP\M07-JOHNSON CREEK\CAD\CVA\C-PP01-MTFWP\M07.dwg PLOT DATE:2/25/2021 12:09 PM USER: JBEATON

App# 33 Additional Information – Mallon Ditch Big Hole Diversion H3 / P2

The Mallon Ditch headgate consists of a pin and plank headgate 10 ft. wide by 3.5 ft. tall. Water is diverted into the upper ditch by what appears to be a natural riffle. Immediately above the headgate, excess diversion is returned to the river. A pin and plank structure on the return controls the water level in the ditch at the headgate to ensure adequate head is available to supply the ditch.



The Mannings equation estimate of flow through the headgate indicated the requested 19.55 cfs flow rate could be achieved at a depth of only 1.39 ft. However, the downstream ditch would likely control the flow through the headgate at a depth of 2.44 ft. do carry 19.55 cfs.

Mallon Ditch Headgate

slope=	0.0005	depth=	1.39
Hydraulic radius=	1.088	Area=	13.9
Mannings n =	0.025	Wet P=	12.8
V(ft/s)=	1.406		
Q (cfs)=	19.539		

Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Jan 15 2026

RIVER DITCH STA: 4+04

User-defined

Invert Elev (ft)	= 5676.79
Slope (%)	= 0.05
N-Value	= 0.070

Calculations

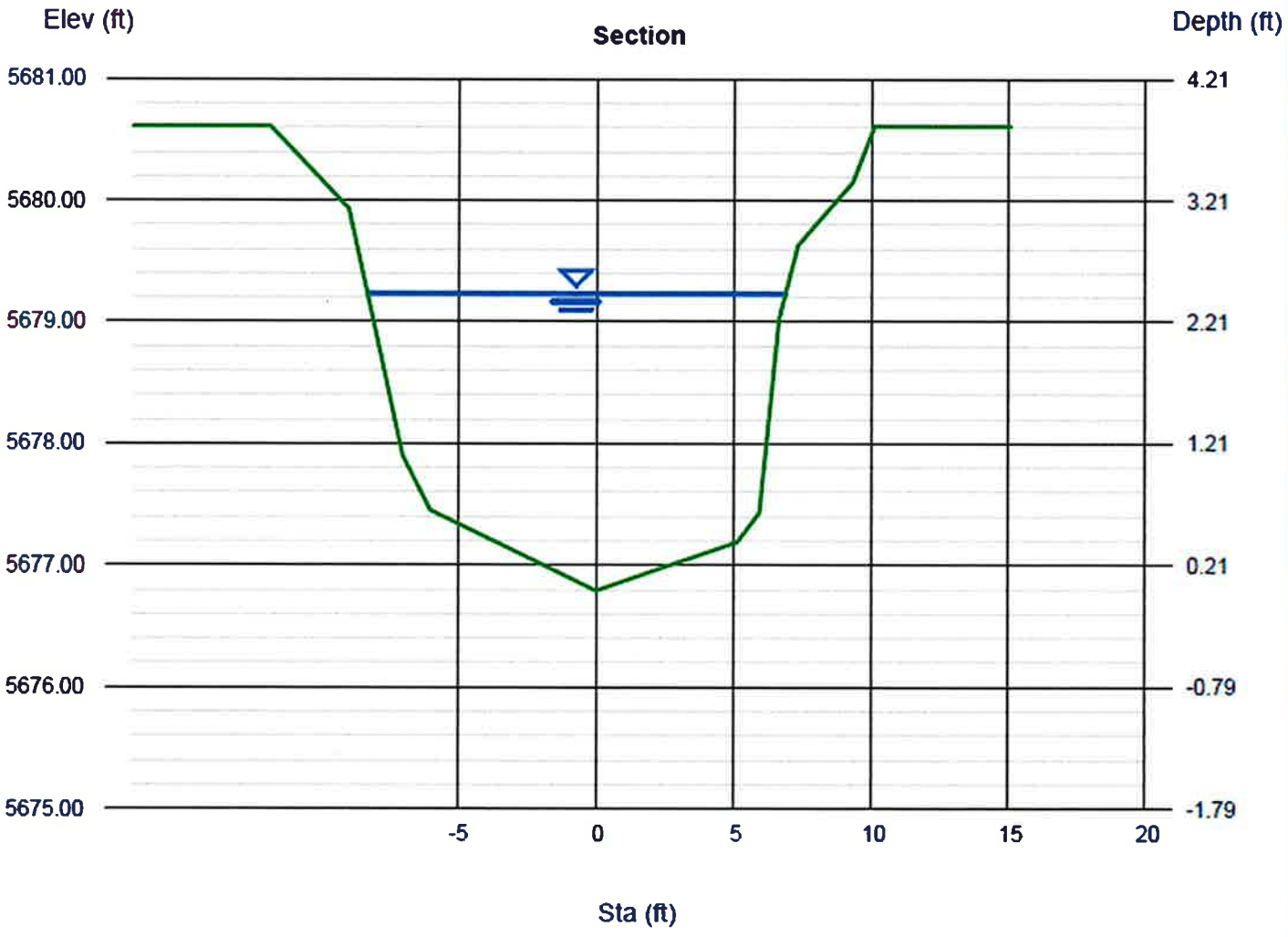
Compute by:	Known Q
Known Q (cfs)	= 19.55

Highlighted

Depth (ft)	= 2.44
Q (cfs)	= 19.55
Area (sqft)	= 29.01
Velocity (ft/s)	= 0.67
Wetted Perim (ft)	= 17.11
Crit Depth, Yc (ft)	= 0.73
Top Width (ft)	= 15.24
EGL (ft)	= 2.45

(Sta, El, n)-(Sta, El, n)...

(-11.91, 5680.61)-(5.14, 5677.19, 0.070)-(5.95, 5677.43, 0.070)-(6.65, 5679.03, 0.070)-(7.33, 5679.63, 0.070)-(9.31, 5680.15, 0.070)-(10.09, 5680.61, 0.070)





Mallon Ditch Headgate looking down-ditch. 1-26-2026 Anthony Zenga, FWP



Mallon Ditch Headgate looking up-ditch. 1-26-2026 Anthony Zenga, FWP



Mallon Ditch return to river with headgate in foreground. 1-26-2026 Anthony Zenga, FWP

App #37.a

The additional point of diversion added for the Mallon Ditch from the Big Hole River would not increase the ditch size as it is already sufficient and would not effectively enlarge the scope of the existing prescriptive easement. The ditch is shown being present in the 1955 Silver Bow County Water Resources Survey and the location of the ditch is generally consistent with the description provided in the 1889 Notice of Appropriation serving as the basis for Claim 41D 93271-00 that already uses the ditch.

App# 40.a

The proposed volume for use under claim 41D 93270-00 of 327.8 AF plus that for 41D 93271-00 of 1,224.1 AF results in an estimated field delivery of 761.0 AF as compared to the 841.1 AF found in Table 11. The Irrigation Water Requirements (IWR) data for the Divide weather station found in Table 1 of ARM 36.12.1902(16) indicates an 80% dry year flood irrigation seasonal evapotranspiration of 15.25 in. based on effective growing season precipitation experience in 8 out of 10 years. A review of the same IWR analysis for a 50% normal year indicates an evapotranspiration value of 14.09 in. or 92.4% of the dry year value. This means in a normal year a field delivery of 777.2 AF is needed which is just slightly over the estimated field delivery of 761.0 AF under the proposed change. This shows the proposed field delivery of 761.0 AF between the two rights is adequate to beneficially irrigate the 240.5-acre place of use.

Irrigation Water Requirements

Crop Data Summary

Job: **Silver Bow County**
Location: Divide
By: DNRC
Weather Station: DIVIDE 2 NW
Latitude: 4546 Longitude: 11247
Computation Method: Blaney Criddle (TR21)
Crop Curve: Blaney Criddle Perennial Crop
Begin Growth: 5/22 End Growth: 9/18

Crop: **Alfalfa Hay**
County: Silver Bow, MT
Date: 07/14/26
Sta No: MT2421
Elevation: 5410 feet above sea level

Net irrigation application: 4 inches
Estimated carryover moisture used at season:
Begin: 1 inches End: 1 inches

Month	Total Monthly ET (3) inches	Dry Year 80% Chance (1)		Normal Year 50% Chance (1)		Average Daily ETc inches	Peak Daily ETPk inches
		Effective Precipitation inches	Net Irrigation Reqirements inches (2)	Effective Precipitation inches	Net Irrigation Reqirements inches (2)		
January	0.00	0.00	0.00	0.00	0.00	0.00	
February	0.00	0.00	0.00	0.00	0.00	0.00	
March	0.00	0.00	0.00	0.00	0.00	0.00	
April	0.00	0.00	0.00	0.00	0.00	0.00	
May	1.28	0.28	0.00	0.38	0.00	0.13	
June	5.12	1.09	4.02	1.47	3.55	0.17	0.18
July	6.60	0.80	5.80	1.07	5.53	0.21	0.23
August	5.59	0.81	4.78	1.09	4.50	0.18	0.20
September	1.99	0.34	0.64	0.46	0.53	0.11	
October	0.00	0.00	0.00	0.00	0.00	0.00	
November	0.00	0.00	0.00	0.00	0.00	0.00	
December	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL	**20.57**	**3.33**	**15.25**	**4.48**	**14.09**		

(1) For 80 percent occurrence, growing season effective precipitation will be equaled or exceeded 8 out of 10 years. For 50 percent chance occurrence, effective precipitation will be equaled or exceeded 1 out of 2 years.

(2) Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moiature used at the end of the growing season.

(3) ET Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

The Montana Department of Natural Resources & Conservation

For Department Use Only

RECEIVED

OCT 02 2026

DNRC-HRO

Consent to Approval of Application

85-2-311, -320, -360, -402, -407, & -408, MCA

Form No. 670 (*Revised 10/2025*)

Application # 30174940 Basin 41D

Received Date 10-2-26

Received By HRO - ZEA

INFORMATION

Use this form to provide written consent to approval of an application for a permit pursuant to 85-2-311, MCA or change authorization pursuant to 85-2-402, MCA (application types 600 and 606, respectively).

The applicant will not be required to prove a lack of adverse effect for any water right(s) identified in this Consent to Approval of Application. When the Department conducts their criteria assessment for the application, they will not conduct an adverse effect analysis for any water right(s) identified in this Consent to Approval of Application.

If a water right has more than one owner, all owners must submit a Consent to Approval of Application for the Consent to Approval to take effect for a given water right. Owners may submit separate forms if desired.

You may submit additional information on a separate sheet if the space provided below is insufficient.

---

1. **Water Right Owner Information**

Name State of Montana, Department of Fish, Wildlife & Parks

Mailing Address P.O. Box 200701

City Helena State MT Zip 59620-0701

Phone _____ Email _____

Name _____

Mailing Address _____

City _____ State _____ Zip _____

Phone _____ Email _____

2. **The individuals listed in subsection 1 hereby consent to excluding the water rights listed herein from evaluation of adverse effect for the application listed in subsection 3 of this Consent to Approval of Application.**

Water Right # Water Reservation 41D 30017409 (see addendum)

Water Right # _____

Water Right # _____

Water Right # _____

3. **Identify the application for which this Consent to Approval of Application is being submitted.**

Application # Change Application 41D 30174940

Signatures

I DECLARE UNDER PENALTY OF PERJURY AND UNDER THE LAWS OF THE STATE OF MONTANA THAT THE FOREGOING IS TRUE AND CORRECT.

Water Right Owner Signature Christy Clark Date 5/18/2026

Printed Name Christy Clark, Director of Montana Fish, Wildlife & Parks

Water Right Owner Signature _____ Date _____

Printed Name _____

Water Right Owner Signature _____ Date _____

Printed Name _____

Water Right Owner Signature _____ Date _____

Printed Name _____

ADDENDUM TO DNRC FORM 670
(Change Application 41D 30174940 – Johnson Creek)

Montana Department of Fish, Wildlife & Parks' consent to approve Change Application 41D 30174940 is expressly contingent on Big Hole River Preserve, LLC limiting diversion of water from Johnson Creek to no more than 5.0 cfs under Statement of Claim 41D 93270-00, as proposed in the change application submitted.

DNRC Helena Regional Office
PO Box 201601

June 9, 2026

Big Hole River Preserve LLC

117 W Patrick St. Ste. 200

Frederick, MD 21701-5798

Subject: Completed Technical Analyses Report for Change Preapplication No. 76 30174940

Dear Applicant,

As designated on the submitted Preapplication Meeting Form per §85-2-302(3)(b), MCA, the Department of Natural Resources and Conservation (DNRC or Department) has completed the technical analyses for Change Preapplication No. 76G 30174940 based on the information provided in your Preapplication Meeting Form accepted by the Department on April 27, 2026. The technical analyses can be found in the attached report. Please note this Change Preapplication Technical Analyses Report is a two-part publication, comprised of a Part A completed by Russ Gates, Helena Regional Office, and a Part B completed by Kristal Kiel, Water Sciences Bureau.

This Technical Analyses Report **IS**: A collection of facts that the DNRC has gathered, including content provided in the Preapplication Meeting Form materials. The Department will use these data to analyze the criteria in §85-2-402, MCA if you submit an application for the project described in the completed Preapplication Meeting Form.

This Technical Analyses Report **IS NOT**: An analysis or discussion of whether the Preapplication Meeting Form as filed meets the criteria (§85-2-402, MCA).

You have 180 days to submit the Water Right Change Application Form 606 considering the information provided in the technical analyses and Preapplication Meeting Form. If the Application Form is not submitted to the Helena Regional Office by December 6, 2026, a new preapplication meeting will be required to process the Application with expedited timelines (ARM 36.12.1302(6)(b)). If any details described in the submitted Application are changed from that of the submitted Preapplication Meeting Form, the discounted filing fee and expedited timelines will not apply (ARM 36.12.1302(6)(a)). Please note that the technical analyses will expire one year from the date of this letter (ARM 36.12.1302(8)).

Please let me know if you have any questions.

Russ Gates

Hydrologist/Water Resource Specialist

Helena Regional Office

406-44-6602

Surface Water Change Technical Analyses Report-Part A

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

Applicant	Big Hole River Preserve LLC
Application No.	41D 30174940
Proposed Point of Diversion	SESWSE S13 1N 12W Silver Bow County

Overview

This report 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). This report was completed by regional office staff.

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

Surface Water Change Technical Analyses Report-Part A 1
Overview 1
1.0 Application Details 2
2.0 Historical Use Technical Analysis 3
2.1 Historical Field Consumed and Applied Volumes 3
2.2 Historical Conveyance Losses 5
2.3 Historical Diverted Volume 7
2.4 Summary of Historical Use 7
3.0 Analysis of Impacted Surface Water Sources 8
3.1 Summary of Proposed Use 8
3.2 Area of Potential Adverse Effect 13
Review 14
References 14

Appendix A: Water Rights within the Area of Potential Adverse Effect on the Big Hole River 15

1.0 Application Details

The Applicant proposes to remove one point of diversion (POD) on Johnson Creek for Statement of Claim (Claim) 41D 93270-00 and add another on the Big Hole River, and to retire 6 acres of historical irrigation. The proposed new POD is in the SWSWSE Section (S) 13, Township (T) 1 North (N) Range (R) 12 West (W), and the proposed retired POD is in the NENENW S19, T1N, R11W. The place of use (POU) is in S19, 20, 29, T1N, R11W, and the proposed retired acres are in the N2NENW S19, T1N, R11W. The project is in Silver Bow County and the sources involved are Johnson Creek and the Big Hole River.

Table 1: Water Right Proposed for Change

Water Right Number	Flow Rate (CFS)	Acres	Purpose	Period Of Use	Place Of Use	Point(s) Of Diversion	Priority Date
41D 93270-00	15	246.5	Irrigation	5/15 – 9/30	S19, 20, 29, T1N R11W	SWNENW and NENENW, T1N R11W	6/27/1888

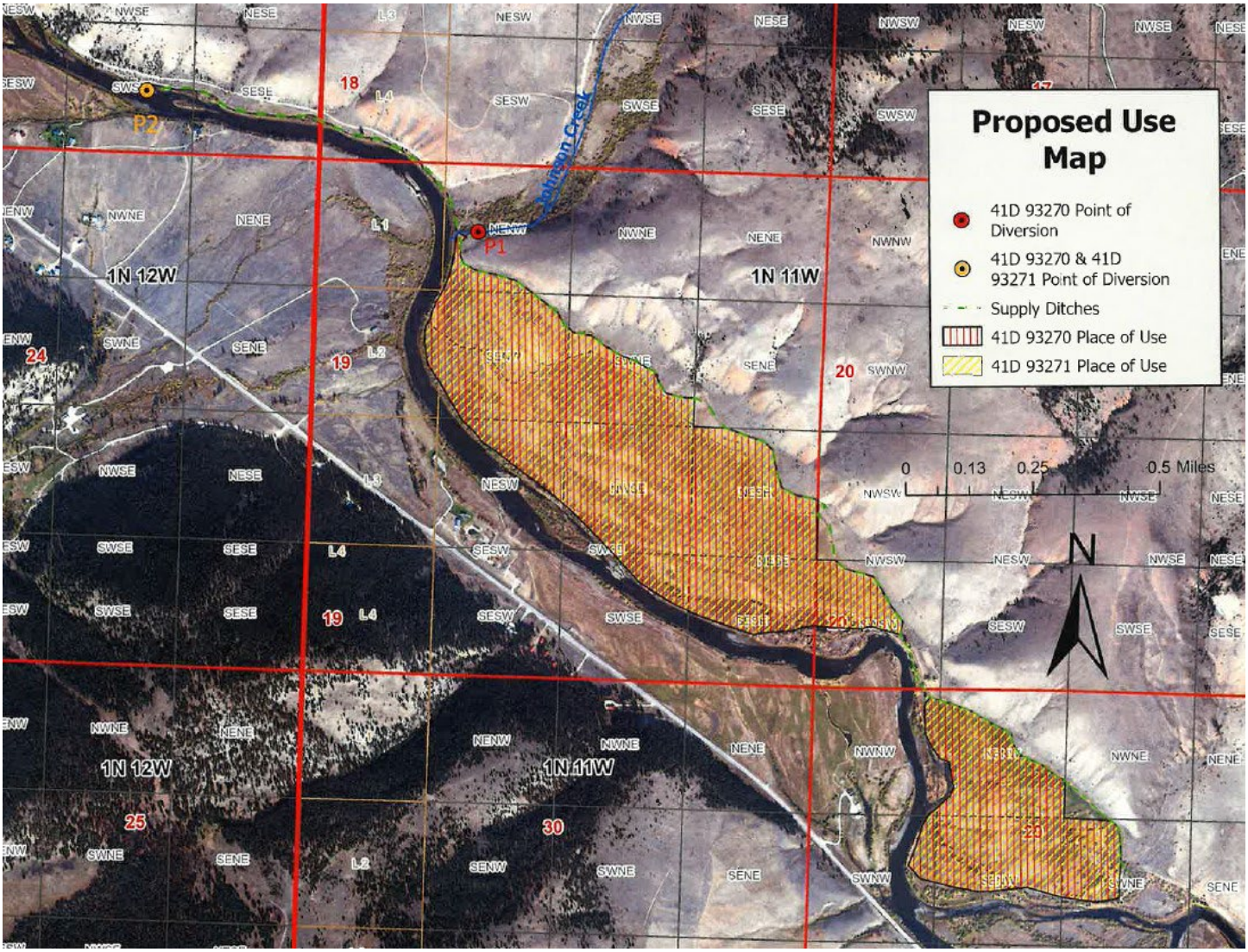


Figure 1: Map of the Applicant's proposed POD on the source and proposed place of use.

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 to determine the field applied volume. 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 irrigation total consumed volume.

Claim 41D 93270-00 proposed for change in this application historically flood irrigated 246.5 acres in sections 19, 20, 29, T1N, R11W, Silver Bow County. The Department confirmed the historical irrigation of the claimed 246.5 acres with aerial photos CXM-4P-88, dated July 19, 1955, and HB-3B-61, dated September 4, 1942. Water was diverted from Johnson Creek at two locations. The upper diversion in the NENENW S19, T1N, R11W diverted water into a ditch on the west side of Johnson Creek which supplied water for 6 acres of irrigation in the N2NENW S19, T1N, R11W on the west side of Johnson Creek. These acres were served exclusively by this upper diversion and began immediately adjacent to the POD. The lower diversion in the SWNENW S19, T1N, R11W diverted water into a ditch on the East side of Johnson Creek and conveyed it approximately 75 ft. to the beginning of the remainder of the POU.

The Applicant also owns Claim 41D 93271-00 from the Big Hole River. Except for the 6 acres described above, Claims 41D 93270-00 and 41D 93271-00 are supplemental on the same 240.5 acres of the historical POU. The historical method of irrigation was wild flood with a field efficiency of 25%.

The historical consumed and field applied volumes for the 240.5 acres of supplemental irrigation and the 6 acres of irrigation covered only by Claim 41D 93270-00 have been calculated with the inputs shown in Tables 2 and 3 following the methods described above and in ARM 36.12.1902.

Table 2: Historical use for the 240.5 acres of supplemental irrigation.

Irrigation Method	Acres	IWR (in)[1]	Mgmt. Factor[2]	Field Efficiency	Crop Consumption (AF)	Field Applied Volume (AF)	IL (AF)	Total Irrigation Consumed Volume (AF)	Non-Consumed Volume (AF)
Flood	246.5	15.25	0.69	25%	210.3	841.1	42.1	252.3	588.8

[1]Divide IWR Weather Station
[2]Silver Bow County Historical Use Management Factor (pre-July 1, 1973)

Table 3: Historical use for the 6 acres served only by Claim 41D 93270-00.

Irrigation Method	Acres	IWR (in)[1]	Mgmt. Factor[2]	Field Efficiency	Crop Consumption (AF)	Field Applied Volume (AF)	IL (AF)	Total Irrigation Consumed Volume (AF)	Non-Consumed Volume (AF)
Flood	6	15.25	0.69	25%	5.25	21.0	1.1	6.3	14.7

[1]Divide IWR Weather Station
[2]Silver Bow County Historical Use Management Factor (pre-July 1, 1973)

Claim 41D 93270-00 for 246.5 acres from Johnson Creek is supplemental with Claim 41D 93271-00 for 240.5 acres from the Big Hole River. These Claims are 100% supplemental on the 240.5 acres claimed by 41D 93271-00. The remaining 6 acres are served exclusively by Claim 41D 93270-00 and will no longer be irrigated under the proposed change.

The Applicant indicated a proportional relationship that attributes 64.1% of the water supplied to the supplemental 240.5 acres to Claim 41D 93271-00, and the remaining 35.9 % to Claim 41D 93270-00. Table 4 below identifies the apportioned supplemental HCV and field application volumes for each claim.

Table 4: Apportionment of supplemental historical use by water right for the 240.5 supplemental acres

Water Right No.	Percentage Contributed	Apportioned HCV *(Including IL) (AF)*	Apportioned Field Application Volume
41D 93270-00	35.9	90.6	302.0
41D 93271-00	64.1	161.7	539.1
Total	**100%**	**252.3**	**841.1**

Claim 41D 93270-00 contributed all of the historical consumptive use to the 6 acres that were not supplemental, resulting in a total HCV of 96.9 AF (90.6 AF from supplemental acres + 6.3 AF from non-supplemental acres) and a total historical Field Application Volume of 323.0 AF (302.0 AF from supplemental acres + 21.0 AF from non-supplemental acres).

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.

Claim 41D 93270-00 historically diverted water into two ditches. The upper diversion was immediately adjacent to the POU, therefore no conveyance losses were associated with this diversion. The lower diversion carried water approximately 75 ft. to the beginning of the POU, therefore historical conveyance losses were calculated for this section of ditch.

The Applicant submitted information regarding ditch length, width, wetted perimeter, and loss rate. The Department utilized the number of days in the historical period of diversion to determine the number of days irrigated and identified the Adjusted Net Evaporation for half of May and all of June, July, August, and September for the area encompassing the ditch. The lower Johnson Creek ditch information utilized to calculate historical conveyance losses is summarized in Table 5.

Table 5: Lower Johnson Creek Ditch information

Ditch Segment	Length (ft.)	Width (ft.)	Wetted Perimeter (ft.)	Loss Rate ($ft^3/ft/day$)	Days Irrigated	Flow Rate (CFS)	Adj. Net Evap. (inches)
1	75	7.84	8.49	2.0	139	15	12.22

Table 6 below summarizes the conveyance loss for the lower Johnson Creek ditch.

Table 6: Historical conveyance losses

[A] Seepage Loss	Ditch Wetted Perimeter (ft)	Ditch Length (ft)	Ditch Loss Rate ($ft^3/ft^2/day$)	Days Irrigated	Seepage Loss (AF)
	8.49	75	2.0	139	4.06
[B] Vegetation Loss	% Loss/Mile	Historic Flow Rate (CFS)	Days Irrigated	Ditch Length (mi)	Vegetation Loss (×2) (AF)
	0.0075	12.95	139	0.01	0.38
[C] Ditch Evaporation	Ditch Width (ft)	Ditch Length (ft)	Ditch Evaporation Rate (ft)	Ditch Evaporation (AF)	**Seasonal Conveyance Loss (AF) (A+B+C)**
	7.84	75	1.02	0.01	4.46

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 8 below summarizes the historical field applied and conveyance loss volumes.

Table 7: Historic Diverted Volume of Claim 41D 93270-00

Water Right No.	Apportioned Field Application Volume (AF)	Conveyance Loss Volume (AF)	HDV (AF)
41D 93270-00	323.0	4.5	327.8

2.4 Summary of Historical Use

The Department will consider the following values when evaluating the historical use of Claim 41D 93270-00 for the adverse effect criterion:

Table 8: Summary of historical use of Claim 41D 93270-00

Water Right No.	Historical Purpose	Maximum Historical Acres	Historical Place of Use	Historical Point of Diversion	Maximum Historical Flow Rate (CFS)	Historically Consumed Volume (AF)	Historically Diverted Volume (AF)
41D 93270-00	Irrigation	246.5	S19, 20, 29, T1N R11W	SWNENW, NENENW S19 T1N R11W	15	96.9	327.8

3.0 Analysis of Impacted Surface Water Sources

3.1 Summary of Proposed Use

The Applicant proposes to use Claim 41D 93270-00 as shown in Table 9:

Table 9: Summary of the proposed use of Claim 41D 93270-00. See below for an explanation of the proposed use.

Water Right No.	Proposed Purpose	Proposed Acres	Proposed Place of Use	Proposed Points of Diversion	Proposed Flow Rate (CFS)	Proposed Consumptive Volume (AF)	Proposed Diverted Volume (AF)
41D 93270-00	Irrigation	240.5	S19, 20, 29, T1N R11W	SWNENW S19 T1N R11W, SESWSE S13 T1N R12W	15	90.6	588.6

Following the procedures outlined in the Historical Use section 2.1 above, the proposed consumed and diverted but non-consumed volumes have been calculated with the inputs shown in Table 10 following the methods described above and in ARM 36.12.1902. Per the December 2, 2015, Department efficiency policy memo, since the proposed irrigation is entirely within the footprint of the historical irrigation the proposed consumed volumes will be the same as the historical consumed volumes.

Table 10: Proposed Consumptive Volume

Irrigation Method	Acres	IWR (in)[1]	Mgmt. Factor[2]	Field Efficiency	Crop Consumption (AF)	Field Applied Volume (AF)	IL (AF)	Total Irrigation Consumed Volume (AF)	Non-Consumed Volume (AF)
Flood	240.5	15.25	0.69	25%	210.3	841.1	42.1	252.3	588.9

[1]Divide IWR Weather Station
[2]Beaverhead County Historical Use Management Factor (pre-July 1, 1973)

Since there are no proposed changes to the supplemental POU or the supplemental relationship between rights, the proposed apportionment between Claims 41D 93270-00 and 41D 93271-00 will be the same as for

the historical apportionment in Section 2.1 above. The Applicant proposes to retire the 6 acres of non-supplemental irrigation from Johnson Creek under Claim 41D 93270-00, resulting in a total of 240.5 proposed irrigated acres. Proposed consumptive use apportionment is summarized in Table 11 below:

Table 11: Apportionment of proposed use by water right

Water Right No.	Percentage Contributed	Apportioned CV *(Including IL) (AF)*	Apportioned Field Application Volume
41D 93270-00	35.9	90.6	302.0
41D 93271-00	64.1	161.7	539.1
Total	**100%**	**252.3**	**841.1**

The Applicant proposes to change the upper POD for Claim 41D 93270-00 from the historical diversion on Johnson Creek to the existing diversion and Mallon Ditch for Claim 41D 93271-00 on the Big Hole River approximately 3600 ft. upstream from the confluence with Johnson Creek. Under the proposed change, Claim 41D 93270-00 will divert up to 10 CFS from the Big Hole River and up to 5 CFS from the historical lower diversion on Johnson Creek to irrigate the historical 240.5 acres. The upper diversion and ditch on Johnson Creek will be retired. The Big Hole River diversion will convey 10 CFS under Claim 41D 93270-00 and 9.55 CFS under Claim 41D 97271-00 approximately 3950 ft. to the historically irrigated 240.5 acres served by both claims.

Proposed conveyance losses were calculated using the same methodology as in Section 2.2 above and are illustrated in Tables 12, 13, and 14 below. The Applicant provided ditch length, width, wetted perimeter, and seepage rate for both the lower Johnson Creek Ditch and Mallon Ditch. The Department utilized the number of days in the proposed period of diversion to determine the number of days irrigated and identified the Adjusted Net Evaporation for half of May and all of June, July, August, and September for the area encompassing the majority of the ditch. Values in Table 12 are for the proposed continued 5 CFS diversion from the lower Johnson Creek diversion, values in Table 13 are for the existing 9.55 CFS diversion in the Mallon Ditch under Claim 41D 93271-00, and values in Table 14 are for the proposed combined 19.55 CFS diversion from both Claims into the Mallon Ditch.

Table 12: Proposed lower Johnson Creek conveyance losses

[A] **Seepage Loss**	Ditch Wetted Perimeter (ft)	Ditch Length (ft)	Ditch Loss Rate ($ft^3/ft^2/day$)	Days Irrigated	Seepage Loss (AF)
	8.49	75	2.0	139	4.06
[B] **Vegetation Loss**	% Loss/Mile	Historic Flow Rate (CFS)	Days Irrigated	Ditch Length (mi)	Vegetation Loss (×2) (AF)
	.0075	5	139	0.01	0.15
[C] **Ditch Evaporation**	Ditch Width (ft)	Ditch Length (ft)	Ditch Evaporation Rate (ft)	Ditch Evaporation (AF)	**Seasonal Conveyance Loss (AF) (A+B+C)**
	7.84	75	1.02	0.01	4.23

Conveyance losses for the Mallon Ditch were calculated using the ditch dimensions supplied by the Applicant for the ditch at a flow rate of 9.55 CFS to determine the losses associated with the existing use of Claim 41D 93271-00. Then the losses were calculated at a flow rate of 19.55 CFS to determine the total conveyance losses under the proposed use. Values used for these calculations are shown in Tables 13 and 14 below.

Table 13: Conveyance losses for the Mallon Ditch under Claim 41D 93271-00

[A] **Seepage Loss**	Ditch Wetted Perimeter (ft)	Ditch Length (ft)	Ditch Loss Rate ($ft^3/ft^2/day$)	Days Irrigated	Seepage Loss (AF)
	15.16	3950	3.5	139	668.8
[B] **Vegetation Loss**	% Loss/Mile	Proposed Flow Rate (CFS)	Days Irrigated	Ditch Length (mi)	Vegetation Loss (×2) (AF)
	0.0075	9.55	139	0.75	14.9
[C] **Ditch Evaporation**	Ditch Width (ft)	Ditch Length (ft)	Ditch Evaporation Rate (ft)	Ditch Evaporation (AF)	**Seasonal Conveyance Loss (AF) (A+B+C)**
	14.05	3950	1.02	1.3	685.0

Table 14: Proposed conveyance losses for the Mallon Ditch under Claims 41D 93270-00 and 41D 93271-00

[A] **Seepage Loss**	Ditch Wetted Perimeter (ft)	Ditch Length (ft)	Ditch Loss Rate ($ft^3/ft^2/day$)	Days Irrigated	Seepage Loss (AF)
	17.11	3950	3.5	139	754.8
[B] **Vegetation Loss**	% Loss/Mile	Proposed Flow Rate (CFS)	Days Irrigated	Ditch Length (mi)	Vegetation Loss (×2) (AF)
	0.0075	19.55	139	0.75	30.5
[C] **Ditch Evaporation**	Ditch Width (ft)	Ditch Length (ft)	Ditch Evaporation Rate (ft)	Ditch Evaporation (AF)	**Seasonal Conveyance Loss (AF) (A+B+C)**
	15.24	3950	1.02	1.4	786.7

Proposed conveyance losses were apportioned between both Claims by calculating the difference between the totals from Tables 13 and 14, and assigning the increase to Claim 41D 93270-00 and the remainder to Claim 41D 93271-00. 786.7 AF – 685.0 AF= 101.7 AF. The apportioned values are shown in Table 15:

Table 15: Proposed Mallon Ditch conveyance loss apportionment

Claim	Pre-change losses	Post-change losses
41D 93270-00	0	101.7
41D 93271-00	685.0	685.0
Total	**685.0**	**786.7**

Total proposed conveyance losses including both ditches are summarized in Table 16 below:

Table 16: Total proposed conveyance losses

Claim	Lower Johnson Ditch	Mallon Ditch	Total
41D 93270-00	4.2	101.7	105.9
41D 93271-00	n/a	685.0	685.0

Proposed diverted volume was calculated using the same methodology as for historical diverted volume in section 2.3 above. The volumes associated with the proposed diverted and consumed use are summarized in table 17 below:

Table 17: Values used to calculate the volumes associated with the proposed use for Claim 41D 93270-00.

Proposed Apportioned Field Application Volume (AF)	Proposed Apportioned Conveyance Loss Volume (AF)	Proposed Apportioned Diverted Volume (AF)	Proposed Apportioned Consumptive Volume (AF)
302.0	105.9	407.9	90.6

The Department will consider the following values when evaluating the proposed change for adverse effect for Claim 41D 93270-00:

Table 18: Volumes associated with historical and proposed use.

Historically Consumed Volume (AF)	Historically Diverted Volume (AF)	Proposed Consumptive Volume (AF)	Proposed Diverted Volume (AF)
96.9	327.8	90.6	407.9

3.2 Area of Potential Adverse Effect

The Department has considered a potentially affected reach on each source of supply. These reaches were determined by accounting for the location of the proposed and historical points of diversion.

The reach on Johnson Creek extends from the historical upper headgate on Johnson Creek in the NENENW S19, T1N, R11W downstream to the confluence with the Big Hole River in the NWNENW S19, T1N, R11W. The only other water right in this reach is Claim 41D 93290-00 for livestock drinking directly from Johnson Creek and also owned by the Applicant.

The reach on The Big Hole River extends from the proposed Mallon Ditch headgate in the SWSWSE S13, T1N, R12W downstream to the confluence with Johnson Creek in the NWNENW S19, T1N, R11W. There are 4 water rights within the reach, as illustrated in Appendix A.

Review

This document has been reviewed by the Department on May 29, 2026.

References

Department Standard Practice for Determining Historical Use
Department Standard Practice for Analyzing Area of Potential Adverse Effect
December 2, 2015, Department efficiency policy memo

Appendix A: Water Rights within the Area of Potential Adverse Effect on the Big Hole River

Water Right	Owner
41D 93288 00	LAZY S BHR RANCH LLC
41D 30017409	MT DFWP
41D 30142800	USA (DEPT OF INTERIOR BUREAU OF LAND MANAGEMENT)
41D 93265-00	BIG HOLE RIVER PRESERVE LLC

Surface Water Change Technical Analyses Report - Part B

The Montana Department of Natural Resources and Conservation (DNRC) Water Resources Division

Kristal Kiel, Groundwater Hydrologist, Water Sciences Bureau (WSB)

Applicant Name	Big Hole River Preserve LLC
Application No.	41D 30174940
Point of Diversion Legal Land Description	POD ID 1: SWNENW Section 19 Township 1 North Range 11 West, Silver Bow County POD ID 2: NENENW Section 19 Township 1 North Range 11 West, Silver Bow County[1] POD ID 3: SESWSE Section 13 Township 1 North Range 12 West, Silver Bow County

[1] POD ID 2 is proposed for retire

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:

Overview 1
1.0 Executive Summary 2
2.0 Methodology 3
3.0 Adverse Effect – Return Flow Analysis 4
Review 9
References 10

1.0 Executive Summary

Application Details

Historically, Statement of Claim No. 41D 93270-00 irrigated 246.50 acres in Sections 19, 20, and 29 of Township 1 North, Range 11 West in Silver Bow County via two points of diversion (PODs): POD ID 1 in the SENENW of Section 19, Township 1 North, Range 11 West, Silver Bow County, and POD ID 2 in the NENENW of Section 19, Township 1 North, Range 11 West, Silver Bow County. POD IDs 1 and 2 in combination divert 15 cubic feet per second (cfs) of water from Johnson Creek via headgates leading to North Johnson, and South Johnson ditches to the historical place of use (POU). The period of diversion and period of use are from May 15 to September 30.

The Applicant proposes to retire 6 acres (Field ID 2) of irrigation in the N2NENW of Section 19, Township 1 North, Range 11 West, Silver Bow County and POD ID 2. Historically diverted water that would have irrigated the retired acreage would be left instream at the location of POD ID 2 on Johnson Creek, which is tributary to the Big Hole River.

Additionally, the Applicant proposes adding a new POD, POD ID 3, located in the SWSWSE of Section 13, Township 1 North, Range 12 West, Silver Bow County to replace POD ID 2. POD ID 3 is an existing diversion of Statement of Claim No. 41D 93271-00, of which the place of use (Field ID 1) is entirely overlapping of the proposed place of use for this change. Under the proposed change, POD ID 1 would divert 5 cfs of water from Johnson Creek, via the South Johnson ditch, and POD ID 3 would divert 10 cfs of water from the Big Hole River, via Mallon and South Johnson ditches to the remaining POU. The period of diversion and period of use would remain unchanged.

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 603.46 acre-feet (AF) and the starting points of historical return flows as identified in **Figure 1** are to Johnson Creek downstream of the northern boundary of the NENENW Section 19, Township 1 North, Range 11 West, Silver Bow County and the Big Hole River downstream of the NWNENW Section 19, Township 1 North, Range 11 West, Silver Bow County. The proposed non-consumed volume is 588.78 AF and the starting point of proposed return flows as identified in **Figure 1** is to the Big Hole River starting in the SWNENW Section 19, Township 1 North, Range 11 West, Silver Bow County. The non-consumed (return flow) volume of 14.68 AF from the retired 6-acres of Field ID 2 would remain instream on Johnson Creek at POD ID 2, in the NENENW Section 19,

Township 1 North, Range 11 West, Silver Bow County. Johnson Creek converges with the Big Hole River downstream the starting point of return flows for Field ID 2. There are two existing water rights within the reach of the Big Hole River between the historical starting point of return flows for Field ID 2 and the outlet of Johnson Creek where water left instream would return to the Big Hole River: Statement of Claim No. 41D 93288-00 (livestock direct from source) and Water Reservation 41D 30017409 (instream flow).

The total net effect to return flows from the proposed change to retire 6-acres would be -14.68 AF/year, with -10.65 AF/year apportioned to Johnson Creek and -4.03 AF/year apportioned to the Big Hole River. The monthly net effect of the proposed change on the rate and timing of return flows is found in **Tables 4** and **5**.

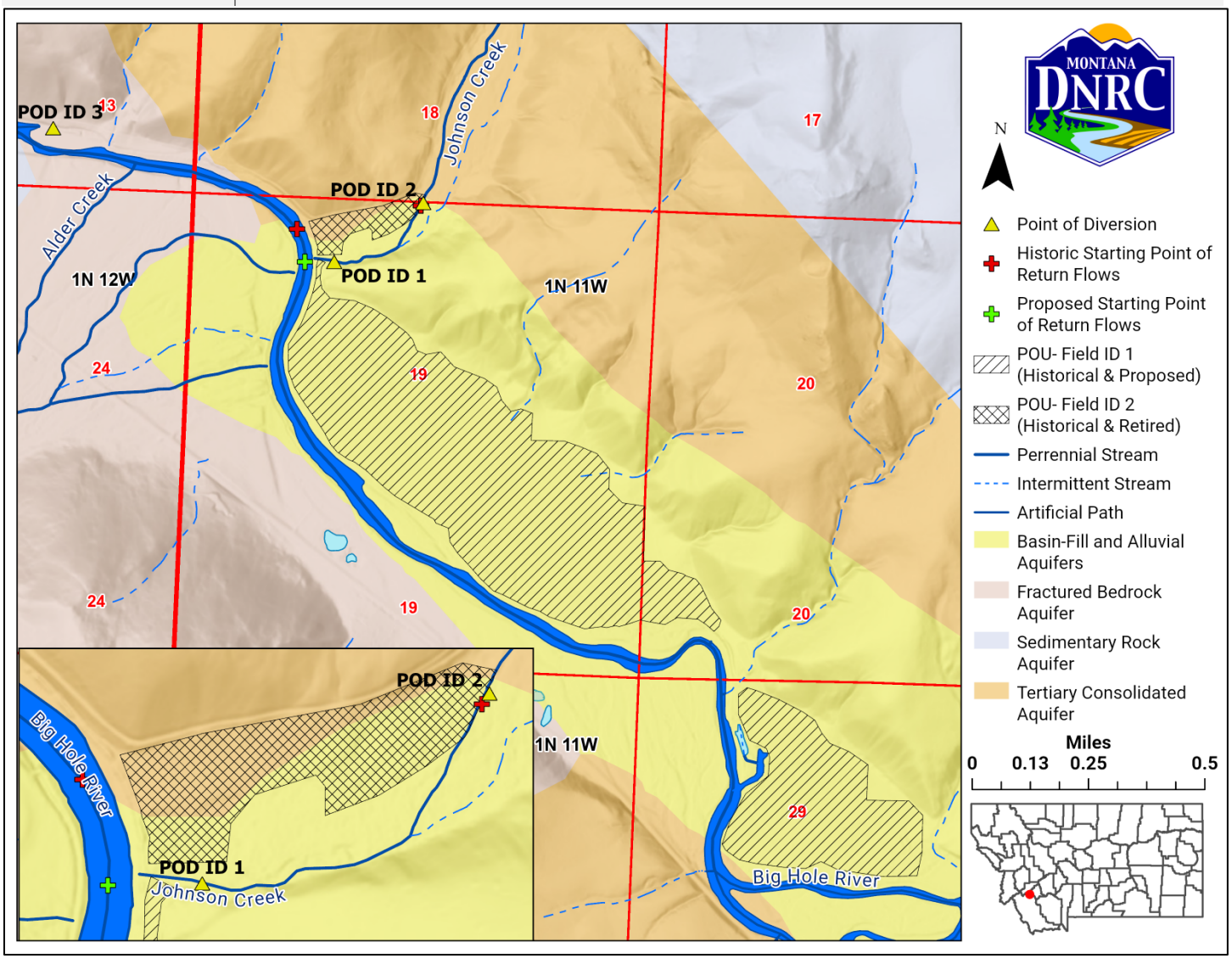


Figure 1: Location of historical and proposed irrigation and return flows.

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 neither criterion is met or return flows accrete to more than one source, the return flow analysis may 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 water. All water that is applied for irrigation and not consumed by a crop is assumed to infiltrate to groundwater as return flow and does not run off. 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.

3.0 Adverse Effect – Return Flow Analysis

3.1. Non-Consumed Volume

The consumed and non-consumed volumes for irrigation were calculated following the methods described in ARM 36.12.1902 and reported in Part A of this two-part report. The historical and proposed non-consumed volumes are 603.46 AF and 588.78 AF, respectively.

3.2 Hydraulically Connected Surface Water(s)

Potentially affected surface waters in a 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 can be found in DNRC (2019). Following protocols in DNRC (2019) **Table 3** identifies published information used to assess hydraulically connected surface water(s) and suggests Johnson Creek and the Big Hole River are the surface water sources that would receive return flows. Not all data may be available for each project and is noted as “NA” when that occurs.

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

Published Information	Surface Water Source: Johnson Creek	Surface Water Source: Big Hole River
USGS National Hydrographic Dataset (NHD)[1]	Perennial	
USGS PROSPER Dataset[2]	Streamflow Permanence Probability of 80-100%	
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]	No wells meeting criteria along source	GWIC ID 48800 and 48802
Published Water Table Maps, Publications, Previous Water Rights, etc.	Alluvium (Qal) mapped entirely throughout irrigated fields and stream channels receiving return flows (Elliot et al., 2025; Lonn, J.D., and McDonald, C., 2004)	
Gridded National Soil Survey Geographic Database[4]	Hydric soils mapped along entirety of affected reach (**Figure 2**)	
Aerial imagery	Wet channel NAIP 2015-2023	
Affidavits, photographs, etc.	NA	

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

[2] USGS PROSPER probability of streamflow permanence (greater than 50 percent of the time it flows).

[3] Per 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] Gridded National Soil Survey Geographic Database used to identify hydric soils or shallow water tables near surface water sources.

WSB Findings

Based on the review of the published information in **Table 3**, Johnson Creek and the Big Hole River are the nearest hydraulically connected surface water sources (**Figure 2**). Johnson Creek and the Big Hole River were the receiving sources for historical return flows. Under the proposed change, the Big Hole River would be the only receiving source for proposed return flows.

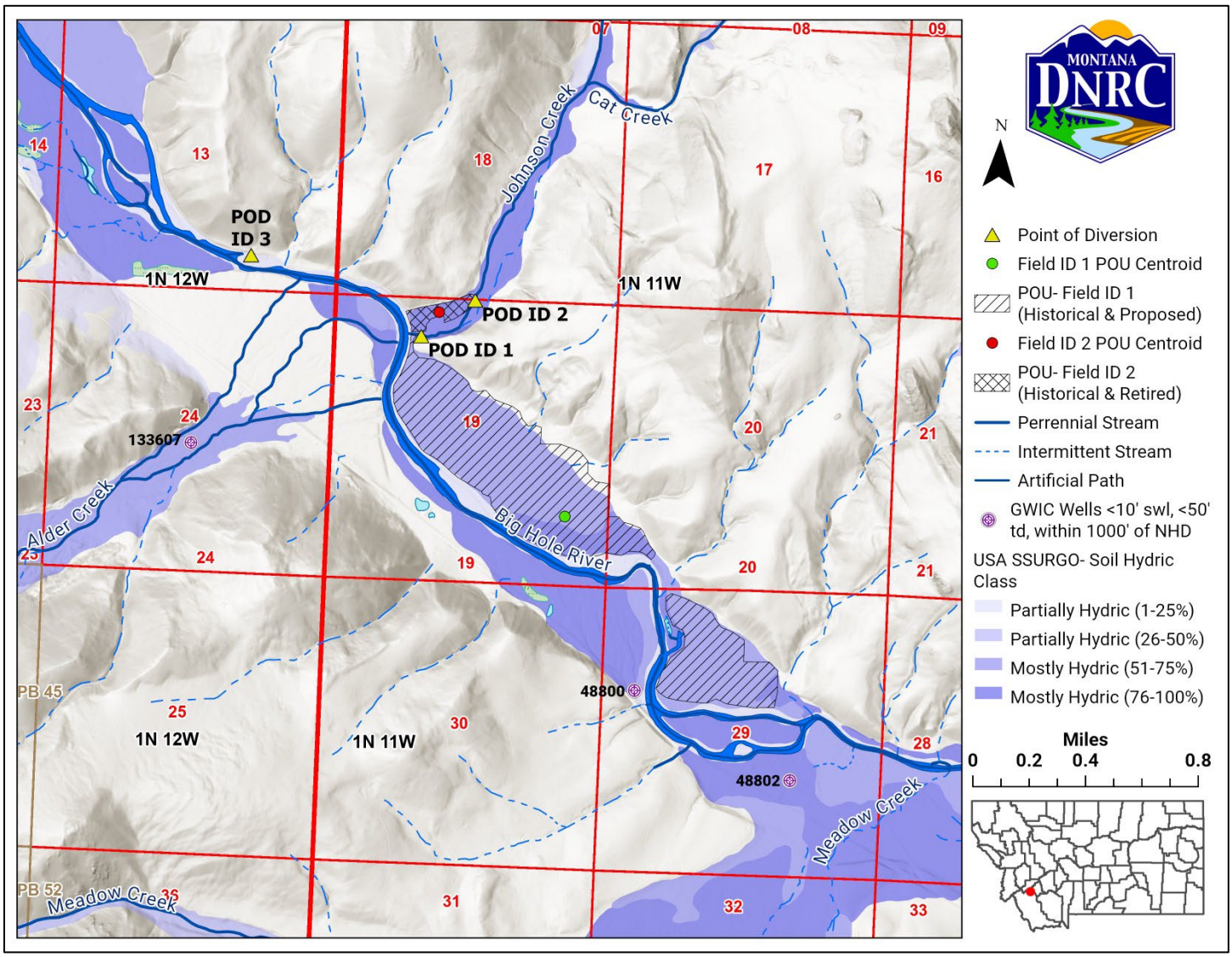


Figure 2: Hydric soils and shallow groundwater wells indicating hydraulically connected surface waters in the project area.

Return flow is 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). Values used for apportionment are described below and summarized in **Table 4**.

The distance from the centroid of the historical Field ID 1 to Johnson Creek and the Big Hole River is 4,100 ft and 710 ft respectively. The proportion of the return flow volume assigned to Johnson Creek is less than 10%, which is the recommended cutoff from DNRC (2019), therefore the Big Hole River is assigned 100% of historical return flow volumes for Field ID 1.

The distance from the center of the historical Field ID 2 to Johnson Creek and the Big Hole River is 400 ft and 650 ft respectively. Johnson Creek and the Big Hole River are assigned 72.5% and 27.5% of historical return flow volumes for Field ID 2, respectively.

Field ID 2 consists of the 6 acres proposed to be retired in this change application. Therefore, the proposed retained acres, or Field ID 1, is analyzed for the proposed return flow volume proportion. 100% of return flow volume from Field ID 1 would accrete to the Big Hole River under the proposed change.

Table 4: Distance to hydraulically connected surface water and Inverse Distance Weighting proportions used to apportion return flows to each source.

Field ID	Distance from Field Centroid to Stream (ft)		IDW Percentages	
	Johnson Creek	Big Hole River	Johnson Creek	Big Hole River
1	4,100	710	2.9	97.1
2	400	650	72.5	27.5

3.3 Location of Return Flows

Historical return flows total 603.46 AF from 246.5 acres of irrigation; of which 10.65 AF accreted to Johnson Creek and 592.81 AF accreted to the Big Hole River. The starting points of return flows are on Johnson Creek downstream of the northern boundary of the NENENW of Section 19, Township 1 North, Range 11 West, Silver Bow County and the Big Hole River in the NENWNW of Section 19, Township 1 North, Range 11 West, Silver Bow County (**Figure 1**).

Under the proposed change, return flows would be equal to 588.78 AF from 240.5-acres of irrigation and would accrue to the Big Hole River starting in the SWNWNW Section 19, Township 1 North, Range 11 West, Silver Bow County (Figure 1). The return flow volume of 14.68 AF from the retired 6 acres would remain instream at the retired POD ID 2, in the NENENW Section 19 Township 1 North Range 11 West, Silver Bow County.

3.4 Rate and Timing of Return Flows

The rate and timing of return flows for historical and proposed conditions are determined by modeling accretions of return flows to the receiving surface water. The monthly timings of accretions of return flows to the identified receiving reach are modeled using analytical models such as the Alluvial Water Accounting System (AWAS) (AWAS, 2003), the Glover parallel drain model (Glover, 1977), FWD:SOLV (HydroSOLVE, 2024) or a numerical model. The choice of model depends on the availability of data on aquifer properties and the geometry of the receiving aquifer and stream(s). These modeling methods are believed to be suitable for common hydrogeologic settings, are appropriate to the limited data available for most locations, and adequate to provide information to evaluate criteria under §85-2-402, MCA. They may not be suitable in more complex geologic settings or where return flows to multiple streams must be considered.

Returns flows are modeled in AWAS (AWAS, 2003) using the following aquifer properties, recharge schedule and stream boundary:

- Transmissivity = 550 ft^2/day (4,114 gpd/ft); a regional estimate of Quaternary alluvium and glacial outwash in the Big Hole Basin (Marvin and Voeller, 2000)
- Specific Yield = 0.1 (Lohman, 1972)
- The recharge schedule identified for the centroid of the proposed/historical POU in **Tables 5** and **6,** modeled for 100 years. Recharge schedules are created by apportioning the annual non-consumed volume to each month according to the monthly percent of total consumed volume (NIR 80% dry year) using the USDA Natural Resources Conservation Service Irrigation Water Requirements (IWR) program (NRCS, 2023) for Divide 2 NW Station No. MT2421
- Stream boundaries representing Johnson Creek and the Big Hole River at distances represented in **Table 4.**

Historical and proposed return flows were modeled using one recharge well at the centroid of each field (as identified in **Figure 1**) in the POU and corresponding non-consumed volumes found in **Tables 5** and **6** that were calculated using the IDW percentages identified in **Table 4**. Using AWAS and the modeling inputs identified above, the rate, timing and volume of return flows were calculated for each surface water for both historical and proposed uses. The rate, timing, volume, and net effect of the change are illustrated in **Tables 5 and 6**.

Table 5: Historical and proposed return flows and net effect to Johnson Creek from retiring 6-acres. The non-consumed volume (AF) was used as the recharge schedule in modeling.

Months	NIR (inches)	Historical			Proposed			Net Effect (AF)	Net Effect (gpm)
		Non-Consumed Volume (AF)	Return Flows (AF)	Return Flows (gpm)	Non-Consumed Volume (AF)	Return Flows (AF)	Return Flows (gpm)		
January	0.00	0.00	0.26	1.90	0.00	0.00	0.00	-0.26	-1.90
February	0.00	0.00	0.14	1.13	0.00	0.00	0.00	-0.14	-1.13
March	0.00	0.00	0.09	0.66	0.00	0.00	0.00	-0.09	-0.66
April	0.00	0.00	0.05	0.38	0.00	0.00	0.00	-0.05	-0.38
May	0.90	0.63	0.22	1.61	0.00	0.00	0.00	-0.22	-1.61
June	3.40	2.37	0.91	6.86	0.00	0.00	0.00	-0.91	-6.86
July	4.91	3.43	1.92	14.01	0.00	0.00	0.00	-1.92	-14.01
August	4.18	2.92	2.44	17.80	0.00	0.00	0.00	-2.44	-17.80
September	1.87	1.30	2.09	15.76	0.00	0.00	0.00	-2.09	-15.76
October	0.00	0.00	1.37	9.99	0.00	0.00	0.00	-1.37	-9.99
November	0.00	0.00	0.73	5.50	0.00	0.00	0.00	-0.73	-5.50
December	0.00	0.00	0.44	3.21	0.00	0.00	0.00	-0.44	-3.21
TOTAL	**15.25**	**10.65**	**10.65**		**0.00**	**0.00**		**-10.65**	

Table 6: Historical and proposed return flows and net effect to the Big Hole River from retiring 6-acres. The non-consumed volume (AF) was used as the recharge schedule in modeling.

Months	NIR (inches)	Historical			Proposed			Net Effect (AF)	Net Effect (gpm)
		Non-Consumed Volume (AF)	Return Flows (AF)	Return Flows (gpm)	Non-Consumed Volume (AF)	Return Flows (AF)	Return Flows (gpm)		
January	0.00	0.00	33.07	241.37	0.00	32.86	239.84	-0.21	-1.53
February	0.00	0.00	25.92	209.51	0.00	25.76	208.21	-0.16	-1.29
March	0.00	0.00	25.65	187.26	0.00	25.49	186.09	-0.16	-1.17
April	0.00	0.00	22.54	169.99	0.00	22.40	168.94	-0.14	-1.06
May	0.90	35.06	24.65	179.90	34.82	24.48	178.73	-0.16	-1.17
June	3.40	132.05	38.49	290.33	131.15	38.21	288.22	-0.28	-2.11
July	4.91	190.75	70.40	513.88	189.45	69.88	510.08	-0.52	-3.80
August	4.18	162.37	94.20	687.65	161.27	93.52	682.68	-0.68	-4.97
September	1.87	72.58	92.19	695.35	72.08	91.55	690.52	-0.64	-4.83
October	0.00	0.00	75.05	547.86	0.00	74.55	544.21	-0.50	-3.65
November	0.00	0.00	50.50	380.91	0.00	50.18	378.49	-0.32	-2.42
December	0.00	0.00	40.15	293.07	0.00	39.89	291.17	-0.26	-1.90
TOTAL	**15.25**	**592.81**	**592.81**		**588.78**	**588.78**		**-4.03**	

Review

This document has been reviewed on May 28, 2026 in accordance with Category 7 of DNRC's Water Sciences Bureau Minimum Standards of Review, Version 2, February 2024.

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PREAPPLICATION MEETING FORM: PART B
CHANGE

§ 85-2-302(3)(b), MCA
Form No. 606P-B *(Revised 02/2025)*

For Department Use Only

Application # 30174940 Basin 41D
Form Received 4/21/2026
Fee Rec'd $ 500.00 Check # Internal
Deposit Receipt # EVT262735
Payor MT FWP
Form Returned
Refund $ Date

RECEIVED
APR 21 2026
DNRC-HRO

PREAPPLICATION MEETING FEE
$ 500

FILING FEE REDUCTION & EXPEDITED TIMELINE
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)).

The Applicant is responsible for providing a "Follow-up Responses" document for all follow-up identified in Preapplication Meeting Form Part A (Form 606P-A). The Applicant may not alter Form 606P-A. If a response has changed to a question answered at the preapplication meeting, the Applicant can provide a new response in a separate document entitled "Amended Responses" with the question number labeled.

The following guidelines are applicable to both the "Follow-up Responses" and "Amended Responses" documents. Clearly label all question numbers. Answer questions in the same format as Form 606P-A. For responses in the form of checkboxes, write "Y", "N", or "S". Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label units in narrative responses and tables. Tables must have the exact headings found on the form. Questions that require items to be submitted to the Department may be marked "S" when the required item is included with the document.

1. ☐ **Y** ☑ **N** Are you submitting this form in response to a determination by the Department that a previously submitted Form 606P-B was inadequately completed?

If yes,

a. Date form was returned ("Form Returned" date found in "For Department Use Only" box on the previously submitted Form 606P-B): _____

b. If a "Follow-up Responses" or "Amended Responses" document is required by questions 2 or 3, submit complete updated documents with responses that stand-alone. The Department will only use the most recently submitted "Follow-up Responses" and "Amended Responses" documents for departmental technical analyses or scientific credibility review; the Department will not use multiple versions of a document.

2. ☑ **Y** ☐ **N** Were any questions identified as requiring follow-up on Form 606P-A?

If yes,

a. ☐ **S** Submit "Follow-up Responses" document for all questions requiring follow-up.

3. ☐ **Y** ☑ **N** Are you submitting amended responses to any questions from Form 606P-A?

If yes,

a. ☐ **S** Submit "Amended Responses" document and record in the table below each question number with an amended response. The amended response will entirely replace the previous response; the amended response cannot build off the previous response.

Question No.	Question No.	Question No.	Question No.

FOLLOW-UP AND AMENDED RESPONSES AFFIDAVIT & CERTIFICATION

"I attest that this preapplication meeting form (Form 606P-A and Form 606P-B), follow-up, and amended responses accurately portray the proposed project. 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 change any element of the proposed application from the preapplication meeting form, amended responses, or follow-up materials (ARM 36.12.1302(6)(a))."

Applicant Signature — Date: 4/3/2026

Applicant Signature — Date

"We confirm that the preapplication form (Form 606P-A and Form 606P-B), amended responses, and follow-up information are adequate for the Department to proceed with technical analyses in ARM 36.12.1303. Or, if the Applicant has elected to complete technical analyses, we confirm they have submitted each required element of technical analysis based on the proposed project and the Department is able to proceed with the scientific credibility review (ARM 36.12.1303(8))."

Department Signature — Date: 4/21/2026

Department Signature — Date

FOLLOW-UP RESPONSES – JOHNSON CREEK

13.a.iii identify specific apportionment for volumes between Big Hole and Johnson Creek rights

The Pre Application identified dry (80th percentile), normal (50th percentile) and wet (20th percentile) year scenarios for apportioning water use between Johnson Creek and the Big Hole River. For the purpose of completing the Technical Analysis Report, DNRC should use the normal (50th percentile) year apportionment assigning 64.1% of the irrigation demand to the Big Hole River amounting to 729.1 ac-ft diverted with the remainder assigned to Johnson Creek.

148.a.ii.1 DNRC will look into ownership of stock claim

DNRC found that the geocode on Statement of Claim was attached to the water right as part of a Master's Report and cannot be adjusted without Water Court Action. As the claim is senior in priority to the water right being changed, it was not dependent on return flow and therefore will not be adversely affected. This will be addressed in the application.

PREAPPLICATION MEETING FORM: PART A

CHANGE

§ 85-2-302(3)(b)

Form No. 606P-A *(Revised 10/2025)*

For Department Use Only

Application # 30174940 Basin 41D

Meeting Date 3/23/2026 Time 10:00

Variance Request Deadline _____

Completed Form Deadline 09/19/2026

PREAPPLICATION MEETING FEE

$ 500

FILING FEE REDUCTION & EXPEDITED TIMELINE

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)).

The Department will fill out Form 606P-A and will identify items for follow-up during the preapplication meeting. The Department and Applicant will sign the Preapplication Meeting Affidavit and Certification within 10 business days. Within 180 days of the preapplication meeting, the Applicant will complete Preapplication Meeting Form Part B (Form 606P-B), including identified follow-up, any amended responses, and the Follow-up and Amended Responses Affidavit & Certification.

Applicant Information: *Add more as necessary.*

Applicant Name Big Hole River Preserve LLC

Mailing Address 117 W Patrick St. Ste. 200 City Frederick State MD Zip 21701-5798

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 (describe) _____

Contact/Representative Name Andy Brummond, Montana Fish, Wildlife & Parks

Mailing Address PO Box 938 City Lewistown State MT Zip 59457

Phone Numbers: Home _____ Work 406-708-7223 Cell _____

Email Address abrummond@mt.gov

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. 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)*

Meeting Attendees: *Add more as necessary.*

Name	Organization	Position
Andy Brummond	MT DFWP	Water Conservationist
Allison Pardis	Trout Unlimited	Instream Flow Project Manager
Russ Gates	MT DNRC	Water Resource Specialist
Jennifer Daly	MT DNRC	Regional Manager

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Application Details

The following questions are mandatory and must be filled out before the Preapplication Meeting Form is determined to be complete. Narrative responses that are larger than the space provided can be answered in an attachment. If an attachment is used, mark the see attachment ("A") checkbox 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 the see attachment ("A") checkbox must be marked. Label units in narrative responses and tables. Questions that require Applicant to submit items to the Department have a submitted ("S") checkbox, which is marked when the required item is attached to the Preapplication Meeting Form. Label all submitted items with the question number for which they were submitted. For all questions where follow-up is necessary, mark the "F" checkbox in the "Follow-Up" column and write the question number on the "Follow-Up Page".

S = Submitted. *Use when required item is included with form.*

A = See attachment. *Use when additional space is needed to answer a question.*

F = Follow-up. *Use when follow-up is necessary.*

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
1. Do you elect to have DNRC conduct technical analyses?	☑ Y ☐ N	☐ F
2. How many change applications will be needed for this project? Please refer to ARM 36.12.1305 for more information. 1		☐ F
3. Which water right(s) are proposed for change?	☑ A	☐ F

Water Right No.	Current Authorized Flow Rate			Flow Rate Needed for Project			Means of Diversion
	Flow	*GPM*	*CFS*	*Flow*	*GPM*	*CFS*	
41D 93270-00	15.0	☐	☑	15.0	☐	☑	diversion dam & ditch
		☐	☐		☐	☐	
		☐	☐		☐	☐	
		☐	☐		☐	☐	
		☐	☐		☐	☐	

4. Is the proposed change on a non-filed water project?	☐ Y ☑ N	☐ F
a. If yes, please submit a Non-Filed Water Project Addendum (Form 606/634-NFWPA). The project must meet the requirements of the addendum. The addendum is required before the Preapplication Meeting Form is completed.	☐ S	☐ F

5. Is the source surface water or groundwater? surface water		
6. What is the source name? Johnson Creek		
7. Identify the water right elements proposed for change, with a checkmark, for each water right proposed for change.	☑ A	☐ F

Water Right #	41D 93270-00					
Point of diversion	☑	☐	☐	☐	☐	☐
Place of use	☑	☐	☐	☐	☐	☐
Purpose of use	☐	☐	☐	☐	☐	☐
Place of storage	☐	☐	☐	☐	☐	☐

8. 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.	☑ S	☐ F
9. Submit a proposed use map created on an aerial photograph or topographic map that shows the following: section corners, township and range, scale bar, north arrow, all proposed points of diversion labeled with a unique POD ID ("P" followed by a number), all proposed places of use, all proposed conveyance structures, all proposed places of storage, and proposed place of use for all overlapping water rights. More than one map may be submitted, if necessary to clearly convey all required information.	☑ S	☐ F
10. Does the change involve a change in point of diversion?	☑ Y ☐ N	☐ F
a. If yes, describe the location for all *new* and *unchanged* points of diversion to the nearest 10 acres. Label POD ID with the POD ID assigned for the proposed use map (question 9).	☑ A	☐ F

POD ID	¼	¼	¼	Sec	Twp	Rge	County	Lot	Block	Tract	Subdivision	Gov. Lot	New or Unchanged
P1	SW	NE	NW	19	1N	11W	Silver Bow						Unchanged
P2	SE	SW	SE	13	1N	12W	Silver Bow						New

11. Describe the location of all historical PODs you propose to *retire*. Label POD ID with the POD ID assigned for the historical use map (question 8). If none are proposed for retirement, write "N/A" here: _____	☑ A	☐ F

POD ID	¼	¼	¼	Sec.	Twp.	Rge	County	Lot	Block	Tract	Subdivision	Gov. Lot
H2	NE	NE	NW	19	1N	11W	Silver Bow					

12. 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. headgate - Water is directed into the Mallon Ditch by a riffle in the Big Hole River.		☐ F
13. Does the change involve a change in place of use?	☑ Y ☐ N	☐ F
a. If yes,		
i. What are the geocodes of the proposed place of use?	☐ A	☐ F

No acres will be added - no change in geocodes, acres being retired are within existing geocodes	

ii. 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.	☐ A	☐ F

Acres	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County
	Total							

iii. Do other water rights supplement or overlap the historical and/or proposed place of use?	☑ Y ☐ N	☐ F
1. If yes,		
a. How were the water rights operated to serve the historical purposes and how will they be operated to serve the proposed purposes? Claim 41D 93721-00 from the Big Hole River irrigates the same area as the claim being changed except for 6 acres. The Big Hole River point of diversion will be added to the Johnson Creek claim being changed to reduce the amount of water diverted directly from Johnson Creek and instead divert it from the Big Hole River.	☑ A	☐ F
b. For each supplemental or overlapping water right, please list whether they contribute water for historical use, proposed use, or both; the average period of contribution (MM/DD-MM/DD); flow rate contributed (GPM or CFS); and, if known, the volume of water contributed (AF) contributed (otherwise write "unknown").	☐ A	☑ F

Water Right No.	**Contributions to Use**			**Average Period of Contribution**	**Flow Rate Contributed**			**Volume Contributed**
	Hist.	*Prop.*	*Both*	*MM/DD-MM/DD*	*Flow*	*GPM*	*CFS*	*AF*
41D 93721-00	☐	☐	☑	5/15 - 9/30	9.55 max	☐	☑	see attached
	☐	☐	☐			☐	☐	
	☐	☐	☐			☐	☐	

14. Does the proposed change include a change in purpose of use? If yes, answer questions 101 to 108 for change in purpose of use and question 13.a.iii for supplemental or overlapping water rights.	☐ Y ☑ N	☐ F
15. Are conveyance ditches used for historical or proposed uses? If yes, answer ditch-specific questions 109 to 115.	☑ Y ☐ N	☐ F
16. Do you propose to add or modify one or more places of storage? 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)). If yes, answer mandatory questions 116 to 123. Additionally, you may choose to answer non-mandatory questions 175 to 179. A Change Storage Addendum (Form 606-SA) will be required at application submittal.	☐ Y ☑ N	☐ F
17. Is the proposed use temporary? If yes, answer questions 94 to 100 for temporary changes.	☐ Y ☑ N	☐ F
18. Are you filing on behalf of another entity? If yes, describe. _____ _____	☐ Y ☑ N	☐ F

19. Do you own the entire historical place of use for all water rights proposed for change?	☑ Y ☐ N	☐ F
a. If no, 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?	☐ Y ☐ N	☑ F
i. If no,		
1. List the water rights for which you do not own the entire historical place of use. _____	☐ A	☐ F
2. Are the water rights listed in question 19.a.i.1 severed from the historical POU?	☐ Y ☐ N	☐ F
a. If yes, do you own the entirety of the severed water rights proposed for change?	☐ Y ☐ N	☐ F
i. If yes, skip to question 20. If no, answer question 19.a.i.3.		
b. If no, answer question 19.a.i.3.		
3. Are all owners of the historical place of use or, if applicable, owners of the severed water rights, willing to sign the application?	☐ Y ☐ N	☐ F
a. If no,		
i. A Form 641 or 642 to split the water rights being changed must be received and processed by the Department prior to application submittal.		
ii. Describe how the water rights will be split, and which part of the split water rights will be proposed for change. _____ _____ _____	☐ A	☐ F
20. Are you proposing to add a point of diversion or place of use on State of Montana Trust Land?	☐ Y ☑ N	☐ F
a. If yes,		
i. Documentation of consent from the DNRC Trust Lands Management Division will be required at application submittal.		
ii. Do you propose to add a place of use on Trust Land with all points of diversion on private land? If yes, the change authorization will be temporary for the duration of the lease term (§85-2-441, MCA); answer temporary change project-specific questions 94 to 100.	☐ Y ☐ N	☐ F

21. Will your system be designed to discharge water from the project?	☐ Y ☑ N	☐ F
a. If yes, explain the wastewater disposal method. A discharge permit may be required to comply with §§ 75-5-410 and 85-2-364, MCA. _____ _____ _____	☐ A	☐ F
22. Is the application to change the purpose of use or place of use of an appropriation of 4,000 or more acre-feet (AF) of water a year and 5.5 or more cubic feet per second (CFS)? If yes, you must submit a Reasonable Use Addendum (Form 606-B) with the application. The reasonable use criteria are found in §85-2-402(4-5), MCA.	☐ Y ☑ N	☐ F
23. Will you be transporting water for use outside of Montana? If yes, you will need to submit an Out-of-State Use Addendum (Form 600/606-OSA) with the application. The out-of-state use criteria are outlined in §85-2-402(6), MCA.	☐ Y ☑ N	☐ F
24. Is the project located in designated sage grouse habitat? If yes, a review letter from the Montana Sage Grouse Habitat Conservation Program will be required at application submittal.	☐ Y ☑ N	☐ F
25. Does the application include a mitigation, aquifer recharge, or marketing for mitigation/aquifer recharge purpose? If yes, answer mandatory questions 124 to 129. Additionally, you may choose to answer non-mandatory questions 185 to 190. A Mitigation Addendum (Form 600/606-MIT) will be required with application submittal.	☐ Y ☑ N	☐ F
26. Does the application include the water marketing purpose? This does not include marketing for mitigation/aquifer recharge. If yes, answer the following question. Additionally, you may choose to answer non-mandatory questions 191 to 195. A Water Marketing Purpose Addendum (Form 600/606-WMA) will be required with application submittal.	☐ Y ☑ N	☐ F
a. For what purposes will the marketed water be used? _____ _____ _____	☐ A	☐ F
27. Does the proposed purpose include instream flow? If yes, answer mandatory questions for instream flow changes 130 to 136. Additionally, you may choose to answer non-mandatory questions 180 to 184. A Change to Instream Flow Addendum (Form 606-IFA) will be required with application submittal.	☐ Y ☑ N	☐ F
28. Will the proposed use include water made available through creation of a “water saving method” (i.e., salvage water) as defined in ARM 36.12.101? If yes, answer questions 137 to 141 for Salvage Water.	☐ Y ☑ N	☐ F

Historical Use

The following questions are mandatory and must be filled out for both Surface Water and Groundwater Applications before the Preapplication Meeting Form is determined to be complete.

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
29. What is the water right type for each water right proposed for change? Answer question 30 for each Statement of Claim, question 31 for each Provisional Permit, and question 32 for water right that is not a Statement of Claim or Provisional Permit. Statement of Claim	☑ A	☐ F
30. In the table below, write the water right number for each Statement of Claim proposed for change in the "Statement of Claim Number" column. If there is one or more previous change authorizations, write the application numbers for the change authorizations in the "Previous Change Authorization Number" column. If there are no previous change authorizations, write "none" in the "Previous Change Authorization Number" column and "N/A" in all the remaining columns. Write the date of the Project Completion Notice for each previous change authorization in the "Project Completion Notice Date" column and if no Project Completion Notice has been submitted, write "none" instead. In the "Previous Historical Use Analysis Quality" column, describe the quality of the previous historical use analysis.	☑ A	☐ F

Statement of Claim Number	Previous Change Authorization Number	Project Completion Notice Date	Previous Historical Use Analysis Quality
41D 93270-00	None	N/A	N/A

31. In the table below, write the water right number for each Provisional Permit proposed for change in the "Provisional Permit Number" column. In the "Project Completion Notice Date" column, write the date of the Project Completion Notice and if no Project Completion Notice has been submitted, write "none" instead. Write the application number for each previous change authorization in the "Previous Change Authorization Number" column. If there are no previous change authorizations, write "none" in the "Previous Change Authorization Number" column and "N/A" in all the remaining columns. Write the date of the Project Completion Notice for each previous change authorization in the "Previous Change Project Completion Notice" column and if no Project Completion Notice has been submitted, write "none" instead. In the "Previous Change Historical Use Analysis Quality" column, describe the quality of the previous historical use analysis.	☐ A	☐ F

Provisional Permit Number	Project Completion Notice Date	Previous Change Authorization Number	Previous Change Project Completion Notice Date	Previous Historical Use Analysis Quality

32. In the table below, write the water right number for each water right proposed for change that is not a Statement of Claim or Provisional Permit, the type of water right, and the completion date. If a Groundwater Certificate, the completion date will be the date of filing. If an exempt or non-filed water right, the completion date will be July 1, 1973. If there are one or more previous change authorizations, write the application number for each change authorization in the "Previous Change Authorization Number" column. If there are no previous change authorizations, write "none" in the "Previous Change Authorization Number" column and "N/A" in all the remaining columns. Write the date of the Project Completion Notice for each previous change authorization in the "Previous Change Project Completion Notice Date" column and if the previous change authorization does not have a Project Completion Notice, write "none" instead. In the "Previous Historical Use Analysis Quality" column, describe the quality of the previous historical use analysis.	☐ A	☐ F

Water Right Number	Water Right Type	Completion Date	Previous Change Authorization Number	Previous Change Project Completion Notice Date	Previous Historical Use Analysis Quality

33. Are there previous Montana Water Court approved stipulations, Water Master reports, or prior Montana Water Court or Department decisions related to the water right(s) being changed?	☑ Y ☐ N	☐ F
a. If yes, explain. The Masters Report reflects a settlement with objectors that removed portions of the place of use located on Bureau of Land Management property and slightly reduced the remaining place of use to reflect the historic place of use.	☑ A	☐ F
34. Fill in the table below based on ARM 36.12.1902(1) and the information provided in questions 29 to 33. In column "Water Right Number", list all water rights proposed for change. Select one of the three historical use analysis options and fill in the required information associated with that option. Select "Full Historical Use Analysis N/A" only if an unperfected Provisional Permit will be used to serve as historical use in lieu of analysis. If the "Existing Historical Use Analysis" or "Full Historical Use Analysis N/A" option is selected, skip to question 57 because this section is complete.	☑ A	☐ F

Water Right No. Proposed for Change	**Historical Use Analysis Options**
41D 93270-00	☑ New Historical Use Analysis. Date for which historical use will be analyzed: June 30, 1973
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis:
	☐ Full Historical Use Analysis N/A. Water right number serving as historical use in lieu of analysis:

	☐ New Historical Use Analysis. Date for which historical use will be analyzed: _____
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: _____
	☐ Full Historical Use Analysis N/A. Water right number serving as historical use in lieu of analysis: _____
	☐ New Historical Use Analysis. Date for which historical use will be analyzed: _____
	☐ Existing Historical Use Analysis. Change authorization number with existing Historical Use Analysis: _____
	☐ Full Historical Use Analysis N/A. Water right number serving as historical use in lieu of analysis: _____

35. Do you have knowledge of historical use?	☐ Y ☑ N	☐ F
a. If yes,		
i. Is this firsthand knowledge?	☐ Y ☐ N	☐ F
ii. Who has this knowledge and what was their role? _____	☐ A	☐ F
b. If no, where will the historical use data be derived? Review of aerial photographs and irrigation system attributes. _____	☑ A	☐ F

*Fill out the remaining Historical Use questions (questions 37 to 56) **one time for each** water right proposed for change. Use the "Additional Water Right Historical Use (606P)" sheet for each additional water right. You may answer **one time for all** water rights proposed for change that have the same purposes, place of use, supplemental water rights, points of diversion, period of use, conveyance, diverted volume parameters, and consumptive volume parameters.*

36. What is the water right number for which questions 37 to 56 will be answered? 41D 93270-00		☐ F

Historical Use: Place of Use

37. The historical use map submitted for question 8 must clearly identify the entire place of use for each overlapping water right that intersects the historical place of use. Does your historical use map meet this requirement?	☑ Y ☐ N	☐ F
38. Are you proposing to change all water rights associated with the historical place of use?	☐ Y ☑ N	☐ F
a. If no, identify the water rights associated with the historical place of use that are not included in this application. Provide the priority date for each water right and explain why all overlapping water rights are not included in the application. Include water received via contract from a company, district, or water users' association.	☑ A	☐ F

Water Right No.	Priority Date	Reason Not Included in Change
41D 93271-00	11/27/1889	no changes to this right - fully supplemental place of use under proposed change

39. Answer the section of this question relevant to the historical purpose. If there is more than one purpose, then answer all relevant parts of this question.		
a. All purposes		
i. Does the legal land description from the abstract encompass the actual location of the historical place of use?	☑ Y ☐ N	☐ F
1. If no, explain the discrepancy and submit historical aerial photographs and/or other data sources to corroborate the location of these historical places of use, and, if a Statement of Claim, submit documentation of a written request submitted to the Water Court for amendment of the Claim. _____ _____	☐ S	☐ F
b. Irrigation		
i. Is the water right being changed a Statement of Claim?	☑ Y ☐ N	☐ F
1. If yes, does the Water Resources Survey corroborate the acres irrigated listed on the abstract?	☐ Y ☑ N	☐ F
a. If no, submit evidence that can corroborate the historical place of use, including the number of irrigated acres. This includes, but is not limited to, aerial photographs, irrigation journals, or logs.	☑ S	☐ F
2. If no, submit one or more aerial photographs that can corroborate the historical place of use, including the number of irrigated acres.	☑ S	☐ F
c. Lawn and garden		
i. Submit aerial photographs that can corroborate the historical place of use, including the number of irrigated acres.	☐ S	☐ F
d. Stock		
i. Submit aerial photographs, grazing records, or other records to corroborate the historical place of use.	☐ S	☐ F
ii. Did the stock drink direct from source or direct from ditch?	☐ Y ☐ N	☐ F
1. If no, submit data sources that make clear the location of the stock watering infrastructure.	☐ S	☐ F
e. Multiple domestic, domestic, municipal, mining, commercial, and other purposes		
i. Submit aerial photographs, deeds, other recorded documents or records, affidavits, or other published documents, such as magazine articles, to corroborate the historical place of use.	☐ S	☐ F

Historical Use: Point of Diversion

Continue to answer questions for water right(s) identified in question 36. Applications corroborating historical flow rate with the Historical Use Addendum (Form 606-HUA) may be eligible to skip question 42; see the Form 606-HUA for more information.

40. For all historical points of diversion, identify the means, location (¼ ¼ ¼ section), and if they are proposed for change. Label using the same POD ID letter as for the Historical Use Map (question 8).	☑ A	☐ F

POD ID	Means	Location (¼ ¼ ¼ Section)	Proposed for Change?
H1	Diversion Dam	SWNENW Section 19, TWP 1N, RGE 11W	☐ Y ☑ N
H2	Diversion Dam	NENENW Section 19, TWP 1N, RGE 11W - on section line	☑ Y ☐ N
			☐ Y ☐ N
			☐ Y ☐ N

41. Do the legal land descriptions from the abstract encompass the actual locations of all historical points of diversion?	☑ Y ☐ N	☐ F
a. If no, explain the discrepancy and submit historical aerial photographs and/or other data sources to corroborate the location of these historical points of diversion, and, if a Statement of Claim, submit documentation of a written request submitted to the Water Court for amendment of the Claim. _____ _____	☐ S	☐ F
42. Answer questions below related to the diversion means for each of the historical points of diversion.		
a. Headgate		
i. For each headgate, provide dimensions in feet (FT), slope of the channel at the headgate (%), material of the headgate, estimated historical capacity in gallons per minute (GPM) or cubic feet per second (CFS) and the method used to estimate historical capacity. Label using the same POD ID letter as for the Historical Use Map (question 8).	☐ A	☐ F

POD ID	Dimensions	Slope	Material	Estimated Capacity			Method
	FT	*%*		*Cap.*	*GPM*	*CFS*	
					☐	☐	
					☐	☐	
					☐	☐	
					☐	☐	
					☐	☐	

b. Pump, dike, dam, or other surface water point of diversion		
i. For each pump, dike, dam, or other surface water point of diversion, provide an estimate of the historical capacity (GPM or CFS) and the method used to estimate the historical capacity. Label using the same POD ID letter as for the Historical Use Map (question 8).	☑ A	☐ F

POD ID	Estimated Capacity			Method
	Cap.	*GPM*	*CFS*	
H1	12.95	☐	☑	Pin & Plank Diversion across stream - No headgate on ditch - ditch capacity limited
H2	15.78	☐	☑	Diversion across stream - No headgate on ditch - ditch capacity limited
		☐	☐	
		☐	☐	
		☐	☐	

c. Well, pit, or other groundwater point of diversion		
i. For each well, pit, or other groundwater point of diversion, provide an estimate of the historical capacity (GPM or CFS) and the method used to estimate the historical capacity. Label using the same POD ID letter as for the Historical Use Map (question 8).	☐ A	☐ F

POD ID	Estimated Capacity			Method
	Cap.	*GPM*	*CFS*	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	

43. Do other water rights share any of the points of diversion?	☐ Y ☑ N	☐ F
a. If yes, list the water rights, their flow rates (GPM or CFS), and the nature of the relationship. Label using the same POD ID letter as for the Historical Use Map (question 8).	☐ A	☐ F

POD ID	Water Right No.	Flow Rate			Relationship
		Flow	*GPM*	*CFS*	
			☐	☐	
			☐	☐	
			☐	☐	
			☐	☐	
			☐	☐	

Historical Use: Period of Diversion

(Continue to answer questions for water right(s) identified in question 36.)

44. Are the period of diversion and the period of use the same?	☑ Y ☐ N	☐ F
a. If no,		
i. Why are they different? _____ _____	☐ A	☐ F
ii. Is there a place of storage?	☐ Y ☐ N	☐ F
45. When was water diverted for the purposes of the water rights being changed?	☐ A	☐ F

Start Date (Month (MM)/Day (DD))	End Date (MM/DD)
5/15	9/30

46. Does the Department have a standard, found in ARM 36.12.112, for the period of diversion for all purposes for which water is used?	☑ Y ☐ N	☐ F
a. If yes, does the period of diversion for all purposes fall within Department standards?	☑ Y ☐ N	☐ F
b. If no, or if any period of diversion falls outside Department standards, explain how the period of diversion is reasonable for the purpose.	☐ A	☐ F

Historical Use: Historical Diverted Volume

Continue to answer questions for water right(s) identified in question 36. Applications corroborating historical diverted volume with the Historical Use Addendum (Form 606-HUA) may be eligible to skip question parts of question 47; see the Form 606-HUA for more information.

47. Answer all relevant sections of this question based on whether the historical purpose was irrigation, non-irrigation, or both.		
a. Irrigation		
i. Do you want ARM 36.12.1902(10) to be used to calculate historical diverted volume?	☑ Y ☐ N	☐ F
1. If no, submit a Historical Water Use Addendum (Form 606-HUA). Form 606-HUA must be submitted to the Department before the Preapplication Meeting Form is completed.	☐ S	☐ F
ii. What were the crop(s) grown? grass hay, grass for pasture		☐ F
1. For hay, how many cuttings were there per season and how many days did cuttings last? Did irrigation cease throughout the place of use for cuttings? For other crops, explain whether irrigation regularly ceased within the irrigation season. For all crops, explain whether diversions ceased during times irrigation did not occur. Likely one cutting of hay per season. At times diversion may have been shut off while during other circumstance diversion may have continued while haying progressed thru the different parts of the fields.	☑ A	☐ F

b. Non-irrigation		
i. Explain your historical diversion schedule, with sufficient detail to estimate the volume of water historically diverted. This may include, but is not limited to, days per year water was historically diverted or the number of diversions per year and the duration of each diversion.	☐ A	☐ F
ii. Explain water diverted but not consumed by the non-irrigation purpose(s). This includes, but is not limited to, wastewater discharge and conveyance loss. Ditch-Specific Questions (questions 110 to 111) will gather information necessary for estimating losses from conveyance ditches.	☐ A	☐ F
iii. Did historical diversions serve more than one non-irrigation purpose?	☐ Y ☐ N	☐ F
1. If yes, how much of the diversions served each non-irrigation purpose and how did you determine this?	☐ A	☐ F
48. Did diversions ever regularly cease within the period of use due to insufficient water in source or calls based on priority date?	☑ Y ☐ N	☐ F
a. If yes, please explain. Diversion was limited at time due to insufficient water supply with additional water diverted from Big Hole to make up for insifficiency.	☑ A	☐ F

Historical Use: Historical Consumed Volume

Continue to answer questions for water right(s) identified in question 36. Applications corroborating historical consumptive volume with the Historical Use Addendum (Form 606-HUA) may be eligible to skip parts of question 50; see the Form 606-HUA for more information.

49. What are the historical purposes? Mark each purpose and answer the applicable questions below. ☑ Irrigation. Answer question 50. ☐ Lawn and garden. Answer question 51. ☐ Stock. Answer question 52. ☐ Domestic and multiple domestic. Answer question 53. ☐ Municipal. Answer question 54. ☐ Other. Answer question 55.		

50. Irrigation		
a. Will you use Department standards for historical consumptive use as defined in ARM 36.12.1902?	☑ Y ☐ N	☐ F
i. If no,		
1. What method will you use to determine historical consumptive use?	☐ A	☐ F
2. Submit a Historical Water Use Addendum (Form 606-HUA) to the Department. Form 606-HUA must be submitted to the Department before the Preapplication Meeting Form is completed.	☐ S	☐ F
ii. If yes,		
1. What is the historical irrigation method type and subtype? Irrigation method types include flood and sprinkler. Flood irrigation subtypes include level border, graded border, furrow, contour ditch, or wild flood. Sprinkler subtypes include wheel line and center pivot. Wild Flood Irrigation	☑ A	☐ F
2. What was the slope (%) of the historical place of use? 2% to 16%		☐ F

3. Are there any factors beyond irrigation method type/subtype and place of use slope that may influence percent efficiency of irrigation?	☐ Y ☑ N	☐ F
a. If yes, submit evidence to support the modified percent efficiency of irrigation in the Historical Water Use Addendum (Form 606-HUA). These factors may include infrastructure age, soil characteristics, or field improvements. Form 606-HUA must be submitted to the Department before the Preapplication Meeting Form is completed.	☐ S	☐ F
4. Based on answers to the above questions, what is the percent efficiency of irrigation? 25%		☐ F
5. What is the County Management Factor? 38.8%		☐ F
6. What is evapotranspiration (ET) based on the irrigation method and county? 15.25 inches for Divide weather station		☐ F
7. What percent of applied water are irrecoverable losses per ARM 36.12.1902(17)? 5%		☐ F

51. Lawn and garden		
a. Will you use a Department standard for historical consumptive use volume for lawn and garden? Department standards include 2.5 acre-feet per acre, or a calculated volume based on Irrigation Water Requirements for turf grass.	☐ Y ☐ N	☐ F
i. If yes, which standard? _____		☐ F
ii. If no, please provide an estimate of historical water use based on expert analysis and methods used to determine this estimate. _____ _____	☐ A	☐ F

52. Stock		
a. Which volume standard for animal units applies to historical use and why? The standards are either 15 gallons per animal unit per day for new appropriations or 30 gallons per animal unit per day for claims. _____	☐ A	☐ F
b. How many animal units were historically served? _____		☐ F
c. Did these animal units rely entirely on the water right(s) proposed for change for their full water demand?	☐ Y ☐ N	☐ F
i. If no, explain. _____ _____	☐ A	☐ F

53. Domestic and multiple domestic		
a. How many households were served? _____		☐ F
b. Will the Department standard of 1 acre-foot per household be used? The same standard shall be applied to historical and proposed uses.	☐ Y ☐ N	☐ F
i. If no, what standard will be used? _____		☐ F
c. Did the historical use include wastewater disposal and treatment?	☐ Y ☐ N	☐ F
i. If yes, which of the following best describes the wastewater disposal and treatment system? Individual drain fields, central treatment facility with minimal consumption, or evaporation basin or land application? _____	☐ A	☐ F

54. Municipal		
a. What is the volume of water (AF) historically consumed for municipal purposes? _____		☐ F
b. Submit evidence to support historical municipal use. The data sources may include records that tie water use to the U.S Census, estimates of historical system capacity and estimates of leakage.	☐ S	☐ F

55. Other		
a. Specify the other purposes. _____		☐ F
b. What is the volume of water (AF) historically consumed for other purposes? _____		☐ F
c. Submit evidence to support the volume of water historically consumed.	☐ S	☐ F

Historical Use: Historical Places of Storage

(Continue to answer questions for water right(s) identified in question 36.)

56. Did the historical use include one or more places of storage? 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)).	☐ Y ☑ N	☐ F
a. If yes, for each historical place of storage please provide the surface area in acres (AC), capacity (AF), annual net evaporation (FT/YR), and number of times per year the place of storage was filled.	☐ A	☐ F

ID	Surface Area (AC)	Capacity (AF)	Annual Net Evaporation (FT/YR)	# of Annual Fillings

Surface Water

☑ **Applicable**, move on to question 57. ☐ **Not Applicable**, skip to question 66.

The following questions are mandatory for changes to surface water rights and must be filled out before the Preapplication Meeting Form is determined to be complete.

Return Flow Analysis

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
57. Do the purposes of the water rights proposed for change include irrigation?	☑ Y ☐ N	☐ F
a. If yes, does the proposed change include a change in place of use *and/or* a change in purpose? If you propose to retire acres in the historical place of use and/or add new acres outside the historical place of use, this constitutes a change in place of use.	☑ Y ☐ N	☐ F
i. If yes, a return flow analysis is required. Move on to answer question 58.		
ii. If no, this section is complete, and you may skip to question 94.		
58. Does the proposed change include a change in purpose?	☐ Y ☑ N	☐ F
a. If yes, consumptive use information is collected in the Change in Purpose section (questions 101 to 108), skip to question 59.		
b. If no, go to question 59.		
59. Does the proposed change include a change in place of use? If yes, move on to question 60. If no, skip to question 63.	☑ Y ☐ N	☐ F

60. Submit a map showing the new, unchanged historical, and retired historical places of use. Create map on an aerial photograph or topographic map that shows the following: section corners, township and range, scale bar, and north arrow. If you have shapefiles associated with this map, in addition to submitting an image of the map, please submit electronic copies of the shapefiles to the Department.	☑ S	☐ F
61. How many acres, if any, will be retired from the historical place of use? 6.0		☐ F
62. Are irrigated acres proposed that are outside the historical place of use?	☐ Y ☑ N	☐ F
a. If yes,		
i. How many acres?		☐ F
ii. What is the proposed irrigation method type (e.g., flood or sprinkler) and subtype (e.g., level border, graded border, furrow, contour ditch, wild flood, center pivot, or wheel line) for the new acres?		☐ F
iii. What is the slope (%) of the new place of use?		☐ F
iv. Based on 62.a.ii to 62.a.iii, what is the percent efficiency of irrigation for the new acres?		☐ F
v. What is the County Management Factor for the new acres?		☐ F
vi. What is the ET based on the irrigation method and county for the new acres?		☐ F
vii. What percent of applied water are irrecoverable losses for new acres?		☐ F
63. Do you have information for the Department to consider about the source and location where return flows historically accrued?	☐ Y ☑ N	☐ F
a. If yes, submit this information to the Department.	☐ S	☐ F

Extended Return Flow Analysis

64. Based on the preliminary data provided by the Department at this preapplication meeting, to what surface water sources do return flows accrue before and after the proposed change? **Return flow data provided by the Department at the preapplication meeting is preliminary and is subject to change during technical analyses. If the source or location of return flow data changes during technical analyses, then the analysis of impacts to identified surface water rights will reflect the technical analyses; this will not constitute a change of any element to the proposed application pursuant to ARM 36.12.1302(6)(a).* Return flows from the 6.0 acres removed from irrigation likely accrue to Johnson Creek and the Big Hole River.	☑ A	☐ F
65. If an extended return flow analysis is necessary to analyze impacts to identified surface water rights for the purpose of evaluating adverse effect, do you elect to answer non-mandatory questions 149 to 154 to provide information required for this extended analysis?	☑ Y ☐ N	☐ F
a. If yes, go to question 149. This information will be used if an extended return flow analysis is necessary to analyze impacts to identified surface water rights for the purpose of evaluating adverse effect.		
b. If no, did you elect in question 1 for the Department to conduct technical analyses?	☑ Y ☐ N	☐ F
i. If yes, do you elect for the Department to use publicly available water quantity data for the extended return flow analysis? If the extended return flow analysis is needed and sufficient publicly available water quantity data are not available, then the Department will not be able to conduct the extended analysis. You will still have to prove a lack of adverse effect from the proposed change.	☑ Y ☐ N	☐ F
ii. If no, you may still include the extended return flow analysis with your technical analyses. The Department will include the extended analysis in its scientific credibility review of your technical analyses. You will still need to prove a lack of adverse effect from the proposed change.		

GROUNDWATER

☐ **Applicable**, move on to question 66. ☑ **Not Applicable**, skip to question 94.

The following questions are mandatory for changes to groundwater rights and must be filled out before the Preapplication Meeting Form is determined to be complete.

Groundwater Analysis for Changes

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
66. Does the proposed change include a change in point of diversion?	☐ Y ☐ N	☐ F
a. If no, this section is complete; skip to question 77.		
b. If yes, a groundwater analysis for changes is required; answer questions specific to the groundwater diversion type.		
i. What is the groundwater diversion type? _____		☐ F

Well/Pumping Pit	Answer questions 67 to 72	**Developed Spring**	Answer question 73	**Pond**	Answer questions 74 to 76

Groundwater Analysis: Well/Pumping Pit

☐ Applicable ☐ Not Applicable

67. Per ARM 36.12.121 a 24- or 72-hour aquifer test is required; do you propose not to conduct the test? An 8-hour test will be required, if no aquifer test is completed.	☐ Y ☐ N	☐ F
a. If yes, explain. The Department will let you know if the request is reasonable and identify additional data needs. _____ _____ _____ _____ _____	☐ A	☐ F

68. Submit Aquifer Test Data Form (Form 633) for each *new* well/pumping pit that will be constructed prior to technical analyses or *existing* well/pumping pit that is added by the change. If an aquifer test was already conducted for an *existing* well/pumping pit, and you would like to use that instead of conducting a new aquifer test, describe this in question 67.a. If a variance is requested, Form 633 must be submitted on or before the Variance Request Deadline. If no variance is requested, Form 633 is due by the time the preapplication meeting form is complete but may be submitted earlier. However, if the Department determines a variance is needed and the Variance Request Deadline has passed, to submit the Form 653 you must reschedule the preapplication meeting or submit the application without expedited fees and timelines (ARM 36.12.1302(6)).	☐ S	☐ F
69. Submit the Aquifer Testing Addendum (Form 600/606-ATA) and associated materials (e.g., well logs). If you request a variance, Form 600/606-ATA must be submitted on or before the Variance Request Deadline. If no variance is requested, Form 600/606-ATA is due by the time the preapplication meeting form is complete but may be submitted earlier. However, if the Department determines a variance is needed and the Variance Request Deadline has passed, to submit the Form 653 you must reschedule the preapplication meeting or submit the application without expedited fees and timelines (ARM 36.12.1302(6)).	☐ S	☐ F
70. Are you requesting a variance from ARM 36.12.121? If you are unsure if a variance request will be needed, mark follow-up and answer this question once Form 600/606-ATA and Form 633 are complete. A variance must be requested by the Variance Request Deadline.	☐ Y ☐ N	☐ F
a. If yes, submit Form 653, Form 600/606-ATA, and Form 633 together on or before the Variance Request Deadline.	☐ S	☐ F
b. If no, you may choose to submit Form 600/606-ATA and Form 633 before the Variance Request Deadline, and the Department will review these two forms. If the Department determines a variance is needed after the Variance Request Deadline, to submit the Form 653 you must reschedule the preapplication meeting or submit the application without expedited fees and timelines (ARM 36.12.1302(6)).		
71. Have all the wells/pumping pits been constructed?	☐ Y ☐ N	☐ F
a. If no,		
i. Submit a list of the POD IDs for all wells/pumping pits and mark whether they have or have not been constructed.	☐ S	☐ F
ii. When will the proposed wells/pumping pits be constructed? _____		☐ F

iii. Is the requested volume for each proposed well/pumping pit known?	☐ Y ☐ N	☐ F
1. If yes, list the flow rate and volume requested for each proposed well/pumping pit. Label with POD ID. _____ _____	☐ A	☐ F
2. If no, what is the total requested volume (AF) and the number of proposed PODs? _____		☐ F
72. What is the flow rate (GPM or CFS), volume (AF), and period of diversion (MM/DD-MM/DD) required at each new well/pumping pit ("*new*") or existing well/pumping pit that is added by the change ("*existing*")? If the well/pumping pit is not yet constructed, use the estimated volume based on question 71.a.iii.2. What is the well/pumping pit depth (FT), if available, or estimated well/pumping pit depth (FT)? Label using the same POD ID number as the Proposed Use Map (question 9) and, if available, GWIC ID. List whether the POD is *new* or an *existing* well added by the change.	☐ A	☐ F

POD ID	**GWIC ID**	**Flow Rate**			**Volume**	**Period of Diversion**	**Depth**	**Measured or Estimated**	**New or Existing**
	(if available)	*Flow*	*GPM*	*CFS*	*AF*	*MM/DD-MM/DD*	*FT*		
			☐	☐					
			☐	☐					
			☐	☐					
			☐	☐					
			☐	☐					

Groundwater Analysis: Developed Spring

☐ Applicable ☐ Not Applicable

73. Have you measured each *new* developed spring or *existing* developed spring that will be added by the change?	☐ Y ☐ N	☐ F
a. If yes, submit the measurements to the Department and answer the following questions:	☐ S	☐ F
i. Do you have flow rate (GPM or CFS) and volume measurements?	☐ Y ☐ N	☐ F
ii. With what method were measurements collected? _____ _____	☐ A	☐ F

iii. What is the interval of measurements? _____		☐ F
iv. Is the interval of measurements sufficient to comply with the Department standard of monthly flow measurements taken at regular intervals or at department-approved intervals during the proposed period of diversion?	☐ Y ☐ N	☐ F
b. If no, or if measurements do not comply with the Department standard, answer the following questions. The Department cannot deem the preapplication meeting form adequately completed until the Department receives measurements that meet the Department standard.		
i. When do you plan to measure? _____	☐ A	☐ F
ii. With what method and at what interval will measurements be collected? _____ _____	☐ A	☐ F

Groundwater Analysis: Pond

☐ Applicable ☐ Not Applicable

74. Submit Form 653 to apply for a variance from ARM 36.12.121 for the Aquifer Test on or before the Variance Request Deadline.	☐ S	☐ F
75. Submit bathymetry data, survey, or engineering plans for each *new* pond added or *existing* pond added or modified by the proposed change. Label using the same POD ID number as the Proposed Use Map (question 9). List whether the pond is *new* or an *existing* pond.	☐ S	☐ F
76. Are any of the *new* ponds, or *existing* ponds added or modified by the proposed change the pond, fed or drained by surface water in addition to groundwater?	☐ Y ☐ N	☐ F
a. If yes,		
i. Explain. _____ _____ _____	☐ A	☐ F
ii. Submit measurements of the connected surface water source. These may include inflow and outflow measurements.	☐ S	☐ F

Surface Water Depletion Analysis for Changes

77. Does the proposed change include any of the following scenarios that necessitate a surface water depletion analysis pursuant to ARM 36.12.1303(5)(c)? • Change in point of diversion • Change in place of use, purpose of use, or place of storage that result in a change in consumptive use or pumping schedule.	☐ Y ☐ N	☐ F
a. If no, this section is complete; skip to question 85.		
b. If yes, a surface water depletion analysis is required; answer questions specific to the groundwater diversion type.		
i. What is the groundwater diversion type? _____		☐ F

Well/Pumping Pit	Answer questions 78 to 79	**Developed Spring**	Answer question 80	**Pond**	Answer questions 81 to 82

Surface Water Depletion Analysis: Well/Pumping Pit

☐ Applicable ☐ Not Applicable

78. Provide the following information for each well/pumping pit on the current version of the water rights proposed for change that will either remain on the water rights after the change ("*unchanged*") or will be retired ("*retired*"): flow rate (GPM or CFS), volume (AF), period of diversion required (MM/DD-MM/DD), well/pumping pit depth (FT) (if available, otherwise or estimated well/pumping pit depth (FT)), and whether it is *unchanged* or *retired*. Please use the same POD ID as the Historical Use Map (question 8) and, if available, provide the GWIC ID number.	☐ A	☐ F

POD ID	**GWIC ID** *(if available)*	**Flow Rate** *Flow Rate*	*GPM*	*CFS*	**Volume** *AF*	**Period of Diversion** *MM/DD-MM/DD*	**Depth** *FT*	**Measured or Estimated**	**Unchanged or Retired**
			☐	☐					
			☐	☐					
			☐	☐					
			☐	☐					
			☐	☐					

79. Provide the pumping schedule for each well/pumping pit (*new*, *existing*, *unchanged*, or *retired*) for both *before* and *after* the proposed change. Use the same POD ID as the project maps. For *new* and *existing* wells/pumping pits, use the Proposed Use Map (question 9). For *unchanged* and *retired* wells/pumping pits use the Historical Use Map (question 8). Attach any additional pumping schedules using *"Additional Pumping Schedule (606P)" sheet*. For *retired* wells/pumping pits, mark "N/A" checkbox for after the change and for *new* wells/pumping pits, mark "N/A" checkbox for before the change. Mark the checkbox "Diverted volume/# of Days" if it is a year-round use and the pump schedule is an allocation of diverted volume by the number of days in the month. Mark the checkbox "80% dry year IWR" if it is an irrigation/lawn and garden use and the pump schedule is the 80% dry year net irrigation requirement (IWR, NRCS 2003).	☐ A	☐ F

(Before) POD ID				**(After) POD ID**			
☐ Diverted volume/# of Days ☐ 80% dry year IWR ☐ N/A				☐ Diverted volume/# of Days ☐ 80% dry year IWR ☐ N/A			
Month	**Volume (AF)**	**Month**	**Volume (AF)**	**Month**	**Voume (AF)**	**Month**	**Volume (AF)**
January		July		January		July	
February		August		February		August	
March		September		March		September	
April		October		April		October	
May		November		May		November	
June		December		June		December	

Surface Water Depletion Analysis: Developed Spring

☐ Applicable ☐ Not Applicable

80. Is the type of groundwater diversion for your proposed project a developed spring? If yes, skip to question 85 because no surface water depletion analysis will be necessary.	☐ Y ☐ N	☐ F

Surface Water Depletion Analysis: Pond

☐ Applicable ☐ Not Applicable

81. Are there any ponds on the current version of the water rights proposed for change that will remain on the water rights unchanged ("*unchanged*") or will be retired ("*retired*")? If yes,	☐ Y ☐ N	☐ F
a. Did you skip questions 74 to 76 because there is no change in POD? If yes,	☐ Y ☐ N	☐ F
i. Submit Form 653 to apply for a variance from ARM 36.12.121 for the Aquifer Test on or before the Variance Request Deadline.	☐ S	☐ F
b. Submit bathymetry data, survey, or engineering plans for each *unchanged* pond or *retired* pond. Label the submittal with the POD ID and whether the pond is *unchanged* or *retired*.	☐ S	☐ F
c. Are any of the *unchanged* or *retired* ponds fed or drained by surface water, in addition to groundwater?	☐ Y ☐ N	☐ F
i. If yes,		
1. Explain. _____ _____ _____	☐ A	☐ F
2. Submit measurements of the connected surface water source. These may include inflow and outflow measurements.	☐ S	☐ F

82. Provide the schedule of diversions for out-of-pond use for each pond (*new*, *existing*, *unchanged*, or *retired*) for both *before* and *after* the proposed change. Use the same POD ID as the project maps. For *new* and *existing* ponds, use the Proposed Use Map (question 9). For *unchanged* and *retired* ponds use the Historical Use Map (question 8). Attach any additional diversion schedules using the same format as the table below. For *retired* ponds, mark "N/A" checkbox for after the change and for *new* ponds, mark "N/A" checkbox for before the change. Mark the checkbox "Diverted volume/# of Days" if it is a year-round use and the diversion schedule is an allocation of diverted volume by the number of days in the month. Mark the checkbox "80% dry year IWR" if it is an irrigation or lawn and garden use and the diversion schedule is the 80% dry year net irrigation requirement (IWR, NRCS 2003).	☐ A	☐ F

(Before) POD ID				**(After) POD ID**			
☐ Diverted volume/# of Days ☐ 80% dry year IWR ☐ N/A				☐ Diverted volume/# of Days ☐ 80% dry year IWR ☐ N/A			
Month	**Diversions for Out-of-Pond Use Volume (AF)**	**Month**	**Diversions for Out-of-Pond Use Volume (AF)**	**Month**	**Diversions for Out-of-Pond Use Volume (AF)**	**Month**	**Diversions for Out-of-Pond Use Volume (AF)**
January		July		January		July	
February		August		February		August	
March		September		March		September	
April		October		April		October	
May		November		May		November	
June		December		June		December	

Extended Surface Water Depletion Analysis

83. Based on the preliminary net depletion data provided by the Department at this preapplication meeting, what are the hydraulically connected surface water sources before and after the proposed change? **Net depletion data provided by the Department at the preapplication meeting are preliminary and are subject to change during the technical analyses. If the source or location of net depletion data changes during the technical analyses, then the extended surface water depletion analysis will reflect the technical analyses; this will not constitute a change of any element to the proposed application pursuant to ARM 36.12.1302(6)(a).* _____ _____ _____	☐ A	☐ F

84. If an extended surface water depletion analysis is necessary to analyze impacts to identified surface water rights for the purpose of evaluating adverse effect, do you elect to answer non-mandatory questions 157 to 161 to provide information required for this extended surface water depletion analysis?	☐ Y ☐ N	☐ F
a. If yes, go to question 156. This information will be used if an extended surface water depletion analysis is necessary to analyze impacts to identified surface water rights for the purpose of evaluating adverse effect.		
b. If no, did you elect in question 1 for the Department to conduct technical analyses?	☐ Y ☐ N	☐ F
i. If yes, do you elect for the Department to use publicly available water quantity data for the extended surface water depletion analysis? If this extended surface water depletion analysis is needed and sufficient publicly available water quantity data are not available, then the Department will not be able to conduct the extended surface water depletion analysis. You will still need to prove a lack of adverse effect from the proposed change.	☐ Y ☐ N	☐ F
ii. If no, you may still include the extended surface water depletion analysis with your technical analyses. The Department will include the extended analysis in its scientific credibility review of your technical analyses. You will still need to prove a lack of adverse effect from the proposed change.		

Return Flow Analysis

85. Do the purposes of the water rights proposed for change include irrigation?	☐ Y ☐ N	☐ F
a. If yes, does the proposed change include a change in place of use *and/or* a change in purpose? If you propose to retire acres in the historical place of use and/or add new acres outside the historical place of use, this constitutes a change in place of use.	☐ Y ☐ N	☐ F
i. If yes, a return flow analysis is required. Move on to answer question 86.		
ii. If no, this section is complete, and you may skip to question 94.		
86. Does the proposed change include a change in purpose?	☐ Y ☐ N	☐ F
a. If yes, consumptive use information is collected in the Change in Purpose section (questions 101 to 108), skip to question 87.		
b. If no, skip to question 87.		
87. Does the proposed change include a change in place of use? If yes, move on to question 88. If no, skip to question 91.	☐ Y ☐ N	☐ F

88. Submit a map showing the new, unchanged historical, and retired historical places of use. Create map on an aerial photograph or topographic map that shows the following: section corners, township and range, scale bar, and north arrow. If you have shapefiles associated with this map, in addition to submitting an image of the map, please submit electronic copies of the shapefiles to the Department.	☐ S	☐ F
89. How many acres, if any, will be retired from the historical place of use? _____		☐ F
90. Are irrigated acres proposed that are outside the historical place of use?	☐ Y ☐ N	☐ F
a. If yes,		
i. How many acres? _____		☐ F
ii. What is the proposed irrigation method type (e.g., flood or sprinkler) and subtype (e.g., level border, graded border, furrow, contour ditch, wild flood, center pivot, or wheel line) for the new acres? _____	☐ A	☐ F
iii. What is the slope (%) of the new place of use? _____		☐ F
iv. Based on question 90.a.ii to 90.a.iii, what is the percent efficiency of irrigation for the new acres? _____		☐ F
v. What is the County Management Factor for the new acres? _____		☐ F
vi. What is the ET based on the irrigation method and county for the new acres? _____		☐ F
vii. What percent of applied water are irrecoverable losses for new acres? _____		☐ F
91. Do you have information for the Department to consider about the source and location where return flows historically accrued?	☐ Y ☐ N	☐ F
a. If yes, submit this information to the Department.	☐ S	☐ F

Extended Return Flow Analysis

92. Based on the preliminary data provided by the Department at this preapplication meeting, to what surface water sources do return flows accrue before and after the proposed change? **Return flow data provided by the Department at the preapplication meeting are preliminary and are subject to change during technical analyses. If the source or location of return flow data changes during technical analyses, then the analysis of impacts to identified surface water rights will reflect the technical analyses; this will not constitute a change of any element to the proposed application pursuant to ARM 36.12.1302(6)(a).* _____ _____	☐ A	☐ F
93. If an extended return flow analysis is necessary to analyze impacts to identified surface water rights for the purpose of evaluating adverse effect, do you elect to answer non-mandatory questions 149 to 155 to provide information required for this extended analysis?	☐ Y ☐ N	☐ F
a. If yes, go to question 149. This information will be used if an extended return flow analysis is necessary to analyze impacts to identified surface water rights for the purpose of evaluating adverse effect.		
b. If no, did you elect in question 1 for the Department to conduct technical analyses?	☐ Y ☐ N	☐ F
i. If yes, do you elect for the Department to use publicly available water quantity data for the extended return flow analysis? If the extended return flow analysis is needed and sufficient publicly available water quantity data are not available, then the Department will not be able to conduct the extended analysis. You will still have to prove a lack of adverse effect from the proposed change.	☐ Y ☐ N	☐ F
ii. If no, you may still include the extended return flow analysis with your technical analyses. The Department will include the extended analysis in its scientific credibility review of your technical analyses. You will still need to prove a lack of adverse effect from the proposed change.		

Mandatory Project-Specific Questions

The following questions are mandatory when applicable and must be filled out before the Preapplication Meeting Form is determined to be complete.

Temporary Change

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
94. Does the proposal include a temporary change? *This includes proposing to add a place of use on State of Montana Trust Land, with all points of diversion on private land, because the change authorization will be temporary for the duration of the lease term.* If yes, answer the questions in this section (questions 95 to 100). If no, this section is complete; skip to question 100.	☐ Y ☑ N	☐ F
95. What elements of the water rights are being temporarily changed? _____		☐ F
96. For what purpose will the water rights be temporarily used? _____		☐ F
97. For how many years will the water rights be temporarily changed? _____		☐ F
98. Will the temporary change be intermittent over the years?	☐ Y ☐ N	☐ F
a. If yes, explain. _____	☐ A	☐ F
99. Is the quantity of water subject to the temporary change being made available from the development of a new water conservation or storage project?	☐ Y ☐ N	☐ F
a. If yes, explain the water conservation or storage project. _____ _____ _____	☐ A	☐ F
100. If you are answering Project-Specific Questions as they are referenced in Application Details, return to question 17 if you are proposing to add a place of use on State of Montana Trust Land and question 20.a.ii if you are proposing a temporary change that does not involve State of Montana Trust Land. If you are answering in consecutive order, go to question 101.		

Change in Purpose

101. Does the project involve a change in purpose? If yes, answer the questions in this section (questions 102 to 108). If no, this section is complete; skip to question 108.	☐ Y ☑ N	☐ F
102. Identify the new and unchanged purposes, flow rate (GPM or CFS), volume (AF), period of diversion, and period of use (MM/DD-MM/DD) for each purpose.	☐ A	☐ F

Purpose	**New or Unchanged?**	**Period of Diversion** *(MM/DD-MM/DD)*	**Period of Use** *(MM/DD-MM/DD)*	**Flow Rate** *Flow Rate*	*GPM*	*CFS*	**Volume** *(AF)*
					☐	☐	
					☐	☐	
					☐	☐	
					☐	☐	
					☐	☐	
			Total		☐	☐	

103. Answer the questions specific to each new and unchanged purpose identified in question 102.		

Lawn and garden	Question 104	**Stock**	Question 105	**Domestic and multiple domestic**	Question 106	**Other purpose**	Question 107

104. Lawn and garden		
a. Will consumptive use be based on the standard of 2.5 acre-feet per acre or a calculated volume based on Irrigation Water Requirements for turf grass?	☐ Y ☐ N	☐ F
i. If yes, which standard? _____		☐ F
ii. If no, describe how consumptive use will be estimated. This must be based on expert analysis. _____ _____	☐ A	☐ F
105. Stock		
a. How many animal units will be served? _____		☐ F

106. Domestic and multiple domestic		
a. Households & bedrooms per household served? _____		☐ F
b. Will the Department volume standard be used to determine consumptive use?	☐ Y ☐ N	☐ F
i. If no, what volume standard will be used? _____	☐ A	☐ F
c. Will the proposed use include wastewater disposal and treatment?	☐ Y ☐ N	☐ F
i. If yes, which of the following best describes the wastewater disposal and treatment system? Individual drain fields, central treatment facility with minimal consumption, or evaporation basin or land application? _____		☐ F
107. Other purpose		
a. What is the other purpose (e.g., municipal, commercial)? _____		☐ F
b. What is the percentage of consumption for the proposed use? Please explain. _____ _____ _____	☐ A	☐ F
108. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 14 and if you are answering in consecutive order, go to question 109.		

Ditch-Specific Questions

Applications corroborating historical diverted volume with the Historical Use Addendum (Form 606-HUA) may be eligible to skip one or more questions in this section; see the Form 606-HUA for more information.

109. Does the historical use of water include at least one conveyance ditch? If yes, answer questions 110 to 111. If no, skip to question 112.	☑ Y ☐ N	☐ F
110. Submit a Historical Use Ditch Map that shows every ditch conveying water for the historical use of all water rights proposed for change. Label the ditch names, PODs, the POUs, and the ditch measurement locations (requested in question 111.d). The map should be created on a historical image or topographic map with the following: section corners, township and range, scale bar, and north arrow.	☑ S	☐ F

111. Answer question 111.a to 111.h one time for each historical conveyance ditch. If there is more than one historical conveyance ditch, use an "Additional Historical Ditch (606P)" sheet for each additional ditch.

a. What is the ditch name?
Johnson North Ditch

☐ F

b. List the water rights proposed for change that were conveyed by the ditch.
41D 93270-00

☐ F

c. What is the distance water was historically carried by the conveyance ditch? Only include segments between the POD and start of the POU; do not include segments within the POU.
Diversion is at edge of field.

☑ A ☐ F

d. Provide at least one set of ditch measurements, which include width (FT), depth (FT), and slope (%). Discuss ditch characteristics with DNRC to determine the minimum number of ditch measurements. Include the location of each measurement, labeled with the 2-digit measurement ID number, used on the map submitted for question 110.

☑ S ☐ F

ID #	Width (FT)	Depth (FT)	Slope (%)	Date of Measurement
M2	7.80	1.94	4.3	Jan 2026

e. What is a reasonable Manning's n value? List the factors used for estimation. If you do not know this value, please work through estimation with the Department.
0.050 The ditch is quite irregular in profile with cobbles creating significant roughness.

☑ A ☐ F

f. What type of soils compose the historical conveyance ditch? For lined ditches, write "lined" instead.
The soil is classified Foohen-Monaberg-Mooseflat complex with is generally a loam to 18 inches transitioning to more gravel below that level.

☑ A ☐ F

g. Are other water rights conveyed by the historical conveyance ditch?	☐ Y ☑ N	☐ F
i. If yes,		
1. List the water right numbers and their flow rates. _____ _____ _____	☐ A	☐ F
2. What is the sum of the flow rates, including the water rights proposed for change? _____	☐ A	☐ F
3. Submit a map with your best estimate of the historical POUs for the other water rights conveyed by the historical conveyance ditch. Include only POUs between the historical POD and your historical POU. If you do not know this information, the Department can help you create the map. The map should be created on an aerial photograph or topographic map and show the following: section corners, township and range, scale bar, and north arrow.	☐ S	☐ F
h. Were any water rights proposed for change part of one historical water right that was split?	☐ Y ☑ N	☐ F
i. If yes, were all split water rights split in such a way to ensure each post-split water right could stand alone and not be reliant on the others for carriage water?	☐ Y ☐ N	☐ F
1. If no, do any of the water rights proposed for change have a carriage water requirement?	☐ Y ☐ N	☐ F
a. If yes,		
i. List the water rights with a carriage water requirement _____		☐ F
ii. Update your Historical Use Ditch Map (question 110) to label the ditch segments where a carriage water requirement exists for a water right proposed for change. Also, use your best estimate to label the POUs for all water rights included in the carriage water requirement. If you do not know this information, the Department can help you update the map.	☐ S	☐ F
112. Does the proposed use include at least one existing or new conveyance ditch? If yes, answer questions 113 to 114. If no, or if you answered these questions earlier in the preapplication meeting, this section is complete; skip to question 115.	☑ Y ☐ N	☐ F

113. Submit a Proposed Use Ditch Map that shows every ditch conveying the water rights proposed for change, including any unchanged portions. Label all unchanged and proposed PODs, all unchanged and proposed POUs, and additional ditch measurement locations (requested in question 114.e). The map should be created on an aerial photograph or topographic map with the following: section corners, township and range, scale bar, and north arrow.	☑ S	☐ F
114. Answer the questions 114.a to 114.i one time for each proposed use conveyance ditch. Use an "Additional Proposed Use Ditch (606P)" sheet for each additional ditch.		
a. What is the ditch name? Mallon Ditch		☐ F
b. Is this ditch a historical conveyance ditch detailed in questions 110 to 111?	☑ Y ☐ N	☐ F
i. If yes, have any of the following details changed, to the best of your knowledge, from historical conditions: ditch length, distance water conveyed, ditch lining, or water rights conveyed by the ditch?	☐ Y ☑ N	☐ F
1. If yes, answer questions 114.c to 114.i using current data.		
2. If no, do not answer questions 114.c to 114.i for this ditch because the information remains unchanged. Move on to the next proposed use conveyance ditch, or if none remain, skip to question 115.		
c. List the water rights proposed for change that are going to be conveyed by the ditch. 41D 93270-00		☐ F
d. What is the distance water will be carried by the conveyance ditch? Only include segments between the POD and start of the POU; do not include segments within the POU. Approximately 3950 feet	☑ A	☐ F
e. Provide at least one set of ditch measurements, which include width (FT), depth (FT), and slope (%). Discuss ditch characteristics with DNRC to determine the minimum number of ditch measurements. Include the location of each measurement, labeled with the 2-digit measurement ID number, used on the map submitted for question 113.	☑ S	☐ F

ID #	Width (FT)	Depth (FT)	Slope (%)	Date of Measurement
M3	22.0	3.82	0.05	2025

f. What is a reasonable Manning's n value? List the factors used for estimation. If you do not know this value, please work through estimation with the Department. The engineer used a composite Manning's n value as it changes with water elevation in the ditch. The average value appears to be about 0.025.	☑ A	☐ F
g. What type of soils compose the proposed conveyance ditch? For lined ditches, write "lined" instead. The ditch is constructed in the recent alluvium immediately adjacent to the Big Hole River with the ditch having a gravelly to cobbly bed.	☑ A	☐ F
h. Are other water rights conveyed by the proposed conveyance ditch?	☑ Y ☐ N	☐ F
i. If yes,		
1. List the water right numbers and their flow rates. 41D 93271-00 9.55 CFS	☑ A	☐ F
2. What is the sum of the flow rates, including the water rights proposed for change? Up to 19.55 CFS will be conveyed in the Mallon Ditch and 5.0 CFS in South Johnson	☑ A	☐ F
3. Submit a map with your best estimate of the location of current POUs for the other water rights conveyed by the proposed conveyance ditch. Include only POUs between the POD and your proposed POU. If you do not know this information, the Department can help you create the map. The map should be created on an aerial photograph or topographic map and show the following: section corners, township and range, scale bar, and north arrow.	☑ S	☐ F
i. Were any water right(s) proposed for change identified as having a carriage water requirement in question 111.h.i.1.a.i?	☐ Y ☑ N	☐ F
i. If yes, update your Proposed Use Ditch Map (question 113) to label the ditch segments where a carriage water requirement exists for a water right proposed for change. Also, use your best estimate to label the POUs for all water rights included in the carriage water requirement. If you do not know this information, the Department can help you update the map.	☐ S	☐ F
115. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 15 and if you are answering in consecutive order, go to question 116.		

Change in Place of Storage

116. Does the project involve a change in place of storage? If yes, answer the questions in this section (questions 117 to 122) for each individual place of storage. Use an "Additional Place of Storage (606P)" sheet for additional places of storage. If no, this section is complete; skip to question 123.	☐ Y ☑ N	☐ F
117. Is this application to add a new place of storage or change an existing place of storage? _____		☐ F
a. If application is to change an existing place of storage, list the water rights that include the place of storage and a short description of the proposed change. _____ _____	☐ A	☐ F
118. Is the place of storage located on-stream?	☐ Y ☐ N	☐ F
a. If no, describe any losses related to conveyance that are not detailed in "Ditch-Specific Questions." _____ _____ _____	☐ A	
119. What is the proposed capacity of the place of storage? Use bathymetry data, survey, or engineering plans for capacity. Submit the data source used with this form. In lieu of these data sources, use the following equation: *Surface Acres x Maximum Depth (ft) x 0.5 = Capacity (AF)* _____	☐ S	☐ F
120. What is the proposed surface area of the place of storage? _____	☐ A	☐ F
121. What is the annual net evaporation of water from the place of storage based on the Department's gridded net evaporation layer? If you propose a different method, attach an explanation and justification of the method. _____	☐ A	☐ F
122. Will the place of storage be lined?	☐ Y ☐ N	☐ F
123. If you are answering Project-Specific Questions as they are referenced in Application Details, return to question 16 and if you are answering in consecutive order, go to question 109.		

Mitigation, Aquifer Recharge, and Marketing for Mitigation/Aquifer Recharge

124. Does your application include one of the following purposes? If no, this section is complete; skip to question 129.	☐ Y ☑ N	☐ F
a. Mitigation water. If yes, answer question 125 and 126.	☐ Y ☐ N	☐ F
b. Aquifer recharge water. If yes, answer question 125 and 127.	☐ Y ☐ N	☐ F
c. Marketing for mitigation/aquifer recharge. If yes, answer question 128.	☐ Y ☐ N	☐ F
125. Mitigation Water and Aquifer Recharge Water		
a. Identify the water right(s) for which the mitigation/aquifer recharge water will be used. _____	☐ A	☐ F
b. Identify the application or preapplication number where these water rights were identified as needing mitigation or aquifer recharge to meet the adverse effect criterion. _____	☐ A	☐ F
c. What is the timing, flow rate, and volume of net depletions identified as needing mitigation or aquifer recharge to meet the adverse effect criterion?	☐ A	☐ F

Month	**Days**	**Flow Rate**			**Volume**	**Month**	**Days**	**Flow Rate**			**Volume**
		Flow	*GPM*	*CFS*	*AF*			*Flow*	*GPM*	*CFS*	*AF*
January			☐	☐		July			☐	☐	
February			☐	☐		August			☐	☐	
March			☐	☐		September			☐	☐	
April			☐	☐		October			☐	☐	
May			☐	☐		November			☐	☐	
June			☐	☐		December			☐	☐	

d. Will other water contribute to the need for mitigation or aquifer recharge water? This may include water rights with a mitigation or aquifer recharge purpose, marketing for mitigation contracts, or mitigation water secured via other types of contracts.	☐ Y ☐ N	☐ F
i. If yes, describe the origin of this water and in the table below, list how much it will contribute. _____	☐ A	☐ F

Month	**Days**	**Flow Rate**			**Volume**	**Month**	**Days**	**Flow Rate**			**Volume**
		Flow	*GPM*	*CFS*	*AF*			*Flow*	*GPM*	*CFS*	*AF*
January			☐	☐		July			☐	☐	
February			☐	☐		August			☐	☐	
March			☐	☐		September			☐	☐	
April			☐	☐		October			☐	☐	
May			☐	☐		November			☐	☐	
June			☐	☐		December			☐	☐	

126. Mitigation Water		
a. What is legal land description (¼ ¼ ¼ section of start and end) and length (ft) of the mitigation reach? _____	☐ A	☐ F
b. By what means will mitigation water be made available? You must submit a copy of all relevant discharge permits at application submittal (§85-2-364, MCA). _____ _____ _____	☐ A	☐ F
127. Aquifer Recharge Water		
a. What is the legal land description (¼ ¼ ¼ section) of the start of net depletions for which the aquifer recharge water will be used? _____	☐ A	☐ F

	b. What is the volume of net depletions that will be offset by the aquifer recharge water? *The volume of aquifer recharge water injected may not equal the volume of net depletions.* _____	☐ A	☐ F
	c. Describe the method of aquifer recharge. Include, if available, a preliminary design. You must submit a copy of all relevant discharge permits at application submittal (§85-2-364, MCA). _____ _____ _____ _____	☐ A	☐ F
	d. Describe any constraints on the aquifer recharge schedule, such as priority date limitations. _____ _____	☐ A	☐ F
	e. What is the proposed area or location of aquifer recharge? *The location is subject to refinement during technical analyses; this will not constitute a change of any element to the proposed application pursuant to ARM 36.12.1302(6)(a).* _____ _____ _____	☐ A	☐ F
128.	Marketing for Mitigation/Aquifer Recharge		
	a. What is the proposed location of the reach where water is to be marketed (¼ ¼ ¼ section of the start and the end of the reach)? _____	☐ A	☐ F
	b. Is this marketing for mitigation	☐ Y ☐ N	☐ F
	i. If yes, by what means will water be made available? _____ _____ _____ _____	☐ A	☐ F

c. Is this marketing for aquifer recharge?	☐ Y ☐ N	☐ F
i. If yes,		
1. Describe the method of aquifer recharge. Include, if available, a preliminary design. You must submit a copy of all relevant discharge permits at application submittal (§85-2-364, MCA). _____ _____ _____ _____	☐ A	☐ F
2. What is the volume of water that will be used for aquifer recharge? _____	☐ A	☐ F
3. Describe any constraints on the aquifer recharge schedule, such as priority date limitations. _____ _____	☐ A	☐ F
4. What is the proposed area or location of aquifer recharge? *The location is subject to refinement during technical analyses; this will not constitute a change of any element to the proposed application pursuant to ARM 36.12.1302(6)(a).* _____ _____ _____	☐ A	☐ F
d. Describe your ability to measure and operate all existing diversions to adjust flow rate as water is sold or leased. _____ _____ _____ _____	☐ A	☐ F

e. How will you cease diversions for the existing beneficial use as water is sold or leased? _____ _____ _____	☐ A	☐ F
129. If you are answering Project-Specific Questions as they are referenced in Application Details, return to question 25 and if you are answering in consecutive order, go to question 130.		

Instream Flow

130. Does the project involve an instream flow change? If yes, answer the questions in this section (questions 131 to 136). If no, this section is complete; skip to question 136.	☐ Y ☑ N	☐ F
131. What is the source name where streamflow will be maintained or enhanced? _____		☐ F
132. What is the location (¼ ¼ ¼ section of start and end of reach) and length (FT) of the protected reach? _____	☐ A	☐ F
133. Describe the way the streamflow is to be maintained or enhanced. _____ _____	☐ A	☐ F
134. Do you propose to retire all water use associated with the historical purposes throughout the entire period of use? This includes conveyance loss associated with historical ditches.	☐ Y ☐ N	☐ F
a. If no, describe the proposed change to existing purposes, including flow rate, volume, and, if applicable, acres. _____ _____ _____ _____	☐ A	☐ F
135. Do historical and proposed return flows accrete to the source of supply? The Department provides an initial estimate of the source(s) that historical and proposed returns flows accrete to at the preapplication meeting.	☐ Y ☐ N	☐ F

136. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 27 and if you are answering in consecutive order, go to question 137.		

Salvage Water

137. Does this project involve salvage water? Salvage water does not include destroying phreatophytes, removing vegetation, converting to a less consumptive crop, or converting to a partial irrigation schedule. If yes, answer the questions in this section (questions 138 to 141). If no, this section is complete; skip to question 141.	☐ Y ☑ N	☐ F
138. What water saving method was implemented? This may include lining an unlined ditch or canal, converting unlined ditch or canal to pipeline, converting high profile or high-pressure sprinklers to low pressure, and others. _____ _____	☐ A	☐ F
139. How much water was salvaged from implementation of the water saving method? Include flow rate (GPM or CFS) and volume (AF). _____		☐ F
140. How did you determine the amount of water salvaged? _____ _____ _____ _____	☐ A	☐ F
141. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 28 and if you are answering in consecutive order, go to question 142.		

Non-Mandatory Questions for Criteria Analysis

The following questions are not mandatory. They should be discussed in the Preapplication Meeting, but do not need to be filled out before the Preapplication Meeting Form is determined to be complete.

Adverse Effect

Questions, Narrative Responses, and Tables	Check-boxes
142. Describe your plan to ensure that existing water rights will be satisfied during times of water shortage. When a valid call on water is made, diversion would be reduced or ceased as appropriate.	☑ A
143. Explain how you can control your diversion in response to call being made. Both diversion will have functioning headgates that will effectively reduce or cease diversion when a valid call is made.	☑ A
144. Are you aware of any calls that have been made on any source of supply or depleted surface water source?	☐ Y ☑ N
a. If yes, explain.	☐ A
145. Does a water commissioner distribute water or oversee water distribution on your proposed source or depleted surface water source?	☐ Y ☑ N
a. If yes, list the sources and explain.	☐ A
146. Describe how the change will or will not affect your ability to make call. The proposed change will not affect the ability to make call.	☐ A

147. When was the last time each water right proposed for change was appropriated and used beneficially? If there has been a period of nonuse, answer questions 147.a to 147.d. 2025	
a. Why was the water right not used?	☐ A
b. Why will a resumption of use not adversely affect other water users?	☐ A
c. Is the period of nonuse greater than 10 years for any of the water rights proposed for change? If yes, list which water rights.	☐ Y ☐ N
d. Have 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.	☐ Y ☐ N
148. Is this a point of diversion change?	☑ Y ☐ N
a. If yes,	
i. Are the proposed points of diversion upstream or downstream of the historical points of diversion? The proposed point of diversion is upstream of the confluence of Johnson Creek and Big Hole River	
ii. Are there intervening water users between the historical and proposed points of diversion?	☑ Y ☐ N
1. If yes, list the water rights. Water Reservation 41D 30017409, Statement of Claim 41D 93288-00, Statement of Claim 41D 93265-00, Statement of Claim 41D 93290-00	☑ A

iii. Will any new points of diversion or conveyance infrastructure be shared with one or more existing water rights?	☑ Y ☐ N
1. If yes, describe how capacity of the new shared point of diversion and/or conveyance infrastructure is sufficient for all water rights. As provided in the additional information for section #164 the existing Mallon Ditch and its diversion is adequate to supply the total requested flow rate of 19.55 cfs.	☑ A

Adverse Effect: Evaluation of Impacts to Identified Surface Water Rights for Return Flow Analysis

149. Respond to questions in this section if you elected in questions 65 or 93 to answer optional questions 150 to 154. Answer one time for each surface water source receiving return flows. Use "Additional Return Flow Source (606P)" sheet if there is more than one source. If you did not elect to answer these questions or answered these questions earlier in the preapplication meeting, this section is complete; skip to question 155.	
150. What is the surface water source for which you are answering questions 151 to 154? Big Hole River	
151. Are stream gage data available?	☑ Y ☐ N
a. If yes, answer question 152.	
b. If no, answer question 153.	
152. Stream gage data are available	
a. Is one stream gage located above, and one stream gage located below the location where return flows accrue?	☑ Y ☐ N
i. If no, is only one stream gage located near the location where return flows accrue?	☐ Y ☐ N
1. If yes, is the stream gage upstream or downstream? _____	
b. List the gage name(s). Write "N/A" for Gage 2 if one gage available. Gage 1: Big Hole River near Wise River, MT - DNRC 41D 08000 formerly USGS 06024580 Gage 2: Big Hole River at Maiden Rock nr Divide MT - USGS-06025250	

c. What is the distance between the gage(s) and the location where return flows accrue? Write "N/A" for Gage 2 if one gage available. Gage 1: 3.2 miles upstream Gage 2: 22.2 miles downstream	
d. Is there a limiting or controlling factor on the source between the stream gage(s) and the location where return flows accrue? This includes dams that control the flow and streams with large gaining and/or losing reaches.	☑ Y ☐ N
i. If yes, explain. Significant tributary inflow occurs and some diversion occurs between the two gages.	☑ A
e. How long is the period of record? Write "N/A" for Gage 2 if one gage is available. Gage 1: USGS 1979-1981, 2009-2014 DNRC 2015-2026 Gage 2: 1997-2026	
f. Who operates and maintains the gage(s)? Write "N/A" for Gage 2 if one gage is available. Gage 1: DNRC Gage 2: USGS	
g. Is each available stream gage operated and maintained by USGS or DNRC?	☑ Y ☐ N
i. If yes, skip to question 152.h.	
ii. If no, answer the following questions for each gage not operated and maintained by USGS or DNRC.	
1. How frequently are stage data recorded? Write "N/A" for Gage 2 if only one gage is not operated or maintained by USGS. Gage 1: _____ Gage 2: _____	
2. If data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	☐ Y ☐ N
a. Gage 1.	☐ Y ☐ N
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N

3. Was the rating curve established and maintained throughout the duration of the period of record using measurements taken near the reference gage and stage recorder according to USGS protocols?	☐ Y ☐ N
a. Gage 1.	☐ Y ☐ N
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N
4. Were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N
a. Gage 1.	☐ Y ☐ N
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N
h. Do the data for one or more available stream gages meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months when return flows accrue?	☑ Y ☐ N
i. If yes, record how many meet the standard, then skip to question 155 because this section is complete. Both gages meet standard.	
ii. If no, answer question 153.	
153. If no gage data are available or if available gage data do not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months when return flows accrue, is the source otherwise measured?	☐ Y ☐ N
a. If no, measurements may be necessary. The Department cannot deem the preapplication meeting form adequately completed until the Department receives gage data and/or measurements that meet the Department's measurement standards or, in combination with an approved request to deviate from the Department's standards, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria. Skip to question 154.	
b. If yes,	
i. Submit measurements to the Department.	☐ S
ii. Who collected the measurements? _____	☐ A

iii. With what method were the data collected? _____ _____	☐ A
iv. What is the period of record? _____	
v. What is the frequency of measurement? _____	
vi. Are there gaps in the data?	☐ Y ☐ N
1. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? _____ _____	☐ A
vii. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N
1. If yes, explain. _____ _____	
viii. Do available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months when return flows accrue?	☐ Y ☐ N
1. If yes, this section is complete. Skip to question 155.	
2. If no, answer question 154.	
154. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique?	☐ Y ☐ N
a. If yes,	
i. Describe how the measurements are representative of high, moderate, and low flows. _____ _____ _____	☐ A

ii. Describe the estimation technique. _____ _____ _____ _____ _____	☐ A
b. If no, but a Department-accepted estimation technique will be appropriate for the source receiving return flows:	
i. Will measurements be collected prior to submission of a completed Form 606P-B that meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique?	☐ Y ☐ N
1. If yes,	
a. With what method will the data be collected? _____ _____	☐ A
b. What will be the interval of measurement? _____	
c. Describe the proposed estimation technique. _____ _____ _____ _____	☐A
2. If no, do you plan on requesting to deviate from the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique? Neither the Department's technical analyses nor scientific credibility review of your technical analyses can commence until the Department receives measurements that meet Department measurement standards, or in combination with an approved request for variance from these standards, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ Y ☐ N

c. If no, because no Department-accepted estimation technique will be appropriate for the source receiving return flows:	
i. Describe why no Department-accepted estimation technique is appropriate for the source characteristics. _____ _____ _____	☐ A
ii. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard for monthly measurements throughout the months when return flows accrue?	☐ Y ☐ N
1. If no, will measurements be collected prior to submission of a completed Form 606P that meet the Department's standard of monthly measurements throughout the months when return flows accrue?	☐ Y ☐ N
a. If yes, with what method will the data be collected? _____ _____	☐ A
b. If no, do you plan on requesting a variance to deviate from the Department's standard for monthly measurements throughout the months when return flows accrue? The Department's technical analyses or scientific credibility review of your technical analyses cannot commence until the Department receives measurements that meet Department measurement standards, or in combination with a request for a variance from these standards are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ Y ☐ N
155. If you went straight to this section when referenced, go back to question 65 for surface water changes and question 93 for groundwater changes. If you waited to answer in consecutive order and have completed all prior sections, move to question 156.	

Adverse Effect: Evaluation of Impacts to Identified Water Rights for Surface Water Depletion Analysis

156. Respond to questions in this section if you elected in question 84 to answer optional questions 157 to 161. Answer one time for each hydraulically connected source. Use "Additional Hydraulically Connected Source (606P)" sheet if there is more than one source. If you did not elect to answer these questions or answered these questions earlier in the preapplication meeting, this section is complete; skip to question 162.	

157. What is the surface water source for which you are answering questions 158 to 161? Big Hole River	
158. Are stream gage data available?	☑ Y ☐ N
a. If yes, answer question 159.	
b. If no, answer question 160.	
159. Stream gage data are available	
a. Is one stream gage located above and one stream gage located below the point of net depletion accumulation?	☐ Y ☐ N
i. If no, is only one stream gage located near the point of net depletion accumulation?	☐ Y ☐ N
1. If yes, is the stream gage upstream or downstream? _____	
b. List the gage name(s). Write "N/A" for Gage 2 if one gage available. Gage 1: Big Hole River near Wise River, MT - DNRC 41D 08000 formerly USGS 06024580 Gage 2: Big Hole River at Maiden Rock nr Divide MT - USGS-06025250	
c. What is the distance between the gage(s) and the point of net depletion accumulation? Write "N/A" for Gage 2 if one gage available. Gage 1: 2.9 miles upstream Gage 2: 22.5 miles downstream	
d. Is there a limiting or controlling factor on the source between the stream gage(s) and the point where net depletions accrue? This includes dams that control the flow and streams with large gaining and/or losing reaches.	☐ Y ☐ N
i. If yes, explain. Significant tributary inflow occurs and some diversion occurs between the two gages.	☐ A
e. How long is the period of record? Write "N/A" for Gage 2 if one gage is available. Gage 1: USGS 1979-1981, 2009-2014 DNRC 2015-2026 Gage 2: 1997-2026	

f. Who operates and maintains the gage(s)? Write "N/A" for Gage 2 if one gage is available. Gage 1: DNRC Gage 2: USGS	
g. Is each available stream gage operated and maintained by USGS or DNRC?	☑ Y ☐ N
i. If yes, skip to question 159.h.	
ii. If no, answer the following questions for each gage not operated and maintained by USGS or DNRC.	
1. How frequently are stage data recorded? Write "N/A" for Gage 2 if only one gage is not operated or maintained by USGS. Gage 1: _____ Gage 2: _____	
2. If data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?	☐ Y ☐ N
a. Gage 1.	☐ Y ☐ N
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N
3. Was the rating curve established and maintained throughout the duration of the period of record using measurements taken near the reference gage and stage recorder according to USGS protocols?	☐ Y ☐ N
a. Gage 1.	☐ Y ☐ N
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N
4. Were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N
a. Gage 1.	☐ Y ☐ N
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	☐ Y ☐ N

h. Do the data for one or more available stream gages meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions?	☑ Y ☐ N
i. If yes, record how many meet the standard, then skip to question 162 because this section is complete. _____	
ii. If no, answer question 160.	
160. If no gage data are available or if available gage data do not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions, is the source otherwise measured?	☐ Y ☐ N
a. If no, measurements may be necessary. The Department cannot deem the preapplication meeting form adequately completed until the Department receives gage data and/or measurements that meet the Department's measurement standards or, in combination with an approved request to deviate from the Department's standards, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria. Skip to question 161.	
b. If yes,	
i. Submit measurements to the Department.	☐ S
ii. Who collected the measurements? _____	☐ A
iii. With what method were the data collected? _____ _____	☐ A
iv. What is the period of record? _____	
v. What is the frequency of measurement? _____	
vi. Are there gaps in the data?	☐ Y ☐ N
1. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? _____ _____	☐ A

vii. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N
1. If yes, explain. _____ _____	
viii. Do available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions?	☐ Y ☐ N
1. If yes, this section is complete. Skip to question 162.	
2. If no, answer question 161.	
161. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique?	☐ Y ☐ N
a. If yes,	
i. Describe how the measurements are representative of high, moderate, and low flows. _____ _____ _____	☐ A
ii. Describe the estimation technique. _____ _____ _____ _____ _____	☐ A
b. If no, but a Department-accepted estimation technique will be appropriate for the hydraulically connected source:	
i. Will measurements be collected prior to submission of a completed Form 606P-B that meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique?	☐ Y ☐ N
1. If yes,	
a. With what method will the data be collected? _____ _____	☐ A

b. What will be the interval of measurement? _____	
c. Describe the proposed estimation technique. _____ _____ _____ _____	☐ A
2. If no, do you plan on requesting to deviate from the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique? The Department's technical analyses or scientific credibility review of your technical analyses cannot commence until the Department receives measurements that meet Department measurement standards, or in combination with a request to deviate, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ Y ☐ N
c. If no, because no Department-accepted estimation technique will be appropriate for the hydraulically connected source:	
i. Describe why no Department-accepted estimation technique is appropriate for the source characteristics. _____ _____ _____	☐ A
ii. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard for monthly measurements throughout the months with net depletions?	☐ Y ☐ N
1. If no, will measurements be collected prior to submission of a completed Form 606P that meet the Department's standard of monthly measurements throughout the months with net depletions?	☐ Y ☐ N
a. If yes, with what method will the data be collected? _____ _____	☐ A

b. If no, do you plan on requesting to deviate from the Department's standard for monthly measurements throughout the months with net depletions? The Department's technical analyses or scientific credibility review of your technical analyses cannot commence until the Department receives measurements that meet Department measurement standards, or in combination with a to deviate, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	☐ Y ☐ N
162. If you went straight to this section when referenced, go back to question 84. If you waited to answer in consecutive order and have completed all prior sections, move to question 163.	

Adequate Means of Diversion and Operation

163. Submit a diagram of how you will operate your system from the point of diversion to the place of use.	☑ S
164. Describe specific information about the capacity of the diversionary structure(s). This may include, where applicable: pump curves and total dynamic head calculations, headgate design specifications, and dike or dam height and length. The South Johnson Ditch diversion will be replaced with a new step pool diversion and 48" wide x 24" high slide gate. The Mallon Ditch diversion from the Big Hole River will remain unchanged, retaining the 10' wide x 3.5 ft. high pin and plank headgate. Additional information is attached.	☑ A
165. Describe the size, materials, capacity, and configuration of infrastructure to convey water from point of diversion to place of use. The existing Mallon Ditch and South Johnson Ditch as previously described will continue to be used to convey water from the points of diversion to the place of use.	☑ A
166. Does the proposed conveyance require easements?	☐ Y ☑ N
a. If yes, explain. Ditches are already in place. The additional point of diversion added for the Mallon Ditch from the Big Hole River would not increase the ditch size as it is already sufficient.	☐ A
167. Do you propose to add a point of diversion?	☑ Y ☐ N
a. If yes, do you own the land where all proposed points of diversion are located?	☐ Y ☑ N
i. If no, documentation to show you have the right to use all points of diversion located on each property you do not own will be required upon application submittal. 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.	

168. 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. Flow rate diverted from Johnson Creek will be limited to 5.0 cfs. The flow rate diverted from the Big Hole River will be 19.55 cfs. The total combined flow rate diverted will not exceed the historic total of 24.55 cfs, 15.0 cfs from Johnson Creek and 9.55 cfs from the Big Hole River. The volume diverted will not exceed the historic volume diverted.	☑ A
169. Do you have any plans to measure your diversion and use?	☑ Y ☐ N
a. If yes, describe the plan and the type of measurements you will take. Johnson Creek nr BLM Boundary 41D 08100 will be used to measure flow above the South Johnson Diversion. Diversion will be measured using a staff gage in the pool, headgate opening and submerged orifice equation.	☑ A

Beneficial Use

170. Does the Department have a standard for any of the purposes for which water is used? Department standards can be found in ARM 36.12.112 and ARM 36.12.115.	☑ Y ☐ N
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. Wild Flood Irrigation - Climatic Area 5	
171. If no standard exists for any proposed purpose or if any proposed purpose falls outside of Department standards, explain how the use is reasonable for that purpose.	☐ A
172. Will your proposed project be subject to DEQ requirements for a public water supply (PWS) system or Certificate of Subdivision Approval (COSA)?	☐ Y ☑ N
a. If yes, have you researched or consulted with DEQ regarding those requirements?	☐ Y ☐ N
173. Are you proposing to use surface water for in-house domestic use?	☐ Y ☑ N
a. If yes, does a COSA exist for the proposed place of use?	☐ Y ☐ N
i. If yes, please submit the COSA.	☐ S
ii. If no, have you researched or consulted with DEQ regarding their requirements?	☐ Y ☐ N

Possessory Interest

174. Do you meet one of the exceptions to possessory interest requirements, pursuant to ARM 36.12.1802? 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.	☐ Y ☑ N
a. If yes, explain. _____ _____ _____ _____	☐ A
b. If no, do you own all proposed places of use?	☑ Y ☐ N
i. If no, explain. Documentation that shows you either have possessory interest or written permission of the parties with possessory interest of the place of use will be required at application submittal. _____ _____ _____	☐ A

Non-Mandatory Project-Specific Questions

Change in Place of Storage

175. Does the project include one or more places of storage? If yes, answer questions 176 to 178 for each individual place of storage (use "Additional Place of Storage (606P)" sheet for additional places of storage). A Change Storage Addendum (606-SA) will be required at application submittal. If no, this section is complete; skip to question 179.	
176. Are preliminary designs available? Preliminary designs will be required at application submittal.	☐ Y ☐ N
a. If yes, submit preliminary designs.	☐ S
177. Will a drainage device be installed?	☐ Y ☐ N
178. Is the place of storage capacity calculated to be greater than 50 acre-feet?	☐ Y ☐ N
a. If yes, have you made an application to the DNRC Water Operations Bureau for a determination of whether the dam or reservoir is a high-hazard dam?	☐ Y ☐ N

179. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 16 and if you are answering in consecutive order, go to question 180.	

Instream Flow Change

180. You may respond to the questions in this section if the project involves an instream flow purpose and you choose to answer the non-mandatory questions. Otherwise, this section is complete, skip to question 184.	
181. Does the protected reach begin at the existing point of diversion?	☐ Y ☐ N
a. If no, does the protected reach begin upstream of or downstream from the existing point of diversion? _____	
182. Provide initial details about a streamflow measuring plan, which include the points where measurements occur, the interval of measurement, and the methods and equipment used. A complete streamflow measuring plan will be required for the application. _____ _____ _____ _____ _____ _____	☐ A
183. Provide initial details about an operation plan, which may include the proposed protected flow rate (GPM or CFS), proposed protected volume (AF), and the proposed protected period. If you propose a trigger flow, please explain. A complete operation plan, based on the technical analyses, will be required for the application. _____ _____ _____ _____	☐ A
184. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 27 and if you are answering in consecutive order, go to question 185.	

Mitigation, Aquifer Recharge, and Marketing for Mitigation

185. You may respond to the questions in this section if the project involves mitigation, aquifer recharge, or marketing for mitigation, and you choose to answer the non-mandatory questions. Otherwise, this section is complete, skip to question 190. For mitigation water, answer questions 186, 187, and 188. For aquifer recharge water, answer questions 187 and 188. For marketing for mitigation/aquifer recharge, answer question 189.	
186. Do the water rights proposed for change to mitigation water have a period of use that is greater than or equal to the period when mitigation is necessary?	☐ Y ☐ N
a. If no, how will mitigation water be made available during the entire period when mitigation is necessary? _____ _____ _____	☐ A
187. How do the priority dates of the water rights proposed for change compare to other water rights on the source? _____ _____	☐ A
188. Do you have measurement records or Water Commissioner records that show the reliability of the water rights proposed for change to a mitigation water or aquifer recharge purpose?	☐ Y ☐ N
a. If yes, submit them to the Department.	☐ S
189. Describe the need for marketing for mitigation/aquifer recharge. _____ _____ _____ _____	☐ A
190. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 25 and if you are answering in consecutive order, go to question 191.	

Water Marketing

191. You may respond to the questions in this section if the project includes the water marketing purpose, and you choose to answer the non-mandatory questions. This does not include marketing for mitigation. Otherwise, this section is complete, skip to question 195.	☐ Y ☐ N

192. How will you control or limit access to the water? _____ _____	☐ A
193. Do you have contracts for the entire volume and flow rate sought?	☐ Y ☐ N
194. Submit a service area map. Create map on an aerial photograph or topographic map and show the following: general service area boundary, section corners, township and range, scale bar, and north arrow.	☐ S
195. If you are answering Project Specific Questions as they are referenced in Application Details, return to question 26 and if you are answering in consecutive order, go to Follow-Up section.	

FOLLOW-UP

The table below will identify all questions marked for follow-up. Applicant follow-up will be submitted with the completed Preapplication Meeting Form: Part B (Form 606P-B). Applicant will provide all responses to questions marked for follow-up on a separate document entitled "Follow-up Responses." At the preapplication meeting, the Department may offer to provide the Applicant with information pertinent to identified follow-up. In this case, record in the notes column what information the Department will provide and the date by which the Department will email this information to the Applicant. This information will supplement but not replace Applicant follow-up. It is the responsibility of the Applicant to provide all follow-up, including questions supplemented by Department information, in the "Follow-up Responses" document.

The "Follow-up Responses" document must conform to the following standards. Label all responses with the question number. Answer questions in the same format as the form. For responses in the form of checkboxes, write "Y", "N", "S". Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label units in narrative responses and tables. Tables must have the exact headings found on the form. Questions that require items to be submitted to the Department may be marked "S" when the required item is attached to the Preapplication Meeting Form. Label all submitted items with the question number for which they were submitted.

***The Applicant may not alter the Preapplication Meeting Form: Part A (Form 606P-A) signed at the Preapplication Meeting**. Instead, the Applicant must use the Amended Responses procedure defined in Form 606P-B. Do not include additional information for questions that were not marked for follow-up on this table; instead include any additional information pursuant to the process for amending responses defined in Form 606P-B.*

QUESTION #	NOTES
13.a.iii	identify specific apportionment for volumes between Big Hole and Johnson Creek rights
148.a.ii.1	DNRC will look into ownership of stock claim

PREAPPLICATION MEETING AFFIDAVIT & CERTIFICATION

"We attest that the information on this form accurately describes the proposed project discussed during the preapplication meeting and that the items marked for follow-up will require the applicant to provide additional information before the form is deemed complete."

"Applicant acknowledges that any information provided by the Department during the preapplication meeting is preliminary and subject to change."

"Applicant acknowledges that if the follow-up information provided to the Department substantially changes the proposed project, for example in a way that alters which sections of the form are applicable or which technical analyses are required, or who is to complete the technical analyses, the applicant will need to schedule a new preapplication meeting so that the Department can identify any additional information necessary for completion of the technical analyses (ARM 36.12.1302(3)(c))."

Upon Department receipt of the completed form (within 180 days following the meeting), the Department reserves five business days to return the form to the applicant if:

1 – the completed form does not include all necessary follow-up information identified in the meeting, OR
2 – the completed form is not adequate for the Department to proceed with technical analyses, OR
3 – the applicant has elected to complete technical analyses and has not submitted each piece of technical analysis required, OR
4 – the applicant has substantially changed the details of the proposed project, such as in a way that alters which sections of the form are applicable, which technical analyses are required, or who is to complete the technical analyses.

If the Department returns the form to the Applicant within these five days due to reasons 1-3 above, the Applicant can use the balance of their 180-day period in ARM 36.12.1302(4) or (5) to gather the remaining follow-up information needed. If there is no time remaining in the 180-day period, the Applicant can submit a written request for a new preapplication meeting, pursuant to ARM 36.12.1302(2). Even if there is still time remaining, the Applicant can choose to schedule a new preapplication meeting. The Department shall transfer the $500 payment received to the new preapplication meeting, or refund the payment to the Applicant if the Applicant desires. If the Department returns the form to the Applicant within these five days due to reason (4) above, the Applicant must submit a written request for a new preapplication meeting, pursuant to ARM 36.12.1302(2). The Department shall transfer the $500 payment received to the new preapplication meeting, or refund the payment to the Applicant if the Applicant desires.

Applicant Signature — Date: 4/3/2026

Applicant Signature — Date

Department Signature — Date: 4/21/2026