Water & Environmental
TECHNOLOGIES

May 24, 2024

Jim Ferch
DNRC Regional Office
655 Timberwolf Parkway, Ste 4
Kalispell, MT 59901

Re: Pre-Application Meeting Form Submittal for Permit Application 76LJ 30163639; Sean T. and Melodye A. Rooney

Dear Jim,

We appreciate you and your staff's support during our pre-application meeting on May 6, 2024. Since that time, WET has gathered the information required to address the follow-up items identified during our pre-application meeting.

Additionally, per our discussion regarding water use, we updated our volume calculations to reflect net evaporation using DNRC's net evaporation GIS layer and the USDA's Irrigation Water Requirements (IWR) program's estimation of irrigation water requirements.

The following items have been addressed or modified from the original Form 600P that was initially filled completed by DNRC during our pre-application meeting on May 6, 2024.

Follow-Up Responses

5. The volume of water requested was updated to 39.76 acre-feet (38.49 acre-feet for wetland enhancement and 1.27 acre-feet irrigation). The update is based on more site-specific data based on DNRC's net evaporation GIS layer and apple tree irrigation based on the Whitefish weather station and USDA's Irrigation Water Requirements application. A copy of the IWR calculation for apple trees is provided. A spreadsheet documenting the water use calculations for the project is also provided.

10. Existing Ground Water Certificate 76LJ 30013084 will be corrected or withdrawn to allow for future uses associated with a new home being constructed on the property. The proposed water right from the Stillwater River will be utilized for the proposed purpose and the well will be utilized to service the home and associated lawn and garden irrigation. A copy of the water right abstract is provided.

18. Volume column updated to reflect the revised volume of 39.75 acre-feet.

60. Evaporation volume has been updated to reflect the DNRC's net evaporation GIS layer provided by DNRC. In total, 20.18 inches (1.68 feet) of net evaporation are anticipated for the proposed pond. The volume has been updated to 2.54 acre-feet, to reflect the volume of net evaporation on the 1.51-acre pond.

The following attachments are provided in support of this pre-application:

Figures

Attachment A – Water Use Calculations

Attachment B – IWR Calculations Apple Tree

Attachment C – Water Right Abstract 76LJ 30013084

If you have any questions regarding the information provided above or would like to discuss this matter in further detail, I can be reached at (406) 309-6083 or bbennett@waterenvtech.com.

Sincerely,

Brad Bennett, PG
Senior Hydrogeologist, Water & Environmental Technologies

PREAPPLICATION MEETING FORM
PERMIT

§ 85-2-302
Form No. 600P *(Revised 4/2024)*

For Department Use Only

Application # 30163639 Basin 76LJ
Meeting Date 5/6/2024 Time 10:30 AM/PM
Completed Form Deadline 11/6/2024

RECEIVED
DNRC Water Resources

MAY 24 2024

Kalispell Unit

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)).

Completed Form Received
Fee Rec'd $ 500- Check # 1354
Deposit Receipt # KLW2426102
Payor Water & Environmental Tech Inc
Refund $ Date

The Department will fill out Form No. 600P and will identify follow-up during the preapplication meeting. The Department and Applicant will sign the Preapplication Meeting Affidavit and Certification within five business days. Within 180 days of the preapplication meeting, the Applicant will complete identified follow-up on a separate document with the question numbers clearly labeled.

Applicant Information: *Add more as necessary.*

Applicant Name Sean & Melodye Rooney
Mailing Address PO Box 97 City Whitefish State MT Zip 59901
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 Water & Environmental Technologies - Brad Bennett
Mailing Address 102 Cooperative Way, STE 100 City Kalispell State MT Zip 59901
Phone Numbers: Home Work Cell
Email Address

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.*

Meeting Attendees: *Add more as necessary.*

Name	Organization	Position
Brad Bennett	WET	Hydrogeologist
Jamie Graham	WET	Hydrogeologist
James Ferch	DNRC	Manager
Alexis Nevins	"	WRS
Kristal Kiel	"	WRS
Travis Wilson	"	WRS
Chrs Gabrielsen	WET	Biologist

Table of Contents

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. Label units in narrative responses. Responses in the form of a table may be entered into the table provided on this form or in an attachment. Responses in the form of a table that are larger than the table provided on this form should be placed 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. For tables in this form, circle correct unit at header of column when faced with a choice of units. For tables in attachments, label all units. 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".

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
1. Do you elect to have DNRC conduct Technical Analyses?	■ Y ☐ N	☐ F
2. Provide a map created on an aerial photograph or topographic map that shows the following: section corners, township and range, a north arrow, all proposed points of diversion labeled with a unique POD ID number, all proposed places of use, all proposed conveyance structures, all proposed places of storage, and places of use for all overlapping water rights.	■ S	☐ F
3. Is the project located in a Controlled Groundwater Area or Basin Closure Area? If yes, immediately go to Project-Specific Questions 47 to 52 because Form 600 may be the incorrect form, or this project may not meet the requirements for the Department to accept a Form 600.	☐ Y ■ N	☐ F
4. Is the proposed use temporary?	☐ Y ■ N	☐ F
a. If yes, when will the appropriation cease? _____	☐ A	☐ F
5. Describe the proposed purpose information, including period of diversion (MM/DD-MM/DD), period of use (MM/DD-MM/DD), flow rate (GPM or CFS) and volume (AF).	☐ A	☐ F

Purpose	Period of Diversion *(MM/DD-MM/DD)*	Period of Use *(MM/DD-MM/DD)*	Flow Rate *Flow Rate*	*GPM*	*CFS*	Volume *(AF)*
Wetland Enhancement	03/01-10/31	1/1-12/31	250	✓		38.49
Irrigation	04/15-10/15	04/15-10/15	250	✓		1.27
		Total	250	✓		39.75

6. Describe the proposed location of the point(s) diversion to the nearest 10 acres, if source is groundwater (GW) or surface water (SW), source name, and means of diversion (e.g., pump, headgate, well). Label each POD with the POD ID number used for the project map (question 2). ☐ A ☐ F

POD #	¼	¼	¼	Sec	Twp	Rge	County	Lot	Block	Tract	Subdivision	Gov Lot	SW or GW	Source Name	Means
1	SW	SE	NE	36	31N	23W	Flathead			1			SW	Stillwater River	Pump

7. What are the geocodes of the place of use? ☐ A ☐ F

07-4291-36-1-01-25-0000

8. Describe the legal land description for the proposed place of use and, if an irrigation or lawn and garden purpose, list the number of irrigated acres. ☐ A ☐ F

Acres	Gov't Lot	Block	¼	¼	¼	Sec	Twp	Rge	County
0.55			N 1/2	SE	NE	36	31N	23W	Flathead
0.55	*Total*								

9. Will other water right(s) supplement or overlap the place of use to contribute to the purpose(s)? ■ Y ☐ N ☐ F

a. If yes, summarize how the water rights will be operated as a whole to serve the purpose(s). ☐ A ☐ F

Existing groundwater certificate that will either be reduced/withdrawn/or otherwise corrected after permit issuance.

10. For each supplemental or overlapping water right, please list the water right number, purpose, typical period of diversion and use (MM/DD-MM/DD), flow rate (GPM or CFS), and the volume of water (AF) contributed.	☐ A	■ F

Water Right No.	Avg. Period of Diversion (MM/DD-MM/DD)	Avg. Period of Use (MM/DD-MM/DD)	Flow Rate (GPM or CFS)	Volume Contributed (AF)
76LJ 30013084	04/01-10/31	04/01-10/31	up to 35 GPM	Up to 10.0 AF

11. Will this application supplement contract water from a Federal Project, ditch company, or other source?	☐ Y ■ N	☐ F
a. If yes, explain. _____ _____	☐ A	☐ F
12. Does the project involve one or more place(s) of storage with a capacity of greater than 0.1 acre-feet? This does not include storage tanks and cisterns. If yes, answer questions 53 to 61 for place of storage.	■ Y ☐ N	☐ F
13. Does the project involve one or more conveyance ditches? If yes, answer questions 62 to 64 for ditch-specific questions.	☐ Y ■ N	☐ F
14. Does the project involve an appropriation that is greater than 5.5 CFS and 4,000 AF? If yes, you must submit a Criteria Addendum Application for Beneficial Water Use Permit for Appropriations Greater than 5.5 CFS and 4,000 AC-FT (Form 600-B) with application submittal. The criteria are found in §85-2-311(3), MCA.	☐ Y ■ N	☐ F
15. Will you be transporting water for use outside of Montana? If yes, you will need 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
16. Does the project include the water marketing purpose? If yes, answer questions 65 to 71 for water marketing. A Water Marketing Purpose Addendum (Form 600/606-WMA) will be required with application submittal.	☐ Y ■ N	☐ F
17. Is the project located in designated sage grouse habitat? If yes, you must have a consultation with and review of your project by the Montana Sage Grouse Habitat Conservation Program. The review letter will be required at application submittal.	☐ Y ■ N	☐ F

Surface Water

■ **Applicable**, move on to question 18. ☐ **Not Applicable**, skip to question 29.

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

Surface Water: Physical Availability

Questions, Narrative Responses, and Tables	**Check-boxes**	**Follow-Up**
18. What is the flow rate (GPM or CFS), volume (AF), period of diversion start date and end date (MM/DD-MM/DD), and source type (e.g., perennial, ephemeral) at each point of diversion? Use the same POD # as the project map (question 2) to label each point of diversion.	■ A	☐ F

POD #	Flow Rate (GPM or CFS)	Volume (AF)	Period Start (MM/DD)	Period End (MM/DD)	Source Type
1	250 GPM	39.75	03/01	10/31	perennial

19. What is the source type of the surface water diversion? perennial						■ A	☐ F
Perennial or intermittent	Answer question 20	**Ephemeral**	Answer questions 22 to 24	**Lakes**	Answer question 25	**Other**	Answer question 26

Surface Water: Physical Availability: Perennial or Intermittent

■ Applicable ☐ Not Applicable

20. Is stream gage data available?	■ Y ☐ N	☐ F
a. If yes, answer the following questions related to the number of stream gages that are available.		
i. One stream gage is available		
1. What is the gage name? Stillwater River at Lawrence Park, at Kalispell - 12365700		☐ F

2. Who operates and maintains the gage? USGS		☐ F
3. Is the stream gage upstream or downstream of point(s) of diversion? Downstream		☐ F
4. Is there a limiting or controlling factor that would make the Drainage Area Method not practical? This includes dams that control the flow and streams with large gaining and/or losing reaches. If you have questions about this, please contact the Regional Hydro-Specialist or the Water Sciences Bureau.	☐ Y ■ N	☐ F
5. Is the period of record greater than or equal to 10 years?	■ Y ☐ N	☐ F
6. How frequently is stage data recorded? 15 minutes		☐ F
7. 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	☐ F
8. 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	☐ F
9. Were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	■ Y ☐ N	☐ F
10. Does the gage data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	■ Y ☐ N	☐ F
a. If yes, this section is complete. Skip to question 27.		
b. If no, answer question 20.b.		
ii. More than one stream gage is available		
1. List the gage names.		☐ F
2. Who operates and maintains the gages?		☐ F
3. Is one stream gage upstream and one downstream of point(s) of diversion?	☐ Y ☐ N	☐ F
4. Do the stream gages have similar periods of record?	☐ Y ☐ N	☐ F
5. Are the periods of record each greater than or equal to 10 years?	☐ Y ☐ N	☐ F

6. How frequently is stage data recorded at each gage? _____		☐ F
7. For each gage, 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	☐ F
8. Were the rating curves established and maintained throughout the duration of the period of record using measurements taken near the reference gages and stage recorders according to USGS protocols?	☐ Y ☐ N	☐ F
9. For each gage, were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N	☐ F
10. Does the gage data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N	☐ F
a. If yes, this section is complete. Skip to question 27.		
b. If no, answer question 20.b.		
b. If no gage data is available or if available gage data does not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion, is the source otherwise measured?	☐ Y ☐ N	☐ F
i. If yes,		
1. Submit available measurements to the Department.	☐ S	☐ F
2. Who collected the measurements? _____	☐ A	☐ F
3. With what method was the data collected? _____ _____	☐ A	☐ F
4. What is the period of record? _____		☐ F
5. What is the frequency of measurement? _____		☐ F
6. Are there gaps in the data?	☐ Y ☐ N	☐ F

a. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality?	☐ A	☐ F
7. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N	☐ F
a. If yes, explain.	☐ A	☐ F
8. Does 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 proposed months of diversion?	☐ Y ☐ N	☐ F
a. If yes, this section is complete. Skip to question 27.		
b. If no, answer question 21.		
21. Does 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	☐ F
a. If yes, describe the estimation technique.	☐ A	☐ F
b. If no,		
i. Will measurements be collected prior to submission of a completed Form No. 600P 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	☐ F
1. If yes,		
a. With what method will the data be collected?	☐ A	☐ F

b. What will be the interval of measurement?		☐ F
c. Describe the proposed estimation technique.	☐ A	☐ F
2. If no,		
a. Describe your plan to comply with the requirements of ARM 36.12.1702(1).	☐ A	☐ F
b. Do you plan on requesting a variance from measurement requirements pursuant to ARM 36.12.1702(1)(b)?	☐ Y ☐ N	☐ F

Surface Water: Physical Availability: Ephemeral

☐ Applicable ■ Not Applicable

22. If you will conduct Technical Analyses, what is your plan to calculate mean annual runoff? If DNRC will conduct Technical Analyses, write N/A.	☐ A	☐ F
23. Where do you plan to obtain climate and drainage area data?	☐ A	☐ F
24. Where is the downstream point of diversion, which will be used to delineate the drainage basin?	☐ A	☐ F

Surface Water: Physical Availability: Lakes

☐ Applicable ☒ Not Applicable

25. Do you have a design plan?	☐ Y ☐ N	☐ F
a. If yes, provide the design plans to DNRC	☐ S	☐ F
b. If no, has the lake volume been quantified by a qualified entity based on bathymetric data?	☐ Y ☐ N	☐ F
i. If yes, provide this information to DNRC.	☐ S	☐ F
ii. If no, answer the following questions,		
1. When do you plan to collect this information? _____		☐ F
2. With what method will it be collected? _____ _____	☐ A	☐ F

Surface Water: Physical Availability: Other

☐ Applicable ☒ Not Applicable

26. Have you measured the source?	☐ Y ☐ N	☐ F
a. If yes, answer the following questions,		
i. With what method was the data collected? _____ _____	☐ A	☐ F
ii. What is the measurement interval? _____		☐ F
1. Does the interval meet the requirements of 36.12.1702(4)?	☐ Y ☐ N	☐ F
b. If no or if the measurement interval does not meet the requirements of 36.12.1702(4)		
i. When do you plan to measure? _____		☐ F
ii. With what method will the measurements be collected? _____ _____ _____	☐ A	☐ F

Surface Water: Identification of Legal Demands in Area of Potential Impact

27. If you are conducting Technical Analysis, how will the Area of Potential Impact be defined? If Department is conducting Technical Analyses, write N/A. N/A	☐ A	☐ F

Surface Water: Basin Closure Area

28. Is the project located in a Basin Closure Area? If yes, explain how the project meets a closure exception. More information about basin closures online at: https://dnrc.mt.gov/Water-Resources/Water-Rights/Basin-Closures-Stream-Depletion-Controlled-Ground-Water-Areas. Answer the follow-up questions for specific Basin Closure Areas in the "Project-Specific Questions: Controlled Groundwater Areas and Basin Closures" section (questions 51 to 52).	☐ Y ☒ N	☐ F

Groundwater

☐ **Applicable**, move on to question 29. ■ **Not Applicable**, skip to question 47.

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

Questions, Narrative Responses, and Tables	**Check-boxes**	**Follow-Up**
Groundwater: Physical Availability		
29. What is the type of groundwater diversion? _____	☐ A	☐ F

Well/Pit	Answer questions 30 to 32	**Developed Spring**	Answer question 33	**Pond**	Answer questions 34 to 38

Groundwater: Physical Availability: Well/Pit

☐ Applicable ☐ Not Applicable

30. Provide the Aquifer Testing Addendum (Form 600-ATA). This form will be required before the Preapplication Meeting Form is deemed complete.	☐ S	☐ F
31. Have you submitted a completed Form 633 to DNRC for review?	☐ Y ☐ N	☐ F
a. If no, submit Form 633 to DNRC for review. Form 633 is required by the time the Preapplication Meeting Form is deemed complete.	☐ S	☐ F
b. If yes, did the Department identify deficiencies?	☐ Y ☐ N	☐ F
i. If yes, are variances from ARM 36.12.121 needed?	☐ Y ☐ N	☐ F
1. If yes,		
a. Do you have data for aquifer characteristics?	☐ Y ☐ N	☐ F
i. If yes, provide the data to the Department.	☐ S	☐ F
b. Have you submitted Form 653 to the Department?	☐ Y ☐ N	☐ F
i. If yes, was the variance granted?	☐ Y ☐ N	☐ F
32. Do you have a map with the location of each well/pit labeled and, if available, with the GWIC ID?	☐ Y ☐ N	☐ F
a. If no, have all the wells/pits been constructed?	☐ Y ☐ N	☐ F

i. If yes, provide a map with the wells/pits labeled and, if available, with the GWIC ID. Create map on an aerial photograph or topographic map that also includes the following: section corners, township and range, and a north arrow.	☐ S	☐ F
ii. If no, answer the following questions,		
1. When will the wells/pits be constructed? _____		☐ F
2. Do you have an initial map with the proposed location of wells/pits?	☐ Y ☐ N	☐ F
a. If yes, provide an initial map to the Department. Create map on an aerial photograph or topographic map that also includes the following: section corners, township and range, and a north arrow.	☐ S	☐ F
3. Is the requested volume for each new well/pit known?	☐ Y ☐ N	☐ F
a. If no, what is the total requested volume (AF) and the number of new PODs? _____		☐ F

Groundwater: Physical Availability: Developed Spring

☐ Applicable ☐ Not Applicable

33. Have you measured the source?	☐ Y ☐ N	☐ F
a. If yes, answer the following questions,		
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 ARM 36.12.1703(1)?	☐ Y ☐ N	☐ F
b. If no, or if measurements do not comply with ARM 36.12.1703(1),		
i. When do you plan to measure? _____		☐ F

ii. With what method and at what interval will measurements be collected? _____ _____	☐ A	☐ F

Groundwater: Physical Availability: Ponds

☐ Applicable ☐ Not Applicable

34. Have you submitted Form 653 to apply for a variance from ARM 36.12.121 for the Aquifer Test?	☐ Y ☐ N	☐ F
a. If yes, did the Department approve the variance request?	☐ Y ☐ N	☐ F
35. Have you submitted measurements to the Department? If yes, describe. _____	☐ Y ☐ N	☐ F
36. Submit pond bathymetry data, survey, or engineering plans to the Department.	☐ S	☐ F
37. Please submit a map identifying the location of the proposed pond to the Department. Create map on an aerial photograph or topographic map that also includes the following: section corners, township and range, and a north arrow.	☐ S	☐ F
38. If you are conducting Technical Analyses, what is your plan to determine depth, surface area, and net evaporation of the pond? If DNRC is conducting Technical Analyses, write N/A. _____ _____ _____	☐ A	☐ F

Groundwater: Identification of Groundwater Legal Demands

All information to calculated Zone of Influence was collected in previous questions.

Groundwater: Adverse Effect to Existing Groundwater Rights

All information to calculate One-Foot Drawdown Contour was collected in previous questions.

Groundwater: Physical Availability of Depleted Surface Water Source(s)

39. What are the hydraulically connected surface water source(s)? _____		☐ F
40. For each hydraulically connected surface water source, is gage data available?	☐ Y ☐ N	☐ F
a. If yes, answer the following questions for the number of stream gages that are available.		

i. One stream gage is available		
1. What is the gage name? _____		☐ F
2. Who operates and maintains the gage? _____		☐ F
3. Is the stream gage upstream or downstream of point(s) of diversion? _____		☐ F
4. Is there a limiting or controlling factor that would make the Drainage Area Method not practical? This includes dams that control the flow and streams with large gaining and/or losing reaches. If you have questions about this, please contact the Regional Hydro-Specialist or the Water Sciences Bureau.	☐ Y ☐ N	☐ F
5. Is the period of record greater than or equal to 10 years?	☐ Y ☐ N	☐ F
6. How frequently is stage data recorded? _____		☐ F
7. 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	☐ F
8. 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	☐ F
9. Were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N	☐ F
10. Does the gage data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N	☐ F
a. If yes, this section is complete. Skip to question 42.		
b. If no, answer question 40.b.		
ii. More than one stream gage is available		
1. List the gage names. _____		☐ F
2. Who operates and maintains the gages? _____		☐ F
3. Is one stream gage upstream and one downstream of point(s) of diversion?	☐ Y ☐ N	☐ F

4. Do the stream gages have similar periods of record?	☐ Y ☐ N	☐ F
5. Are the periods of record each greater than or equal to 10 years?	☐ Y ☐ N	☐ F
6. How frequently is stage data recorded at each gage? _____		☐ F
7. For each gage, 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	☐ F
8. Were the rating curves established and maintained throughout the duration of the period of record using measurements taken near the reference gages and stage recorders according to USGS protocols?	☐ Y ☐ N	☐ F
9. For each gage, were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N	☐ F
10. Does the gage data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?	☐ Y ☐ N	☐ F
a. If yes, this section is complete. Skip to question 42.		
b. If no, answer question 40.b.		
b. If no gage data is available or if available gage data does not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion, is the source otherwise measured?	☐ Y ☐ N	☐ F
i. If yes,		
1. Submit measurements to the Department.	☐ S	☐ F
2. Who collected the measurements? _____	☐ A	☐ F
3. With what method was the data collected? _____ _____	☐ A	☐ F
4. What is the period of record? _____		☐ F
5. What is the frequency of measurement? _____		☐ F
6. Are there gaps in the data?	☐ Y ☐ N	☐ F

a. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality _____ _____ _____ _____	☐ A	☐ F
7. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N	☐ F
a. If yes, explain. _____ _____ _____ _____	☐ A	☐ F
8. Does 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 proposed months of diversion?	☐ Y ☐ N	☐ F
a. If yes, this section is complete. Skip to question 42.		
b. If no, answer question 41.		
41. For each hydraulically connected surface water source, does 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	☐ F
a. If yes, describe the estimation technique. _____ _____ _____	☐ A	☐ F
b. If no,		
i. Will measurements be collected prior to submission of a completed Form No. 600P 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	☐ F
1. If yes,		
a. With what method will the data be collected? _____ _____ _____	☐ A	☐ F

b. What will be the interval of measurement? _____		☐ F
c. Describe the proposed estimation technique. _____ _____ _____ _____	☐ A	☐ F
2. If no, describe your plan to comply with the measurement requirements for hydraulically connected surface water sources. _____ _____ _____	☐ A	☐ F

Groundwater: Legal Availability of Depleted Surface Water Source(s)

All information to determine legal demands for depleted surface water source(s) was collected in previous questions.

Groundwater: Adequacy of Diversion

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
42. What is the flow rate (GPM or CFS), volume (AF), and period of diversion required (MM/DD-MM/DD) at each groundwater point of diversion? If the POD is a well, provide the well depth (FT), if available, or estimated well depth (FT). Please use the same POD # as the project map (question 2) to match this information with the location information.	☐ A	☐ F

POD #	Flow Rate (GPM or CFS)	Volume (AF)	Period of Diversion (MM/DD-MM/DD)	Well Depth (FT)	Measured or Estimated

43. Will the monthly pumping schedule differ from an allocation of diverted volume by the number of days in the month for year-round uses or the IWR 80% net irrigation requirements for irrigation/lawn & garden uses (IWR, NRCS 2003)?	☐ Y ☐ N	☐ F

a. If yes, provide the alternative pumping schedule in the table below. Use the same POD # as the project map (question 2).	☐ A	☐ F

Month	POD #	Volume (AF)	Month	POD #	Volume (AF)
January			**July**		
February			**August**		
March			**September**		
April			**October**		
May			**November**		
June			**December**		

Groundwater: Basin Closure Area

44. Are the point(s) of diversion located in a basin closure area? If yes, fill out questions 45 to 46.	☐ Y ☐ N	☐ F
45. Did you elect in question 1 for the Department to conduct Technical Analysis?	☐ Y ☐ N	☐ F
a. If yes, the Basin Closure Area Addendum (Form 600-BCA), Hydrogeologic Report Addendum (Form 600-HRA), and Hydrogeologic Report are not required at this time. The Department's Technical Analyses will meet requirements of §85-2-360 for Form 600-HRA. Form 600-BCA will be required with application submittal.		
b. If no, submit the Basin Closure Area Addendum (Form 600-BCA), Hydrogeologic Report Addendum (600-HRA), and Hydrogeologic Report with your Technical Analysis.	☐ S	☐ F
46. If the Hydrogeologic Report indicates that the proposed groundwater use will impact a surface water source, which of the following three options best describe your plan to mitigate depletions of hydraulically connected surface water? A separate Preapplication Meeting will be required for each application to change a water right to a mitigation or aquifer recharge purpose to maintain expedited timelines and reduced filing fees for the project.		
a. Application to Change a Water Right to mitigate the adverse effects created.	☐ Y ☐ N	☐ F
b. Alternative mitigation plan.	☐ Y ☐ N	☐ F
c. Documentation to show a mitigation plan is not required.	☐ Y ☐ N	☐ F

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.

Questions, Narrative Responses, and Tables	Check-boxes	Follow-Up
Project-Specific Questions: Controlled Groundwater Areas and Basin Closures		
47. Is the project located in the East Valley Controlled Groundwater Area?	☐ Y ▬ N	☐ F
a. If yes,		
i. Do you have written approval from (1) Lewis and Clark County Board of Health, (2) Lewis and Clark County Water Quality Protection Bureau, (3) the U.S. Environmental Protection Agency, (4) the Montana State Dept. of Environmental Quality and (5) the Montana State Dept. of Natural Resources and Conservation? If the agencies have established a Technical Advisory Group, prior approval by the Technical Advisory Group satisfies this requirement.	☐ Y ☐ N	☐ F
ii. Is the project in Zone 2?	☐ Y ☐ N	☐ F
i. If yes, provide in the written approval the following recommendations which will also be included as conditions on the appropriation. a. Well design and construction requirements necessary to measure the water level and water quality for any well; b. Water level measurement and water quality sample reporting requirements for any new well; c. Any other requirements necessary to ensure new wells can be operated in a manner consistent with purpose of the EVCGWA.	☐ S	☐ F
iii. Is the project in Zone 1? If yes, a Form 600 cannot be accepted by the Department.	☐ Y ☐ N	☐ F
48. Is the project located in the South Pine Controlled Groundwater Area?	☐ Y ▬ N	☐ F
a. If yes, have you completed an Application for Beneficial Water Use Permit South Pine Controlled Groundwater Area Addendum? The addendum needs to be completed by application submittal.	☐ Y ☐ N	☐ F
49. Is the project located in the Yellowstone Controlled Groundwater Area?	☐ Y ▬ N	☐ F
a. If yes, is the use over 35 GPM or 10 AF per year?	☐ Y ☐ N	☐ F
i. If no, this is the incorrect form. Use instead the Yellowstone Controlled Groundwater Area Permit Application (600-YCGA).		
ii. If yes, answer the remaining parts of question 49. A Yellowstone Controlled Groundwater Area Addendum (600 Y over35) will be required with application submittal.		
1. Does the proposed use require a point of diversion with water temperature of 60 degrees Fahrenheit or more?	☐ Y ☐ N	☐ F
2. What is the ground elevation at the point of diversion? _____		☐ F

3. What is the specific conductance at the point of diversion? _____		☐ F
4. If an application is in a basin tributary to a category 3 or 4 stream (generally in or upstream of YNP), provide a report prepared by a professional qualified in the science of groundwater hydrology, verifying that the appropriation is not hydrologically connected to surface flow that is tributary to the reserved portion of category 3 or 4 streams.	☐ S	☐ F
50. Is the project located in one of the Controlled Groundwater Areas listed on the Department's website (https://dnrc.mt.gov/Water-Resources/Water-Rights/Basin-Closures-Stream-Depletion-Controlled-Ground-Water-Areas)?	☐ Y ☒ N	☐ F
a. If yes, list which one and describe how the proposed project meets the requirements of the Controlled Groundwater Area. An application must meet the specific requirements of the Controlled Groundwater Area to be accepted by the Department. _____ _____ _____ _____ _____	☐ A	☐ F
51. Is the project located in one of the administrative, Department ordered, or legislative closures listed on the Department's website (https://dnrc.mt.gov/Water-Resources/Water-Rights/Basin-Closures-Stream-Depletion-Controlled-Ground-Water-Areas)?	☐ Y ☒ N	☐ F
a. If yes, list which one and describe how the proposed project meet the requirements of the closure. An application must meet the specific requirements of the closure to be accepted by the Department. _____ _____ _____ _____ _____	☐ A	☐ F
52. Is the project located in one of the compact closures listed on the Department's website (https://dnrc.mt.gov/Water-Resources/Water-Rights/Basin-Closures-Stream-Depletion-Controlled-Ground-Water-Areas)?	☐ Y ☒ N	☐ F
a. If yes, list which one and describe how the proposed project meet the requirements of the compact closure. An application must meet the specific requirements of the compact closure to be accepted by the Department. _____ _____ _____ _____	☐ A	☐ F

Project-Specific Questions: Place of Storage

53. Does the proposal include at least one place of storage? If yes, answer questions 54 to 61 for each individual place of storage (use Additional Place of Storage Sheet for additional places of storage). If no, this section is complete, and you can skip to question 62.	■ Y ☐ N	☐ F
54. Provide a map showing the location of the place of storage. Create map on an aerial photograph or topographic map that also includes the following: section corners, township and range, and a north arrow.	▬ S	☐ F
55. Is this application to enlarge an existing reservoir?	☐ Y ▬ N	☐ F
a. If yes, what is the water right number for the existing reservoir? _____		☐ F
56. Is the place of storage located on-stream?	☐ Y ▬ N	☐ F
a. If no, explain the conveyance means to and from the off-stream place of storage and any losses that may occur with that conveyance. Water will be conveyed from the Stillwater River via buried 4-inch pipe to the upper pond. No losses are anticipated associated with conveyance.	☐ A	☐ F
57. What is the capacity of the proposed place of storage or the existing place of storage after it is enlarged? 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 (0.4-0.6 depending on side slope) = Capacity (AF)* The capacity of the upper pond is 10.60AF and the capacity of the lower wetland area is 3.35 AF.	▬ A	☐ F
58. Will the place of storage include primary and/or emergency spillways? Preliminary design specifications for primary and emergency spillways must be included with application submittal (ARM 36.12.113).	☐ Y ▬ N	☐ F
59. Will the place of storage be lined?	☐ Y ▬ N	☐ F
60. What is the annual net evaporation of water from the place of storage using the standards in ARM 36.12.116(1)? Gridded net evaporation layer is available from DNRC upon request. Annual Evaporative losses for the upper pond are 2.54 AF (1.51 acre x 1.68 ac-feet/acre)		▬ F
61. Is the place of storage capacity calculated to be greater than 50 acre-feet?	☐ Y ▬ N	☐ F
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	☐ F

Project-Specific Questions: Ditch-Specific Questions

62. Does the proposal include at least one conveyance ditch? If yes, answer question 63 and, for each ditch, answer question 64. If no, this section is complete, and you can skip to question 65.	☐ Y ▬ N	☐ F

63. Submit a Ditch Map that shows every ditch conveying water for the proposed project. Label the ditch name(s), POD(s), the POU(s), and the ditch measurement locations (requested in question 64.c). The map should be created on an aerial photograph or topographic map with the following: section corners, township and range, and a north arrow.	☐ S	☐ F
64. For each conveyance ditch, answer the following. If there is more than one conveyance ditch, use an Additional Ditch Sheet for each additional conveyance ditch.		
a. What is the ditch name? _____		☐ F
b. 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. _____ _____	☐ A	☐ F
c. 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 63.	☐ S	☐ F

ID #	Width (FT)	Depth (FT)	Slope (%)	Date of Measurement

d. 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. _____ _____	☐ A	☐ F
e. What type of soils compose the proposed conveyance ditch? For lined ditches, write "lined" instead. _____ _____	☐ A	☐ F
f. Are other water rights conveyed by the conveyance ditch?	☐ Y ☐ N	☐ F
i. If yes,		
1. What are the water right numbers? _____ _____	☐ A	☐ F

2. What is the sum of the flow rates (GPM or CFS) for water rights conveyed? _____ _____ _____	☐ A	☐ F
3. Provide a map with your best estimate of where the existing POUs begin for the other water rights conveyed by the conveyance ditch for all POUs between the proposed POD and your proposed POU. Create map on an aerial photograph or topographic map that also includes the following: section corners, township and range, and a north arrow.	☐ S	☐ F

Project-Specific Questions: Water Marketing

65. Does the proposal include water marketing? If yes, please answer the questions in this section (questions 66 to 71). If no, this section is complete, and you can skip to question 72.	☐ Y ☒ N	☐ F
66. Identify the flow rate (GPM or CFS) and volume (AF) of water that will be marketed. _____		☐ F
67. Will the marketed water return to the source?	☐ Y ☐ N	☐ F
a. Explain how this determination was made. _____ _____ _____	☐ A	☐ F
68. For what purpose(s) will the marketed water be used? _____ _____	☐ A	☐ F
69. How will you control or limit access to the water? _____ _____	☐ A	☐ F
70. Do you have contracts for the entire volume and flow rate sought?	☐ Y ☐ N	☐ F
71. Provide a service area map. Create map on an aerial photograph or topographic map and shows the following: general service area boundary, section corners, township and range, and a north arrow.	☐ S	☐ F

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
72. Do you have evidence that water is legally available in the proper flow rate, volume, and timing?	■ Y ☐ N
73. If water is not found to be legally available for part or all the proposed period of diversion, what is the plan to address this with the permitting process? The period of diversion will change if required to meet criteria for legal appropriation.	☐ A
74. Describe your plan to ensure that existing water rights will be satisfied during times of water shortage. 1. reduce irrigation application by 50 percent during water shortage, 2. reduce lower pond wetland inflow application to 25 percent during periods of shortage, 3. pump at Stillwater River can be shut off in response to call	☐ A
75. Explain how you can control your diversion in response to call being made. The pump on the Stillwater River can be turned off.	☐ A
76. Are you aware of any calls that have been made on the source of supply or depleted surface water source?	☐ Y ■ N
a. If yes, explain.	☐ A
77. Does a water commissioner distribute water or oversee water distribution on your proposed source or depleted surface water source?	☐ Y ■ N

Adequate Diversion Means and Operation

78. Provide a diagram of how you will operate your system from the point of diversion to the place of use.	■ S
79. 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. Still deciding on appropriate pump.	☐ A

80. Is the diversion capable of providing the full amount requested through the period of diversion?	■ Y ☐ N
81. Describe the size and configuration of infrastructure to convey water from point of diversion to place of use. This may include, where applicable: ditch capacity and/or pipeline size and configuration. Water will be diverted from the Stillwater River via a pump to a buried conveyance system consisting of approximately 550 feet of 4-inch pipe to the upper pond.	☐ A
82. Describe any losses related to conveyance. No losses are anticipated associated with conveyance	☐ A
83. Is the conveyance infrastructure capable of providing the required flow and volume and any losses?	■ Y ☐ N
84. Does the proposed conveyance require easements?	☐ Y ■ N
a. If yes, explain.	☐ A
85. Describe any places of storage, including whether drainage devices will be installed, and provide preliminary designs, if available. Preliminary designs will be required at application submittal. One pond will be utilized for storage, preliminary designs are provided as sheet C2. No drainage devices planned for these pit-ponds.	☐ A
86. Describe 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 and output and configuration of sprinkler heads. Water pumped from river to upper pond at 250 GPM, which will overflow to wetland areas. Pump will be shut off when area is flooded to desired level. Drying cycle(s) will be approx. 30-45 days.	☐ A
87. Is the water delivery system capable of providing the requested beneficial use?	■ Y ☐ N
88. Will your system be designed to discharge water from the project?	☐ Y ■ N
a. If yes, explain the way water will be discharged and the wastewater disposal method.	☐ A

89. Provide a plan of operations. Will provide with application.	☐ A
90. Can the plan of operations deliver the flow rate and volume for the beneficial use being requested?	■ Y ☐ N
91. 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.	☐ A

Beneficial Use

92. Why is the requested flow rate and volume the amount needed for the purpose? Allows adequate periods of flooding to enhance wetland areas below the pond. Irrigation of trees occurs within the standard window of irrigation.	☐ A
93. Does the Department have a standard for the purposes for which water is used? Department standards can be found in ARM 36.12.112.	☐ Y ■ N
a. If yes, does the proposed beneficial use fall within Department standards?	☐ Y ☐ N
94. If no standard, or if proposed beneficial use falls outside of Department standards, explain how the use is reasonable for the purpose. Water is utilized to flood the wetland areas in advance of and during the growing season for wetland vegetation. This period of diversion and period of use standard is relatively consistent with the irrigation period of diversion/period of use.	☐ A
95. 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,	
i. Have you researched or consulted with DEQ regarding those requirements?	☐ Y ☐ N
96. 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

97. Do you have possessory interest, or the permission of the party with possessory interest, of the proposed place of use? Proof of possessory interest or permission of the party with possessory interest is required at application submittal.	■ Y ☐ N
a. If no, explain. _____ _____ _____	☐ A

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 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 the first five days of the 45-day period in ARM 36.12.1302(4) or (5) 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.

	8-May-24
Applicant Signature	Date
	8-May-24
Applicant Signature	Date
K Kirl	5.8.2024
Department Signature	Date

FOLLOW-UP PAGE

Applicant will provide all responses to questions marked for follow-up on a separate document entitled "Follow-up Responses" with the question number labeled. Answer questions in the same format as the form. 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 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 signed at the Preapplication Meeting. Instead, the Applicant must use the Amended Responses procedure defined below. Do not include additional information for questions not marked for follow-up here; instead include any additional information pursuant to the process for amending responses defined below.

Questions marked for follow-up

10	
60	

AMENDED RESPONSES PAGE

The Applicant may not alter the Preapplication Meeting Form signed at the Preapplication Meeting or the Follow-up Page. 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. Answer questions in the same format as the form. 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 attached to the Preapplication Meeting Form. Label all submitted items with the question number for which they were submitted. The Applicant will mark all question numbers with an amended response in the table below and note for each question whether the response will replace the response given at the preapplication meeting or will provide additional information to consider in conjunction with the response given at the preapplication meeting. The Applicant will return the "Amended Responses" document with the "Follow-up Responses" document and the signed Preapplication Meeting Form.

Questions with amended responses

FOLLOW-UP PAGE AFFIDAVIT & CERTIFICATION

"I/we attest that this preapplication meeting form, follow-up page, and amended responses page accurately portray my 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 and follow-up materials (ARM 36.12.1302(6)(a))."

8-May-24

Applicant Signature — Date

8-May-24

Applicant Signature — Date

"We confirm that the preapplication form 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 piece of technical analysis required based on the proposed project and the Department is able to proceed with the scientific credibility review (ARM 36.12.1303(8))."

KKiel

5.24.2024

Department Signature — Date

Department Signature — Date

Figures

No.	Description	Date	Drawn By

Water & Environmental
TECHNOLOGIES
102 Cooperative Way, Ste. 100
Kalispell, MT 59901
(406) 756-2559
WATERENVTECH.COM

VICINITY MAP

PROJECT NAME: ROONEY HABITAT ENHANCEMENT WATER RIGHT
LOCATION: 3787 US HWY 93 W, WHITEFISH, MT 59937
FILE NO.: Vicinity.dwg

JOB NO:	ROONEY M02
DATE:	5/3/24
DRAFTER:	JG
CHECKED BY:	BB

SHEET
C1

NORTH SKIMMER POND
AREA: 1,441 S.F.

WETLAND FRINGE
AREA 2,396 S.F.

ORCHARD IRRIGATION AREA
23,914 S.F

FIXED AERATOR FOUNTAIN

POND - POU
AREA: 65,966 S.F.

WETLAND FRINGE
AREA: 626 S.F.

OVERFLOW CHANNEL
AREA: 895 S.F.

4-INCH
BURIED PIPE
550 FEET

SOUTH SKIMMER POND
AREA: 2,284 S.F.

WETLAND - POU
AREA: 97,341 S.F.

NEW POND
AREA: 2,119 S.F.

FLOWLINE

NEW POND
AREA: 1,496 S.F.

PROPOSED POD

STILLWATER
RIVER

STILLWATER
RIVER

S36
T31N, R23W

S1
T31N, R22W

600

500

700

N

0 50 100 FEET

NO.	DESCRIPTION	DATE	DRN. BY

Water & Environmental
TECHNOLOGIES
502 Cooperative Way
Suite 100
Kalispell, MT 59901
(406) 309-6085
walterenrtech.com

SITE PLAN

PROJECT NAME: ROONEY HABITAT ENHANCEMENT WATER RIGHT
LOCATION: WHITEFISH, MT
FILE NO.: Site plan.dwg

JOB NO: ROONEY.M02
DATE: 5/3/24
DRAFTER: LK
CHECKED BY: SI

SHEET
C2

PRELIMINARY
NOT FOR CONSTRUCTION

M:\ROONEY.M02\CAD\WATER RIGHT\Site plan.dwg PLOT DATE 5/3/2024 2:31 PM USER: JGRAHAM

Attachment A

Water Use Calculations

Rooney Water Requirement Calculations Revised 5/21/24										
	Irrigated Area (Square Feet)	Irrigated Area (Acres)	IWR Volume (Acre-feet) (70% irrigation efficency)	Volume (cubic yards)	Volume (gallons)	Volume (acre-feet)		Flow rate (GPM)	Fill Time Estimate (days) Per IDWR	
Upper Pond (total) volume	NA	NA		17107	3455170	10.60		250	10	
Upper Pond estimated ET losses in Acre-feet per annum (per DNRCs Net Evaporation GIS layer) 1.68 acre-ft per acre times 1.51 acres (pond area)	NA	NA				2.54				
Upper Pond Estimated Seepage losses (Acrefeet per annum per IDWRs Pond Calculator)	NA	NA	NA	NA	NA	11.10				
Upper pond (orchard irrigation area)	23914	0.55	2.3	NA	412201.5	1.27				
Lower Wetland Area (Fill Volume)	NA	NA		5408	1092276	3.35		235	3	flow rate assumes
Lower Wetland Area Est. Seepage During Fill						0.21	(daily maint vol x fill days)			15gpm seepage losses
			lower pond volume per 4 fill cycles			**14.25**				from upper pond
Lower Wetland Area ET losses (alfalfa Whitefish IWR)	97341	2.23	1.93	NA	NA	4.30				
Estimated total volume to be diverted (acre-feet per annum) = upper volume, et, seepage, and irrigation plus 4x lower pond fill						**39.75**				
Estimated consumptive uses = orchard irrigation plus wetland losses						**8.11**				

Attachment B

IWR Calculations Apple Tree

Irrigation Water Requirements
Crop Data Summary

Job: **Rooney**
Location: **Rooney Property**
By: **TW**
Weather Station: **WHITEFISH**
Latitude: **4825** Longitude: **11422**
Computation Method: **Blaney Criddle (TR21)**
Crop Curve: **Blaney Criddle Perennial Crop**
Begin Growth: **5/9** End Growth: **10/9**

Crop: **Apples, Mature (With cover)**
County: **Flathead, MT**
Date: **05/16/24**
Sta No: **MT8902**
Elevation: **3100** feet above sea level

Net irrigation application: **1** inches
Estimated carryover moisture used at season:
Begin: **0.25** inches End: **0.25** 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	2.30	0.69	1.35	0.88	1.17	0.10	
June	5.37	1.26	4.11	1.59	3.78	0.18	0.21
July	6.80	1.00	5.80	1.26	5.54	0.22	0.27
August	5.81	0.70	5.11	0.89	4.92	0.19	0.23
September	3.17	0.46	2.71	0.58	2.59	0.10	0.12
October	0.61	0.12	0.25	0.15	0.22	0.07	
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	**24.05**	**4.23**	**19.32**	**5.33**	**18.21**		

(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.

Date: 5/16/2024

Attachment C

Water Right Abstract 76LJ 30013084

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O. BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number: 76LJ 30013084 GROUND WATER CERTIFICATE

Version: 1 -- ORIGINAL RIGHT

Version Status: ACTIVE

Owners: MELODYE A ROONEY
PO BOX 97
WHITEFISH, MT 59937-0097

SEAN T ROONEY
PO BOX 97
WHITEFISH, MT 59937-0097

Priority Date: NOVEMBER 5, 2004 at 11:18 A.M.

Enforceable Priority Date: NOVEMBER 5, 2004 at 11:18 A.M.

Purpose (Use): IRRIGATION

WILDLIFE/WATERFOWL

Maximum Flow Rate: THIS RIGHT IS LIMITED TO THE ACTUAL AMOUNT USED UP TO 35 GALLONS PER MINUTE.

Maximum Volume: THIS RIGHT IS LIMITED TO THE ACTUAL AMOUNT USED UP TO 10 ACRE-FEET.

Source Name: GROUNDWATER

Source Type: GROUNDWATER

Point of Diversion and Means of Diversion:

ID	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1		NESENE	36	31N	23W	FLATHEAD

Period of Diversion: APRIL 1 TO OCTOBER 31

Diversion Means: WELL

Well Depth: 142.00 FEET

Static Water Level: 29.00 FEET

Casing Diameter: 6.00 INCHES

Flowing: NO

Reservoir: OFF STREAM

Govt Lot	Qtr Sec	Sec	Twp	Rge	County
	NESENE	36	31N	23W	FLATHEAD

Depth: 3.50 FEET

Surface Area: 1.00 ACRES

Current Capacity: 1.75 ACRE-FEET

Purpose (Use): IRRIGATION

Volume:

Period of Use: APRIL 1 to OCTOBER 31

Place of Use:

ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1			NESENE	36	31N	23W	FLATHEAD

Purpose (Use): WILDLIFE/WATERFOWL

Volume:

Period of Use: JANUARY 1 to DECEMBER 31

Place of Use:

ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1			NESENE	36	31N	23W	FLATHEAD

Geocodes/Valid: 07-4291-36-1-01-25-0000 - Y

Remarks:

OWNERSHIP UPDATE RECEIVED

OWNERSHIP UPDATE TYPE DOR # 103025 RECEIVED 03/07/2012.

Surface Water Permit Technical Analyses Report

Department of Natural Resources and Conservation (DNRC or Department)
Water Resources Division
Kristal Kiel, Water Resources Specialist, Kalispell Regional Office

Application No.	76LJ 30163639	**Proposed Point of Diversion**	SWSENE Section 36, Township 31N, Range 23W
Applicant	Sean & Melodye Rooney		

Overview

This report analyzes data submitted by the Applicant in support of the above-mentioned water right application. This report provides technical analyses as required under the Administrative Rules of Montana (ARM) 36.12.1303 in support of the water rights criteria assessment as required in §85-2-311, Montana Code Annotated (MCA).

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

1.0 Application Details

The Applicant proposes to divert water from March 1 to October 31 from the Stillwater River at a rate of 250 GPM (0.56 CFS). A total diverted volume of 39.75 AF is proposed for this project: 38.49 AF of water would be used between March 1 to October 31 for the purpose of wetland enhancement and 1.27 AF of water would be used between April 15 to October 15 for the purpose of irrigation. Both proposed water uses exist within the Applicants property in the SE ¼ of the NE ¼ of Section 36, Township 31 north, Range 23 west, Flathead County, Montana.

2.0 Surface Water Analysis

2.1 Source Description

Proposed Source of Water: Stillwater River

Proposed Point of Diversion: SW ¼ of the SE ¼ of the NE ¼ of Section 36, Township 31N, Range 23W, Flathead County, Montana.

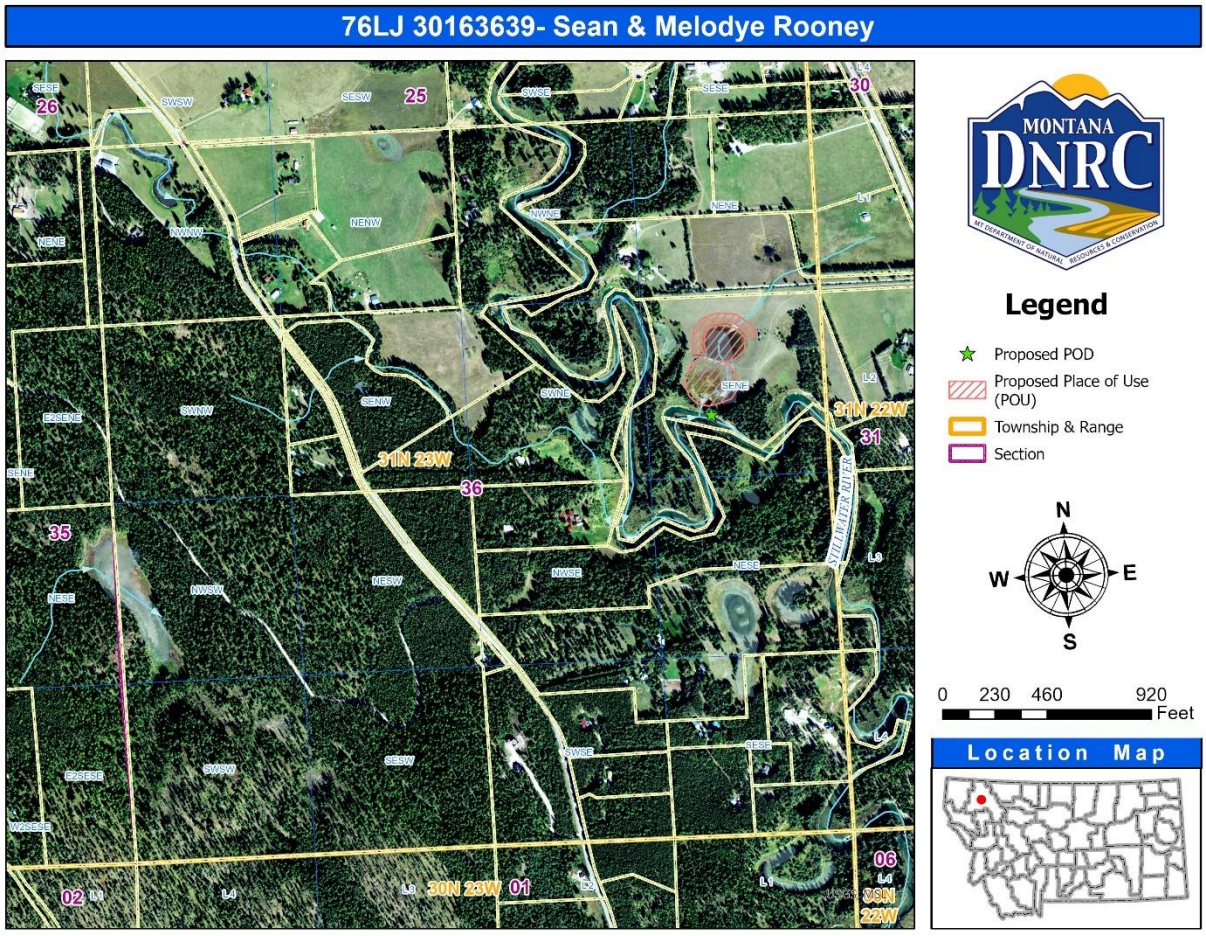

Figure 1: Map of the Applicant's proposed POD on the source and proposed place of use.

2.2 Method of Estimation

Gage Name: Stillwater River near Whitefish MT

Gage Number: USGS 123650000

Period of Record: October 1930-September 2006

Why this gage is considered an appropriate data source:

USGS Gage # 12365000 is the nearest gage to the depleted reach of the Stillwater River. The date range used includes the entire period of record for this gage.

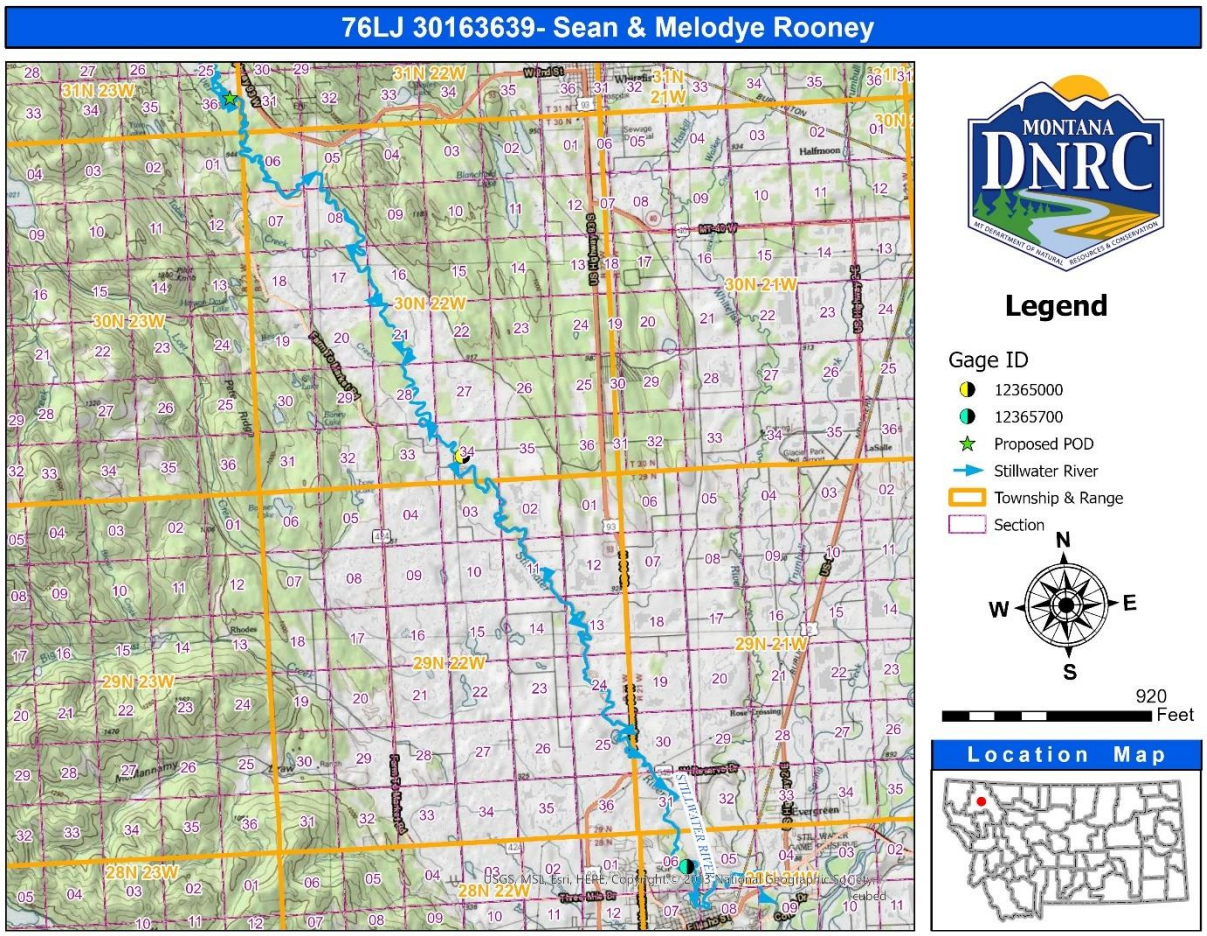

Figure 2- Map of the Proposed POD and USGS Gages Discussed in Analysis

2.3 Monthly Flow Rate and Volume

Methodology:

USGS Gage #12365000 is the nearest gage to the proposed POD. The point of diversion for this application is upstream of the gaging station. The date range used includes the entire period of record for this gage.

Physical availability of the Stillwater River at the POD will be quantified monthly. Department practice for physical availability analyses where the gage used is downstream of the POD is to add the monthly flow rates of existing water rights between the gage and the POD to the median of the mean monthly flows at the gage. The DNRC used the method below to quantify physically available monthly flows and volumes at the POD during the proposed period of diversion:

1. The Department calculated median of the mean monthly flow rates in cubic feet per second for the Stillwater River using USGS Gage #12365000 records for each month of the year (**Table 1**, column B).
2. The Department calculated the monthly flows appropriated by existing users upstream of the gage on the source (**Table 1**, column C) by:
   i. Generating a list of existing water rights from the POD to USGS Gage #12365000 near Whitefish, MT (list is included in the application file and available upon request);
   ii. Designating uses as occurring during their permitted or claimed periods of diversion;
   iii. Assigning a single combined flow rate of 0.08 CFS to all livestock direct from source rights without a designated flow rate, per Department adjudication standards (quantification of said water rights is not a re-adjudication or historical use analysis);
   iv. Assuming that the flow rate of each existing right is continuously diverted throughout each month of the period of diversion, with the exception of the month of October. This assumption is necessary due to the difficulty of differentiating the distribution of appropriated volume over the period of diversion. This leads to an overestimation of existing uses from the source. The Department finds this an appropriate measure of assessing existing rights as it protects existing water users; and,
   v. Of the 47 water rights queried between the POD and gage # 12365000, 15 rights have a period of use that extends through October 19 or earlier. The month of October is split into two date ranges in the Physical Availability analysis to differentiate availability throughout this period.
3. Since the gage used is downstream of the POD, the Department added in the flow rates of the existing rights between the POD and USGS Gage #12365000 (**Table 1**, column C) to the median of the mean monthly gage values (Table 1, column B) to determine physical availability at the POD (**Table 1**, column D). Physically available monthly flows were then converted to monthly volumes (**Table 1**, column E) using the following equation found on DNRC Form 615:

$$median\ of\ the\ mean\ monthly\ flow\ (CFS) * 1.98\ (AF/day/CFS) * \#\ days\ per\ month = AF/month$$

Table 1: Physical Availability at the Point of Diversion on the Stillwater River				
A	**B**	**C**	**D**	**E**
Month	**Median of the Mean Monthly Flow at Gage 12365000 (CFS)**	**Existing Legal Demands from the POD down to Gage 12365000 (CFS)**	**Physically Available Water at the POD (CFS)**	**Physically Available Water at POD (AF)**
March	126.0	0.7	126.7	7773.8
April	593.9	32.4	626.3	37204.6
May	1060.5	46.1	1106.6	67924.3
June	804.4	49.8	854.2	50741.9
July	365.6	50.8	416.4	25557.4
August	169.9	50.8	220.6	13542.3
September	125.9	50.8	176.6	10491.8
October 1-19	114.6	41.0	155.6	9550.7
October 20-31	114.6	18.3	132.9	8159.9

3.0 Area of Potential Impact Analysis

The Area of Potential Impact for this application is:

The area of potential affect is the Stillwater River downstream of the proposed POD to the USGS Gage # 12365700 at Lawrence Park in Kalispell, MT. A total of 117 surface water rights exist within the potentially impacted reach. A list of rights can be found in **Appendix A**.

Why this is an appropriate Area of Potential Impact: The area of potential impact includes the entire downstream reach below the proposed POD up to the Lawerence Park gage (approximately 15 miles). The gage is located approximately 1.3 miles from the confluence with the Whitefish River, and 1.5 miles from the confluence with the Flathead River. In the area near the gage, there is evidence suggesting hydraulic connection of the Flathead Deep Alluvial Aquifer. Due to the complexities of the hydraulic connections of ground and surface waters after the Lawrence Park gage, the Department finds it reasonable to mark the area of potential impact at the gage.

Review

This document has been reviewed by the Department on July 8, 2024.

References

- Department Standard Practice for Determining Physical Availability of Surface Water
- Department Standard Practice for Determining Area of Potential Impact
- DNRC, 2019. Technical Memorandum: *Physical Availability of Surface Water With Gage Data*, dated November 1, 2019.

Appendix A: Water Rights within the Area of Potential Impact

	WR ID#	Purpose(s)	Flow (CFS)	Period of Diversion
Existing Water Rights Between Proposed POD and USGS Gage # 12365000 near Whitefish, MT	76LJ 11812 00	DOMESTIC	0.01	01/01 to 12/31
	76LJ 148848 00	STOCK	0.02	01/01 to 12/31
	76LJ 23245 00	DOMESTIC	0.02	01/01 to 12/31
	76LJ 4696 00	DOMESTIC	0.02	01/01 to 12/31
	76LJ 8433 00	MULTIPLE DOMESTIC	0.02	01/01 to 12/31
	76LJ 124161 00	DOMESTIC	0.03	01/01 to 12/31
	76LJ 8428 00	MULTIPLE DOMESTIC	0.04	01/01 to 12/31
	76LJ 8431 00	IRRIGATION	0.04	05/01 to 09/30
	76LJ 8432 00	STOCK	0.04	01/01 to 12/31
	76LJ 55679 00	DOMESTIC; IRRIGATION; STOCK	0.05	01/01 to 12/31
	76LJ 109407 00	STOCK	0.06	01/01 to 12/31
	76LJ 109408 00	IRRIGATION	0.06	04/15 to 09/30
	76LJ 109409 00	DOMESTIC	0.06	01/01 to 12/31
	76LJ 30122713	LAWN AND GARDEN	0.09	04/15 to 10/15
	76LJ 19935 00	STOCK; IRRIGATION	0.11	04/15 to 10/15
	76LJ 93091 00	IRRIGATION	0.12	05/01 to 09/30
	76LJ 129089 00	DOMESTIC	0.2	01/01 to 12/31
	76LJ 140160 00	IRRIGATION	0.22	06/15 to 09/15
	76LJ 4695 00	IRRIGATION	0.36	05/01 to 09/30
	76LJ 166826 00	IRRIGATION	0.49	06/01 to 09/30
	76LJ 70096 00	IRRIGATION	0.66	04/15 to 10/31
	76LJ 124162 00	IRRIGATION	0.8	05/01 to 10/15
	76LJ 53747 00	IRRIGATION	0.93	04/15 to 10/15
	76LJ 9392 00	IRRIGATION	0.94	07/01 to 09/30
	76LJ 148849 00	IRRIGATION	1.25	05/01 to 10/01
	76LJ 9211 00	IRRIGATION	1.34	05/15 to 10/31
	76LJ 6714 00	IRRIGATION	1.49	04/15 to 10/15
	76LJ 3943 00	IRRIGATION	1.83	04/15 to 10/15
	76LJ 1646 00	IRRIGATION	1.84	05/01 to 09/30
	76LJ 30068683	IRRIGATION	1.85	04/15 to 10/15
	76LJ 4278 00	IRRIGATION	2	04/15 to 10/31
	76LJ 814 00	IRRIGATION	2	04/01 to 10/31
	76LJ 70095 00	IRRIGATION	2.11	04/15 to 10/31
	76LJ 6715 00	IRRIGATION	2.22	04/01 to 10/15
	76LJ 104666 00	IRRIGATION	2.23	05/01 to 10/31
	76LJ 5962 00	IRRIGATION	2.67	04/15 to 10/15
	76LJ 32432 00	IRRIGATION	2.7	05/01 to 09/30
	76LJ 9463 00	IRRIGATION	3	05/01 to 10/15
	76LJ 129026 00	IRRIGATION	3.01	06/01 to 09/15
	76LJ 30067400	IRRIGATION	3.02	04/15 to 10/15
	76LJ 99898 00	IRRIGATION	3.34	04/01 to 11/01
	76LJ 5070 00	IRRIGATION	3.4	04/15 to 10/15
	76LJ 109489 00	IRRIGATION	4.01	04/15 to 10/19
	76LJ 30144312	STOCK	<Null>	01/01 to 12/31
	76LJ 8430 00	STOCK	<Null>	04/01 to 12/15

	WR ID#	Purpose(s)	Flow (CFS)	Period of Diversion
Existing Water Rights Between USGS Gage # 12365000 near Whitefish, MT and USGS Gage # 12365700 at Lawrence Park in Kalispell, MT	76LJ 147212 00	STOCK	0.06	01/01 to 12/31
	76LJ 3465 00	MULTIPLE DOMESTIC	0.06	01/01 to 12/31
	76LJ 147213 00	STOCK	0.07	01/01 to 12/31
	76LJ 30162991	IRRIGATION	0.1	04/15 to 10/30
	76LJ 124147 00	LAWN AND GARDEN	0.11	06/01 to 09/01
	76LJ 67410 00	IRRIGATION	0.11	04/01 to 10/31
	76LJ 15368 00	IRRIGATION	0.13	05/01 to 10/15
	76LJ 129101 00	IRRIGATION	0.15	05/01 to 10/31
	76LJ 12521 00	IRRIGATION	0.17	04/15 to 10/01
	76LJ 153896 00	IRRIGATION	0.18	04/15 to 10/15
	76LJ 115797 00	IRRIGATION; LAWN AND GARDEN; STOCK	0.22	01/01 to 12/31
	76LJ 6970 00	IRRIGATION; STOCK	0.24	01/01 to 12/31
	76LJ 22794 00	IRRIGATION	0.26	04/15 to 10/15
	76LJ 7521 00	IRRIGATION; STOCK	0.27	01/01 to 12/31
	76LJ 57522 00	IRRIGATION; STOCK	0.28	01/01 to 12/31
	76LJ 30162992	IRRIGATION	0.36	05/01 to 10/15
	76LJ 9239 00	IRRIGATION	0.36	05/01 to 08/31
	76LJ 30003970	IRRIGATION	0.38	05/01 to 10/01
	76LJ 62 00	IRRIGATION	0.38	05/01 to 10/01
	76LJ 128956 00	IRRIGATION	0.44	06/05 to 09/15
	76LJ 45086 00	IRRIGATION	0.44	04/01 to 11/01
	76LJ 30118740	IRRIGATION	0.46	04/15 to 10/30
	76LJ 40588 00	IRRIGATION	0.54	05/01 to 10/31
	76LJ 24660 00	IRRIGATION; STOCK	0.8	01/01 to 12/31
	76LJ 9139 00	IRRIGATION	1.06	04/15 to 10/15
	76LJ 9138 00	IRRIGATION	1.11	04/15 to 10/15
	76LJ 25713 00	IRRIGATION	1.24	04/15 to 10/15
	76LJ 148793 00	IRRIGATION	1.33	05/01 to 11/01
	76LJ 748 00	IRRIGATION	1.33	05/01 to 08/01
	76LJ 40583 00	IRRIGATION	1.34	05/01 to 10/31
	76LJ 9212 00	IRRIGATION	1.34	05/15 to 10/31
	76LJ 296 00	IRRIGATION	1.42	04/01 to 11/01
	76LJ 30118731	IRRIGATION	1.47	05/01 to 10/15
	76LJ 30117995	IRRIGATION	1.52	04/15 to 10/15
	76LJ 147215 00	IRRIGATION	1.8	04/15 to 10/15
	76LJ 9214 00	IRRIGATION; INDUSTRIAL	1.84	04/15 to 10/31
	76LJ 1617 00	IRRIGATION; STOCK	2	04/15 to 10/15
	76LJ 6776 00	IRRIGATION	2	05/01 to 10/15
	76LJ 9135 00	IRRIGATION	2	06/01 to 09/30
	76LJ 55741 00	IRRIGATION	2.13	05/01 to 10/15
	76LJ 6712 00	IRRIGATION	2.22	04/15 to 10/15
	76LJ 9719 00	IRRIGATION	2.22	04/15 to 10/15
	76LJ 39732 00	IRRIGATION	2.23	04/01 to 10/01
	76LJ 39706 00	IRRIGATION	2.34	06/01 to 09/30
	76LJ 9149 00	IRRIGATION	2.45	04/01 to 10/01
	76LJ 147214 00	IRRIGATION	2.66	04/15 to 10/15
	76LJ 40581 00	IRRIGATION	2.99	05/01 to 10/31
	76LJ 40582 00	IRRIGATION	3	05/01 to 10/31

	76LJ 40589 00	IRRIGATION	3	05/01 to 10/31
	76LJ 40590 00	IRRIGATION	3	05/01 to 10/31
	76LJ 99898 00	IRRIGATION	3.34	04/01 to 11/01
	76LJ 30044042	IRRIGATION	3.6	05/01 to 10/31
	76LJ 30008767	IRRIGATION; RECREATION	3.78	04/01 to 10/31
	76LJ 2374 00	IRRIGATION; INDUSTRIAL	3.92	05/01 to 10/19
	76LJ 147216 00	IRRIGATION	4	04/15 to 10/15
	76LJ 109489 00	IRRIGATION	4.01	04/15 to 10/19
	76LJ 57621 00	IRRIGATION	4.01	03/01 to 11/15
	76LJ 26596 00	IRRIGATION	5.02	04/15 to 10/15
	76LJ 542 00	IRRIGATION	5.48	04/01 to 10/15
	76LJ 40586 00	IRRIGATION	5.9	05/01 to 10/31
	76LJ 40584 00	IRRIGATION	6	05/01 to 10/31
	76LJ 40585 00	IRRIGATION	6.06	05/01 to 10/31
	76LJ 148792 00	IRRIGATION	8	05/01 to 11/01
	76LJ 109493 00	IRRIGATION	10.7	04/15 to 10/15
	76LJ 40587 00	IRRIGATION	10.98	05/01 to 10/31
	76LJ 40591 00	IRRIGATION	13.37	05/01 to 10/31
	76LJ 51597 00	IRRIGATION	22.28	05/01 to 10/31
	76LJ 153897 00	STOCK	<Null>	01/01 to 12/31
	76LJ 2373 00	IRRIGATION; INDUSTRIAL	2.32	05/01 to 10/19
	76LJ 40592 00	STOCK	<Null>	01/01 to 12/31

APPLICATION FOR BENEFICIAL WATER USE PERMIT

§ 85-2-302

Form No. 600 *(04/2024)*

For Department Use Only
RECEIVED
DNRC Water Resources

JAN 02 2025

Kalispell Unit

FILING FEE

$2900/$1600 – Inside a Basin Closure Area, Controlled Groundwater Area or Compact Closure; without/with filing fee reduction.

$2500/$1200 – Outside a Basin Closure Area; Controlled Groundwater Area or Compact Closure; without/with filing fee reduction.

Application # 30163639 Basin 76LJ

Priority Date 1/2/25 Time 11:21 AM/PM

Rec'd By LP

Fee Rec'd $ 700.00 Check # 1437

Deposit Receipt # KLV2509963

Payor Water + Environmental Tech

Refund $ _____ Date _____

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)).

Applicant Information: *Add more as necessary.*

Applicant Name Sean T & Melodye A Rooney

Mailing Address P O Box 97 City Whitefish State MT Zip 59937

Phone Numbers: Home _____ Work _____ Cell 406-890-5280

Email Address strooney@gmail.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 x Consultant ___ Attorney ___ Other

Contact/Representative Name Water & Environmental Technologies - Jamie Graham

Mailing Address 102 Cooperative Way, STE 100 City Kalispell State MT Zip 59901

Phone Numbers: Home _____ Work 406 309-6085 Cell _____

Email Address jgraham@waterenvtech.com

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.*

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 checked 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. Label units in narrative responses. Responses in the form of a table may be entered into the table provided on this form or in an attachment. Responses in the form of a table that are larger than the table provided on this form should be placed in an attachment. If an attachment is used, the table must have the exact headings found on this form, and "see attachment" must be placed on this form. For tables on this form, circle correct unit at header of column when table has unit options. For tables in attachments, label all units.

PREAPPLICATION AND TECHNICAL ANALYSIS INFORMATION

1. ■ **Y** ☐ **N** Did you have a preapplication meeting AND complete a Form 600P Permit Preapplication Meeting Form?

IF QUESTION 1 IS YES,

2. ▣ **Y** ☐ **N** Did you elect on Form 600P to have the Department conduct Technical Analysis?

3. ▣ **Y** ☐ **N** Has any element of the application changed from Form 600P or the Technical Analysis conducted as part of the preapplication process? A Technical Analysis Addendum (Form 600-TAA) is required if changes have occurred.

4. Submit the following items:

4.1. ■ **S** Technical Analysis you would like the Department to use to conduct criteria assessment.

4.2. ☐ **S** ■ **NA** Scientific Credibility Review, if applicable.

4.3. ■ **S** ☐ **NA** Technical Analysis Addendum (Form 600-TAA), if applicable, per question 3.

IF QUESTION 1 IS NO,

5. ☐ **S** Submit the Technical Analysis Addendum (Form 600-TAA).

6. ☐ **Y** ☐ **N** Do you elect to have the Department conduct Technical Analysis?

6.1. ☐ **S** If no, submit all the required Technical Analyses. See the Technical Analysis Guide for more information.

APPLICATION ADDENDA AND REVIEW

7. ☐ **S** ■ **NA** If your application is for groundwater and one or more of your points of diversion are in a Basin Closure Area, then submit the Basin Closure Area Addendum (Form 600-BCA).

8. ☐ **S** ■ **NA** If your application is for groundwater and one or more of your points of diversion are in a Basin Closure Area, then you must comply with the requirements of §85-2-360. If you elected to conduct Technical Analysis, you must submit the Hydrogeologic Report Addendum (Form 600-HRA). If you did not have a preapplication meeting AND complete a Form 600P Permit Preapplication Meeting Form, you must submit the Hydrogeologic Report Addendum (Form 600-HRA). If you had a preapplication

meeting, completed a Form 600P Permit Preapplication Meeting Form, and elected DNRC to conduct Technical Analysis, you do not need to submit Form 600-HRA because the Department's Technical Analysis, which you must submit along with this application, meets the requirements of §85-2-360.

9. ☐ **S** ■ **NA** If one or more of your points of diversion are in a Controlled Groundwater Area, then submit the Controlled Groundwater Area Addendum (Form 600-CGWA) and all its required attachments.

10. ☐ **S** ■ **NA** If the project involves an appropriation that is greater than 5.5 CFS and 4,000 acre-feet, then submit a Criteria Addendum Application for Beneficial Water Use Permit for Appropriations Greater than 5.5 CFS and 4,000 AC-FT (Form 600-B).

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

12. ☐ **S** ■ **NA** If you require mitigation water to meet the criteria of issuance, then submit a Mitigation Purpose Addendum (Form 600/606-MIT).

13. ☐ **S** ■ **NA** If the proposed purposes include marketing or selling water, then submit the Water Marketing Purpose Addendum (Form 600/606-WMA).

14. ☐ **S** ■ **NA** If the project is in designated sage grouse habitat, then submit a review letter from the Montana Sage Grouse Habitat Conservation Program (https://sagegrouse.mt.gov).

15. ☐ **Y** ☐ **N** ■ **NA** You must provide a written notice of the application to each owner of an appropriation right sharing the point of diversion or means of conveyance (e.g., canal, ditch, flume, pipeline, or constructed waterway). Have you sent this notice to all applicable parties? Your application cannot be deemed correct and complete until you have sent this notice pursuant to §85-2-302(4)(c), MCA.

PURPOSE AND DIVERSION INFORMATION

16. ☐ **Y** ■ **N** Is the proposed use temporary?

16.1. If yes, when will the appropriation cease? _____

17. Is the proposed source surface water or groundwater? surface water

18. What is the source name? Stillwater River

19. ■ **S** Attach a map utilizing an aerial photograph or topographic map that shows the following: section corners, township and range, a north arrow, all proposed points of diversion labeled with a unique POD ID number, all proposed places of use, all proposed conveyance facilities and or routes, all proposed places of storage, and places of use for all overlapping water rights.

20. Fill out the table below. 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.

Purpose	**Means of Diversion**	**Acres Irrigated** (if appl.)	**Period of Diversion** *(Month/Day - Month/Day)*	**Period of Use** *(Month/Day - Month/Day)*	**Flow Rate** *(GPM or CFS)*	**Volume** *(Acre-Feet)*
Irrigation	pump	0.55	3/1-7/31 & 10/15-10/31	4/15 - 10/15	10	1.26
Wetland Enhancement	pump		3/1-7/31 & 10/15-10/31	3/1-7/31 & 10/15-10/31	250	37.45
				Total Flow Rate and Volume Required	250	38.71

POINT(S) OF DIVERSION

21. Describe the proposed location of the point(s) diversion to the nearest ¼ ¼ ¼ Section. Label each POD with the POD ID number used for the project map (question 19).

POD #	**¼**	**¼**	**¼**	**Sec.**	**Twp.**	**Rge.**	**County**	**Lot**	**Block**	**Tract**	**Subdivision**	**Gov. Lot**
1	SE	SE	NE	36	31N	23W	Flathead					

PLACE OF USE

22. What are the geocodes of the place of use?

-07-4291-36-1-01-25-0000	-
-	-
-	-
-	-

23. Describe the legal land description of the proposed place of use and, if an irrigation or lawn and garden purpose, list the number of irrigated acres.

Acres	Gov. Lot	Block	¼	¼	¼	Sec.	Twp.	Rge.	County
0.55				SE	NE	36	31N	23W	Flathead

SUPPLEMENTAL AND OVERLAPPING WATER RIGHTS

24. ☐ **Y** ■ **N** Will other water rights supplement or overlap the place of use to contribute to the purpose(s)?

24.1. If yes, summarize how the water rights will be operated as a whole to serve the purpose(s).

25. For each supplemental or overlapping water right, please list the water right number, purpose, typical period of diversion and use (MM/DD-MM/DD), flow rate (GPM or CFS), and the volume of water (AF) contributed to the shared place of use.

Water Right #	Average Period of Diversion	Average Period of Use	Flow Rate	Volume Contributed

26. ☐ **Y** ■ **N** Will this application supplement contract water from a Federal Project, ditch company, or other source?

26.1. If yes, explain.

OWNERSHIP AND POSSESSORY INTEREST

27. ■ **Y** ☐ **N** Does the Applicant have ownership of all proposed points of diversion and places of use?

27.1. If no, explain.

28. ☐ **Y** ■ **N** 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.

28.1. If yes, explain.

ADVERSE EFFECT

29. ■ **Y** ☐ **N** Do you have evidence that water is physically and/or legally available in the amount required for the proposed flow rate and volume of your project?

29.1. If yes, explain.

DNRC's technical analysis indicates water is physically and legally available for the proposed period of diversions 3/1 through 7/31 and 10/15 through 10/31. This is the proposed period of diversion.

30. ☐ **Y** ■ **N** If the legal availability criteria assessment finds that water is not legally available throughout the entire proposed period of diversion, do you have a contingency plan to address this?

30.1. If yes, explain.

31. ☐ **Y** ■ **N** Are there any factors that would limit your ability to turn off your appropriation in response to a call?

31.1. If yes, explain.

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

The power supply to the pump will be turned off if necessary following a valid call.

33. ☐ **Y** ■ **N** Are you aware of any calls that have been made on the source of supply or depleted surface water source?

33.1. If yes, explain.

34. ☐ **Y** ■ **N** Does a water commissioner distribute water or oversee water distribution on your proposed source or any identified depleted surface water sources?

34.1. If yes, list the source(s).

35. Describe your plan to ensure existing water rights will be satisfied during times of water shortage.

1. Reduce irrigation application by 50 percent during water shortage, 2. reduce lower pond wetland inflow application to 25 percent during periods of shortage, 3. the pump at the Stillwater River can be shut off in response to a valid call.

36. ☐ **Y** ■ **N** Do other water rights share any of the proposed points of diversion?

36.1. If yes, describe how the proposed project will not adversely affect these water rights.

37. ☐ **Y** ■ **N** Do other water rights share any conveyance ditch associated with the proposed project? See the list of water rights that share the conveyance ditches in either the Preapplication Meeting Form (Form 600P) or the Technical Analysis Addendum (Form 600-TAA).

37.1. If yes, describe how the proposed project will not adversely affect these water rights.

ADEQUATE MEANS OF DIVERSION AND OPERATION

38. ■ **S** Provide a diagram of how you will operate your system from all proposed points of diversion to all proposed places of use.

39. 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 pump will be deployed on a sled seasonally at the point of diversion in the Stillwater river. Water will be conveyed from the pump to the upper pond via a 6-inch diameter buried PVC transmission line. Total dynamic head for the system was calculated to be 24.18 feet (calculations attached). A Grundfos 230S30-1A submersible pump (or equivalent pump) curve and specification attached is capable of providing a flow of 250 GPM at a TDH of 25 feet. The ponds will be filled four times annually within the proposed period of use, including three fills between 3/1 and 7/31 and one fill between 10/15 and 10/31.

40. ■ **Y** ☐ **N** Is the diversion capable of providing the full amount of water requested through the period of diversion?

40.1. If no, explain.

41. Describe the size and configuration of infrastructure to convey water from all proposed points of diversion to all proposed places of use. This may include, where applicable: ditch capacity and/or pipeline size and configuration.

A buried 6-inch diameter PVC pipe will be utilized to convey water from the point of diversion to the upper pond. Irrigation application of the orchard will be completed via graded border irrigation along a length of 607 feet by approximately 4 feet wide. A Grundfos 10 SQ05-110 submersible pump (or equivalent pump) will be utilized to divert water from the upper pond to the graded border irrigation area. The flow rate out of the pond for the graded border irrigation area is anticipated to be approximately 10 GPM.

42. Describe any losses related to the proposed conveyance.

No losses are anticipated associated with conveyance as buried pipe will be utilized for water conveyance from the point of diversion to the place of use. Graded border irrigation is assumed to have 70% irrigation efficiency.

43. ■ **Y** ☐ **N** ☐ **NA** Is the proposed conveyance infrastructure capable of providing the required flow and volume, plus any conveyance losses?

43.1. If no, explain.

44. ☐ **Y** ■ **N** Does the proposed conveyance require easements?

44.1. If yes, explain.

45. Describe 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, output and configuration of sprinkler heads and pipelines within the place of use.

Water will be diverted from the Stillwater River via a pump and conveyed to the place of use (pond) through a buried pipeline. From there, water will overflow into the wetland during fill cycles. Irrigation water will be diverted from the pond via a submersible pump to be installed in the pond via buried PVC water line and will be applied via graded border to the tree (orchard) area at a flow rate of approximately 10 gpm.

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

46.1. If yes, explain the way water will be discharged and the disposal method.

46.2. ☐ **Y** ☐ **N** ☐ **Y** Have the necessary permits been obtained to comply with §§ 75-5-410 and 85-2-364, MCA?

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

IF YES,

47.1. ☐ **Y** ☐ **N** Have all wells already been drilled?

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

47.3. ☐ **Y** ☐ **N** For all wells yet to be drilled, will a licensed well driller construct the wells?

47.4. ☐ **S** ☐ **NA** Submit any additional well logs for wells drilled after submittal of Form 600P.

BENEFICIAL USE

48. Why is the requested flow rate and volume the amount needed for the purpose(s)?

The flow rate and volume are adequate to provide periods of flooding to enhance wetland areas below the ponds. The proposed flow rate is required to effectively fill the pond and overflow for wetland flooding. The volume of water required for wetland enhancement is based on filling the pond and wetland area four times throughout the year. Tree and landscaping irrigation will occur using water contained in the pond and volumes are based on the proposed irrigated area and the irrigation requirements calculated using DNRC standards (USDA's IWR).

49. ☐ **Y** ■ **N** Does the Department have a standard for the purposes for which water is proposed? Department standards can be found in the DNRC Water Calculation Guide, ARM 36.12.112, and ARM 36.12.115.

49.1. ☐ **Y** ☐ **N** If yes, does the proposed beneficial use fall within Department standards?

49.2. If no Department standard exists, or if proposed beneficial use falls outside of Department standards, explain how the use is reasonable for the purpose.

Irrigation use will fall within department standards. There are no standards established for wetland enhancement. The flow rate is adequate to fill the ponds in a reasonable time frame and the volume is estimated based on the need to fill the pond four (4) times seasonally. Filling the pond four times will allow for enhanced wetland vegetation and help maintain the moisture in the soil immediately beneath the pond and wetland area.

50. ☐ **Y** ■ **N** Will your proposed project be subject to DEQ requirements for a public water supply (PWS) system or Certificate of Subdivision Approval (COSA)?

50.1. ☐ **Y** ☐ **N** If yes, have you researched or consulted with DEQ regarding those requirements?

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

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

51.1.1. ☐ **S** ☐ **NA** If yes, please submit the COSA.

51.1.2. ☐ **Y** ☐ **N** If no, have you researched or consulted with DEQ regarding their requirements?

PROPOSED COMPLETION PERIOD

52. How many years will be needed to complete this project and to submit to the DNRC a Project Completion Notice (Form 617)? Five (5) years will be necessary to complete this project.

53. Why is this amount of time needed?

This will allow for installation of infrastructure (pumps and conveyance piping), and allow time to plant and establish vegetation in the project area.

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. 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.

Applicant Signature _____ Date: 19-Dec-24

Printed Name Sean Rooney

Title _____

Applicant Signature _____ Date: 19-12-24

Printed Name Melodye Rooney

Title _____

Applicant Signature _____ Date: _____

Printed Name _____

Title _____

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. 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.

Applicant Signature _____ Date: 19-Dec-24

Printed Name Sean Rooney

Title _____

Applicant Signature _____ Date: 19-12-24

Printed Name Melodye Rooney

Title _____

Applicant Signature _____ Date: _____

Printed Name _____

Title _____

January 22, 2025

Sean T & Melodye A Rooney
PO Box 97
Whitefish, MT 59937

Subject: Deficiency letter for Application for Beneficial Water Use Permit No. 76LJ 30163639

Dear Applicant,

The Department of Natural Resources and Conservation (DNRC or Department) has begun reviewing your application. This letter is to notify you of the deficiencies in your application as required in ARM 36.12.1501(1) and §85-2-302(5)(b), MCA. An Applicant is required to submit substantial and credible information addressing the rules and statutes that are relative to your application. You must provide the information specified below for your application to be considered correct and complete. "Correct and complete" means all of the information provided is substantial and credible and provides all of the information as required by applicable rules and statutes. The application as submitted contains deficiencies in the following section(s):

- ❑ Form 600, Question 20 (and Applicant-provided table labeled "Rooney Water Requirement Calculations Revised 5/21/24"): *Fill out the table in Question 20 with Purpose, Means of Diversion, Acres Irrigated, Period of Diversion, Period of Use, Flow Rate, and Volume.*
  - For the Wetland Enhancement Purpose, please elaborate on your volume calculations. For example, evaporation for the upper pond was provided, but evaporation for the lower wetland area was not- what is the rationale for this?
  - For the Wetland Enhancement Purpose, the period of use indicates a break during the months of August, September, and beginning of October. Please explain how the diverted water is not being used for this purpose during this time, and at other times not requested under the period of use.
  - Applicable rules and policy for these requests are as follows:
    - ARM 36.12.113 (1) & (7)
    - ARM 36.12.115 (5) & (6)
    - ARM 36.12.116 (Include number from the form, the question itself, the rule being addressed in the question, the original answer in the application, WHY that answer is not substantial and credible, and what additional information the applicant needs to provide to be considered substantial and credible.)
    - DNRC Technical Memorandum: *Pond and Wetland Evaporation/Evapotranspiration* (enclosed)

- ❑ Form 600, Question 48: *Why is the requested flow rate and volume the amount needed for the purpose(s)?*
    - For the Wetland Enhancement Purpose, please elaborate on your volume calculations. For example, evaporation for the upper pond was provided, but evaporation for the lower wetland area was not- what is the rationale for this?
    - Applicable rules for this request are as follows:
        - 36.12.1801 (2)(b)

- ❑ Form 600, Question 49.2: *If no Department standard exists, or if the proposed beneficial use falls outside of the Department standards, explain how the use is reasonable for the purpose.*
    - In the response to this question, it is stated that "the flow rate is adequate to fill the ponds in a reasonable time frame and the volume is estimated based on the need to fill the pond four times seasonally." Please define what is a reasonable time frame and why the time frame is reasonable. Please explain why the requested flow rate is needed to achieve the desired timeline. Please provide evidence on why filling the pond and overflow to the wetland area four times (no more, no less) annually benefits wetland enhancement.
    - Applicable rules for this request are as follows:
        - 36.12.1801 (2)(b)

As stated above, the information submitted to address the rules and statutes listed in this deficiency letter must be substantial credible information to be acceptable at the correct and complete determination. §§85-2-102 (9) and (26), MCA.

Please submit the information specified above to the Kalispell Regional Office by May 22, 2025. This is the only deficiency letter that will be sent. An application not corrected or completed within 120 days from the date of this letter is terminated per ARM 36.12.1501(2) and §85-2-302(6)(a), MCA.

Please let me know if you have any questions.

Best,

Kristal Kiel
Water Resource Specialist
Kalispell Regional Office
655 Timberwolf Parkway, Suite 400
Kalispell, MT 59901

CC:
Brad Bennett
Senior Hydrologist
Water Environmental Technologies Inc.
102 Cooperative Way, Suite 100
Kalispell MT 59901

Water & Environmental
TECHNOLOGIES

May 6, 2025

Kristal Kiel – Water Resource Specialist
Kalispell Regional Office
655 Timberwolf Parkway, Suite 400
Kalispell, MT, 59901

Subject: Rooney Application for Beneficial Water Use – Permit No. 76LJ 3016369

Dear Kristal:

Water and Environmental Technologies (WET) is pleased to provide the additional information requested in support of the application for beneficial water for Sean and Melody Rooney. DNRC queries are provided in italicized text, WET's responses to each question are provided in regular text.

1. *Form 600, Question 20 (and Applicant-provided table labeled "Rooney Water Requirement Calculations Revised 5/21/24"):*

    - *For the Wetland Enhancement Purpose, please elaborate on your volume calculations. For example, evaporation for the upper pond was provided, but evaporation for the lower wetland area was not- what is the rationale for this?*

The rationale for not providing evaporative losses for the lower pond are as follows:

The lower wetland area (also referred to as the "lower pond") is not designed to retain water or maintain a consistent water level. The fill volume for this wetland is estimated at 3.35 acre-feet. Filling occurs only when the upper pond reaches the set overflow, allowing water to flow into the lower wetland. It is anticipated that most of this water will be lost through seepage, evaporation, or evapotranspiration (ET) between fill events.

WET has provided revised seasonal net evaporation estimates for the lower wetland totaling 3.75 acre-feet. However, this value is considered conservative, as it assumes a constant full-pool surface area of 2.23 acres, an area that will not be sustained year-round. As water levels decline, so does the open water surface area, reducing actual evaporative losses. Note that the estimated net evaporation of 3.75 acre-feet does not impact the requested diverted volume, but does increase the calculated consumption.

Additionally, ET losses have been accounted for in the vegetated wetland areas, totaling an annual volume of 4.30 acre-feet. Calculating both net evaporation and ET for the proposed lower wetland area results in an overestimation of total consumptive use. Nonetheless, the net evaporation and ET estimates for the lower wetland area have been included in the updated table titled "Rooney Water Requirements" (attached to this letter response). The lower wetland is proposed to be filled up to four times annually.

WET used the Idaho Department of Water Resources (IDWR) pond loss calculation spreadsheet to estimate fill volumes, fill time, and seepage losses during the filling of the lower wetland pond area. A seepage rate of 0.02 feet per day per square foot was used to represent site soil conditions at the lower wetland (silty or clayey fine sands). Based on this seepage rate and incorporating annual evapotranspiration (ET) losses, the wetland is estimated to drain in approximately seven weeks (49 days). This is based on the total pond volume of 3.345 acre-feet (AF) divided by the calculated daily maintenance volume of 0.069 AF/day.

Assuming the initial fill is completed by March 15 (approximately 10 days to fill the upper pond and 3.5 to fill the lower wetland), the lower wetland is expected to be low to empty by early May (May 2). After an additional dry out period of approximately two weeks, a second fill cycle will occur in mid-May. The pond will slowly drain over the next seven weeks (into early-July). Following a second dry out period a third filling will occur in late July to top off the wetland area prior to a cessation in diversion on August 1. Based on the proposed period of diversion, no water will be diverted between August 1 and October 14. During that time, the lower wetland area will drain and begin to dry out. The fourth and final cycle will occur between October 15 and October 31, allowing the lower wetland area to be saturated at the end of the growing season. This seasonal fill schedule is designed to promote alternating wetting and drying conditions in the wetland, which supports the objectives of wetland enhancement and ecological function.

A typical annual schedule is anticipated to follow something similar to that proposed below:

- March 1 – start diverting to fill upper pond.
- March 15 – upper pond full and lower wetland area full (first fill = 3.56 AF)
- May 2 – lower wetland area effectively drained of standing water
- May 17 – lower wetland area dry out period
- May 20 – lower wetland area full (second fill = 7.12 AF total to lower wetland area)
- July 8 – lower wetland area effectively drained of standing water
- July 22 – lower wetland area dry out period
- July 26 – lower wetland area full (third fill = 10.69 AF total to lower wetland area)
- August 1 – periods of no diversion begins
- September 13 – lower wetland area drained of standing water
- October 14 – period of no diversion ends
- October 15 – start diverting to fill upper pond.
- October 31 – lower wetland area full (fourth fill = 14.25 AF total to lower wetland area)

    - *For the Wetland Enhancement Purpose, the period of use indicates a break during the months of August, September, and beginning of October. Please explain how the diverted water is not being used for this purpose during this time, and at other times not requested under the period of use.*

This was a clerical error on the form 600. Water that has been previously diverted to the lower wetland area will continue to be utilized to support and enhance the wetland during this time period. In many ways, the water diverted for wetland enhancement will provide a beneficial use throughout the year. However, based on our understanding of the period of use, water diverted

for wetland enhancement is most accurately described as from the beginning of diversion in the spring (3/1) to the end of diversion in the fall (10/31). As such, the proposed period of use for Wetland Enhancement should be 3/1 to 10/31, annually. No changes to the period of diversion or volume of appropriation are proposed.

- *Applicable rules and policy for these requests are as follows:*
  - *ARM 36.12.113 (1) an application involving a new or existing reservoir must identify the capacity of the reservoir and the annual volume of net evaporation pursuant to arm 36.12.116 & (7) if the application is for a reservoir for with the above standards are not applicable, the applicant must explain why the standard is not applicable.*
  - *ARM 36.12.115 (5) the flow rate and volume of water for any uses not listed under this rule must be calculated, explained and documented based on the beneficial use and operation of the project & (6) deviations outside the standards will require information supporting the requested amount.*
  - *ARM 36.12.116 (Include number from the form, the question itself, the rule being addressed in the question, the original answer in the application, WHY that answer is not substantial and credible, and what additional information the applicant needs to provide to be considered substantial and credible.)*
  - *DNRC Technical Memorandum: Pond and Wetland Evaporation/Evapotranspiration (enclosed)*

- *Form 600, Question 48: Why is the requested flow rate and volume the amount needed for the purpose(s)?*
  - *For the Wetland Enhancement Purpose, please elaborate on your volume calculations. For example, evaporation for the upper pond was provided, but evaporation for the lower wetland area was not- what is the rationale for this?*
    See above.
  - *Applicable rules for this request are as follows:*
    - *36.12.1801 (2)(b) – that the requested flow rate and volume for each purpose is reasonably needed to accomplish that purpose.*

The lower wetland area is not designed to retain water or maintain a consistent water level. The fill volume for this wetland is estimated at 3.35 acre-feet. Filling occurs only when the upper pond reaches the set overflow, allowing water to flow into the lower wetland. It is anticipated that most of this water will be lost through seepage, evaporation, or evapotranspiration (ET) between fill events.

The volume of water proposed for diversion and beneficial use for Wetland Enhancement is based on the desire to create periods of inundation followed by receding water levels and a dry period. A detailed schedule is provided above. The fluctuations in water availability support wetland plants and maintain diverse plant communities. Wet and dry phases promote decomposition, nutrient release and uptake. Further, the dry out periods between fill cycles are long enough to allow for soil aeration. The spring filling in March simulates snowmelt and early growing conditions, while the summer filling in latter May and July accommodate the peak growing season needs while allowing for periods of controlled dry out. By not diverting water between August and mid-October,

the wetland biota experience conditions that mimic late summer drying, which is common in the western United States. Lastly, the fall (October) fill allows for an end of the growing season saturation, which benefits numerous wetland species and will improve soil conditions over the winter.

Each inundation of the lower wetland area requires 3.56 acre-feet of water. Achieving four fills seasonally requires an annual volume of up to 14.25 acre-feet.

WET has included seasonal net evaporation estimates for the lower wetland area totaling 3.75 acre-feet. However, this value is considered conservative, as it assumes a constant full-pool surface area of 2.23 acres, an area that will not be sustained year-round. As water levels decline, so does the open water surface area, eventually drying out and thus reducing actual evaporative losses. Note that the estimated net evaporation of 3.75 acre-feet does not impact the requested diverted volume, but does increase the calculated consumption.

- *Form 600, Question 49.2: If no Department standard exists, or if the proposed beneficial use falls outside of the Department standards, explain how the use is reasonable for the purpose.*

  In the response to this question, it is stated that "the flow rate is adequate to fill the ponds in a reasonable time frame and the volume is estimated based on the need to fill the pond four times seasonally." Please define what is a reasonable time frame and why the time frame is reasonable. Please explain why the requested flow rate is needed to achieve the desired timeline. Please provide evidence on why filling the pond and overflow to the wetland area four times (no more, no less) annually benefits wetland enhancement.

A reasonable time frame for filling the pond and wetland is defined as approximately 13 days per filling cycle. This duration balances efficient pond and wetland replenishment with the natural variability in water availability and avoids overtaxing the water source. Filling the pond and wetland within this time frame allows for flexibility within the season and accommodates potential delays due to weather or operational limitations.

The rationale for the reasonable time frame (approximately 13 days) is further supported by ecological responsiveness. Wetland-dependent flora and fauna benefit from relatively rapid rehydration of habitat, especially in dry or shoulder seasons (early spring and late summer). Furthermore, a 13-day period allows for operational practicality. This manageable water delivery schedule allows for active monitoring during each fill cycle as necessary, reducing the risk of overfilling. Additionally, this schedule is hydrologically realistic. If the fill duration were longer, it could increase the risk of incomplete filling cycles within the requested period of use.

The requested flow rate was calculated based on the total pond and wetland volume, pond loss estimates, and the reasonable time frame for filling. WET utilized IDWR pond loss calculation spreadsheet to estimate pond losses. This flow rate (250 GPM) ensures a timely delivery of water to the pond and wetland, ensuring that the fill is completed within the designated window. Additionally, this provides consistent overflow, which guarantees a surface water connection

between the pond and adjacent wetland, supporting nutrient exchange and hydrological continuity between the two units.

Filling the pond and wetland four times annually provides seasonal hydrologic pulses (Junk, 1989). Seasonal hydrologic pulses are critical for mimicking natural hydrology, vegetation support, wildlife habitat, and water quality improvement. Wetland systems evolved under conditions of intermittent, seasonal inundation. Further, these seasonal fills provide vegetation support as native wetland plants rely on repeated wetting cycles for germination, growth, and seed dispersal. Additionally, wildlife habitat is benefited by diverse hydroperiods, neither too short (drying out) nor too constant (stagnant water). Periodic overflows also enhance nutrient flushing and reduce stagnation, improving oxygen levels and reducing algal buildup. Too few fill events may result in extended dry periods, reducing ecological function. Too many may not allow for drying cycles that certain plant and animal species require.

Wet and dry phases promote diverse plant communities, decomposition, nutrient release and uptake. Further, the dry out periods between fill cycles are long enough to allow for soil aeration. The spring filling in March simulates snowmelt and early growing conditions, while the summer filling in latter May and July accommodate the peak growing season needs while allowing for periods of controlled dry out. Not diverting water in August, September, and early-October, mimic late summer drying conditions, which is common in the western United States. Lastly, the fall (October) fill allows for an end of the growing season saturation, which benefits numerous wetland species and will improve soil conditions over the winter.

A 13-day fill period (utilizing a flow rate of 250 GPM) ensures the pond and connected wetland can be reliably filled four times within the requested period of diversion. The flow rate is calibrated to achieve this timeline efficiently. Four fill events annually strike a balance that maximizes ecological benefits while maintaining hydrologic sustainability.

Please reach out if you have any questions or require additional information.

Sincerely,

Jamie Graham
Project Hydrogeologist
Water & Environmental Technologies

Enclosures:
Rooney Water Requirements

References:

Junk, W.J., Bayley, P.B., & Sparks, R.E. (1989).*The Flood Pulse Concept in River-Floodplain Systems*. In: Dodge, D.P. (Ed.), *Proceedings of the International Large River Symposium*. Canadian Special Publication of Fisheries and Aquatic Sciences 106.

Rooney Water Requirement Calculations Revised 55/19/25										
	Irrigated Area (Square Feet)	Irrigated Area (Acres)	IWR Volume (Acre-feet) (70% irrigation efficency)	Volume (cubic yards)	Volume (gallons)	Volume (acre-feet)		Flow rate (GPM)	Fill Time Estimate (days) Per IDWR	
Upper Pond (total) volume	NA	NA		17107	3455170	10.60		250	10	
Upper Pond estimated ET losses in Acre-feet per annum (per DNRCs Net Evaporation GIS layer) 1.68 acre-ft per acre times 1.51 acres (pond area)	NA	NA				2.54				
Upper Pond Estimated Seepage losses (Acrefeet per annum per IDWRs Pond Calculator)	NA	NA	NA	NA	NA	11.10				
Upper pond (orchard irrigation area)	23914	0.55	2.3	NA	412201.5	1.27				
Lower Wetland Area (Fill Volume)	NA	NA		5408	1092276	3.35		235	3	flow rate assumes
Lower Wetland Area Est. Seepage During Fill						0.21	(daily maint vol x fill days)			15gpm seepage losses
			lower pond volume per 4 fill cycles			**14.25**				from upper pond
Lower Wetland Area ET losses (alfalfa Whitefish IWR)	97341	2.23	1.93	NA	NA	4.30				
Lower Wetland maximum surface water ET - estimated ET losses in acre-feet per annum (per DNRC's Net Evaporation GIS layer) 1.68 acre0feet per acre times 2.23 acres (wetland/lower pond area)						3.75				
						39.75				
Estimated total volume to be diverted (acre-feet per annum) = upper volume, et, seepage, and irrigation plus 4x lower pond fill										
Estimated consumptive uses = orchard irrigation plus wetland losses						**11.86**				

APPLICATION AMENDMENT FORM

ARM 36.12.1401

Form No. 655 *(Revised 01/2024)*

Application # _____

Rec'd Date _____

INFORMATION

Use this form to modify an element of a permit or change application.

An applicant may modify an element of a permit or change application prior to the department's issuance of a draft preliminary determination. If the draft preliminary determination is to deny or to grant with modifications, the applicant may modify their application after the draft preliminary determination has been issued, only if they have been granted an extension of time under §85-2-307, MCA, and may only modify it one time under this provision (ARM 36.12.1401).

Modification of an element will reset the statutory timelines for application processing identified in §85-2-302 and -307, MCA. If the applicant completed a preapplication meeting and the modification does not require the department to update its technical analyses, the reduced preapplication timelines shall still apply. If the applicant completed a preapplication meeting and the modification requires the department to update any of its technical analyses, the reduced preapplication timelines shall no longer apply. In addition to resetting timelines, the priority date of a permit application will be changed to the date the last modification was made if a modification changes the nature or scope of the permit application information (ARM 36.12.1401).

Application Number 76LJ 3016369

Applicant Name Sean T & Melodye A Rooney

Name of individual completing Form, (*If other than applicant*)

Name Water & Environmental Technologies (WET) - Jamie Graham

Mailing Address 102 Cooperative Way, STE 100 City Kalispell State MT Zip 59901

Phone Number (406) 309-6084 Email Address jgraham@waterenvtech.com

I am amending the following elements: *(please check all that apply)*

- ☐ Purpose
- ☐ Point of diversion
- ☐ Place of use
- ☐ Flow rate
- ☒ Period of diversion
- ☒ Period of use
- ☒ Volume
- ☐ Other: _____

Describe in detail the proposed amendment(s) checked above. Use additional sheets if necessary.

The period of diversion shall be 3/1 through 7/31 and 10/19 through 10/31 annually based on the availability of water in the Stillwater River.

The proposed period of use for Wetland Enhancement should be 3/1 to 10/31, annually. Water that has been previously diverted to the lower wetland area will continue to be utilized to support and enhance the wetland during this time period. In many ways, the water diverted for wetland enhancement will provide a beneficial use throughout the year. However, based on our understanding of the period of use, water diverted for wetland enhancement is most accurately described as from the beginning of diversion in the spring (3/1) to the end of diversion in the fall (10/31).

The total volume associated with the project is anticipated to be 39.75 acre-feet, based on water volume requirement calculations provided in a letter dated 5/6/25 from WET to DNRC.

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

Printed Name Sean Rooney

Applicant / Representative Signature DocuSigned by: Sean Rooney 8E7BBE07E6CB42A... **Date** _____

Printed Name Melodye Ann (Smith) Rooney

Applicant / Representative Signature Signed by: Melodye Ann (Smith) Rooney 47E594267A7D431... **Date** _____

NOTE: Form must be signed by the applicant or an individual with legal power of attorney representing applicant

Water Resources Division – Kalispell Regional Office
655 Timberwolf Pkwy, Ste. 4
Kalispell, MT 59901-1215
(406) 752-2288
DNRCKalispellWater@mt.gov

June 12, 2025

SEAN & MELODYE ROONEY
PO BOX 97
WHITEFISH, MT 59937

Subject: Correct and Complete Application for Beneficial Water Use Permit No. 76LJ 30163639

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.

Best,

Kristal Kiel
WATER RESOURCE SPECIALIST
KALISPELL REGIONAL OFFICE
655 TIMBERWOLF PARKWAY, SUITE 4

CC:

BRAD BENNETT
SENIOR HYDROLOGIST
WATER & ENVIRONMENTAL TECHNOLOGIES
102 COOPERATIVE WAY, SUITE 100
KALISPELL, MT 59901