

Environmental Assessment & Public Notice for Public Comment

- **Environmental Assessment & supporting documents**
- **Public Notice for Public Comment package**
 - Notice Area List
 - Notice Area Map
 - Form Checklist
 - PN- Letter to applicant
 - PN- Letter to editor
 - PN- Certificate of service
 - PN- Invoice & tear sheet
 - PN- Return mail
 - Public Comment files

**Environmental Assessment &
Public Notice for Public
Comment**

NOTICE AREA

Application No. **43B 30171298**

Regional Office # 03

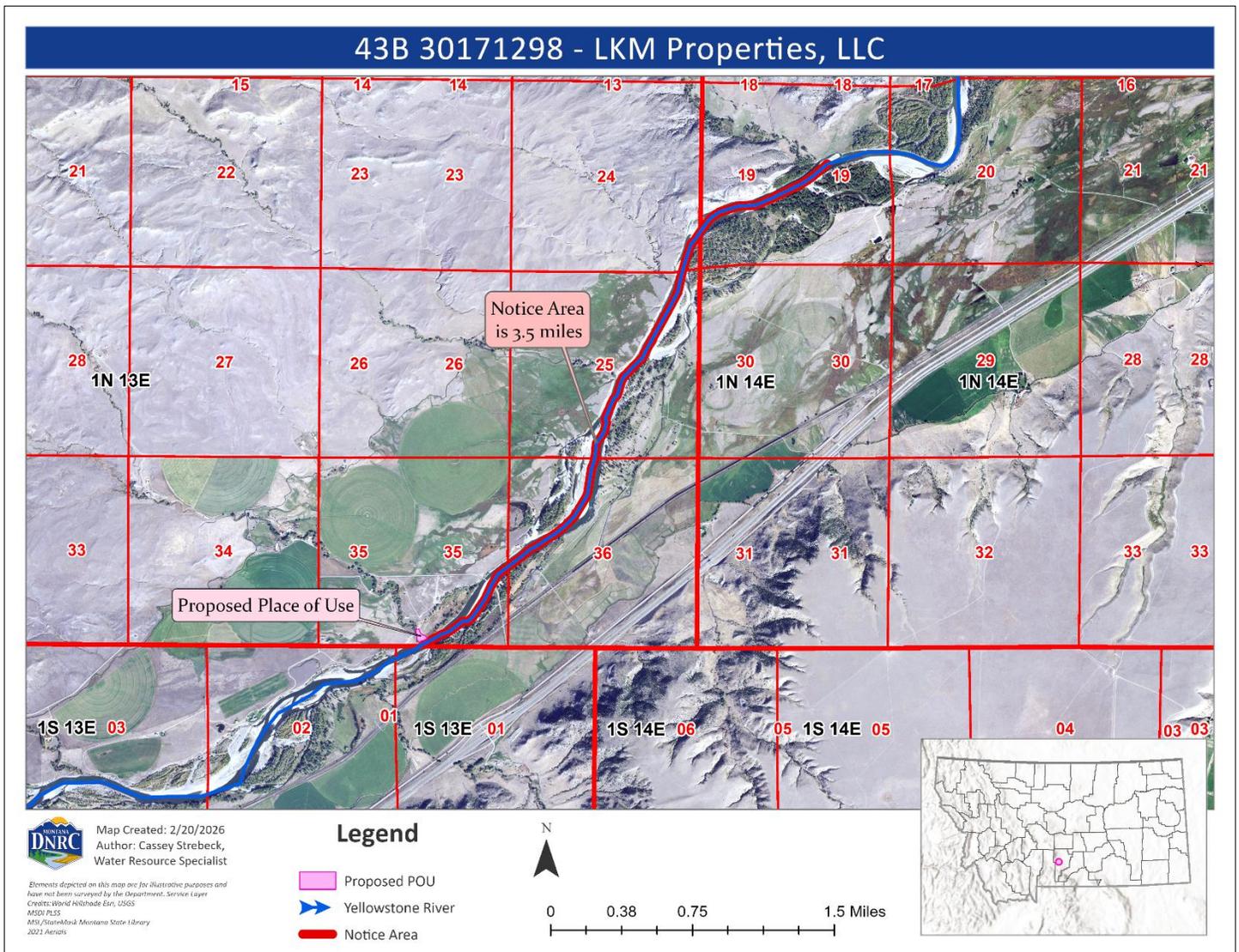
Applicant's Name **LKM Properties, LLC**

Indian Reservation Yes No If yes, Reservation _____

Irrigation District Yes No If yes, District _____

Specialist **C. Strebeck**

Date **2/25/2026**



Water Right Owner	Water Right # (Basin, ID, and Number)
Applicant: LKM Properties, LLC.	43B 30171298
Water Right Owners in Potentially Affected Area	
MT Dept of FWP	43B 194349-00
	43B 194350-00
Laubach, Alice Trust	43B 102620-00
	43B 102623-00
	43B 102619-00
Windbreak Ranch LLC	43B 106352-00
	43B 106353-00
	43B 106349-00
Theorem River LLC	43B 181151-00
	43B 30137243
Warren N Nunn	43B 33999-00
Water Right Owners in Potentially Affected Area	
1BIA BUREAU OF INDIAN AFFAIRS	
1DSL MONTANA BOARD OF LAND COMMISSIONER	
1FWP DEPT OF FISH, WILDLIFE, & PARKS	
1NWE NORTHWESTERN ENERGY	
1PPL PPL MONTANA LLC, Holly Franz	
2FWP DEPT OF FISH, WILDLIFE, & PARKS	
3BLG DEPT OF NATURAL RESOURCES & CONSERVATION	
3NPR NORTHERN PLAINS RESOURCE COUNCIL	
1BOR US DEPT OF INTERIOR	
1TUL MT TROUT UNLIMITED	
1FWS US FISH & WILDLIFE SERVICE	
1CRP US ARMY	
1WDB DEPT OF NATURAL RESOURCES & CONSERVATION	
3BLM BUREAU OF LAND MANAGEMENT	
3FP21 SWEET GRASS COUNTY	
3SGD SWEET GRASS COUNTY CONSERVATION DISTRICT	
BIG TIMBER PIONEER	

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

The public notice area is shown on the map as the source outlined in red. The reach of the Yellowstone River within the red outline extends from the upstream extent of the proposed transitory point of diversion to the confluence of Little Timber Creek and the Yellowstone River, approximately 3.5 river miles.

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

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: LKM Properties LLC
2016 Moore Lane
Billings, MT, 59101
2. Type of action: Application for Beneficial Water Use Permit No. 43B 30171298
3. Water source name: Yellowstone River
4. Location affected by project: Generally located in the SWSWSE of Section 35, Township 1N, Range 13E, Sweet Grass County.
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposed to divert water from the Yellowstone River, by means of a pump, from a transitory point of diversion, approximately 87 feet long, along the southern side of the Applicant's property boundary, located in the SWSWSE of Section 35, Township 1N, Range 13E, Sweet Grass County, at a flow rate of 50 GPM (0.11 CFS) and up to 3.1 AF of volume, for Lawn & Garden Irrigation. The Applicant proposes to water 1.25 acres of lawn and garden. The Department has proposed a modified period of diversion and period of use from May 1 to September 30.

The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

Montana Department of Natural Resources and Conservation
Montana Department of Fish, Wildlife and Parks (FWP)
Montana Department of Environmental Quality (DEQ)
Montana Sage Grouse Habitat Conservation Program (SGHCP)
Montana Natural Heritage Program (NHP)
U.S. Fish and Wildlife Service (USFWS)
U.S. Department of Agriculture, National Resource Conservation Service (USDA, NRCS)

Part II. Environmental Review

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity – This project is for 3.1 AF/YR in volume from the Yellowstone River and is not expected to affect water quantity. The majority of water extracted for this project will return to the Yellowstone through absorption.

StreamStats determined a contributing basin area of 4,921 square miles at the project. USGS classifies the Yellowstone River as a perennial stream. This Department analyzed the physical availability of water of the Yellowstone River at the project's location using the interpolated method, with USGS gages No. 06192500 and No. 06214500. Water was found to be physically available with no less than 80,000 AF in volume throughout the year, based on the data retrieved and analyzed at the time of the Technical Analysis. Montana FWP classifies the Yellowstone River as having periodic dewatering at the project site.

Determination: No Significant Impact

Water quality – This project will consist of using water from the Yellowstone River to irrigate 1.25 acres of Lawn and Garden. The Applicant's property is adjacent to the river, in which runoff is likely to occur. Minimal pollutants are expected to occur; however, this is dependent on the Applicant's behaviors, and the Applicant should be conscious of how their actions affect the riparian and water quality.

As of reporting cycle 2020, Montana DEQ Classifies the area of the Yellowstone River from Reese Creek to Bridger Creek, consisting of 119 miles, as a Use Class B-1, with water quality category 4C. This record identifies this area as Not Supporting for Aquatic Life, likely due to loss of riparian and substrate habitat, and Not Assessed for Drinking Water, Recreation, or Agricultural use. See Assessment Record: MT 43B003_010. The FWP does not show any restrictions or closure near the project, at the time of this assessment.

Determination: No Significant Impact

Groundwater - This project is for surface water. The source, the Yellowstone River, is a significant hydrologic boundary. The project should not affect the quality or quantity of groundwater.

Determination: No Impact

DIVERSION WORKS - The portion of the hose that is placed in the water will have a 2” strainer with a net around it to limit the uptake of sand and prevent the uptake of vegetation and life forms. There are no plans to make any modifications to the channel, flow, nor has construction been mentioned by the Applicant. This project will use a movable pump that will allow for the point of diversion to be transitory and move up and down the Applicant's parcel along the Yellowstone River, approximately 87 feet long. This movement may affect the riparian zone; however, aerial imagery shows that the proposed transitory point of diversion has nearly no vegetation that will be affected. The Applicant should take precautions to limit erosion of the riverbank.

Determination: Potential Impact

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species – The Natural Heritage Program has identified multiple Species of Concern (SOC), Special Status Species (SSS), Potential Species of Concern (PSOC), and Important Animal Habitat (IAH). The list is included in the EA attachment: LKM Environmental Summary. See pages 3-11.

Determination: No Significant Impact

Wetlands – This project is located along the Yellowstone River. Wetlands and riparian areas are expected at the project site, upstream, and downstream. The Natural Heritage Program identifies a Palustrine Emergent wetland immediately upstream of the project site, bordering the Applicant's western property boundary. Within the project site, it appears to be Riparian Lotic Scrub-Shrub, Forested, and Emergent Riparian. The location of the proposed pump is located along the riverbank, where there appears to be no vegetation.

Determination: Potential Impact

Ponds – No ponds were claimed or proposed in this project. Aerial imagery does not show a body of water suggestive of a pond or pit.

Determination: No Impact

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE

Geology – The Montana Bureau of Mines and Geology identifies the project area as having geologic features consisting of gravel, sand, silt, and clay deposits of stream and river channels, and floodplains.

Soil Quality – The NRCS Web Soil Survey expects that the point of diversion along the Applicant’s property boundary, where the pump will be placed/moved, consists of Nesdam-Illwaine loams, 0 to 2 percent slopes (107A). *See attached NRCS Web Soil Survey.*

Stability – As mentioned with regard to the transitory point of diversion along the Applicant's property, the Applicant should consider the effects on bank stabilization by limiting the removal of riparian vegetation.

Determination: Potential Impact

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS

Vegetation Cover – The area around the project site consists primarily of Great Plains Riparian and Great Plains Mixed grass Prairie. As mentioned above in the Diversion Works section, loss of riparian is expected due to the pump being moved along the bank of the river. The Applicant should take precautions to prevent loss of vegetation.

Determination: Potential Impact

Noxious Weeds – The Natural Heritage Program identifies multiple Priority 1A, 1B, 2A, and 2B noxious weeds within the area of interest. It will be the responsibility of the landowner to prevent the establishment and spread of noxious weeds and non-native species. The list is included in the EA attachment: LKM Environmental Summary. See pages 18-21 for a list of Aquatic Invasive Species, Noxious Weeds, and Non-Native Biocontrol Species.

Determination: No Significant Impact

AIR QUALITY – This project proposes to use a water pump with a 6.5hp engine powered by fuel. This product may produce air pollutants. It is the Applicant's responsibility to ensure that the product is functioning appropriately.

Determination: No Significant Impact

HISTORICAL AND ARCHEOLOGICAL SITES - Montana's National Register of Historic Places does not identify any registered historic landmarks, properties, or districts near the project site, at the time of this assessment. If the Applicant were to locate something of historical significance, it is the Applicant's responsibility to notify the appropriate authorities.

Determination: No Known Impact

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY – No additional impact on other environmental resources is expected due to this project.

Determination: No Known Impacts

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - There are no known locally adopted environmental plans or goals.

Determination: No Known Impacts

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - This project will have no significant impact on recreational and wilderness activities.

Determination: No Significant Impact

HUMAN HEALTH - This project will have no significant impact on human health.

Determination: No Significant Impact

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No_X_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No Known Impact

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

Impacts on:

- (a) Cultural uniqueness and diversity? No Significant Impact
- (b) Local and state tax base and tax revenues? No Significant Impact
- (c) Existing land uses? No Significant Impact
- (d) Quantity and distribution of employment? No Significant Impact
- (e) Distribution and density of population and housing? No Significant Impact
- (f) Demands for government services? No Significant Impact
- (g) Industrial and commercial activity? No Significant Impact
- (h) Utilities? No Significant Impact
- (i) Transportation? No Significant Impact
- (j) Safety? No Significant Impact

(k) Other appropriate social and economic circumstances? No Significant Impact

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

Secondary Impacts: No secondary impacts are identified

Cumulative Impacts: No cumulative impacts are identified

3. ***Describe any mitigation/stipulation measures: None at this time.***

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:***

The alternative to the proposed project is the no-action alternative. The no-action alternative prevents the property owner from improving the operation of their irrigation system. The no-action alternative does not prevent or mitigate any significant environmental impacts.

PART III. Conclusion

1. ***Preferred Alternative:*** The DNRC shall issue a water use permit if an Applicant proves the criteria in 85-2-311 MCA are met.

2. ***Comments and Responses:*** It is recommended that the Applicant consider erosion control and increasing the health of the riparian zone.

3. ***Finding:***

Yes___ No_X_ Based on the significance criteria evaluated in this EA, is an EIS required?

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

No significant environmental impacts were identified; therefore, an EIS is not required.

Name of person responsible for preparation of EA:

Name: Cassey Strebeck

Title: Water Resource Specialist

Date: January 28, 2026



MONTANA STATE LIBRARY

NATURAL HERITAGE PROGRAM mtnhp.mt.gov

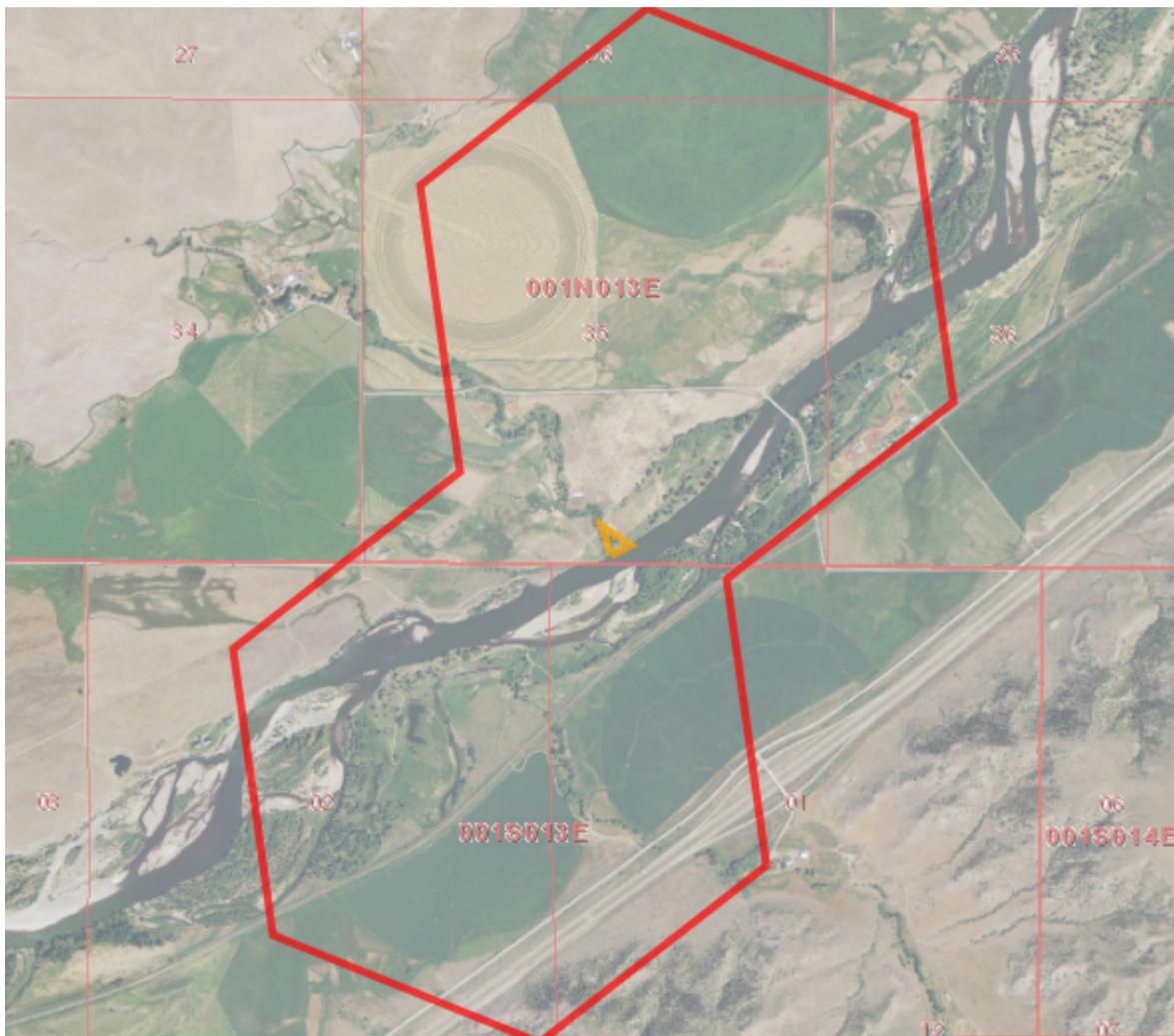
1201 11th Ave • P.O. Box 201800 • Helena, MT 59620-1800 • fax 406-444-0266 • phone 406-444-3989



Latitude	Longitude
45.76992	-110.05867
45.80233	-110.09043

Summarized by:

LKM - Environmental Summary
(Custom Area of Interest)



Suggested Citation

Montana Natural Heritage Program. Environmental Summary Report.
for Latitude 45.76992 to 45.80233 and Longitude -110.05867 to -110.09043. Retrieved on 1/28/2026.

The Montana Natural Heritage Program is part of the Montana State Library's Natural Resource Information System. Since 1985, it has served as a neutral and non-regulatory provider of easily accessible information on Montana's species and biological communities to inform all stakeholders in environmental review, permitting, and planning processes. The program is part of the NatureServe network that is composed of over 60 member programs across North America that work to provide current and comprehensive distribution and status information on species and biological communities.



Environmental Summary

Table of Contents

- [Species Report](#)
- [Structured Surveys](#)
- [Land Cover](#)
- [Wetland and Riparian](#)
- [Land Management](#)
- [Biological Reports](#)
- [Invasive and Pest Species](#)
- [Introduction to Montana Natural Heritage Program](#)
- [Data Use Terms and Conditions](#)
- [Suggested Contacts for Natural Resource Agencies](#)
- [Introduction to Native Species](#)
- [Introduction to Land Cover](#)
- [Introduction to Wetland and Riparian](#)
- [Introduction to Land Management](#)
- [Introduction to Invasive and Pest Species](#)
- [Additional Information Resources](#)

Introduction to Environmental Summary Report

Environmental Summary Reports from the Montana Natural Heritage Program (MTNHP) provide information on species and biological communities to inform all stakeholders in environmental review, permitting, and planning processes. For information on environmental permits in Montana, please see permitting overviews by the [Montana Department of Environmental Quality](#), the [Montana Department of Natural Resources and Conservation](#), the [Index of Environmental Permits for Montana](#) and our [Suggested Contacts for Natural Resource Management Agencies](#). The report for your area of interest consists of introductory and related materials in this PDF and an Excel workbook with worksheets summarizing information managed in the MTNHP databases for: (1) species occurrences; (2) other observed species without species occurrences; (3) other species potentially present based on their range, presence of associated habitats, or predictive distribution model output if available; (4) structured surveys that follow a protocol capable of detecting one or more species; (5) land cover mapped as ecological systems; (6) wetland and riparian mapping; (7) land management categories; and (8) biological reports associated with plant and animal observations. If your area of interest corresponds to a statewide polygon layer (e.g., watersheds, counties, or public land survey sections) information summaries in your report will exactly match those boundaries. However, if your report is for a custom area, users should be aware that summaries do not correspond to the exact boundaries of the polygon they have specified, but instead are a summary across a layer of hexagons intersected by the polygon they specified as shown on the report cover. Summarizing by these hexagons which are one square mile in area and approximately one kilometer in length on each side allows for consistent and rapid delivery of summaries based on a uniform grid that has been used for planning efforts across North America.

In presenting this information, MTNHP is working towards assisting the user with rapidly assessing the known or potential species and biological communities, land management categories, and biological reports associated with the report area. Users are reminded that this information is likely incomplete and may be inaccurate as surveys to document species are lacking in many areas of the state, species' range polygons often include regions of unsuitable habitat, methods of predicting the presence of species or communities are constantly improving, and information is constantly being added and updated in our databases. **Field verification by professional biologists of the absence or presence of species and biological communities in a report area will always be an important obligation of users of our data. Users are encouraged to only use this environmental summary report as a starting point for more in depth analyses and are encouraged to contact state, federal, and tribal resource management agencies for additional data or management guidelines relevant to your efforts. Please see the Appendix for introductory materials to each section of the report, additional information resources, and a list of relevant agency contacts.**

Legend

Model Icons	Habitat Icons	Range Icons	Num Obs
Suitable (native range)	Common	Native / Year-round	Count of obs with 'good precision' (<=1000m)
Optimal Suitability	Occasional	Summer	+ indicates additional 'poor precision' obs (1001m-10,000m)
Moderate Suitability	Winter	Migratory	
Low Suitability	Non-native	Historical	
Suitable (introduced range)			



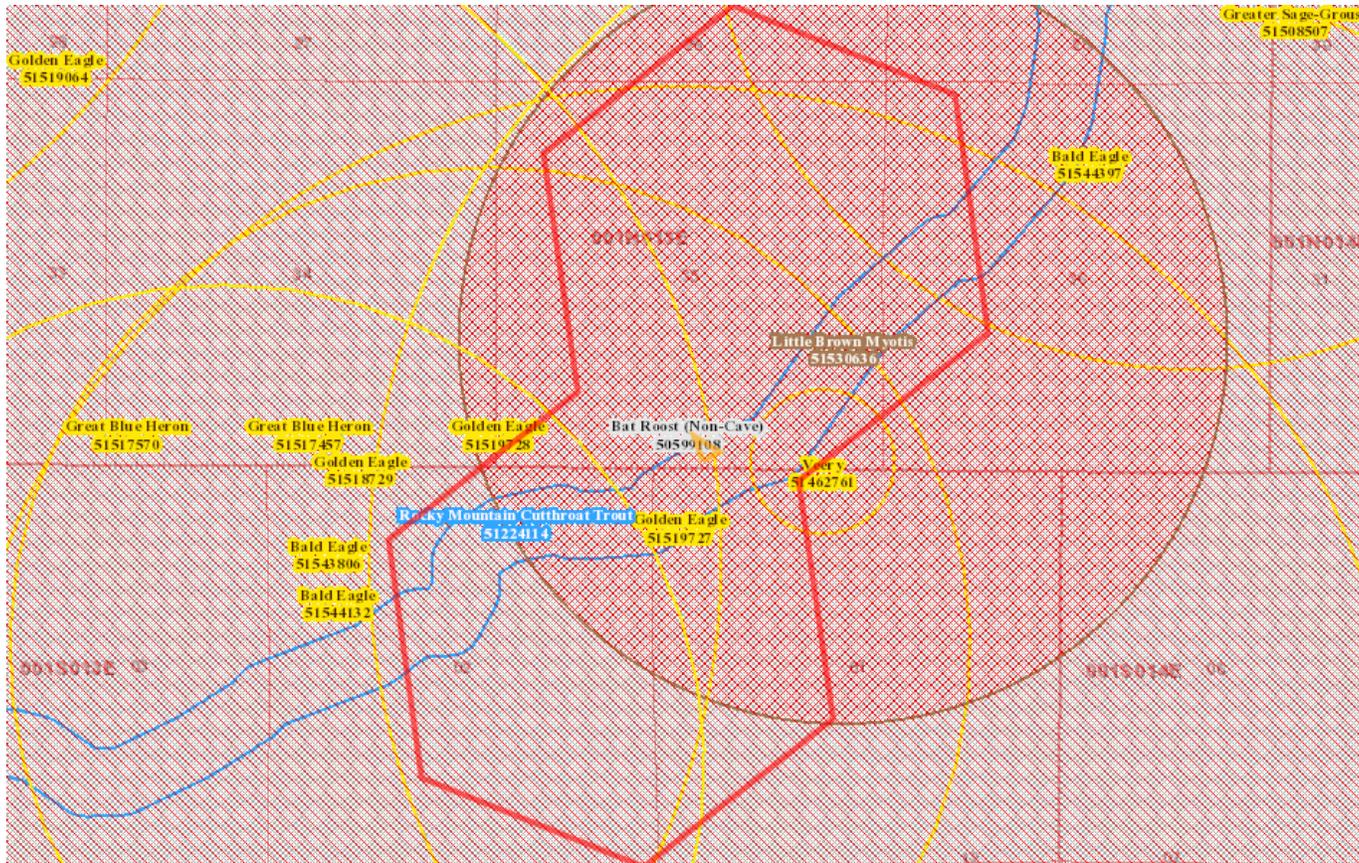
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Native Species

Summarized by: **LKM - Environmental Summary (Custom Area of Interest)**

Filtered by:

Native Species reports are filtered for Species with MT Status = Species of Concern, Special Status, Important Animal Habitat, Potential SOC



Species Occurrences

Species	USFWS	# SO	# Obs	Predicted Model	Range
F - Rocky Mountain Cutthroat Trout (<i>Oncorhynchus virginalis</i>) SOC	Sec7	1	1		
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native/Non-native Species - (depends on location or taxa) Global: GNR State: S2 BLM: SENSITIVE FWP SWAP: SGCN Delineation Criteria Stream reaches and standing water bodies where the species presence has been confirmed through direct capture or where they are believed to be present based on the professional judgement of a fisheries biologist due to confirmed presence in adjacent areas. In order to reflect the importance of adjacent terrestrial habitats to survival, stream reaches are buffered 100 meters, standing water bodies greater than 1 acre are buffered 50 meters, and standing water bodies less than 1 acre are buffered 30 meters into the terrestrial habitat based on PACFISH/INFISH Riparian Conservation Area standards. (Last Updated: Oct 22, 2024) Predicted Models: 100% Suitable (native range) (deductive)					
B - Bald Eagle (<i>Haliaeetus leucocephalus</i>) SSS		3	22		
View in Field Guide View Predicted Models View Range Maps Special Status Species - Native Species Global: G5 State: S4 USFWS: BGEPA; MBTA USFS: Sensitive - Known in Forests (LOLO) BLM: SENSITIVE PIF: 2 Delineation Criteria Confirmed nesting area buffered by a minimum distance of 2,000 meters in order to be conservative about encompassing the breeding territory and area commonly used for re-nesting. Only nesting observations with a locational uncertainty of 1,000 meters or less will be used to delineate a nesting area. (Last Updated: Jan 22, 2026) Predicted Models: 50% Optimal (inductive), 50% Moderate (inductive)					
M - Little Brown Myotis (<i>Myotis lucifugus</i>) SOC		1	1		
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G3G4 State: S2S3 USFS: Sensitive - Known in Forests (BD, BRT, KOOT) FWP SWAP: SGCN Delineation Criteria Confirmed area of occupancy based on the documented presence (mistnet captures, definitively identified acoustic recordings, or definitively identified roosting individuals) of adults or juveniles. Point observation location is buffered by a distance of 1,600 meters in order to encompass the greater than 1,500 meters foraging distance reported for the species in New Brunswick, Canada and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 5,000 meters. When cave locations are involved, point observations are mapped in the center of a one-square mile hexagon to protect the exact location of the cave entrance as per the Federal Cave Resource Protection Act and associated regulations (U.S. Code Title 16 Chapter 63, Code of Federal Regulations Title 43 Subtitle A Part 37). The outer edges of the hexagon are then buffered by a distance of 1,600 meters and otherwise by the locational uncertainty associated with the observation up to a maximum distance of 5,000 meters. All of the one-square mile hexagons intersecting this buffered area are presented as the Species Occurrence record. (Last Updated: Sep 24, 2025) Predicted Models: 100% Moderate (inductive)					

B - Great Blue Heron (*Ardea herodias*) **SOC** | 2 | 15 | [Orange Box] | [Y] [S] [M]

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)

Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **MBTA** FWP SWAP: **SGCN**

Delineation Criteria Confirmed nesting area buffered by a minimum distance of 6,500 meters in order to be conservative about encompassing the areas commonly used for foraging near the breeding colony. If the locational uncertainty associated with the observation is greater than 5,000 meters, the observation is not valid for creation of a species occurrence. (Last Updated: May 02, 2025)

Predicted Models: [M] 100% Moderate (inductive)

B - Veery (*Catharus fuscescens*) **SOC** | 1 | 2 | [Orange Box] | [S] [M]

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)

Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** BLM: **SENSITIVE** FWP SWAP: **SGCN** PIF: **2**

Delineation Criteria Observations with evidence of breeding activity buffered by a minimum distance of 300 meters in order to be conservative about encompassing home ranges and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 5,000 meters. (Last Updated: Dec 20, 2024)

Predicted Models: [M] 100% Moderate (inductive)

B - Golden Eagle (*Aquila chrysaetos*) **SOC** | 3 | 9 | [Yellow Box] | [Y]

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)

Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **BGEPa; MBTA** BLM: **SENSITIVE** FWP SWAP: **SGCN**

Delineation Criteria Confirmed nesting area buffered by a minimum distance of 3,000 meters in order to be conservative about encompassing the entire breeding territory and area commonly used for re-nesting and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 5,000 meters. (Last Updated: Aug 22, 2025)

Predicted Models: [L] 100% Low (inductive)

O - Bat Roost (Non-Cave) (*Bat Roost (Non-Cave)*) **IAH** | 1 | Not Assessed

[View in Field Guide](#)

Important Animal Habitat - Native Species Global: **GNR** State: **SNR**

Delineation Criteria Confirmed area of occupancy based on the documented presence of adults or juveniles of any bat species at non-cave natural roost sites (e.g. rock outcrops, trees), below ground human created roost sites (e.g. mines), and above ground human created roost sites (e.g., bridges, buildings). Point observation locations are buffered by a distance of 4,500 meters in order to encompass the 95% confidence interval for nightly foraging distance reported for Townsend's Big-eared Bat (a resident Montana bat Species of Concern) and otherwise by the locational uncertainty associated with the observation up to a maximum distance of 5,000 meters. (Last Updated: Oct 22, 2019)

Legend

Model Icons	Habitat Icons	Range Icons	Num Obs
Suitable (native range)	Common	Native / Year-round	Count of obs with 'good precision' (<=1000m)
Optimal Suitability	Occasional	Summer	+ indicates additional 'poor precision' obs (1001m-10,000m)
Moderate Suitability		Winter	
Low Suitability		Migratory	
Suitable (introduced range)		Non-native	
		Historical	



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Native Species

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Other Observed Species

Species Name	USFWS Sec7	# Obs	Predicted Model	Range
B - American White Pelican (<i>Pelecanus erythrorhynchos</i>) SOC		10		
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S3B USFWS: MBTA FWP SWAP: SGCN PIF: 3 Predicted Models: 100% Moderate (inductive)				
B - Clark's Nutcracker (<i>Nucifraga columbiana</i>) SOC		2		
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3 USFWS: MBTA USFS: Species of Conservation Concern in Forests (FLAT) FWP SWAP: SGCN PIF: 3 Predicted Models: 100% Low (inductive)				
B - Bobolink (<i>Dolichonyx oryzivorus</i>) SOC		1		
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3B USFWS: MBTA; BCC10; BCC11; BCC17 FWP SWAP: SGCN PIF: 3 Predicted Models: 100% Low (inductive)				
B - Long-billed Curlew (<i>Numenius americanus</i>) SOC		1		
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S3B USFWS: MBTA; BCC11 BLM: SENSITIVE FWP SWAP: SGCN PIF: 2 Predicted Models: 100% Low (inductive)				
B - Brewer's Sparrow (<i>Spizella breweri</i>) SOC		1		
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3B USFWS: MBTA BLM: SENSITIVE FWP SWAP: SGCN PIF: 2 Predicted Models: 50% Low (inductive)				
B - Common Tern (<i>Sterna hirundo</i>) SOC		1	Not Assessed	
View in Field Guide View Range Maps Species of Concern - Native Species Global: G5 State: S3B USFWS: MBTA BLM: SENSITIVE FWP SWAP: SGCN PIF: 2				
B - Solitary Sandpiper (<i>Tringa solitaria</i>) SOC		2	Not Assessed	
View in Field Guide View Range Maps Species of Concern - Native Species Global: G5 State: S2B USFWS: MBTA FWP SWAP: SGCN				

Legend

Model Icons	Habitat Icons	Range Icons	Num Obs
Suitable (native range)	Common	Native / Year-round	Count of obs with 'good precision' (<=1000m)
Optimal Suitability	Occasional	Summer	+ indicates additional 'poor precision' obs (1001m-10,000m)
Moderate Suitability		Winter	
Low Suitability		Migratory	
Suitable (introduced range)		Non-native	
		Historical	



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Native Species

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Filtered by:

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Other Potential Species

Species	USFWS Sec7	Predicted Model	Range
F - Burbot (<i>Lota lota</i>) PSOC View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G5 State: S4 FWP SWAP: SGIN Predicted Models: 100% Suitable (native range) (deductive)			
I - Bombus pensylvanicus (<i>American Bumble Bee</i>) SOC View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G3G4 State: S3 FWP SWAP: SGCN Predicted Models: 100% Optimal (inductive)			
I - Danaus plexippus (<i>Monarch</i>) SOC View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S2S3 USFWS: P USFS: Sensitive - Migratory in Forests (BD, BRT, KOOT) FWP SWAP: SGCN Predicted Models: 50% Optimal (inductive), 50% Moderate (inductive)			
M - Fringed Myotis (<i>Myotis thysanodes</i>) SOC View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S3 BLM: SENSITIVE FWP SWAP: SGCN Predicted Models: 100% Moderate (inductive)			
M - Long-eared Myotis (<i>Myotis evotis</i>) SOC View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3 FWP SWAP: SGCN Predicted Models: 100% Moderate (inductive)			
M - North American Porcupine (<i>Erethizon dorsatum</i>) PSOC View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G5 State: S3S4 FWP SWAP: SGCN Predicted Models: 100% Moderate (inductive)			
M - Prairie Shrew (<i>Sorex haydeni</i>) PSOC View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G5 State: S3S4 FWP SWAP: SGCN Predicted Models: 100% Moderate (inductive)			
M - Silver-haired Bat (<i>Lasionycteris noctivagans</i>) SOC View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S3 FWP SWAP: SGCN Predicted Models: 100% Moderate (inductive)			
M - Townsend's Big-eared Bat (<i>Corynorhinus townsendii</i>) SOC View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S3 USFS: Sensitive - Known in Forests (LOLO) BLM: SENSITIVE FWP SWAP: SGCN Predicted Models: 100% Moderate (inductive)			
M - Western Spotted Skunk (<i>Spilogale gracilis</i>) PSOC View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G5 State: SU FWP SWAP: SGIN Predicted Models: 100% Moderate (inductive)			
B - Pinyon Jay (<i>Gymnorhinus cyanocephalus</i>) SOC View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G3 State: S3 USFWS: MBTA; BCC10; BCC17 FWP SWAP: SGCN Predicted Models: 100% Moderate (inductive)			
I - Bombus suckleyi (<i>Suckley's Cuckoo Bumble Bee</i>) SOC View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G2G3 State: S1 USFWS: P FWP SWAP: SGCN Predicted Models: 100% Moderate (inductive)			

V - Carex crawei (<i>Crawe's Sedge</i>) SOC	 
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S2S3 Plant Threat Score: Low Predicted Models:  100% Moderate (inductive)	
V - Dichanthelium acuminatum (<i>Panic Grass</i>) SOC	 
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S2S3 Plant Threat Score: Unknown FWP SWAP: SGCN Predicted Models:  100% Moderate (inductive)	
V - Eleocharis rostellata (<i>Beaked Spikerush</i>) SOC	 
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3 USFS: Species of Conservation Concern in Forests (CG, FLAT, HLC) Plant Threat Score: Unknown CCVI: Less Vulnerable FWP SWAP: SGCN Predicted Models:  100% Moderate (inductive)	
V - Lilium philadelphicum (<i>Wood Lily</i>) SOC	 
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3 Plant Threat Score: Low CCVI: Less Vulnerable Predicted Models:  100% Moderate (inductive)	
M - Eastern Red Bat (<i>Lasiurus borealis</i>) SOC	  
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G3G4 State: S3B BLM: SENSITIVE FWP SWAP: SGCN Predicted Models:  100% Moderate (inductive)	
M - Northern Hoary Bat (<i>Lasiurus cinereus</i>) SOC	  
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G3G4 State: S3B BLM: SENSITIVE FWP SWAP: SGCN Predicted Models:  100% Moderate (inductive)	
M - Spotted Bat (<i>Euderma maculatum</i>) PSOC	  
View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G4 State: S4 BLM: SENSITIVE FWP SWAP: SGIN Predicted Models:  100% Moderate (inductive)	
B - Plumbeous Vireo (<i>Vireo plumbeus</i>) PSOC	  
View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G5 State: S3S4B USFWS: MBTA FWP SWAP: SGCN PIF: 3 Predicted Models:  100% Moderate (inductive)	
B - Rufous Hummingbird (<i>Selasphorus rufus</i>) PSOC	  
View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G4 State: S4B USFWS: MBTA; BCC10 FWP SWAP: SGIN PIF: 3 Predicted Models:  100% Moderate (inductive)	
B - Yellow-billed Cuckoo (<i>Coccyzus americanus</i>) SOC	  
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3B USFWS: PS: LT; MBTA BLM: THREATENED FWP SWAP: SGCN PIF: 2 Predicted Models:  100% Moderate (inductive)	
M - Dwarf Shrew (<i>Sorex nanus</i>) PSOC	 
View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G4 State: S2S3 FWP SWAP: SGIN Predicted Models:  50% Moderate (inductive),  50% Low (inductive)	
M - Long-legged Myotis (<i>Myotis volans</i>) SOC	 
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4G5 State: S3 FWP SWAP: SGCN Predicted Models:  50% Moderate (inductive),  50% Low (inductive)	
M - Merriam's Shrew (<i>Sorex merriami</i>) SOC	 
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S3 FWP SWAP: SGCN Predicted Models:  50% Moderate (inductive),  50% Low (inductive)	
B - Great Gray Owl (<i>Strix nebulosa</i>) PSOC	 
View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G5 State: S3S4 USFWS: MBTA BLM: SENSITIVE FWP SWAP: SGCN PIF: 3 Predicted Models:  50% Moderate (inductive),  50% Low (inductive)	
B - Hooded Merganser (<i>Lophodytes cucullatus</i>) PSOC	  
View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G5 State: S4 USFWS: MBTA PIF: 2 Predicted Models:  50% Moderate (inductive),  50% Low (inductive)	
R - Western Milksnake (<i>Lampropeltis gentilis</i>) SOC	 
View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S2 BLM: SENSITIVE FWP SWAP: SGCN Predicted Models:  50% Moderate (inductive),  50% Low (inductive)	

<input type="checkbox"/>	A - Northern Leopard Frog (<i>Lithobates pipiens</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S354 USFS: Sensitive - Suspected in Forests (KOOT, LOLO) BLM: SENSITIVE FWP SWAP: SGCN Predicted Models: 50% Moderate (inductive), 50% Low (inductive)		
<input type="checkbox"/>	I - Bombus occidentalis (<i>Western Bumble Bee</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G3 State: S2 USFS: Sensitive - Known in Forests (BD, BRT, KOOT) BLM: SENSITIVE FWP SWAP: SGCN Predicted Models: 50% Moderate (inductive), 50% Low (inductive)		
<input type="checkbox"/>	V - Stellaria crassifolia (<i>Fleshy Stitchwort</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S2 Plant Threat Score: No Known Threats Predicted Models: 50% Moderate (inductive), 50% Low (inductive)		
<input type="checkbox"/>	B - American Bittern (<i>Botaurus lentiginosus</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3B USFWS: MBTA BLM: SENSITIVE FWP SWAP: SGCN PIF: 3 Predicted Models: 50% Moderate (inductive), 50% Low (inductive)		
<input type="checkbox"/>	B - Black-billed Cuckoo (<i>Coccyzus erythrophthalmus</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3B USFWS: MBTA; BCC11; BCC17 BLM: SENSITIVE FWP SWAP: SGCN PIF: 2 Predicted Models: 50% Moderate (inductive), 50% Low (inductive)		
<input type="checkbox"/>	B - Broad-tailed Hummingbird (<i>Selasphorus platycercus</i>) PSOC		
	View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G5 State: S4B USFWS: MBTA; BCC10 Predicted Models: 50% Moderate (inductive), 50% Low (inductive)		
<input type="checkbox"/>	B - Lewis's Woodpecker (<i>Melanerpes lewis</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S2B USFWS: MBTA; BCC10; BCC17 USFS: Species of Conservation Concern in Forests (HLC) BLM: SENSITIVE FWP SWAP: SGCN PIF: 2 Predicted Models: 50% Moderate (inductive), 50% Low (inductive)		
<input type="checkbox"/>	B - White-faced Ibis (<i>Plegadis chihi</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3B USFWS: MBTA BLM: SENSITIVE FWP SWAP: SGCN PIF: 2 Predicted Models: 50% Moderate (inductive), 50% Low (inductive)		
<input type="checkbox"/>	M - Black-tailed Prairie Dog (<i>Cynomys ludovicianus</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S3 BLM: SENSITIVE FWP SWAP: SGCN Predicted Models: 100% Low (inductive)		
<input type="checkbox"/>	M - Grizzly Bear (<i>Ursus arctos</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S3 USFWS: LT BLM: THREATENED Predicted Models: 100% Low (inductive)		
<input type="checkbox"/>	M - North American Water Vole (<i>Microtus richardsoni</i>) PSOC		
	View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G5 State: S4 FWP SWAP: SGCN Predicted Models: 100% Low (inductive)		
<input type="checkbox"/>	M - Preble's Shrew (<i>Sorex preblei</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S3 FWP SWAP: SGCN Predicted Models: 100% Low (inductive)		
<input type="checkbox"/>	B - Barrow's Goldeneye (<i>Bucephala islandica</i>) PSOC		
	View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G5 State: S4 USFWS: MBTA PIF: 2 Predicted Models: 100% Low (inductive)		
<input type="checkbox"/>	B - Cassin's Finch (<i>Haemorhous cassinii</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3 USFWS: MBTA; BCC10 FWP SWAP: SGCN PIF: 3 Predicted Models: 100% Low (inductive)		
<input type="checkbox"/>	B - Evening Grosbeak (<i>Coccothraustes vespertinus</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3 USFWS: MBTA; BCC10 FWP SWAP: SGCN Predicted Models: 100% Low (inductive)		
<input type="checkbox"/>	B - Sharp-tailed Grouse (<i>Tympanuchus phasianellus</i>) SOC		
	View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S354 FWP SWAP: SGCN PIF: 2 Predicted Models: 100% Low (inductive)		

<p>B - Harlequin Duck (<i>Histrionicus histrionicus</i>) SOC S M</p>
<p> View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S2B USFWS: MBTA USFS: Sensitive - Known in Forests (BD, KOOT, LOLO) Sensitive - Migratory in Forests (BRT) FWP SWAP: SGCN PIF: 1 Predicted Models: <input type="checkbox"/> 100% Low (inductive) </p>
<p>B - Ovenbird (<i>Seiurus aurocapilla</i>) PSOC S M</p>
<p> View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G5 State: S4B USFWS: MBTA PIF: 3 Predicted Models: <input type="checkbox"/> 100% Low (inductive) </p>
<p>B - Sage Thrasher (<i>Oreoscoptes montanus</i>) SOC S M</p>
<p> View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G4 State: S3B USFWS: MBTA BLM: SENSITIVE FWP SWAP: SGCN PIF: 3 Predicted Models: <input type="checkbox"/> 100% Low (inductive) </p>
<p>V - Atriplex canescens (<i>Four-wing Saltbush</i>) PSOC Y</p>
<p> View in Field Guide View Predicted Models View Range Maps Potential Species of Concern - Native Species Global: G5 State: S3S4 Plant Threat Score: Unknown Predicted Models: <input type="checkbox"/> 50% Low (inductive) </p>
<p>V - Erigeron flabellifolius (<i>Fan-leaved Fleabane</i>) SOC Y</p>
<p> View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G3 State: S3 USFS: Species of Conservation Concern in Forests (HLC) Plant Threat Score: No Known Threats CCVI: Highly Vulnerable Predicted Models: <input type="checkbox"/> 50% Low (inductive) </p>
<p>B - Green-tailed Towhee (<i>Pipilo chlorurus</i>) SOC S M</p>
<p> View in Field Guide View Predicted Models View Range Maps Species of Concern - Native Species Global: G5 State: S3B USFWS: MBTA FWP SWAP: SGCN PIF: 3 Predicted Models: <input type="checkbox"/> 50% Low (inductive) </p>
<p>M - Canada Lynx (<i>Lynx canadensis</i>) SOC 7 Not Assessed Y</p>
<p> View in Field Guide View Range Maps Species of Concern - Native Species Global: G5 State: S3 USFWS: LT; CH BLM: THREATENED FWP SWAP: SGCN </p>
<p>B - Sprague's Pipit (<i>Anthus spragueii</i>) SOC 7 Not Assessed S M</p>
<p> View in Field Guide View Range Maps Species of Concern - Native Species Global: G3G4 State: S3B USFWS: MBTA; BCC11; BCC17 BLM: SENSITIVE FWP SWAP: SGCN PIF: 1 </p>
<p>M - Wolverine (<i>Gulo gulo</i>) SOC 7 Not Assessed</p>
<p> View in Field Guide Species of Concern - Native Species Global: G4 State: S3 USFWS: LT USFS: Sensitive - Known in Forests (LOLO) BLM: THREATENED FWP SWAP: SGCN </p>

Structured Surveys

Summarized by: LKM - Environmental Summary (*Custom Area of Interest*)

The Montana Natural Heritage Program (MTNHP) records information on the locations where more than 80 different types of well-defined repeatable survey protocols capable of detecting an animal species or suite of animal species have been conducted by state, federal, tribal, university, or private consulting biologists. Examples of structured survey protocols tracked by MTNHP include: visual encounter and dip net surveys for pond breeding amphibians, point counts for birds, call playback surveys for selected bird species, visual surveys of migrating raptors, kick net stream reach surveys for macroinvertebrates, visual encounter cover object surveys for terrestrial mollusks, bat acoustic or mist net surveys, pitfall and/or snap trap surveys for small terrestrial mammals, track or camera trap surveys for large mammals, and trap surveys for turtles. Whenever possible, photographs of survey locations are stored in MTNHP databases.

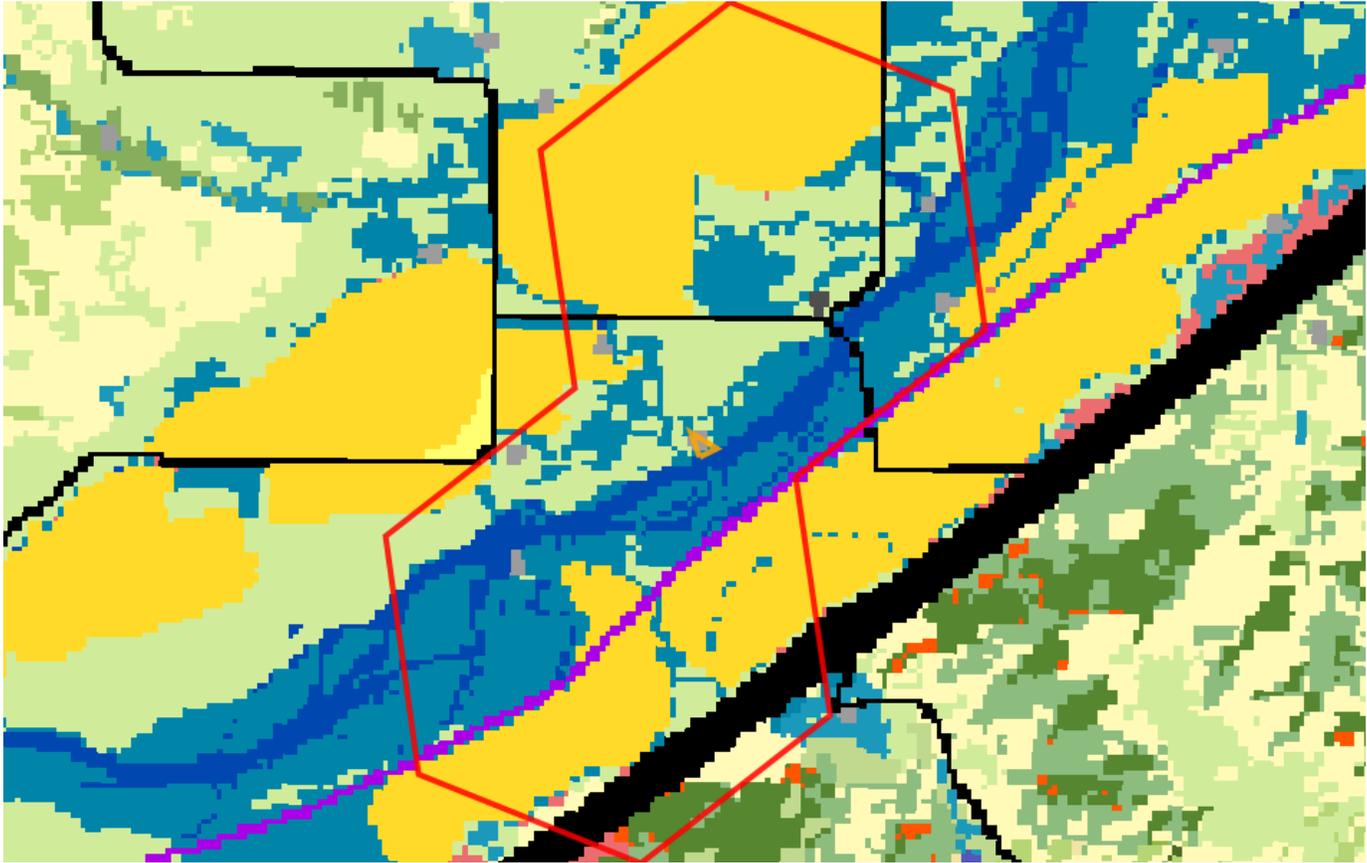
MTNHP does not typically manage information on structured surveys for plants; surveys for invasive species may be a future exception.

Within the report area you have requested, structured surveys are summarized by the number of each type of structured survey protocol that has been conducted, the number of species detections/observations resulting from these surveys, and the most recent year a survey has been conducted.

B-Bald Eagle Nest (<i>Bald Eagle Nest Survey</i>)	Survey Count: 1	Obs Count: 1	Recent Survey: 2025
B-Great Blue Heron Rookery (<i>Great Blue Heron Rookery</i>)	Survey Count: 1	Obs Count: 1	Recent Survey: 2021
B-Raptor nest (<i>Raptor Nest Survey</i>)	Survey Count: 19	Obs Count: 16	Recent Survey: 2025
E-Eurasian Water-milfoil Rake (<i>Rake tows/pulls for Eurasian Water-milfoil</i>)	Survey Count: 6	Obs Count:	Recent Survey: 2022
E-Invasive Mussel Plankton Tow (<i>Plankton tows for veligers of Invasive Mussels</i>)	Survey Count: 7	Obs Count:	Recent Survey: 2024
E-Kicknet (<i>Kicknet Collection Survey for Invasive Mussels and Snails</i>)	Survey Count: 10	Obs Count:	Recent Survey: 2024
E-Noxious Weed, Road-based (<i>Noxious Weed Road-based Visual Surveys</i>)	Survey Count: 7	Obs Count: 33	Recent Survey: 2003
E-Noxious Weed, Visual (<i>Noxious Weed Visual Surveys</i>)	Survey Count: 1	Obs Count: 20	Recent Survey: 2005
E-Visual Aquatic Invasives (<i>Visual Encounter Surveys for Aquatic Invasives on Shorelines or Underwater</i>)	Survey Count: 49	Obs Count: 66	Recent Survey: 2024
I-Aquatic Invert Lotic Dipnet (<i>Invertebrate Lotic Site Dipnet and Visual Encounter Survey</i>)	Survey Count: 1	Obs Count: 2	Recent Survey: 1975
I-Odonates/Butterfly VES (<i>Visual Encounter Survey for Damselfly/Dragonfly/Butterfly</i>)	Survey Count: 1	Obs Count: 1	Recent Survey: 1975
M-Bat Roost (Active Season) (<i>Bat Roost (Active Season) Survey</i>)	Survey Count: 1	Obs Count: 2	Recent Survey: 2019

Land Cover

Summarized by: **LKM - Environmental Summary** (*Custom Area of Interest*)



Human Land Use Agriculture

Cultivated Crops

36% (463 Acres)

These areas used for the production of crops, such as corn, soybeans, small grains, sunflowers, vegetables, and cotton, typically on an annual cycle. Agricultural plant cover is variable depending on season and type of farming. Other areas include more stable land cover of orchards and vineyards.



Wetland and Riparian Systems Floodplain and Riparian

Great Plains Floodplain

26% (335 Acres)

This system occurs along the Missouri and Yellowstone Rivers and their larger tributaries, including parts of the Little Missouri, Clark's Fork Yellowstone, Powder, Tongue, Bighorn, Milk, and Musselshell rivers. These are the big perennial rivers of the region, with hydrologic dynamics largely driven by snowmelt and rainfall originating in their headwater watersheds, rather than local precipitation events. In the absence of disturbance, periodic flooding of fluvial and alluvial soils and channel migration will create depressions and backwaters that support a mosaic of wetland and riparian vegetation, whose composition and structure is sustained, altered and redistributed by hydrology. Dominant communities within this system range from floodplain forests to wet meadows to gravel/sand flats, linked by underlying soils and flooding regimes. In the western part of the system's range in Montana, the overstory dominant species is black cottonwood (*Populus balsamifera ssp. trichocarpa*) with narrowleaf cottonwood (*Populus angustifolia*) and eastern cottonwood (*Populus deltoides*) occurring as co-dominants in the riparian/floodplain interface near the mountains. Further east, narrowleaf cottonwood and Plains cottonwood become dominant. In relatively undisturbed stands, willow (*Salix* species), redosier dogwood (*Cornus sericea*) and common chokecherry (*Prunus virginiana*) form a thick, multi-layered shrub understory, with a mixture of cool and warm season graminoid species below.

In Montana, many occurrences are now degraded to the point where the cottonwood overstory is the only remaining natural component. The hydrology of these floodplain systems has been affected by dams, highways, railroads and agricultural ditches, and as a result, they have lost their characteristic wetland /riparian mosaic structure. This has resulted in a highly altered community consisting of relict cottonwood stands with little regeneration. The understory vegetation is dominated by non-native pasture grasses, legumes and other introduced forbs, or by the disclimax western snowberry (*Symphoricarpos occidentalis*) and rose (*Rosa* species) shrub community.



Grassland Systems Lowland/Prairie Grassland

17% (217 Acres)

Great Plains Mixedgrass Prairie

The system covers much of the eastern two-thirds of Montana, occurring continuously for hundreds of square kilometers, interrupted only by wetland/riparian areas or sand prairies. Soils are primarily fine and medium-textured. The growing season averages 115 days, ranging from 100 days on the Canadian border to 130 days on the Wyoming border. Climate is typical of mid-continental regions with long severe winters and hot summers. Grasses typically comprise the greatest canopy cover, and western wheatgrass (*Pascopyrum smithii*) is usually dominant. Other species include thickspike wheatgrass (*Elymus lanceolatus*), green needlegrass (*Nassella viridula*), blue grama (*Bouteloua gracilis*), and needle and thread (*Hesperostipa comata*). Near the Canadian border in north-central Montana, this system grades into rough fescue (*Festuca campestris*) and Idaho fescue (*Festuca idahoensis*) grasslands. Remnants of shortbristle needle and thread (*Hesperostipa curtisetata*) dominated vegetation are found in northernmost Montana and North Dakota, and are associated with productive sites, now mostly converted to farmland. Forb diversity is typically high. In areas of southeastern and central Montana where sagebrush steppe borders the mixed grass prairie, common plant associations include Wyoming big sagebrush-western wheatgrass (*Artemisia tridentata* ssp. *wyomingensis*/*Pascopyrum smithii*). Fire and grazing are the primary drivers of this system. Drought can also impact it, in general favoring the shortgrass component at the expense of the mid-height grasses. With intensive grazing, cool season exotics such as Kentucky bluegrass (*Poa pratensis*), smooth brome (*Bromus inermis*), and Japanese brome (*Bromus japonicus*) increase in dominance; both of these rhizomatous species have been shown to markedly decrease species diversity. Previously cultivated acres that have been re-vegetated with non-native plants have been transformed into associations such as Kentucky bluegrass (*Poa pratensis*)/western wheatgrass (*Pascopyrum smithii*) or into pure crested wheatgrass (*Agropyron cristatum*) stands.

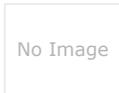


Wetland and Riparian Systems Open Water

8% (108 Acres)

Open Water

All areas of open water, generally with less than 25% cover of vegetation or soil



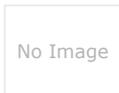
No Image

Human Land Use Developed

Interstate

4% (49 Acres)

National Highway System (NHS) limited access highways and their shoulders and rights of way.



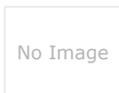
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Human Land Use Developed

Other Roads

2% (29 Acres)

County, city and or rural roads generally open to motor vehicles.



No Image

Human Land Use Developed

Railroad

2% (22 Acres)

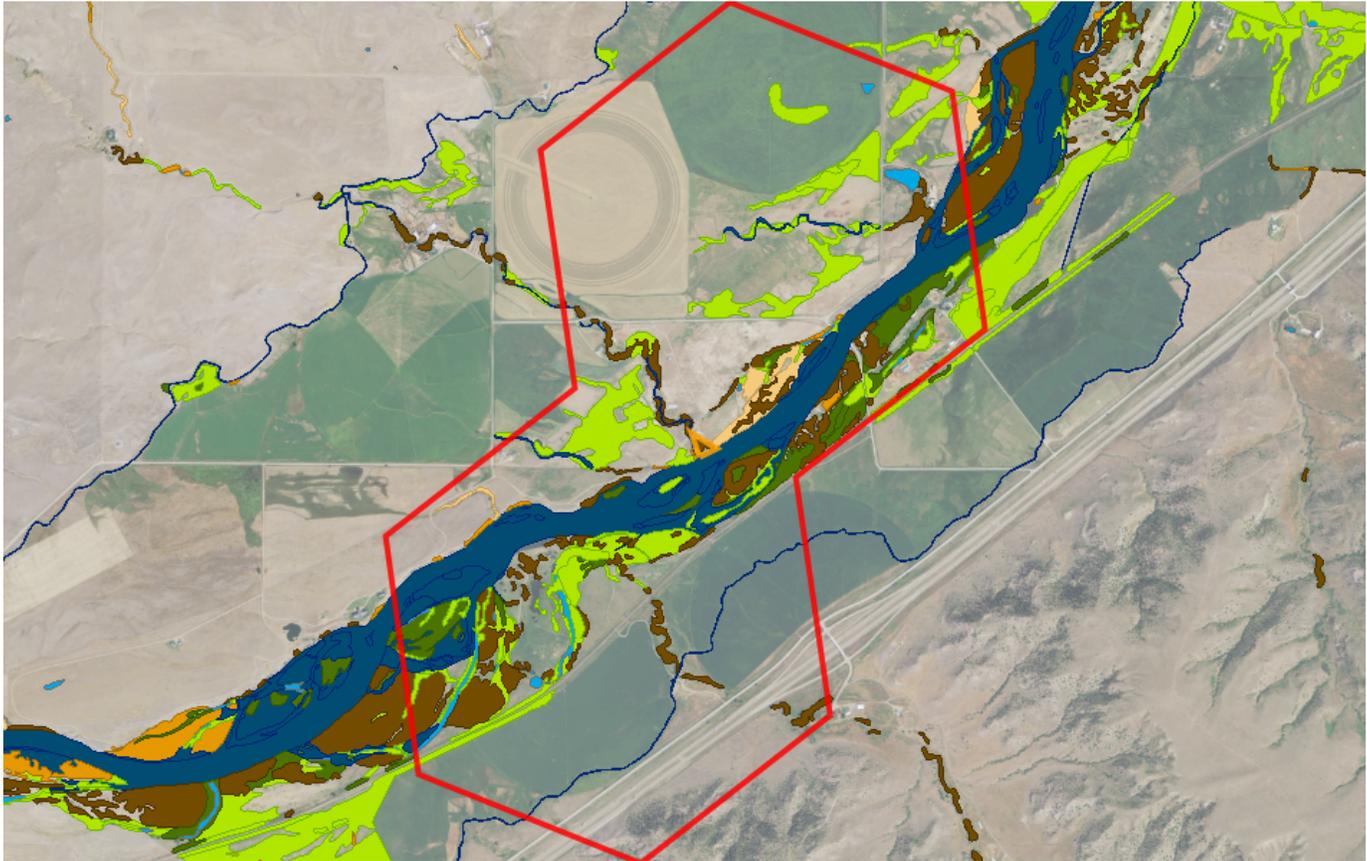
Railroad tracks and railroad berms/rights of way, currently in use or capable of use

Additional Limited Land Cover

- 1% (18 Acres) [Big Sagebrush Steppe](#)
- 1% (14 Acres) [Great Plains Ponderosa Pine Woodland and Savanna](#)
- 1% (9 Acres) [Low Intensity Residential](#)
- <1% (6 Acres) [Great Plains Riparian](#)
- <1% (3 Acres) [Introduced Upland Vegetation - Annual and Biennial Forbland](#)
- <1% (3 Acres) [Rocky Mountain Foothill Woodland-Steppe Transition](#)
- <1% (2 Acres) [High Intensity Residential](#)
- <1% (2 Acres) [Insect-Killed Forest](#)

Wetland and Riparian

Summarized by: **LKM - Environmental Summary (Custom Area of Interest)**



Wetland and Riparian Mapping

P - Palustrine

■ AB - Aquatic Bed		
F - Semipermanently Flooded	9 Acres	
(no modifier)	2 Acres PABF	
h - Diked/Impounded	6 Acres PABFh	
x - Excavated	1 Acres PABFx	

P - Palustrine, AB - Aquatic Bed
Wetlands with vegetation growing on or below the water surface for most of the growing season.

■ EM - Emergent		
A - Temporarily Flooded	56 Acres	
(no modifier)	50 Acres PEMA	
h - Diked/Impounded	6 Acres PEMAh	
C - Seasonally Flooded	57 Acres	
(no modifier)	56 Acres PEMC	
h - Diked/Impounded	1 Acres PEMCh	

P - Palustrine, EM - Emergent
Wetlands with erect, rooted herbaceous vegetation present during most of the growing season.

■ SS - Scrub-Shrub		
A - Temporarily Flooded	33 Acres	
(no modifier)	29 Acres PSSA	
h - Diked/Impounded	4 Acres PSSAh	
C - Seasonally Flooded	2 Acres	
(no modifier)	1 Acres PSSC	
h - Diked/Impounded	1 Acres PSSCh	

P - Palustrine, SS - Scrub-Shrub
Wetlands dominated by woody vegetation less than 6 meters (20 feet) tall. Woody vegetation includes tree saplings and trees that are stunted due to environmental conditions.

R - Riverine (Rivers)

2 - Lower Perennial

■ UB - Unconsolidated Bottom		
F - Semipermanently Flooded	2 Acres	
(no modifier)	2 Acres R2UBF	
H - Permanently Flooded	89 Acres	
(no modifier)	89 Acres R2UBH	

R - Riverine (Rivers), 2 - Lower Perennial, UB - Unconsolidated Bottom
Stream channels where the substrate is at least 25% mud, silt or other fine particles.

■ US - Unconsolidated Shore

A - Temporarily Flooded	17 Acres
(no modifier)	17 Acres R2USA
C - Seasonally Flooded	16 Acres
(no modifier)	16 Acres R2USC

R - Riverine (Rivers), 2 - Lower Perennial, US - Unconsolidated Shore

Shorelines with less than 75% areal cover of stones, boulders, or bedrock and less than 30% vegetation cover. The area is also irregularly exposed due to seasonal or irregular flooding and subsequent drying.

3 - Upper Perennial

UB - Unconsolidated Bottom	
F - Semipermanently Flooded	1 Acres
(no modifier)	1 Acres R3UBF

R - Riverine (Rivers), 3 - Upper Perennial, UB - Unconsolidated Bottom

Stream channels where the substrate is at least 25% mud, silt or other fine particles.

4 - Intermittent

SB - Stream Bed	
C - Seasonally Flooded	5 Acres
(no modifier)	3 Acres R4SBC
x - Excavated	2 Acres R4SBCx

R - Riverine (Rivers), 4 - Intermittent, SB - Stream Bed

Active channel that contains periodic water flow.

Rp - Riparian

1 - Lotic

SS - Scrub-Shrub	2 Acres	Rp1SS
(no modifier)		

Rp - Riparian, 1 - Lotic, SS - Scrub-Shrub

This type of riparian area is dominated by woody vegetation that is less than 6 meters (20 feet) tall. Woody vegetation includes tree saplings and trees that are stunted due to environmental conditions.

FO - Forested	72 Acres	Rp1FO
(no modifier)		

Rp - Riparian, 1 - Lotic, FO - Forested

This riparian class has woody vegetation that is greater than 6 meters (20 feet) tall.

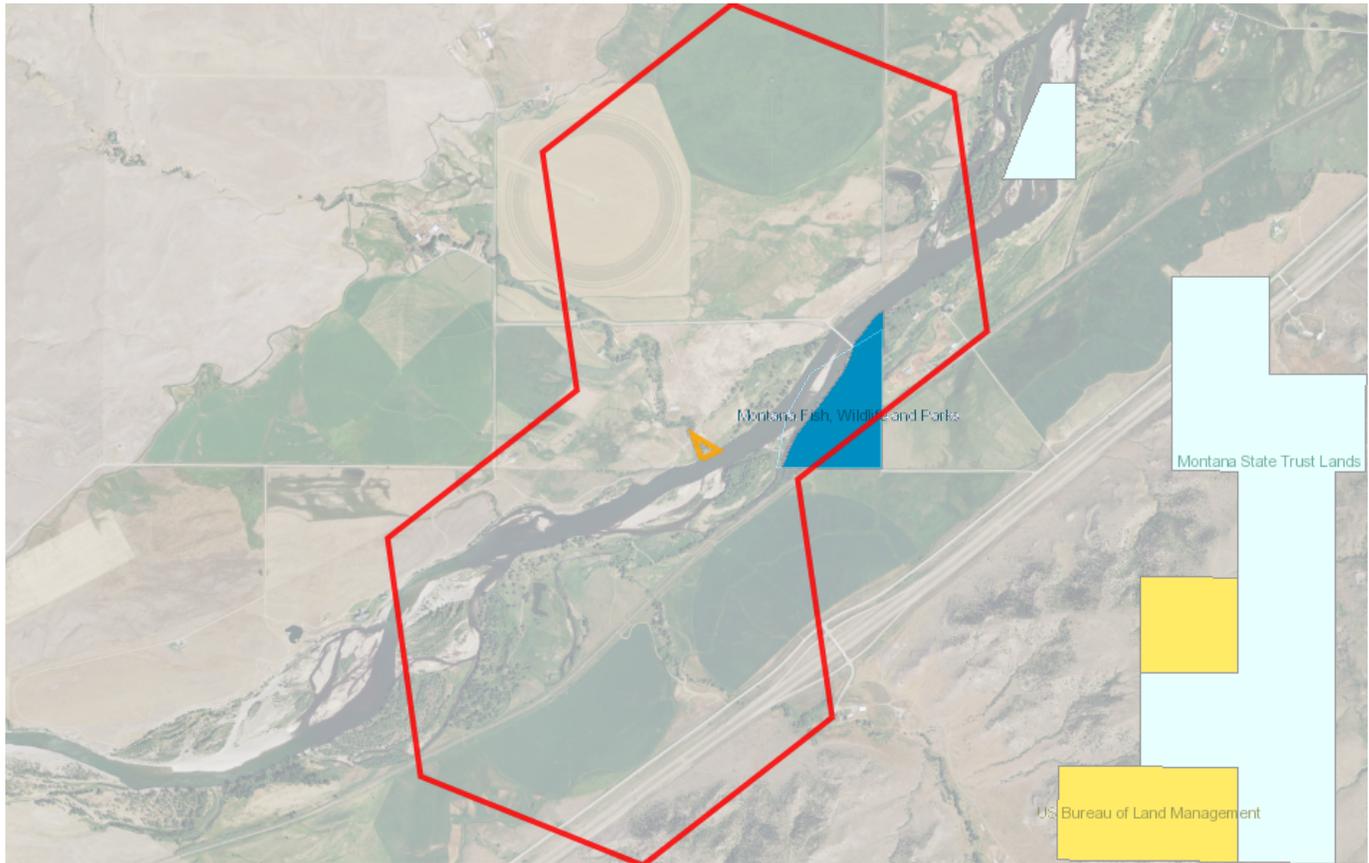
EM - Emergent	10 Acres	Rp1EM
(no modifier)		

Rp - Riparian, 1 - Lotic, EM - Emergent

Riparian areas that have erect, rooted herbaceous vegetation during most of the growing season.

Land Management

Summarized by: **LKM - Environmental Summary** (Custom Area of Interest)



Land Management Summary

	Ownership	Tribal	Easements	Other Boundaries (possible overlap)
Public Lands	28 Acres (2%)			
State	28 Acres (2%)			
Montana Fish, Wildlife and Parks	28 Acres (2%)			
MTFWP Owned	28 Acres (2%)			
MTFWP Fishing Access Sites				36 Acres
Grey Bear Fishing Access Site				36 Acres
Private Lands or Unknown Ownership	1,251 Acres (98%)			

Biological Reports

Summarized by: **LKM - Environmental Summary** (*Custom Area of Interest*)

Within the report area you have requested, citations for all reports and publications associated with plant or animal observations in Montana Natural Heritage Program (MTNHP) databases are listed and, where possible, links to the documents are included.

The MTNHP plans to include reports associated with terrestrial and aquatic communities in the future as allowed for by staff resources. If you know of reports or publications associated with species or biological communities within the report area that are not shown in this report, please let us know: mtnhp@mt.gov

 Fuller, Pam and A. Benson. U.S. Department of the Interior. USGS NAS: **Nonindigenous Aquatic Species Database**. 2017. Accessed 10 October 2017.
<https://nas.er.usgs.gov/>

 Newell, R. L. 1976. **Yellowstone River study - final report**. MT Dept. Fish and Game and Intake Water Co.

- Regele, Deb. 2019. **Email with tabular data detailing nesting records for osprey on the Yellowstone River**. 25 November 2019.
- Regele, Deb. 2020. **Email with tabular data detailing nesting records for osprey on the Yellowstone River**. 30 November 2020.
- Regele, Deb. 2021. **Email with tabular data detailing nesting records for osprey on the Yellowstone River**. 26 November 2021.

Legend

Model Icons	Habitat Icons	Range Icons	Num Obs
Suitable (native range)	Common	Non-native	Count of obs with 'good precision' (<=1000m)
Optimal Suitability	Occasional		+ indicates additional 'poor precision' obs (1001m-10,000m)
Moderate Suitability			
Low Suitability			
Suitable (introduced range)			



Latitude 45.76992 Longitude -110.05867
45.80233 -110.09043

Invasive and Pest Species

Summarized by: LKM - Environmental Summary (Custom Area of Interest)

	# Obs	Predicted Model	Range
Aquatic Invasive Species			
<input type="checkbox"/> V - Myriophyllum spicatum (<i>Eurasian Water-milfoil</i>) N2A/AIS			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2A - Aquatic Invasive Species - Non-native Species Global: GNR State: SNA Predicted Models: 100% Moderate (inductive)			
<input type="checkbox"/> V - Butomus umbellatus (<i>Flowering-rush</i>) N2A/AIS			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2A - Aquatic Invasive Species - Non-native Species Global: G5 State: SNA Predicted Models: 100% Low (inductive)			
<input type="checkbox"/> V - Nymphaea odorata (<i>American Water-lily</i>) AIS			
View in Field Guide View Predicted Models View Range Maps Aquatic Invasive Species - Non-native Species Global: G5 State: SNA Predicted Models: 100% Suitable (introduced range) (deductive)			
<input type="checkbox"/> V - Nymphoides peltata (<i>Yellow Floating Heart</i>) AIS			
View in Field Guide View Predicted Models View Range Maps Aquatic Invasive Species - Non-native Species Global: G5 State: SNA Predicted Models: 100% Suitable (introduced range) (deductive)			
<input type="checkbox"/> I - Potamopyrgus antipodarum (<i>New Zealand Mudsnail</i>) AIS	2	Not Assessed	
View in Field Guide Aquatic Invasive Species - Non-native Species Global: G5 State: SNA			
Noxious Weeds: Priority 1A			
<input type="checkbox"/> V - Centaurea solstitialis (<i>Yellow Starthistle</i>) N1A			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 1A - Non-native Species Global: GNR State: SNA Predicted Models: 100% Optimal (inductive)			
<input type="checkbox"/> V - Isatis tinctoria (<i>Dyer's Woad</i>) N1A			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 1A - Non-native Species Global: GNR State: SNA Predicted Models: 50% Moderate (inductive), 50% Low (inductive)			
<input type="checkbox"/> V - Phragmites australis ssp. australis (<i>European Common Reed</i>) N1A			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 1A - Non-native Species Global: G5T5 State: SNA Predicted Models: 100% Low (inductive)			
<input type="checkbox"/> V - Taeniatherum caput-medusae (<i>Medusahead</i>) N1A			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 1A - Non-native Species Global: G4G5 State: SNA Predicted Models: 100% Low (inductive)			
Noxious Weeds: Priority 1B			
<input type="checkbox"/> V - Lythrum salicaria (<i>Purple Loosestrife</i>) N1B			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 1B - Non-native Species Global: G5 State: SNA Predicted Models: 50% Optimal (inductive), 50% Moderate (inductive)			
<input type="checkbox"/> V - Echium vulgare (<i>Blueweed</i>) N1B			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 1B - Non-native Species Global: GNR State: SNA Predicted Models: 100% Moderate (inductive)			
<input type="checkbox"/> V - Polygonum cuspidatum (<i>Japanese Knotweed</i>) N1B			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 1B - Non-native Species Global: GNRTNR State: SNA Predicted Models: 50% Moderate (inductive), 50% Low (inductive)			
<input type="checkbox"/> V - Polygonum x bohemicum (<i>Bohemian Knotweed</i>) N1B			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 1B - Non-native Species Global: GNA State: SNA Predicted Models: 100% Low (inductive)			

V - Chondrilla juncea (*Rush Skeletonweed*) **N1B**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 1B - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 50% Low (inductive)

V - Cytisus scoparius (*Scotch Broom*) **N1B**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 1B - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 50% Low (inductive)

Noxious Weeds: Priority 2A

V - Myriophyllum spicatum (*Eurasian Water-milfoil*) **N2A/AIS**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2A - Aquatic Invasive Species - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 100% Moderate (inductive)

V - Hieracium piloselloides (*Tall Hawkweed*) **N2A**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2A - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 50% Moderate (inductive), 50% Low (inductive)

V - Hieracium praealtum (*Kingdevil Hawkweed*) **N2A**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2A - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 50% Moderate (inductive), 50% Low (inductive)

V - Ranunculus acris (*Tall Buttercup*) **N2A**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2A - Non-native Species Global: **G5** State: **SNA**
Predicted Models: 50% Moderate (inductive), 50% Low (inductive)

V - Ventenata dubia (*Ventenata*) **N2A**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2A - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 50% Moderate (inductive), 50% Low (inductive)

V - Butomus umbellatus (*Flowering-rush*) **N2A/AIS**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2A - Aquatic Invasive Species - Non-native Species Global: **G5** State: **SNA**
Predicted Models: 100% Low (inductive)

V - Lepidium latifolium (*Perennial Pepperweed*) **N2A**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2A - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 100% Low (inductive)

V - Rhamnus cathartica (*Common Buckthorn*) **N2A**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2A - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 100% Low (inductive)

Noxious Weeds: Priority 2B

V - Berteroa incana (*Hoary False-alyssum*) **N2B**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 50% Optimal (inductive), 50% Moderate (inductive)

V - Cynoglossum officinale (*Common Hound's-tongue*) **N2B**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 50% Optimal (inductive), 50% Moderate (inductive)

V - Centaurea diffusa (*Diffuse Knapweed*) **N2B**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 100% Moderate (inductive)

V - Centaurea stoebe (*Spotted Knapweed*) **N2B**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 100% Moderate (inductive)

V - Cirsium arvense (*Canada Thistle*) **N2B**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2B - Non-native Species Global: **G5** State: **SNA**
Predicted Models: 100% Moderate (inductive)

V - Convolvulus arvensis (*Field Bindweed*) **N2B**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predicted Models: 100% Moderate (inductive)

<input type="checkbox"/> V - Euphorbia virgata (<i>Leafy Spurge</i>) N2B	1		
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: GNR State: SNA Predicted Models: 100% Moderate (inductive)			
<input type="checkbox"/> V - Lepidium draba (<i>Whitetop</i>) N2B			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: GNR State: SNA Predicted Models: 100% Moderate (inductive)			
<input type="checkbox"/> V - Linaria dalmatica (<i>Dalmatian Toadflax</i>) N2B			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: G5 State: SNA Predicted Models: 100% Moderate (inductive)			
<input type="checkbox"/> V - Tanacetum vulgare (<i>Common Tansy</i>) N2B	3		
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: GNR State: SNA Predicted Models: 100% Moderate (inductive)			
<input type="checkbox"/> V - Potentilla recta (<i>Sulphur Cinquefoil</i>) N2B			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: GNR State: SNA Predicted Models: 50% Moderate (inductive), 50% Low (inductive)			
<input type="checkbox"/> V - Hypericum perforatum (<i>Common St. John's-wort</i>) N2B			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: GNR State: SNA Predicted Models: 100% Low (inductive)			
<input type="checkbox"/> V - Leucanthemum vulgare (<i>Oxeye Daisy</i>) N2B			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: GNR State: SNA Predicted Models: 100% Low (inductive)			
<input type="checkbox"/> V - Linaria vulgaris (<i>Yellow Toadflax</i>) N2B			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: GNR State: SNA Predicted Models: 100% Low (inductive)			
<input type="checkbox"/> V - Tamarix ramosissima (<i>Salt Cedar</i>) N2B			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: GNR State: SNA Predicted Models: 100% Low (inductive)			
<input type="checkbox"/> V - Acroptilon repens (<i>Russian Knapweed</i>) N2B			
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: GNR State: SNA Predicted Models: 50% Low (inductive)			
Regulated Weeds: Priority 3			
<input type="checkbox"/> V - Bromus tectorum (<i>Cheatgrass</i>) R3			
View in Field Guide View Predicted Models View Range Maps Regulated Weed: Priority 3 - Non-native Species Global: GNR State: SNA Predicted Models: 100% Low (inductive)			
<input type="checkbox"/> V - Elaeagnus angustifolia (<i>Russian Olive</i>) R3			
View in Field Guide View Predicted Models View Range Maps Regulated Weed: Priority 3 - Non-native Species Global: GNR State: SNA Predicted Models: 100% Low (inductive)			
Biocontrol Species			
<input type="checkbox"/> I - Aphthona lacertosa (<i>Brown-legged Leafy Spurge Flea Beetle</i>) BIOCNTL			
View in Field Guide View Predicted Models View Range Maps Biocontrol Species - Non-native Species Global: GNR State: SNA Predicted Models: 100% Moderate (inductive)			
<input type="checkbox"/> I - Oberea erythrocephala (<i>Red-headed Leafy Spurge Stem Borer</i>) BIOCNTL			
View in Field Guide View Predicted Models View Range Maps Biocontrol Species - Non-native Species Global: GNR State: SNA Predicted Models: 100% Moderate (inductive)			
<input type="checkbox"/> I - Cyphocleonus achates (<i>Knapweed Root Weevil</i>) BIOCNTL			
View in Field Guide View Predicted Models View Range Maps Biocontrol Species - Non-native Species Global: GNR State: SNA Predicted Models: 50% Moderate (inductive), 50% Low (inductive)			
<input type="checkbox"/> I - Mecinus janthiniformis (<i>Dalmatian Toadflax Stem-boring Weevil</i>) BIOCNTL			
View in Field Guide View Predicted Models View Range Maps Biocontrol Species - Non-native Species Global: GNR State: SNA Predicted Models: 50% Moderate (inductive), 50% Low (inductive)			

I - Aphthona nigricutis (*Black Dot Leafy Spurge Flea Beetle*) **BIOCNTL**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)

[Biocontrol Species - Non-native Species](#) Global: **GNR** State: **SNA**

Predicted Models: 100% Low (inductive)

I - Mecinus janthinus (*Yellow Toadflax Stem-boring Weevil*) **BIOCNTL**

[View in Field Guide](#) [View Predicted Models](#) [View Range Maps](#)

[Biocontrol Species - Non-native Species](#) Global: **GNR** State: **SNA**

Predicted Models: 100% Low (inductive)

Introduction to Montana Natural Heritage Program



PO Box 201800 • 1201 11th Avenue • Helena, MT 59620-1800 • fax 406.444.0266 • phone 406.444.3989 • mtnhp.mt.gov

INTRODUCTION

The Montana Natural Heritage Program (MTNHP) is Montana’s source for reliable and objective information on Montana’s native species and habitats, emphasizing those of conservation concern. MTNHP was created by the Montana legislature in 1983 as part of the Natural Resource Information System (NRIS) at the Montana State Library (MSL). MTNHP is “a program of information acquisition, storage, and retrieval for data relating to the flora, fauna, and biological community types of Montana” (MCA 90-15-102). MTNHP’s activities are guided by statute as well as through ongoing interaction with, and feedback from, principal data source agencies such as Montana Fish, Wildlife, and Parks, the Montana Department of Environmental Quality, the Montana Department of Natural Resources and Conservation, the Montana University System, the US Forest Service, and the US Bureau of Land Management. Since the first staff was hired in 1985, the Program has logged a long record of success, and developed into a highly respected, service-oriented program. MTNHP is widely recognized as one of the most advanced and effective of over 60 natural heritage programs that are distributed across North America.

VISION

Our vision is that public agencies, the private sector, the education sector, and the general public will trust and rely upon MTNHP as the source for information and expertise on Montana’s species and habitats, especially those of conservation concern. We strive to provide easy access to our information to allow users to save time and money, speed environmental reviews, and make informed decisions.

CORE VALUES

- We endeavor to be a single statewide source of accurate and up-to-date information on Montana’s plants, animals, and aquatic and terrestrial biological communities.
- We actively listen to our data users and work responsively to meet their information and training needs.
- We strive to provide neutral, trusted, timely, and equitable service to all of our information users.
- We make every effort to be transparent to our data users in setting work priorities and providing data products.

CONFIDENTIALITY

All information requests made to the Montana Natural Heritage Program are considered library records and are protected from disclosure by the Montana Library Records Confidentiality Act (MCA 22-1-11).

INFORMATION MANAGED

Information managed at the Montana Natural Heritage Program is botanical, zoological, and ecological information that describes the distribution (e.g., observations, structured surveys, range polygons, predicted habitat suitability models), conservation status (e.g., global and state conservation status ranks, including threats), and other supporting information (e.g., accounts and references) on the biology and ecology of species and biological communities.

Data Use Terms and Conditions

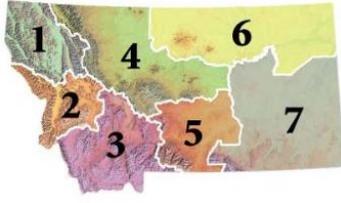
- Montana Natural Heritage Program (MTNHP) products and services are based on biological data and the objective interpretation of those data by professional scientists. MTNHP does not advocate any particular philosophy of natural resource protection, management, development, or public policy.
- MTNHP has no natural resource management or regulatory authority. Products, statements, and services from MTNHP are intended to inform parties as to the state of scientific knowledge about certain natural resources, and to further develop that knowledge. The information is not intended as natural resource management guidelines or prescriptions or a determination of environmental impacts. MTNHP recommends consultation with appropriate state, federal, and tribal resource management agencies and authorities in the area where your project is located.
- Information on the status and spatial distribution of biological resources produced by MTNHP are intended to inform parties of the state-wide status, known occurrence, or the likelihood of the presence of those resources. **These products are not intended to substitute for field-collected data, nor are they intended to be the sole basis for natural resource management decisions.**
- MTNHP does not portray its data as exhaustive or comprehensive inventories of rare species or biological communities. **Field verification of the absence or presence of sensitive species and biological communities will always be an important obligation of users of our data.**
- MTNHP responds equally to all requests for products and services, regardless of the purpose or identity of the requester.
- Because MTNHP constantly updates and revises its databases with new data and information, products will become outdated over time. Interested parties are encouraged to obtain the most current information possible from MTNHP, rather than using older products. We add, review, update, and delete records on a daily basis. Consequently, we strongly advise that you update your MTNHP data sets at a minimum of every four months for most applications of our information.
- MTNHP data require a certain degree of biological expertise for proper analysis, interpretation, and application. Our staff is available to advise you on questions regarding the interpretation or appropriate use of the data that we provide. See [Contact Information for MTNHP Staff](#)
- The information provided to you by MTNHP may include sensitive data that if publicly released might jeopardize the welfare of threatened, endangered, or sensitive species or biological communities. This information is intended for distribution or use only within your department, agency, or business. Subcontractors may have access to the data during the course of any given project, but should not be given a copy for their use on subsequent, unrelated work.
- MTNHP data are made freely available. Duplication of hard-copy or digital MTNHP products with the intent to sell is prohibited without written consent by MTNHP. Should you be asked by individuals outside your organization for the type of data that we provide, please refer them to MTNHP.
- MTNHP and appropriate staff members should be appropriately acknowledged as an information source in any third-party product involving MTNHP data, reports, papers, publications, or in maps that incorporate MTNHP graphic elements.
- Sources of our data include museum specimens, published and unpublished scientific literature, field surveys by state and federal agencies and private contractors, and reports from knowledgeable individuals. MTNHP actively solicits and encourages additions, corrections and updates, new observations or collections, and comments on any of the data we provide.
- MTNHP staff and contractors do not enter or cross privately-owned lands without express permission from the landowner. However, the program cannot guarantee that information provided to us by others was obtained under adherence to this policy.

Suggested Contacts for Natural Resource Management Agencies

As required by Montana statute (MCA 90-15), the Montana Natural Heritage Program works with state, federal, tribal, nongovernmental organizations, and private partners to ensure that the latest animal and plant distribution and status information is incorporated into our databases so that it can be used to inform a variety of permitting and planning processes and management decisions. We encourage you to contact state, federal, and tribal resource management agencies in the area where your project is located and review the permitting overviews by the [Montana Department of Environmental Quality](#), the [Montana Department of Natural Resources and Conservation](#) and the [Index of Environmental Permits for Montana](#) for guidelines relevant to your efforts. In particular, we encourage you to contact the Montana Department of Fish, Wildlife, and Parks for the latest data and management information regarding hunted and high-profile management species and to use the U.S. Fish and Wildlife Service’s [Information Planning and Consultation \(IPAC\) website regarding](#) U.S. Endangered Species Act listed Threatened, Endangered, or Candidate species.

For your convenience, we have compiled a list of relevant agency contacts and links below:

Montana Fish, Wildlife, and Parks

Fish Species	Zachary Shattuck zshattuck@mt.gov (406) 444-1231																												
Aquatic Invasive Species	Tom Woolf thomas.woolf@mt.gov (406) 444-1230																												
American Bison Black-footed Ferret Black-tailed Prairie Dog Bald Eagle Golden Eagle Common Loon Least Tern Piping Plover Whooping Crane	Kristina Smucker kismucker@mt.gov (406) 444-5209																												
Grizzly Bear Greater Sage Grouse Trumpeter Swan Big Game Upland Game Birds Furbearers	Brian Wakeling brian.wakeling@mt.gov (406) 444-3940																												
Managed Terrestrial Game Data	Adam Messer – MFWP GIS Coordinator amesser@mt.gov (406) 444-0095																												
Fisheries Data and Nongame Animal Data	Adam Messer – MFWP GIS Coordinator amesser@mt.gov (406) 444-0095																												
Wildlife and Fisheries Scientific Collector’s Permits	https://fwp.mt.gov/buyandapply/commercialwildlifeandscientificpermits/scientific Kristina Smucker for Wildlife kismucker@mt.gov (406) 444-5209 Dave Schmetterling for Fisheries dschmetterling@mt.gov (406) 542-5514																												
Fish and Wildlife Recommendations for Subdivision Development	Stevie Burton stevie.burton@mt.gov (406) 594-7354 See https://fwp.mt.gov/conservation/living-with-wildlife/subdivision-recommendations																												
Regional Contacts 	<table> <tr> <td>Region 1</td> <td>(Kalispell)</td> <td>(406) 752-5501</td> <td>fwprg12@mt.gov</td> </tr> <tr> <td>Region 2</td> <td>(Missoula)</td> <td>(406) 542-5500</td> <td>fwprg22@mt.gov</td> </tr> <tr> <td>Region 3</td> <td>(Bozeman)</td> <td>(406) 577-7900</td> <td>fwprg3@mt.gov</td> </tr> <tr> <td>Region 4</td> <td>(Great Falls)</td> <td>(406) 454-5840</td> <td>fwprg42@mt.gov</td> </tr> <tr> <td>Region 5</td> <td>(Billings)</td> <td>(406) 247-2940</td> <td>fwprg52@mt.gov</td> </tr> <tr> <td>Region 6</td> <td>(Glasgow)</td> <td>(406) 228-3700</td> <td>fwprg62@mt.gov</td> </tr> <tr> <td>Region 7</td> <td>(Miles City)</td> <td>(406) 234-0900</td> <td>fwprg72@mt.gov</td> </tr> </table>	Region 1	(Kalispell)	(406) 752-5501	fwprg12@mt.gov	Region 2	(Missoula)	(406) 542-5500	fwprg22@mt.gov	Region 3	(Bozeman)	(406) 577-7900	fwprg3@mt.gov	Region 4	(Great Falls)	(406) 454-5840	fwprg42@mt.gov	Region 5	(Billings)	(406) 247-2940	fwprg52@mt.gov	Region 6	(Glasgow)	(406) 228-3700	fwprg62@mt.gov	Region 7	(Miles City)	(406) 234-0900	fwprg72@mt.gov
Region 1	(Kalispell)	(406) 752-5501	fwprg12@mt.gov																										
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Region 3	(Bozeman)	(406) 577-7900	fwprg3@mt.gov																										
Region 4	(Great Falls)	(406) 454-5840	fwprg42@mt.gov																										
Region 5	(Billings)	(406) 247-2940	fwprg52@mt.gov																										
Region 6	(Glasgow)	(406) 228-3700	fwprg62@mt.gov																										
Region 7	(Miles City)	(406) 234-0900	fwprg72@mt.gov																										

Montana Conservation Districts

Clickable map for contact information across Montana: <https://macdnet.org/conservation-district-map/>
Montana Association of Conservation Districts Resources Directory: <https://macdnet.org/resources>

Montana Department of Agriculture

General Contact Information: <https://agr.mt.gov/About/Office-Locations/Office-Locations-and-Field-Offices>
Noxious Weeds: <https://agr.mt.gov/Noxious-Weeds>

Montana Department of Environmental Quality

Permitting and Operator Assistance for all Environmental Permits: <https://deq.mt.gov/Permitting>
Opencut Mining Web Mapping Application for review of opencut mining applications
<https://gis.mtdeq.us/portal/apps/webappviewer/index.html?id=7b60084bc4c444a19c9a7a0867e7635a>

Montana Department of Natural Resources and Conservation

Permits and Services: <https://dnrc.mt.gov/Permits-Services>
Stream Permitting (310, 404, Section 10, SPA 124, floodplain, 318, Navigable Water, and other stream permits)
<https://dnrc.mt.gov/licenses-and-permits/stream-permitting/>
Wildfire Resources: <https://dnrc.mt.gov/Forestry/Wildfire>
Regional Office Contacts: <https://dnrc.mt.gov/TrustLand/About/Regional-Offices>

Bureau of Land Management

Montana Field Office Contacts:	Billings (406) 896-5013	Lewistown (406) 538-1900
	Butte (406) 533-7600	Malta (406) 654-5100
	Dillon (406) 683-8000	Miles City (406) 233-2800
	Glasgow (406) 228-3750	Missoula (406) 329-3914
	Havre (406) 262-2820	

United States Army Corps of Engineers

Montana Regulatory Office for federal permits related to construction in water and wetlands
<https://www.nwo.usace.army.mil/Missions/Regulatory-Program/Montana/>
Email for questions: Montana.Reg@usace.army.mil
Phone for questions: (406) 441-1375

United States Environmental Protection Agency

Environmental information, notices, permitting, and contacts <https://www.epa.gov/mt>
Gateway to state resource locators <https://www.envcap.org/srl/index.php>

United States Fish and Wildlife Service

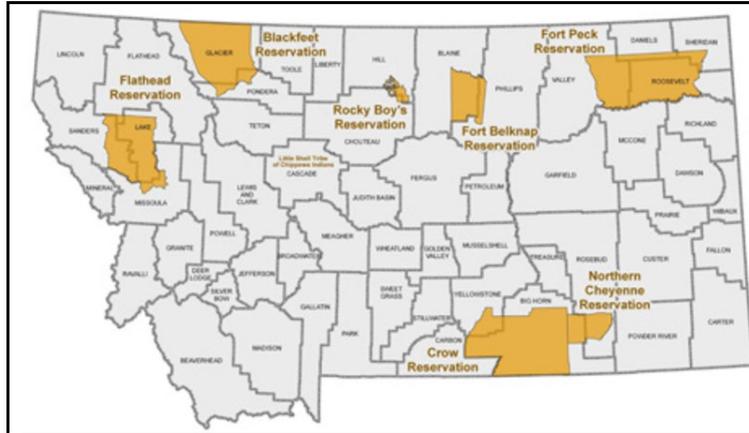
Information Planning and Conservation (IPAC) website: <https://ipac.ecosphere.fws.gov>
Montana Ecological Services Field Office: <https://www.fws.gov/office/montana-ecological-services> (406) 449-5225

United States Forest Service

Regional Office – Missoula, Montana Contacts

Assistant Regional TES PM	Diane Probasco	diane.probasco@usda.gov	(307) 709-2292
Assessment/Planning Wildlife Ecologist	T.J. Fontaine	jospeh.fontaine@usda.gov	(406) 802-0617
Interagency Grizzly Bear Coordinator	Scott Jackson	scott.jackson@usda.gov	(406) 329-3664
Regional Botanist	Amanda Hendrix	amanda.hendrix@usda.gov	(651) 447-3016
Regional Vegetation Ecologist	Mary Manning	mary.manning@usda.gov	(406) 329-3304
Invasive Species Program Manager	Michelle Cox	michelle.cox2@usda.gov	(406) 329-3669
Regional Hydrologist	Andy Efta	james.efta@usda.gov	(406) 329-3447

Tribal Nations



[Assiniboine & Gros Ventre Tribes – Fort Belknap Reservation](#)
[Assiniboine & Sioux Tribes – Fort Peck Reservation](#)
[Blackfeet Tribe - Blackfeet Reservation](#)
[Chippewa Creek Tribe - Rocky Boy's Reservation](#)
[Crow Tribe – Crow Reservation](#)
[Little Shell Chippewa Tribe](#)
[Northern Cheyenne Tribe – Northern Cheyenne Reservation](#)
[Salish & Kootenai Tribes - Flathead Reservation](#)

Natural Heritage Programs and Conservation Data Centers in Surrounding States and Provinces

[Alberta Conservation Information Management System](#)
[British Columbia Conservation Data Centre](#)
[Idaho Natural Heritage Program](#)
[North Dakota Natural Heritage Program](#)
[Saskatchewan Conservation Data Centre](#)
[South Dakota Natural Heritage Program](#)
[Wyoming Natural Diversity Database](#)

Invasive Species Management Contacts and Information

General

[Montana Invasive Species Council \(MISC\)](#)
[Central and Eastern Montana Invasive Species Team \(CEMIST\)](#)
[Montana State University Integrated Pest Management Extension](#)

Aquatic Invasive Species

[Montana Fish, Wildlife, and Parks Aquatic Invasive Species staff](#)
[Montana Department of Natural Resources and Conservation's Aquatic Invasive Species Grant Program](#)
[Western Montana Conservation Commission](#)

Noxious Weeds

[Montana Weed Control Association Contacts Webpage](#)
[Montana Biological Weed Control Coordination Project](#)
[Montana Department of Agriculture - Noxious Weeds](#)
[Montana Weed Control Association](#)
[Montana Fish, Wildlife, and Parks - Noxious Weeds](#)
[Integrated Noxious Weed Management after Wildfires](#)
[Fire Management and Invasive Plants](#)

Introduction to Native Species

Within the report area you have requested, separate summaries are provided for: (1) Species Occurrences (SO) for plant and animal Species of Concern, Special Status Species (SSS), Important Animal Habitat (IAH) and some Potential Plant Species of Concern; (2) other observed non-Species of Concern filtered or requested as “Additional Species” or Species of Concern without suitable documentation to create Species Occurrence polygons; and (3) other non-documented Species of Concern or additionally filtered or requested that are potentially present based on their range, predicted suitable habitat model output, or presence of associated habitats. Each of these summaries provides the following information when present for a species: (1) the number of [Species Occurrences](#) and associated delineation criteria for construction of these polygons that have long been used for considerations of documented Species of Concern in environmental reviews; (2) the number of observations of each species; (3) the geographic range polygons for each species that the report area overlaps; (4) predicted habitat suitability classes that are present if a predicted suitable habitat model has been created; (5) the percent of the report area that is mapped as commonly associated or occasionally associated habitat as listed for each species in the [Montana Field Guide](#); and (6) a variety of conservation status ranks and links to species accounts in the [Montana Field Guide](#). Details on each of these information categories are included under relevant section headers below or are defined on our [Species Status Codes](#) page. In presenting this information, the Montana Natural Heritage Program (MTNHP) is working towards assisting the user with rapidly determining what species have been documented and what species are potentially present in the report area. We remind users that this information is likely incomplete as surveys to document native and introduced species are lacking in many areas of the state, the MTNHP’s staff and resources are restricted by budgets, and information is constantly being added and updated in our databases. **Thus, field verification by professional biologists of the absence or presence of species and biological communities will always be an important obligation of users of our data.**

If you are aware of observation datasets that the MTNHP is missing, please report them to the Program Botanist apipp@mt.gov or Senior Zoologist dbachen@mt.gov. If you have animal or plant observations that you would like to contribute, you can also submit them via Excel spreadsheets, geodatabases, iNaturalist, or a Survey123 form. Various methods of data submission are reviewed in this playlist of videos: <https://www.youtube.com/playlist?list=PLRaydtZpHu2qOHPoSPq9cnM9uXGmEXACx>

Observations

An observation is a visual, audio, specimen, genetic, or other documentation of a particular species at a location with an assigned spatial precision on a given date. Most observations are submitted in digital format from standardized databases associated with research or monitoring efforts and spreadsheets of incidental observations submitted by professional biologists and amateur naturalists. At a minimum, accepted observation records must contain a credible species identification (i.e. appropriate geographic range, date, and habitat and, if species are difficult to identify, a photograph and/or notes on key identifying features), a date or date range, observer name, locational information (ideally with latitude and longitude in decimal degrees), notes on numbers observed, and species behavior or habitat use (e.g., is the observation likely associated with reproduction). Bird records are also required to have information associated with date-appropriate breeding or overwintering status of the species observed. MTNHP reviews observation records to ensure that they are mapped correctly, occur within date ranges when the species is known to be present or detectable, occur within the known seasonal geographic range of the species, and occur in appropriate habitats. MTNHP also assigns each record a locational uncertainty value in meters to indicate the spatial precision associated with the record’s mapped coordinates. Only records with locational uncertainty values of 5,000 meters or less are included in environmental summary reports and number summaries are only provided for records with locational uncertainty values of 1,000 meters or less.

Species Occurrences

The MTNHP evaluates plant and animal observation records for Species of Concern, Potential Species of Concern, and Special Status Species to determine whether they are worthy of inclusion in the [Species Occurrence](#) (SO) (also known as an “element occurrence” or EO) layer for use in environmental reviews; observations not worthy of inclusion in this layer include long distance dispersal events, migrants observed away from key migratory stopover habitats, and winter observations. An SO is a polygon depicting what is known about a species occupancy from direct observation with a defined level of locational uncertainty and any inference that can be made about adjacent habitat use from the latest peer-reviewed science. If an observation can be associated with a map feature that can be tracked (e.g., a wetland boundary) then this polygon feature is used to represent the SO. Areas that can be inferred as probable occupied habitat based on direct observation of a species location and what is known about the foraging area or home range size of the species may be incorporated into the SO. Species Occurrences generally belong to one of the following categories:

Botanical Species

A documented location of a specimen collection or observed plant, lichen, or fungi population. In some instances, adjacent, spatially separated clusters are considered subpopulations and are grouped as one occurrence (e.g., the subpopulations occur in ecologically similar habitats, and their spatial proximity likely allows them to interbreed). Tabular information for multiple observations at the same SO location is generally linked to a single polygon.

Animal Species

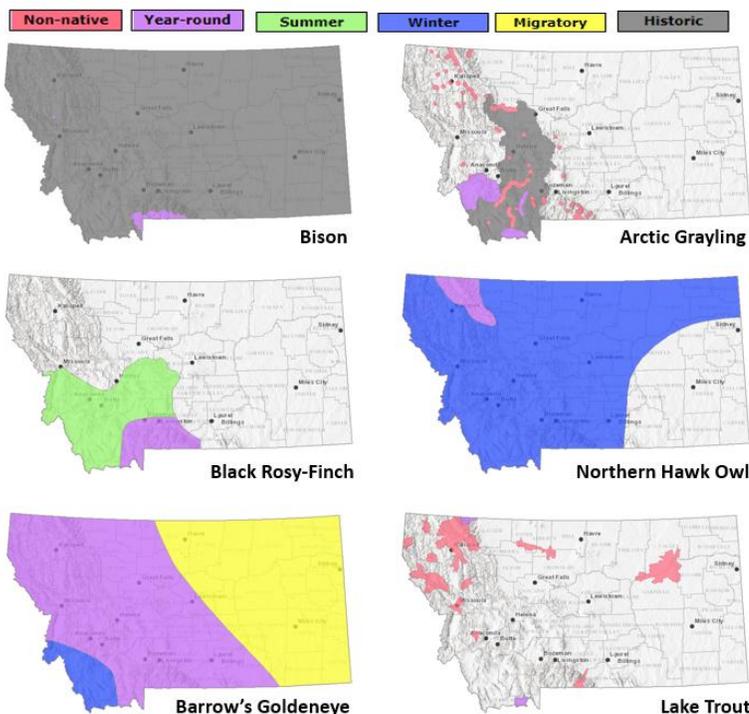
The location of a verified observation or specimen record typically known or assumed to represent a breeding population or a portion of a breeding population. Animal SO's are generally: (1) buffers of terrestrial point observations based on documented species' home range sizes; (2) buffers of stream segments to encompass occupied streams and immediate adjacent riparian habitats; (3) polygonal features encompassing known or likely breeding populations (e.g., a wetland for some amphibians or a forested portion of a mountain range for some wide-ranging carnivores); or (4) combinations of the above. Tabular information for multiple observations at the same SO location is generally linked to a single polygon. Species Occurrence polygons may encompass some unsuitable habitat in some instances in order to avoid heavy data processing associated with clipping out habitats that are readily assessed as unsuitable by the data user (e.g., a point buffer of a terrestrial species may overlap into a portion of a lake that is obviously inappropriate habitat for the species).

Other

Significant biological features not included in the above categories, such as Important Animal Habitats like bird rookeries and bat roosts, and peatlands or other wetland and riparian communities that support diverse plant and animal communities.

Geographic Range Polygons

Range polygons have been created for native vascular plants and vertebrate animal species with sufficient data and are being created for other taxa as staff time is available. Range polygons are refined over time with



assistance of additional survey and observation data and predicted habitat suitability models. Range polygons are classified as native year-round, summer, winter, migratory, historical, and non-native year-round (see examples to the left). Range polygons for native species and non-native aquatic species typically bound the extent of known or likely occupied habitats for non-migratory and relatively sedentary species and the regular extent of known or likely occupied habitats for migratory and long-distance dispersing species; polygons may include unsuitable intervening habitats. Unless predicted invasion risk models indicate unsuitable habitat for large portions of Montana, range polygons for non-native vascular plant species are typically mapped as statewide to reflect their possible invasion across Montana; please see relative density maps for reported distributions of these

species. For most species, a single polygon can represent the year-round or seasonal range, but breeding ranges of some colonial nesting water birds and some non-native species are represented more patchily when supported by data. Some ranges are mapped more broadly than actual distributions to be visible on statewide maps (e.g., streams with fish are buffered for visibility)

Predicted Suitable Habitat Models

Predicted habitat suitability models have been created for plant and animal Species of Concern and are undergoing development for non-Species of Concern. For species for which models have been completed, the environmental summary report includes simple rule-based associations with streams for aquatic species and seasonal habitats for game species as well as mathematically complex Maximum Entropy models (Phillips et al. 2006, *Ecological Modelling* 190:231-259) constructed from a variety of statewide biotic and abiotic layers and presence only data for individual species for most terrestrial species. For the Maximum Entropy models, we reclassified 90 x 90-meter continuous model output into suitability classes (unsuitable, low, moderate, and optimal) then aggregated that into the one square mile hexagons used in the environmental summary report; this is the finest spatial scale we suggest using this information in management decisions and survey planning. Full model write ups for individual species that discuss model goals, inputs, outputs, and evaluation in much greater detail are posted on the MTNHP's [Predicted Suitable Habitat Models](#) webpage. Evaluations of predictive accuracy and specific limitations are included with the metadata for models of individual species.

Model outputs should not be used in place of on-the-ground surveys for species. Instead model outputs should be used in conjunction with habitat evaluations to determine the need for on-the-ground surveys for species. We suggest that the percentage of predicted optimal and moderate suitable habitat within the report area be used in conjunction with geographic range polygons and the percentage of commonly associated habitats to generate lists of potential species that may occupy broader landscapes for the purposes of landscape-level planning.

Other Habitat Information for Species

1. The excel spreadsheet accompanying this report contains a field labeled “Habitat” in all the species related worksheets that contains brief text describing the predominant habitat or habitats each species is dependent on. This field can be useful for quickly determining whether a species needs considerations in environmental permitting and planning. For example, if the report area includes a large area of forest and grassland habitat and the project is only affecting a small portion of the grassland habitat without any disturbance to the forest habitat, the Habitat field can be useful for removing the forest dependent species from further consideration.
2. Species accounts in the [Montana Field Guide](#) each contain a section on Ecological Communities Associated with this Species that lists and links to accounts for associated natural habitats.
3. Accounts for natural habitats in the Ecological Communities portion of the [Montana Field Guide](#) each contain a section on Species Associated with this Community that lists and links to accounts for associated species. This is divided between: (1) Species of Concern Associated with this Community; (2) Diagnostic, Dominant, or Codominant Plant Species for this Community; and (3) Other Native Species Commonly Associated with this Community.

Introduction to Land Cover

Land Use/Land Cover is one of 15 [Montana Spatial Data Infrastructure](#) framework layers considered vital for making statewide maps of Montana and understanding its geography. The layer records all Montana natural vegetation, land cover and land use, classified from satellite and aerial imagery, mapped at a scale of 1:100,000, and interpreted with supporting ground-level data. The baseline map is adapted from the Northwest ReGAP (NWGAP) project land cover classification, which used 30m resolution multi-spectral Landsat imagery acquired between 1999 and 2001. Vegetation classes were drawn from the Ecological System Classification developed by NatureServe (Comer et al. 2003). The land cover classes were developed by Anderson et al. (1976). The NWGAP effort encompasses 12 map zones. Montana overlaps seven of these zones. The two NWGAP teams responsible for the initial land cover mapping effort in Montana were Sanborn and NWGAP at the University of Idaho. Both Sanborn and NWGAP employed a similar modeling approach in which Classification and Regression Tree (CART) models were applied to Landsat ETM+ scenes. The Spatial Analysis Lab within the Montana Natural Heritage Program was responsible for developing a seamless Montana land cover map with a consistent statewide legend from these two separate products. Additionally, the Montana land cover layer incorporates several other land cover and land use products (e.g., MSDI Structures and Transportation themes and the Montana Department of Revenue Final Land Unit classification) and reclassifications based on plot-level data and the latest NAIP imagery to improve accuracy and enhance the usability of the theme. Updates are done as partner support and funding allow, or when other MSDI datasets can be incorporated. Recent updates include fire perimeters and agricultural land use (annually), energy developments such as wind, oil and gas installations (2014), roads, structures and other impervious surfaces (various years): and local updates/improvements to specific ecological systems (e.g., central Montana grassland and sagebrush ecosystems). Current and previous versions of the Land Use/Land Cover layer with full metadata are available for download from the Montana State Library's [GIS Data List](#). More information on the land cover layer is available at: https://msl.mt.gov/geoinfo/msdi/land_use_land_cover/

Within the report area you have requested, land cover is summarized by acres of Level 1, Level 2, and Level 3 Ecological Systems.

Literature Cited

- Anderson, J.R. E.E. Hardy, J.T. Roach, and R.E. Witmer. 1976. A land use and land cover classification system for use with remote sensor data. U.S. Geological Survey Professional Paper 964.
- Comer, P., D. Faber-Langendoen, R. Evans, S. Gawler, C. Josse, G. Kittel, S. Menard, M. Pyne, M. Reid, K. Schulz, K. Snow, and J. Teague. 2003. Ecological systems of the United States: A working classification of U.S. terrestrial systems. NatureServe, Arlington, VA.

Introduction to Wetland and Riparian

Within the report area you have requested, wetland and riparian mapping is summarized by acres of each classification present. Summaries are only provided for modern MTNHP wetland and riparian mapping and not for outdated (NWI Legacy) or incomplete (NWI Scalable) mapping efforts; [described here](#). MTNHP has made all three of these datasets and associated metadata available for separate download on the [Montana Wetland and Riparian Framework](#) web page.

Wetland and Riparian mapping is one of 15 [Montana Spatial Data Infrastructure](#) framework layers considered vital for making statewide maps of Montana and understanding its geography. The wetland and riparian framework layer consists of spatial data representing the extent, type, and approximate location of wetlands, riparian areas, and deep water habitats in Montana.

Wetland and riparian mapping is completed through photointerpretation of 1-m resolution color infrared aerial imagery acquired from 2005 or later. A coding convention using letters and numbers is assigned to each mapped wetland. These letters and numbers describe the broad landscape context of the wetland, its vegetation type, its water regime, and the kind of alterations that may have occurred. Ancillary data layers such as topographic maps, digital elevation models, soils data, and other aerial imagery sources are also used to improve mapping accuracy. Wetland mapping follows the federal Wetland Mapping Standard and classifies wetlands according to the Cowardin classification system of the National Wetlands Inventory (NWI) (Cowardin et al. 1979, FGDC Wetlands Subcommittee 2013). Federal, State, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands differently than the NWI. Similar coding, based on U.S. Fish and Wildlife Service conventions, is applied to riparian areas (U.S. Fish and Wildlife Service 2009). These are mapped areas where vegetation composition and growth is influenced by nearby water bodies, but where soils, plant communities, and hydrology do not display true wetland characteristics. **These data are intended for use at a scale of 1:12,000 or smaller. Mapped wetland and riparian areas do not represent precise boundaries and digital wetland data cannot substitute for an on-site determination of jurisdictional wetlands.**

See detailed overviews, with examples, of both wetland and riparian classification systems and associated codes as a [storymap](#) and companion [guide](#)

Literature Cited

- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Service, FWS/OBS-79/31. Washington, D.C. 103pp.
- Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, D.C.
- U.S. Fish and Wildlife Services. 2009. A system for mapping riparian areas in the western United States. Division of Habitat and Resource Conservation, Branch of Resource and Mapping Support, Arlington, Virginia.

Introduction to Land Management

Within the report area you have requested, land management information is summarized by acres of federal, state, and local government lands, tribal reservation boundaries, private conservation lands, and federal, state, local, and private conservation easements. Acreage for “Owned”, “Tribal”, or “Easement” categories represents non-overlapping areas that may be totaled. However, “Other Boundaries” represents managed areas such as National Forest boundaries containing private inholdings and other mixed ownership which may cause boundaries to overlap (e.g. a wilderness area within a forest). Therefore, acreages may not total in a straight-forward manner.

Because information on land stewardship is critical to effective land management, the Montana Natural Heritage Program (MTNHP) began compiling ownership and management data in 1997. The goal of the Montana Land Management Database is to manage a single, statewide digital data set that incorporates information from both public and private entities. The database assembles information on public lands, private conservation lands, and conservation easements held by state and federal agencies and land trusts and is updated on a regular basis. Since 2011, the Information Management group in the Montana State Library’s Digital Library Division has led the Montana Land Management Database in partnership with the MTNHP.

Public and private conservation land polygons are attributed with the name of the entity that owns it. The data are derived from the statewide [Montana Cadastral Parcel layer](#). Conservation easement data shows land parcels on which a public agency or qualified land trust has placed a conservation easement in cooperation with the landowner. The dataset contains no information about ownership or status of the mineral estate. For questions about the dataset or to report errors, please contact the Montana Natural Heritage Program at (406) 444-5363 or mtnhp@mt.gov. You can download various components of the Land Management Database and view associated metadata at the Montana State Library’s [GIS Data List](#) at the following links:

[Public Lands](#)

[Conservation Easements](#)

[Private Conservation Lands](#)

[Managed Areas](#)

Map features in the Montana Land Management Database or summaries provided in this report are not intended as a legal depiction of public or private surface land ownership boundaries and should not be used in place of a survey conducted by a licensed land surveyor. Similarly, map features do not imply public access to any lands. The Montana Natural Heritage Program makes no representations or warranties whatsoever with respect to the accuracy or completeness of this data and assumes no responsibility for the suitability of the data for a particular purpose. The Montana Natural Heritage Program will not be liable for any damages incurred as a result of errors displayed here. Consumers of this information should review or consult the primary data and information sources to ascertain the viability of the information for their purposes.

Introduction to Invasive and Pest Species

Within the report area you have requested, separate summaries are provided for: Aquatic Invasive Species, Noxious Weeds, Agricultural Pests, Forest Pests, and Biocontrol species that have been documented or potentially occur there based on the predicted suitability of habitat. Definitions for each of these invasive and pest species categories can be found on our [Species Status Codes](#) page.

Each of these summaries provides the following information when present for a species: (1) the number of observations of each species; (2) the geographic range polygons for each species, if developed, that the report area overlaps; (3) predicted relative habitat suitability classes that are present if a predicted suitable habitat model has been created; (4) the percent of the report area that is mapped as commonly associated or occasionally associated habitat as listed for each species in the [Montana Field Guide](#); and (5) links to species accounts in the [Montana Field Guide](#). Details on each of these information categories are included under relevant section headers under the Introduction to Native Species above or are defined on our [Species Status Codes](#) page. In presenting this information, the Montana Natural Heritage Program (MTNHP) is working towards assisting the user with rapidly determining what invasive and pest species have been documented and what species are potentially present in the report area. We remind users that this information is likely incomplete as surveys to document introduced species are lacking in many areas of the state, information on introduced species has only been tracked relatively recently, the MTNHP's staff and resources are limited, and information is constantly being added and updated in our databases. **Thus, field verification by professional biologists of the absence or presence of species will always be an important obligation of users of our data.**

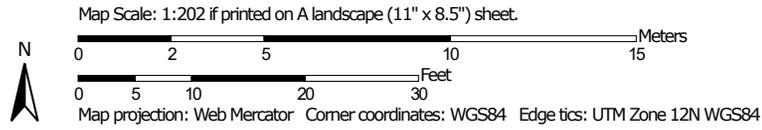
If you are aware of observation or survey datasets for invasive or pest species that the MTNHP is missing, please report them to the Program Coordinator bmaxell@mt.gov Program Botanist apipp@mt.gov or Senior Zoologist dbachen@mt.gov If you have animal or plant observations that you would like to contribute, you can also submit them via Excel spreadsheets, geodatabases, iNaturalist, or a Survey123 form. Various methods of data submission are reviewed in this playlist of videos:

<https://www.youtube.com/playlist?list=PLRaydtZpHu2qOHPoSPq9cnM9uXGmEXACx>

Additional Information Resources

[Effects of Recreation on Rocky Mountain Wildlife](#)
[Gilly – tool for simplifying stream, wetland, and floodplain permitting applications](#)
[Laws, Treaties, Regulations, and Agreements on Animals and Plants](#)
[MTNHP Staff Contact Information](#)
[Montana Field Guide](#)
[MTNHP Species of Concern Report - Animals and Plants](#)
[MTNHP Species Status Codes - Explanation](#)
[MTNHP Predicted Suitable Habitat Models](#) (for select Animals and Plants)
[MTNHP Request Information page](#)
[Montana Cadastral](#)
[Montana Climate Office](#)
[Montana Code Annotated](#)
[Montana Fisheries Information System](#)
[Montana Fish, Wildlife, and Parks Subdivision Recommendations](#)
[Montana Forestry Best Management Practices](#)
[Montana GIS Data Layers](#)
[Montana GIS Data Bundler](#)
[Montana Greater Sage-Grouse Project Submittal Site](#)
[Montana Guide to Streamside Management Zone Law and Rules](#)
[Montana Ground Water Information Center](#)
[Montana Index of Environmental Permits, 21st Edition \(2018\)](#)
[Montana Environmental Policy Act \(MEPA\)](#)
[Montana Environmental Policy Act Analysis Resource List](#)
[Montana Native Plant Conservation Strategy](#)
[Montana Spatial Data Infrastructure Layers](#)
[Montana State Historic Preservation Office Review and Compliance](#)
[Montana Stream Permitting: a guide for conservation district supervisors and others](#)
[Montana Water Information System](#)
[Montana Web Map Services](#)
[National Environmental Policy Act](#)
[Penalties for Misuse of Fish and Wildlife Location Data](#) (MCA 87-6-222)
[Rangeland Analysis Platform](#)
[U.S. Fish and Wildlife Service Information for Planning and Consultation](#) (Section 7 Consultation)
[Uses of Information from the Montana Natural Heritage Program](#)
[Web Soil Survey Tool](#)
[Xerces Society for Invertebrate Conservation Resources](#)

Soil Map—Sweet Grass County Area, Montana
(LKM - Proposed Transitory Zone)



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sweet Grass County Area, Montana
Survey Area Data: Version 26, Aug 31, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 4, 2022—Aug 29, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
107A	Nesda-McIlwaine loams, 0 to 2 percent slopes	0.1	100.0%
Totals for Area of Interest		0.1	100.0%

Draft Preliminary Determinations

- **Draft PD**
- **Draft PD cover letter**
- **Updated Draft PD**
- **Updated Draft PD cover letter**
- **Any correspondence with the applicant regarding the draft PDs**

Draft Preliminary Determinations

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

APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 43B 30171298 BY LKM PROPERTIES, LLC)))	DRAFT PRELIMINARY DETERMINATION TO GRANT IN MODIFIED FORM PERMIT
----------------------------------------------------------------------------------------------------	-------------	-----------------------------------------------------------------------------

On November 14, 2025, LKM Properties, LLC (Applicant) submitted Application for Beneficial Water Use Permit No. 43B 30171298 to the Billings Regional Office of the Department of Natural Resources and Conservation (Department or DNRC) for a flow rate of 50 GPM, and up to 3.1 AF volume of surface water for Lawn & Garden Irrigation. The Department published the receipt of the application on its website. A preapplication meeting was held between the Department and the Applicant on July 8, 2025, in which the Applicant designated that the technical analyses for this application would be completed by the Department. The Applicant returned the completed Form 600P-B on July 15, 2025. The Department delivered the Department-Completed Technical Analyses on September 5, 2025. The application was determined to be correct and complete as of December 8, 2025. An Environmental Assessment for this application was completed on January 28, 2026.

INFORMATION

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

Application as filed:

- Application for Beneficial Water Use Permit, Form 600
- Attachments:
 - Pump Information for a GX200 Honda Engine Pump model WP-2065HL
 - Pump Curve
 - Montana Sage Grouse Habitat Conservation Program letter dated July 11, 2025
- Maps:
 - Map of proposed project: place of use, proposed transitory point of diversion, and proposed pipeline conveyance system, overlaying aerial imagery from 2021, NAIP

- Department- completed technical analyses, dated September 5, 2025, based on information provided in the Preapplication Meeting Form

Information within the Department's Possession/Knowledge

- USGS Stream Gage No. 0619250; Yellowstone River at Livingston, MT, with a period of record from May 1, 1897, to October 31, 2024
- USGS Stream Gage No. 06214500; Yellowstone at Billings, MT, with a period of record from October 1, 1928, to February 28, 2025
- Surface Water Technical Analyses Report – Notice of Errata, dated February 2, 2026, sent with this Draft Preliminary Determination
- DNRC Water Right Information System (WRIS)
- National Hydrography Dataset (NHD)
- USGS StreamStats for Montana Chapter G
- USGS StreamStats web application at <https://streamstats.usgs.gov/ss/>.
- The Department also routinely considers the following information. The following information is not included in the administrative file for this application but is available online or upon request. Please contact the Billings Regional Office at 406-247-4415 to request copies of the following documents:
 - Department Technical Memorandum: Physical Availability of Surface Water with Gage Data; Between Gages: Interpolation Method
 - Department Permit Application Manual (February 2025)

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

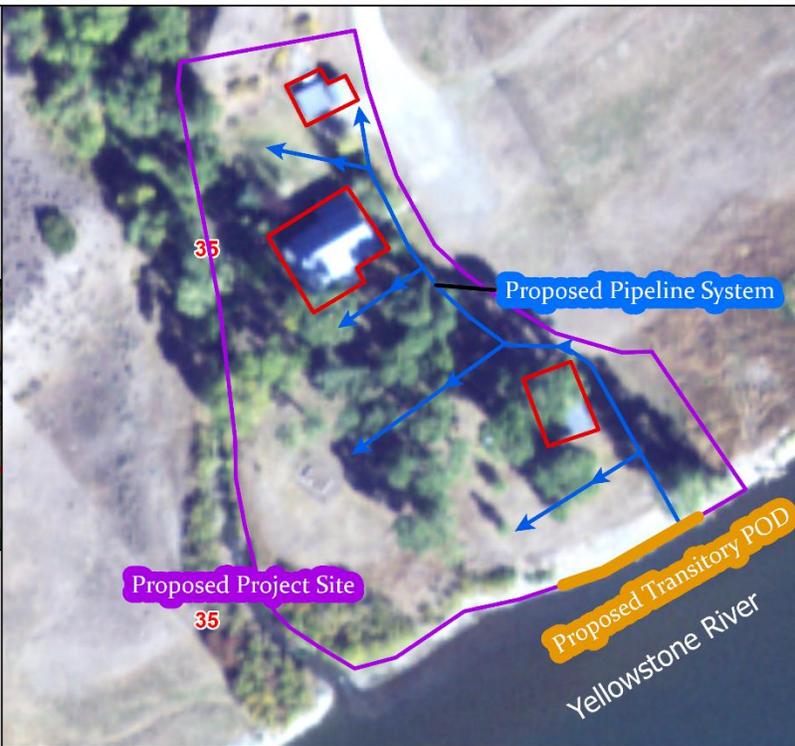
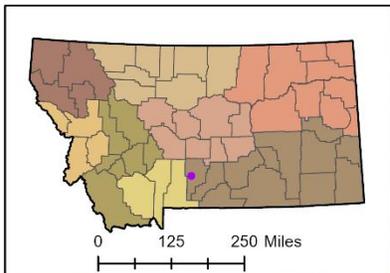
For the purposes of this document, Department or DNRC means the Department of Natural Resources & Conservation; AC means acres; AF means acre-feet; AF/YR means acre-feet per year; AOPI means Area of Potential Impact; CFS means cubic feet per second; FWP means Fish, Wildlife, and Parks; GPM means gallons per minute; F & W means Fish and Wildlife; and POD means Point of Diversion.

PROPOSED APPROPRIATION

FINDINGS OF FACT

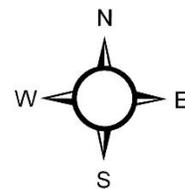
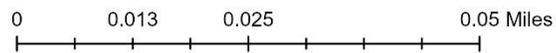
1. The Applicant proposes to divert water from the Yellowstone River, from April 15 to October 15, by means of a pump, from a transitory point of diversion, approximately 87 feet long, along the southern side of the Applicant's property boundary. The entire range of the proposed transitory point of diversion is located within the SWSWSE of Section 35, Township 1N, Range 13E, Sweet Grass County. The proposed use includes diverting at a flow rate of 50 GPM (0.11 CFS) and up to 3.1 AF of volume, for Lawn & Garden Irrigation from April 15 to October 15. The Applicant proposes to water 1.25 acres of lawn and garden. The place of use is located in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County. From the transitory point of diversion, the Applicant plans to convey water from the Yellowstone River using a pump to pipelines and hoses that will distribute the water onto the 1.25 acres.
2. This permit, if granted, will not be supplemental to any other water rights.

43B 30171298 - LKM - Proposed



Map Created: 8/28/2025
 Author: Cassey Strebeck,
 Water Resource Specialist

Elements depicted on this map are for illustrative purposes and have not been surveyed by the Department. MontanaBaseMap: Montana State Library
 MSDI PLSS:
 USGS National Hydrography Dataset (NHD); USGS TNM - National Hydrography Dataset. Data refreshed January, 2018.
https://nhd.usgs.gov/NHD_High_Resolution.html
 Hybrid Reference Layer: Esri Community Maps Contributors, Montana State University, Montana State Library, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS
 World Imagery: Maxar
 2021 Aerials.



Scale: 1:1,000

Figure 1. Proposed Place of Use and Conveyance for Application 43B 30171298

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

GENERAL CONCLUSIONS OF LAW

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

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

- (1) Pursuant to Article IX of the Montana constitution, the legislature declares that any use of water is a public use and that the waters within the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided in this chapter. . . .
- (3) It is the policy of this state and a purpose of this chapter to encourage the wise use of the state's water resources by making them available for appropriation consistent with this chapter and to provide for the wise utilization, development, and conservation of the waters of the state for the maximum benefit of its people with the least possible degradation of the natural aquatic ecosystems. In pursuit of this policy, the state encourages the development of facilities that store and conserve waters for beneficial use, for the maximization of the use of those waters in Montana . . .

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

- ... the department shall issue a permit if the Applicant proves by a preponderance of evidence that the following criteria are met:
 - (a) (i) there is water physically available at the proposed point of diversion in the amount that the Applicant seeks to appropriate; and
 - (ii) water can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal

availability is determined using an analysis involving the following factors:

(A) identification of physical water availability;

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

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

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

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

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

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

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

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

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

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

To meet the preponderance of evidence standard, “the Applicant, in addition to other evidence demonstrating that the criteria of subsection (1) have been met, shall submit hydrologic or other evidence, including but not limited to water supply data, field reports, and other information developed by the Applicant, the department, the U.S. geological survey, or the U.S. natural resources conservation service and other specific field studies.” Section 85-2-311(5), MCA (emphasis added). The determination of whether an application has satisfied the § 85-2-311, MCA criteria is committed to the discretion of the Department. *Bostwick Properties, Inc. v.*

Montana Dept. of Natural Resources and Conservation, 2009 MT 181, ¶ 21. The Department is
Draft Preliminary Determination to Grant in Modified Form
Application for Beneficial Water Use Permit No. 43B 30171298

required grant a permit only if the § 85-2-311, MCA, criteria are proven by the Applicant by a preponderance of the evidence. *Id.* A preponderance of evidence is “more probably than not.” *Hohenlohe v. DNRC*, 2010 MT 203, ¶¶ 33, 35, 357 Mont. 438, 240 P.3d 628.

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

(1) (a) The department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used without waste for the purpose stated in the application. The department may require modification of plans and specifications for the appropriation or related diversion or construction. The department may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria listed in 85-2-311 and subject to subsection (1)(b), and it may issue temporary or seasonal permits. A permit must be issued subject to existing rights and any final determination of those rights made under this chapter.

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

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

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

See also, Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order* (2011). The Supreme Court likewise explained that:

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

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

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

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

PHYSICAL AVAILABILITY

FINDINGS OF FACT

9. The Applicant proposes to divert water from the Yellowstone River using a pump from a transitory point of diversion, approximately 87 feet long, along the southern side of the Applicant's property boundary, located in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County at a flow rate of 50 GPM (0.11 CFS; $50 \text{ GPM} \times 1 \text{ CFS} / 448.8 \text{ GPM} = 0.11 \text{ CFS}$), up to 3.1 AF of volume, to be conveyed by pipelines for the irrigation of 1.25 acres of lawn and garden (FOF 1).

10. The Department determined the physical availability of water at the upstream point of the proposed transitory point of diversion on the Yellowstone River using stream gages, pursuant to ARM 36.12.1702(1)(a). The upstream and downstream points of the proposed transitory point of diversion are located between two gages. The Department used USGS Gage No. 06192500 Yellowstone River at Livingston, MT, the nearest upstream gage, approximately 31 river miles upstream from this project, with a period of record from May 1, 1897 to October 31, 2024; and USGS Gage No. 06214500 Yellowstone River at Billings, MT, the nearest downstream gage, approximately 90 miles downstream, with a period of record from October 1, 1928 to February 28, 2025. According to the DNRC Technical Memorandum: Physical Availability of Surface

Water with Gage Data dated November 1, 2019, when the proposed POD is located between

two stream gages on the same stream and both gages exhibit similar streamflow characteristics, then the physical availability at the proposed PODs will be determined using the interpolation method. These two gages meet the stream gaging requirements found in ARM 36.12.1702 and are acceptable for determining the physical and legal availability of surface water in this application.

11. The Department determined physical availability using a logarithmic interpolation method. Logarithmic interpolation is used when the proposed POD is located between two stream gages. This method estimates a streamflow characteristic at an intermediate location based on the basin drainage area at the gaged sites and the ungaged site (upstream point of the proposed transitory PODs). Several assumptions must be met in order for this method to be appropriate: 1) the ratio of the contributing drainage area to the ungaged site must be within 0.5 to 1.5 of the drainage areas for the stream gages, 2) periods of record for both gages must be similar, and 3) streamflow conditions must be similar at both stream gage locations. The ratio of the contributing drainage area at the upstream point of the proposed PODs is 1.4 to the Yellowstone River near Livingston and 0.4 to the Yellowstone River at Billings gages. The estimation technique was reviewed by the DNRC Water Sciences Bureau and was determined to be the best estimation technique available, even though the drainage basin area of the proposed POD is outside the acceptable range for the Billings gage. Both gages have a similar period of record. Both gages exhibit similar streamflow characteristics. As a result, the logarithmic interpolation is suitable for estimating physical water availability at the POD.

12. The following equation describes the logarithmic interpolation method, described further in DNRC (2019).

$$\log Q_u = \log Q_{g1} + \left(\frac{\log Q_{g2} - \log Q_{g1}}{\log A_{g2} - \log A_{g1}} \right) (\log A_u - \log A_{g1})$$

Where: Q = streamflow characteristic; A = drainage area; Subscripts g1 and g2 are gaged sites 1 and 2, respectively; Subscript u = ungaged site (proposed point of diversion)

13. Basin drainage area at the upstream point of the proposed transitory PODs was delineated using USGS StreamStats. Drainage area at the gage locations were taken from the USGS gaging station information web page.

14. The median of the mean monthly flow was calculated using the period of record for each gage. The median of the mean monthly flow was then used to estimate the mean monthly volume by multiplying the median of the mean monthly flow by 1.98 (the number of AF per day

per CFS) and the number of days in the respective month. Table 1 shows the median of the mean monthly flow and volume at the Livingston and Billings gages, as well as the interpolated flow and volume at the ungaged location (upstream point of the proposed transitory PODs). The interpolated data represent the estimated flow rate and volume physically available at the upstream location of the proposed transitory PODs on the Yellowstone River in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County.

Table 1: Interpolated flow rate & volume at proposed PODs using USGS gages at Livingston & Billings, MT

Month	USGS gage at Livingston 06192500 – gage 1, Upstream		USGS gage at Billings 06214500 – gage 2, Downstream		Interpolation at Proposed PODs	
	Median of the Mean Monthly Flow at gage 06192500 (CFS)	Median of the Mean Monthly Volume at gage 06192500 (AF)	Median of the Mean Monthly Flow at gage 06214500 (CFS)	Median of the Mean Monthly Volume at gage 06214500 (AF)	Interpolated Monthly Flow at the Ungaged Site (Proposed POD) (CFS)	Interpolated Monthly Volume at the Ungaged Site (Proposed POD) (AF)
April	1,903	113,038.20	3,971.50*	235,907.10*	2,320.63	137,845.14
May	7,207	442,365.66	12,885	790,881.30	8,429.51	517,403.20
June	13,315	790,911.00	24,270	1,441,638	15,655.03	929,908.60
July	7,319	449,240.22	12,405	761,418.9	8,438.15	517,933.37
August	3,332	204,518.16	4,571	280,567.98	3,628.55	222,720.55
September	2,270.5*	134,867.70*	3,717.50*	220,819.50*	2,593.39	154,047.22
October	1,916	117,604.08	3,911	240,057.18	2,322.56	142,558.59

*Differs from the September 5, 2025 Technical Analysis; see February 2, 2026 Surface Water Permit Technical Analyses Report – Notice of Errata

15. Typographical errors were discovered in the Department-completed Technical Analyses Report dated September 5, 2025. These typographical errors have no impact on the criteria findings for the Physical or Legal Availability analyses. The corrections are reflected in Table 1 of this Preliminary Determination and in the Surface Water Permit Technical Analyses Report – Notice of Errata dated February 2, 2026.

16. The Department finds that water is physically available in excess of the proposed flow rate and volume at the proposed PODs during the proposed period of diversion, April 15 to October 15.

LEGAL AVAILABILITY

FINDINGS OF FACT

17. The Department determined the legal availability of water in an area of potential impact (AOPI) that spans a reach of the Yellowstone River extending from the upstream point of the proposed transitory PODs located in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County, downstream, approximately 3.5 river miles, to the confluence of Little Timber Creek and

the Yellowstone River located in the SWSWNE of Sec. 19, T1N, R14E, Sweet Grass County. This is an acceptable area of potential impact as the reach adds 55.8 square miles of drainage area, and Little Timber Creek is a significant hydrologic boundary.

18. There are 12 active water rights on the Yellowstone River within the AOPI: 11 Statements of Claim and one Conservation District Record. Of the 11 Statements of Claim, five are for irrigation, four are for livestock, and two are for fish and wildlife; the Conservation District Record is for irrigation. Table 2.

Table 2: Water Rights located in the AOPI

WR Number	WR Type	WR Owner	Purpose	Period of Diversion	CFS	AF	AU	Acres
43B 194349 00	Statement of Claim	MT Dept Of FWP	F & W	1-Nov to 15-Apr	1,200	395,014.0	-	-
43B 194350 00	Statement of Claim	MT Dept Of FWP	F & W	16-Apr to 31-Oct	2,000	789,234.0	-	-
43B 102620 00	Statement of Claim	Laubach, Alice Trust	Irrigation	1-Apr to 15-Oct	3.120	866.18*	-	322
43B 102623 00	Statement of Claim	Laubach, Alice Trust	Irrigation	1-Apr to 15-Oct	6.500	866.18*	-	322
43B 106352 00	Statement of Claim	Windbreak Ranch LLC	Irrigation	1-Apr to 15-Oct	3.380	941.5*	-	350
43B 106353 00	Statement of Claim	Windbreak Ranch LLC	Irrigation	1-Apr to 15-Oct	6.500	941.5*	-	350
43B 181151 00	Statement of Claim	Theorem River LLC	Irrigation	1-Jun to 1-Jul	15.92	1,129.8*	-	420
43B 102619 00	Statement of Claim	Laubach, Alice Trust	Stock	1-Jan to 31-Dec	0.0116*	8.415*	247.5	-
43B 106349 00	Statement of Claim	Windbreak Ranch LLC	Stock	1-Jan to 1-Nov	0.0097*	7.032*	247.5	-
43B 30137243	Statement of Claim	Theorem River LLC	Stock	1-Jan to 31-Dec	0.0341*	24.65*	725	-
43B 33999 00	Statement of Claim	Warren N Nunn	Stock	1-Jan to 31-Dec	0.0292*	21.165*	622.5	-
43-B 9948 00	Water Reservation	Sweet Grass County Conservation District	Irrigation	1-Apr to 15-Oct	363.40	46,245.0	-	15,313

*These values were calculated by DNRC staff using Department standards, per ARM 36.12.115.

19. The Department considers the entire Conservation District (CD) Reservation when a Conservation District Record is within an AOPI. The volume assigned to CD Reservation 43B 9948-00 accounts for the volume of all Conservation District Records associated with the CD Reservation and all unperfected volume, including Conservation District Record 43B 30105980. To not double-count the flow rate and volume of Conservation District Record 43B 30105980, owned by Sweet Grass CD and George Norsworthy, it was omitted from the AOPI, and the full reservation of Sweet Grass CD Reservation 43D 9948-00 was applied, utilizing the full flow rate of 363.40 CFS and the full allotted volume of 46,245 AF.

20. The flow rate and volume of all other water rights were taken from the face value on their respective abstracts. Water rights without a flow rate and/or volume were quantified based on their purpose and Department standard practices. The four (4) stock direct from source claims within the AOPI were quantified using the adjudication standard of 30 GPD per AU (0.34 AF/YR), with the flow rate in GPM back-calculated, and then converted to CFS, followed by 35 GPM (0.078 CFS) added to the final total flow rate. The five (5) irrigation claims had flow rates, were located in climatic area 2, and had their volume quantified based on 2.69 AF/AC, which is the lower end of the higher range at 60% efficient flood irrigation (ARM 36.12.115).

21. The flow rate of existing legal demands is calculated by combining the flow rate of all water rights within the area of potential impact, for each month of the proposed period of diversion.

22. The volume of existing legal demands is calculated by combining the volume of all water rights within the area of potential impact, for each month of the proposed period of diversion. To find the volume for a specific month of a water right, the volume is divided by the number of days in the period of diversion, giving the volume per day, then multiplying the volume per day by the number of days in the respective month.

23. Due to varying periods of diversion for Statement of Claim 43B 194349-00 (1,200 CFS, April 1 – 15) and Statement of Claim 43B 194350-00 (2,000 CFS, April 16 – 30), owned by Montana Department of Fish, Wildlife and Parks, the legal demand for April was calculated for April 1 – 15 and April 16 – 30. For April 1 – April 15, all water rights within this range were quantified based on the flow rate and the number of days (15), with 1,200 CFS for Statement of Claim 43B 194349-00, and no quantification for Statement of Claim 43B 194350-00. For April 16 – April 30, all water rights within this range were quantified based on the flow rate and the number of days (15), with 2,000 CFS for Statement of Claim 43B 194350-00 and no quantification for Statement of Claim 43B 194349-00.

24. Due to the periods of diversion ending on October 15th, for Statements of Claim 43B 102620-00 and 43B 102623-00, owned by the Laubach, Alice Trust; and Statements of Claim 43B 106352-00 and 43B 106353-00, owned by the Windbreak Ranch LLC, the legal demand for the month of October was assessed by October 1 – 15 and October 16 – 31. For October 1 – 15, all water rights within this range were quantified based on the flow rate and the number of days (15). For October 16 – 31, all water rights within this range were quantified based on the flow rate and the number of days (16).

25. The comparison between the physically and legally available flow rate in the Yellowstone River at the proposed upstream point of the proposed transitory POD located in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County is shown in Table 3.

26. The comparison between the physically and legally available volume in the Yellowstone River at the proposed upstream point of the proposed transitory POD located in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County is shown in Table 4.

Table 3: Legal Availability Analysis of the Available Flow Rate at the Proposed Point of Diversion

Month	April 1-15	April 16-30	Total April	May	June	July	Aug	Sept	Total October	October 1-15	October 16-31
Physically Available Flow Rate (CFS)	2,320.63	2,320.63	2,320.63	8,429.51	15,655.03	8,438.15	3,628.55	2,593.39	2,322.56	2,322.56	2,322.56
Existing Legal Demands in AOPI (CFS)	1583.06 ⁺	2,383.06 ⁺	2,383.06 ⁺	2,383.06 ⁺	2,398.98 ⁺	2,383.06 ⁺	2,363.56 ⁺				
Legally Available Water (CFS)	737.56	-62.44	-62.44	6,046.45	13,256.04	6,055.08	1,245.49	210.33	-60.50	-60.50	-41.00

All values were calculated by DNRC staff using Department standards, per ARM 36.12.115. All values were rounded to the hundredths place after calculations/conversions. +Sweet Grass Conservation Record 43B 30105980 was excluded from the legal demands as an individual right, since it was accounted for in the Sweet Grass Water Reservation.

Table 4: Legal Availability Analysis of the Available Volume at the Proposed Point of Diversion

Month	April 1-15	April 16-30	Total April	May	June	July	Aug	Sept	Total October	October 1-15	October 16-31
Physically Available Volume (AF)	68,922.57	68,922.57	137,845.14	517,403.20	929,908.60	517,933.37	222,720.55	154,047.22	142,558.59	68,979.96	73,578.63
Existing Legal Demands in AOPI (AF)	39,211.97 ⁺	63,007.94 ⁺	102,219.91 ⁺	130,216.40 ⁺	127,109.23 ⁺	130,216.40 ⁺	130,216.40 ⁺	126,015.87 ⁺	129,924.25 ⁺	63,007.94 ⁺	66,916.32 ⁺
Legally Available Water (AF)	29,710.60	5,914.63	35,625.23	387,186.80	802,799.37	387,716.97	92,504.14	28,031.34	12,634.33	5,972.02	6,662.31

All values were calculated by DNRC staff using Department standards, per ARM 36.12.115. All values were rounded to the hundredths place after calculations/conversions. +Sweet Grass Conservation Record 43B 30105980 was excluded from the legal demands as an individual right, since it was accounted for in the Sweet Grass Water Reservation.

27. The Department finds that the existing legal demand for the flow rate exceeds the physically available flow rate during April and October. Thus, the Department finds that the requested flow rate, 50 GPM (0.11 CFS), is not legally available to appropriate during the Applicant's proposed period of diversion, April 15 to October 15 (Table 3).

28. The Department finds that the requested volume of 3.1 AF is legally available at the proposed point of diversion from April 15 to October 15; however, the flow rate is not legally available during the originally proposed period of diversion.

29. Modifying the Applicant's proposed period of diversion, April 15 to October 15, to the legally available period of diversion and use of May 1 to September 30, the Department finds that the legal availability criterion for this application is met.

ADVERSE EFFECT

FINDINGS OF FACT

30. The Applicant's plan to prevent adverse effect is to shut down the pump and cease diversion, if a valid call is made by a senior water user.

31. The comparison of the physically available flow rate to the existing legal demands demonstrated that no flow rate would be legally available to the Applicant during the months of April or October, as shown in Table 3 (FOF 27). Appropriating during the months of April and/or October may cause an adverse effect to senior water users. A list of the water rights within the AOPI is in Table 2.

32. The Department proposes to reduce the period of diversion and use to May 1 to September 30 (FOF 29).

33. The Department finds that the proposed flow rate of 50 GPM and up to 3.1 AF of volume for Lawn & Garden Irrigation will not have adverse effects on existing water users, during the modified period of diversion and use, May 1 to September 30.

ADEQUATE MEANS OF DIVERSION

FINDINGS OF FACT

34. The Applicant proposes to use a transitory point of diversion, approximately 87 feet long, along the southern side of the Applicant's property boundary located in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass.

35. The Applicant proposes to pump water from the Yellowstone River using a Honda WP-2065HL, with a 6.5 HP engine, and a capacity of up to 158 GPM. The flow rate can be manually

controlled and lowered to the requested flow rate of 50 GPM. The water will be conveyed through a 2.0" PVC mainline along the east side of the property that will have four (4) ¾-inch spigots. Hoses will be attached to the spigots that will decrease the flow to water the lawn and garden. This system will not endure any conveyance losses.

36. The Department finds that the proposed means of diversion and conveyance are capable of diverting and conveying the proposed flow rate and volume.

BENEFICIAL USE

FINDINGS OF FACT

37. The Applicant proposes to divert up to 3.1 AF in volume, at a flow rate of 50 GPM, to water 1.25 acres of lawn and garden. Lawn & Garden Irrigation is recognized as a beneficial use under the Montana Water Use Act §_85-2-102(5), MCA.

38. The flow rate is based on the size of the pump, and the volume requested is calculated using Department standard for Lawn & Garden Irrigation of 2.5 acre-feet per acre on 1.25 acres (2.5 AF/acre x 1.25 acres = 3.1 AF), found in ARM 36.12.115.

39. The Applicant requests a period of diversion and a period of use from April 15 to October 15, which is the standard period of diversion and use for climatic area 3, where the place of use is located (ARM 36.12.112). However, the requested flow rate is not legally available in April or in October (FOF 27-29). The Department proposes reducing the period of diversion and period of use to May 1 through September 30, when the flow rate is legally available. This modification is within the standard period of diversion for Lawn & Garden Irrigation.

40. The Department finds the proposed water use is beneficial, and that the requested flow rate of 50 GPM and up to 3.1 AF in volume, during the modified period of diversion, are reasonably justified per ARM 36.12.1801(3).

POSSESSORY INTEREST

FINDINGS OF FACT

41. The Applicant signed the application form affirming that the Applicant has possessory interest or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use.

CONCLUSIONS OF LAW

PHYSICAL AVAILABILITY

42. Pursuant to § 85-2-311(1)(a)(i), MCA, an Applicant must prove by a preponderance of the evidence that “there is water physically available at the proposed point of diversion in the amount that the Applicant seeks to appropriate.”
43. It is the Applicant’s burden to produce the required evidence. *In the Matter of Application for Beneficial Water Use Permit No. 27665-411 by Anson* (DNRC Final Order 1987) (Applicant produced no flow measurements or any other information to show the availability of water; permit denied); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).
44. An Applicant must prove that at least in some years there is water physically available at the point of diversion in the amount the Applicant seeks to appropriate. *In the Matter of Application for Beneficial Water Use Permit No. 72662s76G by John Fee and Don Carlson* (DNRC Final Order 1990); *In the Matter of Application for Beneficial Water Use Permit No. 85184s76F by Wills Cattle Co. and Ed McLean* (DNRC Final Order 1994).
45. The Applicant has proven that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate. Section 85-2-311(1)(a)(i), MCA. (FOF 9-16)

LEGAL AVAILABILITY

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

- (ii) water can reasonably be considered legally available during the period in which the Applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:
 - (A) identification of physical water availability;
 - (B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and
 - (C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

E.g., ARM 36.12.101 and 36.12.120; *Montana Power Co.*, 211 Mont. 91, 685 P.2d 336 (Permit granted to include only early irrigation season because no water legally available in late irrigation season); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC Final Order 1992).

47. It is the Applicant's burden to present evidence to prove water can be reasonably considered legally available. *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (the legislature set out the criteria (§ 85-2-311, MCA) and placed the burden of proof squarely on the Applicant. The Supreme Court has instructed that those burdens are exacting.); see also *Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston* (1991), 249 Mont. 425, 816 P.2d 1054 (burden of proof on Applicant in a change proceeding to prove required criteria); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005) (it is the Applicant's burden to produce the required evidence.); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions, LLC* (DNRC Final Order 2007) (permit denied for failure to prove legal availability); see also ARM 36.12.1705.

48. A flow of water on a given date does not show that water is legally available without showing that all prior appropriators were diverting all claimed water at that moment. *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pgs. 5-6. A flow of water past a point on a particular date or dates does not demonstrate that water is legally available. *Id.*

49. Applicant has proven by a preponderance of the evidence that water can reasonably be considered legally available during the period from May 1 to September 30, in the amount requested, based on the records of the Department and other evidence provided to the Department. Section 85-2-311(1)(a)(ii), MCA. (FOF 17-29)

ADVERSE EFFECT

50. Pursuant to § 85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Analysis of adverse effect must be determined based on a consideration of an Applicant's plan for the exercise of the permit that demonstrates that the Applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied. See *Montana Power Co.*, 211 Mont. 91, 685 P.2d 336 (1984) (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users); *Bostwick Properties, Inc.*, ¶ 21.

51. An Applicant must analyze the full area of potential impact under the § 85-2-311, MCA criteria. *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006). While § 85-2-361, MCA, limits the boundaries

expressly required for compliance with the hydrogeologic assessment requirement, an Applicant is required to analyze the full area of potential impact for adverse effect in addition to the requirement of a hydrogeologic assessment. *Id.* ARM 36.12.120(5).

52. Applicant must prove that no prior appropriator will be adversely affected, not just the objectors. *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, 4 (2011).

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

54. It is the Applicant’s burden to produce the required evidence. *E.g.*, *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, 7 (2011) (legislature has placed the burden of proof squarely on the Applicant); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005). The Department is required to grant a permit only if the § 85-2-311, MCA, criteria are proven by the Applicant by a preponderance of the evidence. *Bostwick Properties, Inc.*, ¶ 21.

55. Section 85-2-311 (1)(b) of the Water Use Act does not contemplate a de minimis level of adverse effect on prior appropriators. *Wesmont Developers v. DNRC*, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, 8 (2011).

56. The Applicant has proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Section 85-2-311(1)(b), MCA. (FOF 30-33)

ADEQUATE DIVERSION

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

58. The adequate means of diversion statutory test merely codifies and encapsulates the case law notion of appropriation to the effect that the means of diversion must be reasonably effective, i.e., must not result in a waste of the resource. *In the Matter of Application for Beneficial Water Use Permit No. 33983s41Q by Hoyt* (DNRC Final Order 1981); § 85-2-312(1)(a), MCA.

59. Collection of snowmelt and rain in lined ponds considered adequate means of diversion. *In the Matter of Application for Beneficial Water Use Permit No. 69141-76G by Silver Eagle Mining* (DNRC Final Order 1989).

60. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. Section 85-2-311(1)(c), MCA. (FOF 34-36)

BENEFICIAL USE

61. Under § 85-2-311(1)(d), MCA, an Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use.

62. An appropriator may appropriate water only for a beneficial use. See also, § 85-2-301 MCA. It is a fundamental premise of Montana water law that beneficial use is the basis, measure, and limit of the use. *E.g.*, *McDonald; Toohy v. Campbell* (1900), 24 Mont. 13, 60 P. 396. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. *E.g.*, *Bitterroot River Protective Association v. Siebel, Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court, Lewis and Clark County (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; *In The Matter Of Application For Beneficial Water Use Permit No. 43C 30007297 by Dee Deaterly* (DNRC Final Order), *affirmed other grounds, Dee Deaterly v. DNRC*, Cause No. 2007-186, Montana First Judicial District, *Order Nunc Pro Tunc on Petition for Judicial Review* (2009); *Worden v. Alexander* (1939), 108 Mont. 208, 90 P.2d 160; *Allen v. Petrick* (1924), 69 Mont. 373, 222 P. 451; *In the Matter of Application for Beneficial Water Use Permit No. 41S-105823 by French* (DNRC Final Order 2000).

63. Amount of water to be diverted must be shown precisely. *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, 3 (2011) (citing *BRPA v. Siebel*, 2005 MT 60, and rejecting Applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet).

64. It is the Applicant's burden to produce the required evidence. *Bostwick Properties, Inc. v. DNRC*, 2013 MT 48, ¶ 22, 369 Mont. 150, 296 P.3d 1154 ("issuance of the water permit itself does not become a clear, legal duty until [the applicant] proves, by a preponderance of the evidence, that the required criteria have been satisfied"); *Sitz Ranch v. DNRC*, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7; *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005); *see also Royston; Ciotti*.

65. Applicant proposes to use water for Lawn & Garden Irrigation, which is a recognized beneficial use. Section 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence that Lawn & Garden Irrigation is a beneficial use and that 3.1 AF of diverted volume

and 50 GPM is the amount needed to sustain the beneficial use. Section 85-2-311(1)(d), MCA. (FOF 37-40)

POSSESSORY INTEREST

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

67. Pursuant to ARM 36.12.1802:

(1) An Applicant or a representative shall sign the application affidavit to affirm the following:

(a) the statements on the application and all information submitted with the application are true and correct and

(b) except in cases of an instream flow application, or where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use, the Applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

(2) If a representative of the Applicant signs the application form affidavit, the representative shall state the relationship of the representative to the Applicant on the form, such as president of the corporation, and provide documentation that establishes the authority of the representative to sign the application, such as a copy of a power of attorney.

(3) The department may require a copy of the written consent of the person having the possessory interest.

68. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. Section 85-2-311(1)(e), MCA. (FOF 41)

PRELIMINARY DETERMINATION

Subject to the terms, analysis, and conditions in this Order, the Department preliminarily determines that this Application for Beneficial Water Use Permit No. 43B 30171298 should be GRANTED IN MODIFIED FORM.

The Department determines the Applicant may divert water from the Yellowstone River, by means of a pump, from May 1 to September 30, at a flow rate of 50 GPM, up to 3.1 AF of volume, from a transitory point of diversion in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County, for Lawn & Garden Irrigation from May 1 to September 30. The Applicant may irrigate 1.25 acres of lawn and garden. The place of use is located in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County.

NOTICE

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

Dated this 2nd day of February 2026.

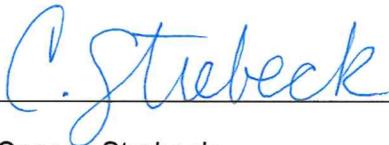


Heidi Christison
Billings Regional Manager
Department of Natural Resources and
Conservation
Water Resources Division
1371 Rimtop Drive
Billings, MT, 59105

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the DRAFT PRELIMINARY DETERMINATION TO GRANT IN MODIFIED FORM was served upon all parties listed below on this 2nd day of February, 2026, by first class United States mail.

LKM PROPERTIES, LLC
216 MOORE LANE
BILLINGS, MT, 59101
GARYBRINK@BRINKINCMT.COM



Cassey Strebeck
Water Resource Specialist
Billings Regional Office, Department of
Natural Resources and Conservation
Cassey.Strebeck@mt.gov
406-247-4422

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

GOVERNOR GREG GIANFORTE



DNRC DIRECTOR AMANDA KASTER

DNRC Water Resources
Billings Regional Office
1371 Rimtop Dr.
Billings, MT 59105-1978

February 2, 2026

LKM Properties, LLC
2016 Moore Lane
Billings, MT, 59101

Subject: Draft Preliminary Determination to Grant in Modified Form Beneficial Water Use Permit Application No. 43B 30171298

Dear Applicant,

The Department of Natural Resources and Conservation (Department or DNRC) has completed a preliminary review of your application. This review consists of an evaluation of the criteria for issuance of a PERMIT authorization found in §85-2-311, MCA. The Department has preliminarily determined that the criteria can be met only with modifications to the original application, and this application should be granted in modified form. A copy of the Draft Preliminary Determination to Grant in Modified Form is attached.

You have the opportunity to request an extension of time to submit additional information for the Department to consider in the decision, within 15 business days of the date of this letter. If no written request for an extension is received by February 24, 2026, the Department will prepare a notice of opportunity to provide public comment per §85-2-307(4), MCA.

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

Please let me know if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "C. Strebeck".

Cassey Strebeck
Water Resource Specialist
Billings Regional Office, Montana DNRC
Cassey.Strebeck@mt.gov
406-247-4422



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Processing Materials

- Work copies of applicant-submitted information
- Deficiency letter
- Deficiency response
- Correct & complete determination
- Any correspondence with the applicant after application receipt and prior to sending the Draft PD

Processing Materials

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

GOVERNOR GREG GIANFORTE



DNRC DIRECTOR AMANDA KASTER

12/8/2025

DNRC Water Resources
Billings Regional Office
1371 Rimtop Dr.
Billings, MT 59105-1978

LKM Properties LLC
2016 Moore Lane
Billings, MT, 59101

Subject: Correct and Complete Application for Beneficial Water Use Permit No. 43B 30171298

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.

Sincerely,

A handwritten signature in blue ink that reads "Cassey Strebeck". The signature is written in a cursive, flowing style.

Cassey Strebeck
Water Resource Specialist
Billings Regional Office, Montana DNRC
Cassey.Strebeck@mt.gov
406-247-4422



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Application Materials

- Application
- Any information submitted with Application including maps

Application Materials



APPLICATION FOR BENEFICIAL WATER USE PERMIT

§ 85-2-302, MCA

Form No. 600 (10/2025)

For Department Use Only

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.

INFORMATION

An application will be eligible for a filing fee reduction and expedited timelines if the applicant completes a preapplication meeting with the Department (ARM 36.12.1302(1)), which includes submitting any follow-up information identified by the Department (ARM 36.12.1302(3)(c)) and receiving either Department-completed technical analyses or Department review of applicant-submitted technical analyses (ARM 36.12.1302(4) and (5)). An application for the proposed project also must be submitted within 180 days of delivery of Department technical analyses or scientific credibility review and no element on the submitted application can be changed from the completed preapplication meeting form (ARM 36.12.1302(6)). If application is eligible for a filing fee reduction, \$500 paid for Form 600P-B will be credited toward filing fees shown above.

Application # 30171298 Basin 43B
Priority Date 11/14/25 Time 0957 AM/PM
Rec'd By LN
Fee Rec'd \$ 700.00 Check # 1142
Deposit Receipt # BLS 2608680
Payor LKM Properties LLC.
Refund \$ Date

Applicant Information: Add more as necessary.

Applicant Name LKM Properties LLC (487461)
Mailing Address 216 Moore Ln City Billings State MT Zip 59101
Phone Numbers: Home 406-259-7935 Work Cell
Email Address garybrink@brinkincmt.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: [X] Applicant [] Consultant [] Attorney [] Other
Contact/Representative Name
Mailing Address City State Zip
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 (ARM 36.12.122(2)). If a contact person is identified as a consultant, employee, or lessee, the individual filing the water right form or objection form will receive all correspondences, and a copy may be sent to the contact person (ARM 36.12.122(3)).



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

PREAPPLICATION AND TECHNICAL ANALYSES INFORMATION

- 1. Y N Do you elect for Department technical analyses to be used for criteria assessment?
- 2. Y N Did you have a preapplication meeting AND complete a Permit Preapplication Meeting Form Part A and Part B (Form 600P-A and 600P-B)?

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

- 2.a. S Submit the Technical Analyses Addendum (Form 600-TAA).
- 2.b. S NA Submit the technical analyses, if you elected in question 1 for Applicant technical analyses to be used for criteria assessment. Select "NA" if you elected for Departmental technical analyses.

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

- 2.c. Y N Has any element of the project described in this application changed from the mandatory elements of the project described in the completed form 600P? **If yes:**
 - 2.c.i. Please explain.

- 2.c.ii. S Submit the Technical Analyses Addendum (Form 600-TAA).

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

- 2.d.ii. S Submit the Technical Analyses Addendum (Form 600-TAA).

- 2.e. Y N Did you elect in Question 1 for Department technical analyses to be used for criteria assessment? **If no:**
 - 2.e.i. S Submit the technical analyses.



APPLICATION ADDENDA AND REVIEW

3. S NA If your application is for groundwater, not surface water, 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).
4. S NA If your application is for groundwater and one or more points of diversion are in a Basin Closure Area, then your project must have a Hydrogeologic Report that conforms with MCA 85-2-361 to comply with the requirements of § 85-2-360, MCA. A Hydrogeologic Report Addendum (Form 600-HRA) or Department Technical Analyses may be used to meet these requirements. Please mark the box below that best applies, then select "S" if submitting a Hydrogeologic Report or "NA" if one is not required. This question does not apply to surface water points of diversion in a Basin Closure Area.
- If you elected to conduct Technical Analyses, you must submit the Hydrogeologic Report Addendum (Form 600-HRA).
 - If you elected for DNRC to conduct Technical Analyses but did not have a preapplication meeting AND complete a Form 600P Permit Preapplication Meeting Form (or changes have occurred since the completed Form 600P), you must submit the Hydrogeologic Report Addendum (Form 600-HRA).
 - If you elected for DNRC to conduct Technical Analyses, had a preapplication meeting, completed a Form 600P, and the Technical Analyses remain unchanged since the preapplication meeting, you do not need to submit Form 600-HRA because the Department's Technical Analyses meet the report requirements of § 85-2-360 and § 85-2-361, MCA.
5. S NA If the project is for one or more groundwater points of diversion located in a Controlled Groundwater Area, then submit the Controlled Groundwater Area Addendum (Form 600-CGWA).
6. 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).
7. S NA If the project involves out-of-state water use, then submit the Out-of-State Use Addendum (Form 600/606-OSA).
8. S NA If you require mitigation water to meet the criteria of issuance, then submit a Mitigation Purpose Addendum (Form 600/606-MIT).
9. S NA If the proposed purposes include marketing or selling water, (not marketing for mitigation/aquifer recharge), then submit the Marketing Purpose Addendum (Form 600/606-WMA).
10. S NA If the project involves one or more places of storage, then submit a Permit Storage Addendum (Form 600-SA). This does not include reservoirs, pits, pit-dams, or ponds with a capacity less than 0.1 AF; water tanks; or cisterns (ARM 36.12.113(6)).
11. S NA If the project is in designated sage grouse habitat, then submit a review letter from the Montana Sage Grouse Habitat Conservation Program.
12. S NA If the project includes a point of diversion and/or place of use on State of Montana Trust Land, submit documentation of consent from the DNRC Trust Lands Management Division.
13. S NA You must provide a written notice of the application to each owner of an appropriation right sharing a point of diversion or means of conveyance (e.g., canal, ditch, flume, pipeline, or constructed waterway) pursuant to §85-2-302(4)(c), MCA. Submit a copy of this notice and the recipient list.



PURPOSE AND DIVERSION INFORMATION

14. Y N Is the proposed use temporary?

14.a. If yes, when will the appropriation cease? _____

15. Is the proposed source surface water or groundwater? Surface Water

16. What is the source name? Yellowstone River

17. S Attach a map utilizing an aerial photograph or topographic map that shows the following: section corners; township and range; north arrow; scale bar; all proposed points of diversion labeled with a unique Point of Diversion (POD) ID number and, if applicable, GWIC number; all proposed places of use; all proposed conveyance facilities and or routes; all proposed places of storage labeled with a unique Storage ID number; and places of use (POU) for all overlapping water rights. More than one map may be submitted, if necessary to clearly convey all required information.

18. 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		Volume (Acre-Feet)
					<input checked="" type="checkbox"/> GPM	<input type="checkbox"/> CFS	
Lawn and Garden	Pump (Transitory)	1.25	04/15 - 10/15	04/15 - 10/15	50		3.1
Total Flow Rate and Volume Required					50		3.1

19. Y N Does the proposed use include on or more of the following purposes: domestic, multiple domestic, stock, or irrigation? If yes, fill out the table below, where applicable.

Purpose	Requested Information	Response
Domestic or multiple domestic	Number of households and bedrooms served per household	N/A
Stock	Number of animal units	N/A
Irrigation	Method of irrigation type (sprinkler or flood) and subtype (if flood: level border, graded border, furrow, contour ditch, or other; if sprinkler: center pivot, wheel line, or other)	N/A
Irrigation (flood only)	Design slope	N/A



POINT(S) OF DIVERSION

20. 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 17).

POD #	¼	¼	¼	Sec.	Twp.	Rge.	County	Lot	Block	Tract	Subdivision	Gov. Lot
1T	SW	SW	SE	35	1N	13E	SG			3-A-1	Night Sky	2
2T	SW	SW	SE	35	1N	13E	SG			3-A-1	Night Sky	2

PLACE OF USE

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

40-1019-35-3-01-04-0000	

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

Acres	Gov. Lot	Block	¼	¼	¼	Sec.	Twp.	Rge.	County
1.25	2		SW	sw	SE	35	1N	13E	Sweet Grass

SUPPLEMENTAL AND OVERLAPPING WATER RIGHTS

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

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

24. For each supplemental or overlapping water right, please list the water right number, 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

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

25.a. If yes, explain.

ADVERSE EFFECT

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

The pump can be shut off.



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

The pump can be shut off.

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

28.a. If yes, explain.

29. Y N Does a water commissioner distribute water or oversee water distribution on your proposed source?

29.a. If yes, list the source(s).

30. Y N Do other water rights share any of the proposed points of diversion?

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

31. Y N Do other water rights share any conveyance infrastructure associated with the proposed project?

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



ADEQUATE MEANS OF DIVERSION AND OPERATION

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

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

Pump is a 2-inch, 6.5 engine, with a capacity up to 158 GPM (proposed model is a Honda WP-2065HL).

34. Describe the size, materials, capacity, and configuration of infrastructure to convey water from all proposed points of diversion to all proposed places of use. This may include but is not limited to, pipelines and ditches. Include a description of any losses related to the proposed conveyance. Ditch conveyance losses may be estimated numerous ways, which include a ditch loss rate or Department standard methods.

Pipelines will be 2-inch PVC, that will run a mainline along the east side of the property that will have four 3/4-inch spigots, where hoses will be attached to water the Lawn & Garden.

35. Describe how the proposed diversion and conveyance infrastructure can provide the required flow and volume, for the purposes plus any conveyance losses and storage, throughout the proposed period of diversion.

There will be no conveyance losses due to the use of a pipeline. The pump is more than adequate to achieve the requested flow rate.



36. Provide a plan of operations, which includes specific information about how water is delivered within the place of use. This may include, where applicable, the range of flow rates needed for a pivot. Water will be pumped using a transitory point of diversion along the southern side of the property, from the Yellowstone River. Pipelines will be 2-inch PVC, that will run a mainline along the east side of the property that will have four 3/4-inch spigots, where hoses will be attached to water the Lawn & Garden.

37. Y N Does the proposed conveyance require easements?

37.a. If yes, explain.

38. Y N Do you own the land where all proposed points of diversion are located?

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

39. Y N Will your system be designed to discharge water from the project?

IF YES,

39.a. Explain the wastewater disposal method.

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

40. Y N Do you have any plans to measure your diversion and use?

40.a. If yes, describe the plan and the type of measurements you will take.



41. Y N Is the means of diversion for any proposed point of diversion a well?

IF YES,

41.a. Y N Have all wells been drilled?

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

41.c. Y N For all wells yet to be drilled, will a licensed well driller construct the wells?

41.d. S NA Submit any well logs not yet submitted to the Department.

BENEFICIAL USE

42. Y N Does the Department have a volume, period of diversion, or period of use 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.

42.a. Y N If yes, do all proposed beneficial uses fall within Department standards?

42.b. If no Department standard exists, or if any proposed beneficial use falls outside of Department standards, explain how the requested flow rate and volume are reasonable for the purpose.

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

44. Y N Are you proposing to use surface water for in-house domestic use?

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

44.a.i. S NA If yes, please submit the COSA.

44.a.ii. Y N If no, have you researched or consulted with DEQ regarding their requirements?



POSSESSORY INTEREST

45. 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.

45.a. If yes, explain.

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

IF NO,

46.a. S Explain and submit documentation that shows you either have possessory interest or written permission of the parties with possessory interest of the place of use.

46.b. Y N Would you like the water right to be appurtenant to the land? Please note that if your water right is not appurtenant to land it will not transfer by default with the conveyance of the property, pursuant to § 85-2-403, MCA.

46.b.i. If no, explain.

PROPOSED COMPLETION PERIOD

47. How much time will be needed to complete this project and to submit to the DNRC a Project Completion Notice (Form 617)? 3 years

48. Please describe why this amount of time is needed to complete this project.

Purchase materials, contractors, and work cannot be performed until the weather is
appropriate.



AFFIDAVIT & CERTIFICATION

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

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

I affirm I have possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use, unless this application meets an exception to the possessory interest requirements in ARM 36.12.1802(1)(b).

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

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

Printed Name EKM Properties LLC
GARY BRINK

Applicant Signature [Signature] Date: 11/4/2025

Printed Name _____

Applicant Signature _____ Date: _____

Printed Name _____

Applicant Signature _____ Date: _____





WATER PUMP

2" · 6.5 · 158GPM

WP-2065HL

WP-2065HL

- 1 GX200 HONDA ENGINE (6.5)
- 2 RECOIL START
- 3 FUEL TANK CAPACITY, 0.82 GAL. (3.1L)
- 4 2" INTAKE CONNECTION MNPT
- 5 2" OUTLET CONNECTION MNPT
- 6 CENTRIFUGAL ALUMINUM PUMP
- 7 HEAVY DUTY CAST IRON IMPELLER
- 8 82' TOTAL HEAD (36 PSI)
- 9 26' MAXIMUM SUCTION HEAD
- 10 1 YR PUMP WARRANTY
- 11 3 YR ENGINE WARRANTY

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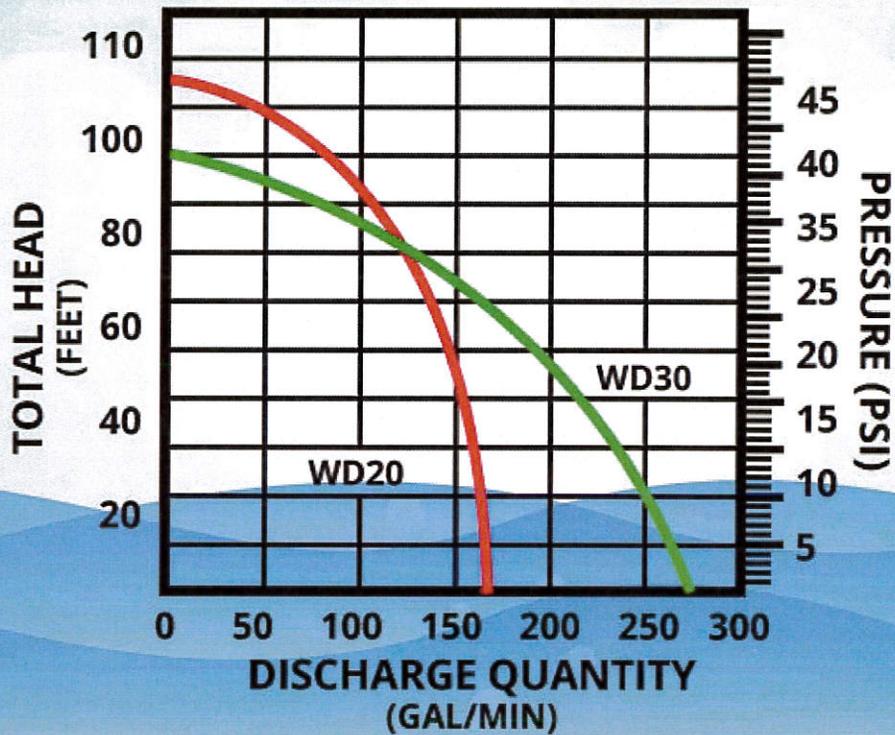
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· HEAVY DUTY STEEL STRAINER



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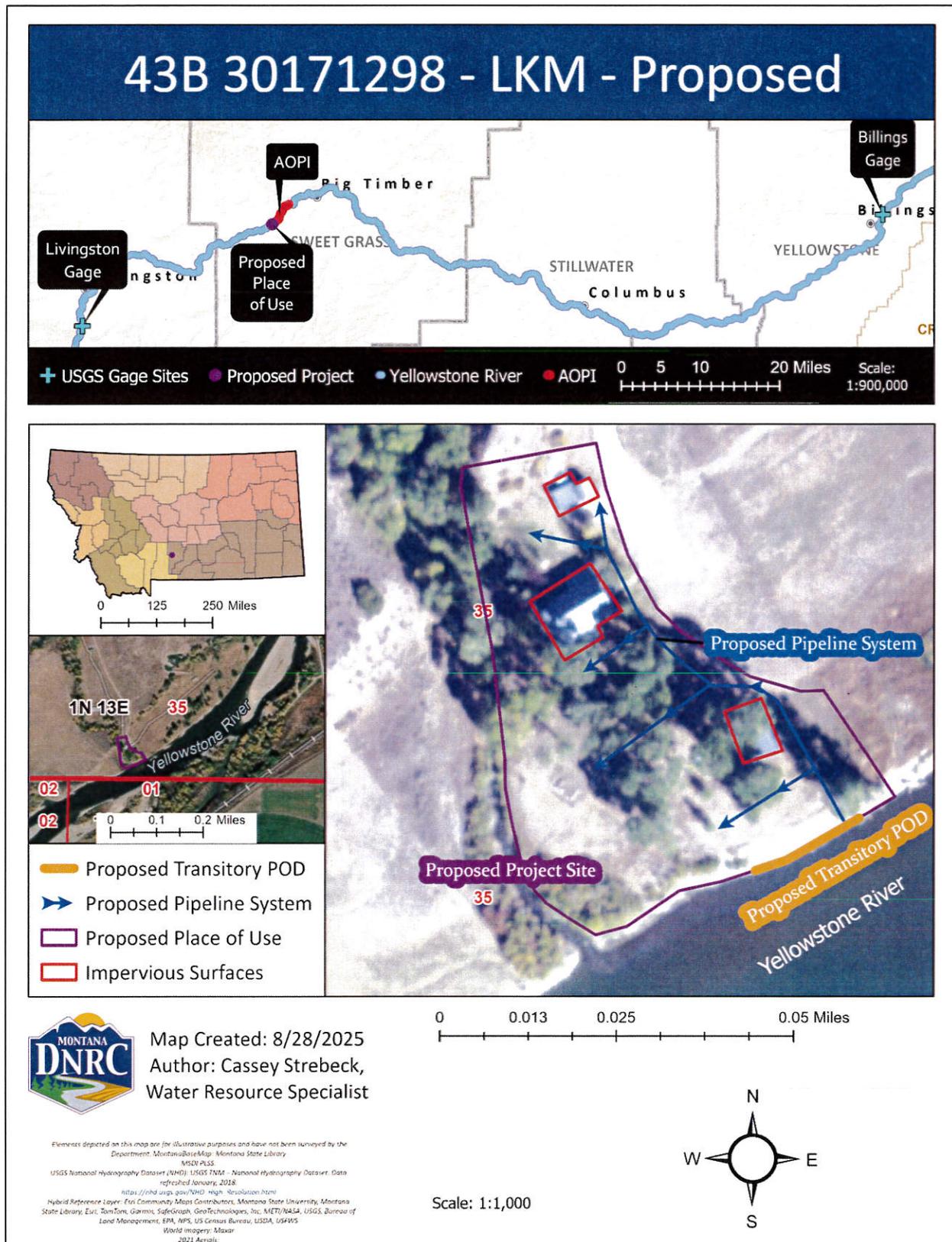


Figure 1: Map of the Applicant's proposed POD on the source and proposed place of use.

MONTANA SAGE GROUSE HABITAT CONSERVATION PROGRAM



GREG GIANFORTE, GOVERNOR

1539 ELEVENTH AVENUE

STATE OF MONTANA

PHONE: (406) 444-0551
FAX: (406) 444-6721

PO BOX 201601
HELENA, MONTANA 59620-1601

Project No. 7076
Governor's Executive Orders 12-2015 and 21-2015
LKM Properties LLC Irrigation

Gary Brink
216 Moore Lane
Billings, MT 59101

July 11, 2025

Dear Mr. Brink,

The Montana Sage Grouse Habitat Conservation Program received a request for consultation and review of your project or proposed activity on July 10, 2025. Based on the information provided, this Project is located within General Habitat for sage grouse.

Executive Orders 12-2015 and 21-2015 set forth Montana's Sage Grouse Conservation Strategy. Montana's goal is to maintain viable sage grouse populations and conserve habitat so that Montana maintains flexibility to manage our own lands, our wildlife, and our economy and ensure that a listing under the federal Endangered Species Act is not warranted in the future.

The Program has completed its review, including:

Project Description:

Project Type: Agriculture – Water

Project Disturbance: 0.002 Acre Water Supply Well

Construction Timeframe: April 1, 2026, to April 6, 2026; Temporary (< 1 Year)

Operations Timeframe: May 1, 2026; Permanent (>25 Years)

Project Location:

Legal: Township 1 North, Range 13 East, Section 35

County: Sweet Grass

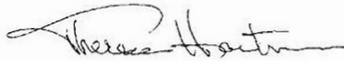
Ownership: Private



If the location or boundaries of your proposed project or activity change in the future, or if new activities are proposed within one of the designated sage grouse habitat areas, please visit <https://sagegrouse.mt.gov/> and submit the new information.

Thanks for your interest in sage grouse and your commitment to taking the steps necessary to ensure Montana's Sage Grouse Conservation Strategy is successful.

Sincerely,



Therese Hartman
Montana Sage Grouse Habitat Conservation Program Manager





Surface Water Permit Technical Analyses Report – Notice of Errata
Department of Natural Resources and Conservation (DNRC or Department)
Water Resources Division

Cassey Strebeck, Water Resource Specialist, Billings Regional Office

Applicant	LKM Properties, LLC
Application No.	43B 30171298
Proposed Transitory Point of Diversion (Upstream)	SWSWSE Sec. 35, T1N, R13E, Sweet Grass County
Proposed Transitory Point of Diversion (Downstream)	SWSWSE Sec. 35 T1N, R13E, Sweet Grass County

Overview

This memo documents corrections to the Surface Water Permit Technical Analyses Report prepared for Beneficial Water Use Permit Preapplication No. 43B 30171298, sent to the Applicant on September 5, 2025. In preparation of the Draft Preliminary Determination, errors were discovered in the following locations of “Table 2: Median of the mean monthly flow at the upstream and downstream, USGS gages, and calculated volume”:

- (1) Errors were discovered for September and December, for the Median of the mean monthly flow at Gage 1 in CFS (Livingston 06192500 – upstream), located in column two (2) of Table 2.
- (2) Errors were discovered for September and December, for the Median of the mean monthly volume at Gage 1 in AF, located in column three (3) of Table 2.
- (3) Errors were discovered for March, April, and September, for the Median of the mean monthly flow at Gage 2 in CFS (Billings 06214500 - downstream), located in column four (4) of Table 2.
- (4) Errors were discovered for March, April, and September, for the Median of the mean monthly volume at Gage 2 in AF, located in column five (5) of Table 2.

This Surface Water Permit Technical Analyses Report – Notice of Errata contains the following sections:

Overview.....1

2.0 Surface Water Analysis.....2

 2.2 Method of Estimation.....2

Review.....2

2.0 Surface Water Analysis

2.2 Method of Estimation

The physical availability of the Yellowstone River at the point of diversion was quantified monthly using USGS stream gages and the “Between Gages: Interpolation” method outlined in the DNRC Technical Memorandum: Physical Availability of Surface Water with Gage Data to estimate physical availability of water for each month of the proposed period of diversion. The median of the mean monthly flow and volume for both gages are in Table 2. The median of the mean monthly volume was calculated by multiplying the median of the mean monthly flow rate by 1.98 (AF/1 CFS/Day) and by the number of days in each month.

Typographical errors were made by the Department during the Technical Analysis and have been corrected. The corrected values are shown below in Table 2.

Table 1: Median of the mean monthly flow at upstream and downstream USGS gages, and calculated volume

Month	Median of the mean monthly flow at Gage 1 in CFS (Livingston 06192500 - upstream)	Median of the mean monthly volume at Gage 1 in AF	Median of the mean monthly flow at Gage 2 in CFS (Billings 06214500 - downstream)	Median of the mean monthly volume at Gage 2 in AF
January	1,191	73,103.58	2,494	153,081.72
February	1,185	65,696.40	2,512	139,265.28
March	1,293	79,364.34	2,893.5*	177,603.03*
April	1,903	113,038.20	3,971.5*	235,907.10*
May	7,207	442,365.66	12,885	790,881.30
June	13,315	790,911.00	24,270	1,441,638.00
July	7,319	449,240.22	12,405	761,418.90
August	3,332	204,518.16	4,571	280,567.98
September	2,270.5*	134,867.70*	3,717.5*	220,819.5*
October	1,916	117,604.08	3,911	240,057.18
November	1,637	97,237.80	3,554	211,107.60
December	1,359.5*	83,446.11*	2,766	169,777.08
Total:		2,651,393.3*		4,822,124.67*

**Updated from the September 5, 2025, Technical Analysis*

Review

This document has been reviewed by the Department on February 2, 2026.

Technical Analyses Report/ Scientific Credibility Review

- Departmental Technical Analyses Report/ Scientific Credibility Review
- Any correspondence relating to the Technical Analyses Report

Technical Analyses Report / Scientific Credibility Review



Surface Water Permit Technical Analyses Report

**Department of Natural Resources and Conservation (DNRC or Department)
Water Resources Division**

Cassey Strebeck, Water Resource Specialist, Billings Regional Office

Application Number:	43B 30171298	Proposed Transitory Point of Diversion:	SWSWSE Sec. 35, T1N, R13E, Sweet Grass County to SWSWSE Sec. 35 T1N, R13E, Sweet Grass County along the Applicant’s property boundary
Applicant:	LKM Properties, LLC		

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:

Overview 1

1.0 Application Details 2

2.0 Surface Water Analysis..... 4

 2.1 Source Description 4

 2.2 Method of Estimation..... 4

 2.3 Monthly Flow Rate and Volume..... 6

3.0 Area of Potential Impact Analysis 7

Review 9

References..... 9

Appendix A: Water Rights within the Area of Potential Impact 10



1.0 Application Details

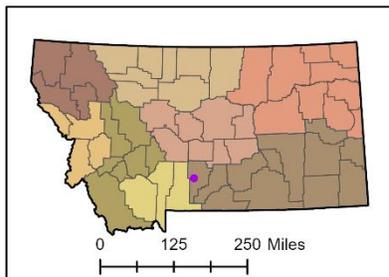
The Applicant proposes to divert water from the Yellowstone River at a rate of 50 GPM, up to 3.1 AF for lawn and garden irrigation of 1.25 acres. The proposed period of diversion and period of use is April 15 – October 15 annually. The proposed point of diversion is transitory along the Applicant’s property boundary, approximately 86 ft in length, from a point in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County to a point in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County. The proposed place of use is 1.25 acres in the SWSWSE of Sec. 35, T1N, R13E, of Sweet Grass County. The details of this Application are shown in Table 1.

Table 1: Summary of the proposed use.

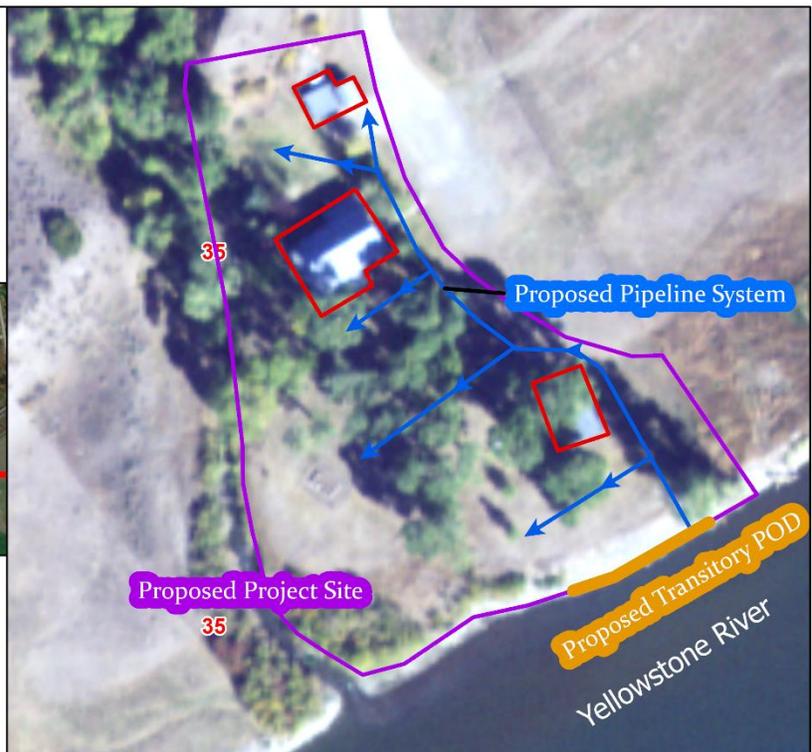
Source	Flow Rate	Diverted Volume	Purpose	Acres	Period of Use	Place of Use	Point of Diversion Type	Period of Diversion
Yellowstone River	50 GPM	3.1 AF	Lawn & Garden	1.25	April 15 to October 15	SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County	Transitory along the Applicant’s property boundary	April 15 to October 15
Proposed Transitory Point of Diversion					SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County to the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County			



43B 30171298 - LKM - Proposed



- Proposed Transitory POD
- Proposed Pipeline System
- Proposed Place of Use
- Impervious Surfaces



Map Created: 8/28/2025
Author: Cassey Strebeck,
Water Resource Specialist

Elements depicted on this map are for illustrative purposes and have not been surveyed by the Department. MontanaBaseMap: Montana State Library
MSDI PLSS
USGS National Hydrography Dataset (NHD): USGS TNM - National Hydrography Dataset. Data refreshed January, 2018.
https://nhd.usgs.gov/NHD_High_Resolution.html
Hybrid Reference Layer: Esri Community Maps Contributors, Montana State University, Montana State Library, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS
World Imagery: Maxar
2021 Aerials

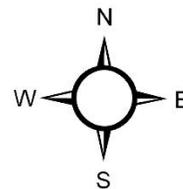
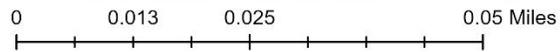


Figure 1: Map of the Applicant's proposed POD on the source and proposed place of use.



2.0 Surface Water Analysis

2.1 Source Description

Proposed Source of Water: Yellowstone River

Proposed Source Type: Perennial

Proposed Point of Diversion: The proposed point of diversion (POD) is a transitory POD along the Applicant's property boundary on the Yellowstone River located in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County to the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County.

2.2 Method of Estimation

Physical availability in the Yellowstone River at the POD is quantified monthly. ARM 36.12.1702(1)(a) requires the Department to use stream gaging records when they are available. The Department used the “Between Gages: Interpolation” method outlined in the November 1, 2019, DNRC Technical Memorandum: *Physical Availability of Surface Water with Gage Data* to estimate physical availability of water for each month in the proposed period of diversion.

Where there is both an upstream and downstream gaging station relative to the depleted reach on the same source, the equation (equation 11) from USGS (2015) StreamStats, Chapter G, p. 13, for Montana, can be used to make a logarithmic linear interpolation between the two gages:

$$\log Q_u = \log Q_{g1} + \left(\frac{\log Q_{g2} - \log Q_{g1}}{\log A_{g2} - \log A_{g1}} \right) (\log A_u - \log A_{g1})$$

Where:

Q_u = streamflow characteristic

A = drainage area

Subscripts g1 and g2 are gaged sites 1 and 2, respectively

Subscript u = ungaged site (top of the depleted reach)

Gage 1 Name: [Yellowstone at Livingston](#)

Gage 1 Number: USGS-06192500

Period of Record: 05/01/1897 – 10/31/2024

Why is this gage considered an appropriate data source: The USGS gage on the Yellowstone River at Livingston is approximately 31 miles upstream from the POD, with a period of record spanning 128 years, and is the nearest upstream gage of the project located on the Yellowstone River.

Gage 2 Name: [Yellowstone at Billings](#)

Gage 2 Number: USGS-06214500

Period of Record: 10/01/1989 – 07/25/2025

Why is this gage considered an appropriate data source: The USGS gage on the Yellowstone River at Billings is approximately 90 miles downstream of the POD, with a period of record spanning 121 years. This gage is the nearest downstream gage to the project, located on the Yellowstone River.



These two gages meet the stream gaging requirements found in ARM 36.12.1702 and are acceptable for determining physical and legal availability of surface water in this application. The median of the mean monthly flow and volume for both gages are in Table 2, and their respective basin ratios are in Table 3. The median of the mean monthly volume was calculated by multiplying the median of the mean monthly flow rate by 1.98 (AF/1 CFS/Day) and by the number of days in each month.

Table 2: Median of the mean monthly flow at upstream and downstream USGS gages, and calculated volume

Month	Median of the mean monthly flow at Gage 1 in CFS (Livingston 06192500 - upstream)	Median of the mean monthly volume at Gage 1 in AF	Median of the mean monthly flow at Gage 2 in CFS (Billings 06214500 - downstream)	Median of the mean monthly volume at Gage 2 in AF
January	1,191	73,103.58	2,494	153,081.72
February	1,185	65,696.40	2,512	139,265.28
March	1,293	79,364.34	2,894	177,633.72
April	1,903	113,038.20	3,972	235,936.80
May	7,207	442,365.66	12,885	790,881.30
June	13,315	790,911.00	24,270	1,441,638.00
July	7,319	449,240.22	12,405	761,418.90
August	3,332	204,518.16	4,571	280,567.98
September	2,271	134,897.40	3,718	220,849.20
October	1,916	117,604.08	3,911	240,057.18
November	1,637	97,237.80	3,554	211,107.60
December	1,360	83,476.80	2,766	169,777.08
Total:		2,651,453.64		4,822,214.76

Table 3: Basin drainage area at the gaged and ungaged sites on the Yellowstone River

Location	Drainage Area (Square Miles)	Drainage Area Ratio of Ungaged Site to Gage Location
USGS Yellowstone River at Livingston	3,551.3	1.4
USGS Yellowstone River near Billings	11,414.3	0.4
Yellowstone River at the top of the reach	4,865.2	1.0

Method of Estimation Used:

The Department estimated the available flow at the top of the depleted reach (ungaged site) using the interpolation method along with the data from the upstream gage at Livingston (06192500) and the downstream gage at Billings (06214500). The drainage basin areas for the two gaged sites were taken from the USGS gage records. The drainage basin area for the ungaged site (top of the depleted reach) was taken from the USGS StreamStats for Montana website at <https://streamstats.usgs.gov/ss/>.



The results from the interpolation method are considered reasonable, although the ungaged area is outside of the suggested parameters of $0.5A_g - 1.5A_g$, with the ungaged area being 0.4 times the size of the Billings gaged area and 1.4 times the size of the Livingston gaged area. This method was reviewed by Water Sciences, and the results were found to be acceptable given that there are no dams or other significant regulations between the gages and the proposed POD, 0.4 is not significantly outside of the range, and the Billings gage includes large upstream tributaries not included in the Livingston gage. This method is considered adequate because the streamflow conditions are similar for the source at both gages, and the periods of record for the gages are similar.

Why this method is considered appropriate: Use of this method is standard practice when the surface water source is a perennial source with upstream and downstream gages available. This method provides a more realistic estimate of stream flow conditions than adding or subtracting monthly legal demands to or from a single set of USGS stream gage data.

2.3 Monthly Flow Rate and Volume

Methodology: The median of the mean monthly flow rate in CFS and volume in AF were calculated using the USGS gage records at Livingston and Billings, MT, as shown in Table 2. The median of the mean monthly flow rates and the drainage basin areas were entered into equation 11 for each month of the year (USGS 2015). The results are shown in Table 4 for the months the applicant requests appropriation.

Table 4: Interpolated flow rate (CFS) and volume (AF) at proposed POD using USGS gages at Livingston and Billings, MT, for the proposed period of use: April to October

Month	Interpolated Monthly Flow at the Ungaged Site (Proposed POD) (CFS)	Interpolated Monthly Volume at the Ungaged Site (Proposed POD) (AF)
April	2,320.63	137,845.14
May	8,429.51	517,403.2
June	15,655.03	929,908.6
July	8,438.15	517,933.37
August	3,628.55	222,720.55
September	2,593.39	154,047.22
October	2,322.56	142,558.59

All values have been rounded to the hundredth place.

Physically Available Water

The values calculated in the interpolation method, shown in Table 4, are taken as the flow rate and volume of water physically available at the proposed POD during the months requested by the applicant.



3.0 Area of Potential Impact Analysis

The Area of Potential Impact for this application is:

The AOPI on the depleted source, the Yellowstone River, is approximately 3.5 miles from the top of the depleted reach, downstream to the confluence with Little Timber Creek, which encompasses a 4,291 square mile drainage area. There are 12 existing surface water rights within the AOPI, including the Sweet Grass Conservation District (CD) Water Reservation No. 43B 9948-00. A list of these water rights within the AOPI can be found below in Appendix A.

Why this is an appropriate Area of Potential Impact:

The Department considered the potentially impacted reach on the source of supply by accounting for the location of the proposed project and downstream water users on the Yellowstone River. This reach extends from the top of the depleted reach in the SWSWSE of Sec. 35, T1N, R13E, Sweet Grass County, downstream, approximately 3.5 miles, to the confluence of Little Timber Creek and the Yellowstone River in the SWSWNE of Sec. 19, T1N, R14E, Sweet Grass County. This is an acceptable area of potential adverse effect as the reach includes several small tributaries, adds 55.8 square miles ($4,921 - 4,865.2 = 55.8$) of drainage area (Table 5), and Little Timber Creek is a significant hydrologic boundary. Water rights within the reach were identified using the Department’s Water Right Query System and Esri ArcGIS.

Table 5: Additional Drainage in AOPI

Location	Drainage Area (Square Miles)
Yellowstone River at the top of the reach	4,865.2
Yellowstone River at the confluence with Little Timber Creek	4,921
Additional drainage in AOPI	55.8

Methodology:

The Department determined the AOPI and quantified the surface water rights using the following methods, as shown in Table 6:

1. In determining the area of potential impact the Department considered the proposed flow rate and volume, the fact that the Yellowstone River basin above and including Bridger Creek (43B) is an open basin, existing source and tributary knowledge, the source type, and the tributary contributions downstream. The confluence of the Yellowstone River at Little Timber Creek is approximately 3.5 miles downstream. The larger stems of the Little Timber Creek watershed include the West Fork Little Timber Creek and the main stem of Little Timber Creek, both of which are classified as perennial, making it a significant hydrologic boundary and a sufficient location to end the area of potential impact.
2. There are 12 water rights within the AOPI, 11 Statements of Claim, and one Conservation District Record. Of the 11 Statements of Claim, five are for irrigation, four are for livestock, and two are for fish & wildlife; the Conservation District Record is for irrigation. These water rights are listed in Appendix A.
3. The flow rate and volume for each water right were taken from the face value on the abstracts.
4. Water rights without an assigned flow rate or volume were quantified using further analysis:



- a. There are four stock direct from source water rights within the AOPI, all of which without a flow rate or volume.
 - i. The adjudication standard of 30 gallons per day per animal unit was used for stock claim volumes (0.034 AF/YR).
 - ii. The flow rate in GPM was back-calculated using the following equation: $\text{volume in AF} \times 325,851 \text{ gallons} / 365 \text{ days} / 1,440 \text{ minutes per day} = \text{GPM}$.
 - iii. The flow rate in GPM was converted to the flow rate in CFS using the following equation: $\text{GPM} / 448.8 = \text{CFS}$.
 - iv. As per the standard practice for calculating stock direct from source, 35 GPM (0.078 CFS) was added to the flow rate.
 - b. All five irrigation claims had flow rates and were in climatic area 2, without a quantified volume. The volume was calculated by taking the lower end of the higher range at 60% efficiency for climatic area 2 (2.69 of the range: 2.69 – 3.15; ARM 36.12.115), multiplied by the acres claimed. Thus, the volume for irrigation claims were calculated using the following equation: $\text{Acres} \times 2.69 = \text{AF}$. This method for estimating volume is Department standard practice.
5. The full flow rate and volume of the Sweet Grass Conservation District (CD) Water Reservation No. 43B 9948-00, was applied: 363.40 CFS/Month and 46,245 AF/YR, for the standard period of use for climatic area 2, April 1 – October 31, per ARM 36.12.115.
 6. Due to varying periods of diversion for Statement of Claim 43B 194349-00 (1200 CFS, April 1 – 15) and Statement of Claim 43B 194350-00 (2000 CFS, April 16 – 30), owned by Montana Department of Fish, Wildlife and Parks, the legal demand for April was assessed for April 1 – 15 and April 16 – 30. For April 1 – April 15, all water rights within this range were quantified based on the flow rate and the number of days, with 1,200 CFS for 43B 194349-00, and no quantification for 43B 194350-00. For April 16 – April 30, all water rights within this range were quantified based on the flow rate and the number of days, with 2,000 CFS for 43B 194350-00 and no quantification for 43B 194349-00.
 7. Due to the periods of diversion ending on October 15th, for Statement of Claims 43B 102620 00 and 43B 102623 00, owned by the Laubach, Alice Trust; and Statements of Claims 43B 106352 00 and 43B 106353 00, owned by the Windbreak Ranch LLC, the legal demand for the month of October was assessed by October 1 – 15 and October 16 – 31. For October 1 – 15, all water rights within this range were quantified based on the flow rate and the number of days (15). For October 16 – 31, all water rights within this range were quantified based on the flow rate and the number of days (16).



Table 6: Existing Legal Demands in the Area of Potential Impact (AOPI)

Month	Existing Legal Demands in AOPI (CFS)	Existing Legal Demands in AOPI (AF)
April 1-15¹	1583.06 ¹	39,211.97 ¹
April 16-30¹	2,383.06 ¹	63,007.94 ¹
May	2,383.06	130,216.40
June	2,398.98	127,109.23
July	2,383.06	130,216.40
August	2,383.06	130,216.40
September	2,383.06	126,015.87
October 1-15³	2,383.06 ²	63,007.94 ²
October 16-31³	2,363.56 ²	66,916.32 ²

¹ April has been broken down into 2 groups, April 1-15 and April 16-30, based on the period of diversion for the fish and wildlife rights 43B 194349-00 and 43B 194350-00. ² October has been broken down into October 1-15 and October 16-31, to show that the legal demand varies based on the end of the period of diversion for several water rights in the AOPI. All values have been rounded to the hundredth place.

Review

This document has been reviewed by the Department on September 4, 2025.

References

- DNRC Technical Memorandum: *Physical Availability of Surface Water with Gage Data*
- Department Standard Practice for Area of Potential Impact Analysis
- USGS StreamStats for Montana website at <https://streamstats.usgs.gov/ss/>
- USGS (2015) StreamStats, Chapter G, p. 13, for Montana
- DNRC Water Calculation Guide



Appendix A: Water Rights within the Area of Potential Impact

WR Number	WR Owner	Purpose	Period of Diversion Start	Period of Diversion End	CFS	AF	AU	Acres
43B 194349 00	MT Dept Of FWP	F & W	1-Nov	15-Apr	1200	395014.0	-	-
43B 194350 00	MT Dept Of FWP	F & W	16-Apr	31-Oct	2000	789234	-	-
43B 102620 00	Laubach, Alice Trust	Irrig.	1-Apr	15-Oct	3.120	866.183 ³	-	322
43B 102623 00	Laubach, Alice Trust	Irrig.	1-Apr	15-Oct	6.500	866.18 ³	-	322
43B 106352 00	Windbreak Ranch LLC	Irrig.	1-Apr	15-Oct	3.380	941.5 ³	-	350
43B 106353 00	Windbreak Ranch LLC	Irrig.	1-Apr	15-Oct	6.500	941.5 ³	-	350
43B 181151 00	Theorem River LLC	Irrig.	1-Jun	1-Jul	15.92	1,129.8 ³	-	420
43B 102619 00	Laubach, Alice Trust	Stock	1-Jan	31-Dec	0.0116 ³	8.415 ³	247.5	-
43B 106349 00	Windbreak Ranch LLC	Stock	1-Jan	1-Nov	0.0097 ³	7.032 ³	247.5	-
43B 30137243	Theorem River LLC	Stock	1-Jan	31-Dec	0.0341 ³	24.65 ³	725	-
43B 33999 00	Warren N Nunn	Stock	1-Jan	31-Dec	0.0292 ³	21.165 ³	622.5	-
43 B 9948 00	Sweet Grass County Conservation District	Irrig.	1-Apr	15-Oct	363.40	46,245	-	15,313

(1) FWP is Fish, Wildlife and Parks; F & W is Fish and Wildlife; Irrig. is Irrigation. (2) Sweet Grass Conservation Record 43B 30105980 was excluded from the legal demands as an individual entity, since it was accounted for in the Sweet Grass Water Reservation. (3) These values were calculated by DNRC staff using department standards, per ARM 36.12.115.

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

GOVERNOR GREG GIANFORTE



DNRC DIRECTOR AMANDA KASTER

9/5/2025

DNRC Water Resources
Billings Regional Office
1371 Rimtop Dr.
Billings, MT 59105-1978

LKM Properties LLC
2016 Moore Lane
Billings, MT, 59101

Subject: Completed Technical Analyses for Beneficial Water Use Permit Preapplication No. 43B 30171298

Dear Applicant,

As designated on the submitted Preapplication Meeting Form per §85-2-302(3)(b), MCA, the Department of Natural Resources and Conservation (DNRC or Department) has completed the technical analyses for Beneficial Water Use Permit Preapplication No. 43B 30171298 based on the information provided in your Preapplication Meeting Form accepted by the Department on July 22, 2025. The technical analyses can be found in the attached report.

This Technical Analyses Report **IS**: A collection of facts that the DNRC has gathered, including content provided in the Preapplication Meeting Form materials. The Department will use these data to analyze the criteria in §85-2-311, MCA, if you submit an application for the project described in the completed Preapplication Meeting Form.

This Technical Analyses Report **IS NOT**: An analysis or discussion of whether the Preapplication Meeting Form as filed meets the criteria (§85-2-311, MCA).

You have 180 days to submit the Beneficial Water Use Permit Application Form 600, considering the information provided in the technical analyses and Preapplication Meeting Form. If the Application Form is not submitted to the Billings Regional Office by **3/4/2026** a new preapplication meeting will be required to process the Application with expedited timelines (ARM 36.12.1302(6)(b)). If any details described in the submitted Application are changed from that of the submitted Preapplication Meeting Form, the discounted filing fee and expedited timelines will not apply (ARM 36.12.1302(6)(a)). **Please note that the technical analyses will expire one year from the date of this letter** (ARM 36.12.1302(8)).

Please let me know if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "C. Strebeck". The signature is written in a cursive, flowing style.

Cassey Strebeck
Water Resource Specialist
Billings Regional Office, Montana DNRC
Cassey.Strebeck@mt.gov
406-247-4422



DNRC.MT.GOV

Preapplication Materials

- **Preapplication Meeting Request**
- **Preapplication Meeting Form**
- **All attachments**
- **All correspondence prior to application receipt**

Preapplication Materials



DNRC Water Resources
Billings Regional Office
1371 Rintop Dr.
Billings, MT 59105-1978

07/30/2025

LKM Properties LLC
2016 Moore Lane
Billings, MT, 59101

Subject: Complete Preapplication Form for Beneficial Water Use Permit
Application No. 43B 30171298

Dear Applicant,

The Billings Regional Office of the Department of Natural Resources and Conservation (DNRC or Department) received your Preapplication Meeting Form and preapplication meeting fee on July 15, 2025, and the Department deemed the submitted Preapplication Meeting Form to be successfully completed per ARM 36.12.1302 on July 22, 2025.

Please let me know if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Cassey Strebeck". The signature is fluid and cursive.

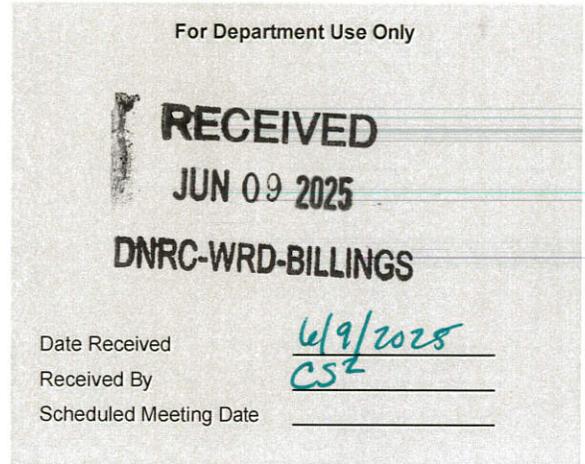
Cassey Strebeck
Water Resource Specialist
Billings Regional Office, Montana DNRC
Cassey.Strebeck@mt.gov
406-247-4422





REQUEST FOR PREAPPLICATION MEETING

ARM 36.12.1302(2)
(Revised 02/2025)



Instructions

Use this optional form to submit a written request for a preapplication meeting, as required in ARM 36.12.1302(2) for applicants electing to complete a preapplication meeting with the department prior to submitting an application for a beneficial water use permit or change in appropriation right pursuant to § 85-2-302, MCA. Use additional sheets as necessary.

Submit this form to the appropriate regional office; see contact information on the last page of this form.

1. Applicant Name Gary Brink
Mailing Address 216 Moore Lane
City Billings State MT Zip 59101
Home Phone 406-652-7413 Other Phone 406-698-8491
Email: garybrink@brinkincmt.com

2. Representative Name (if other than Applicant) _____
 Representative is Consultant Representative is Attorney Representative is Other
Mailing Address _____
City _____ State _____ Zip _____
Home Phone _____ Other Phone _____
Email: _____

3. Are you requesting a preapplication meeting for a permit or change application?
 Permit Change

4. Describe your project:

I have a 1/2-acre lawn and a small garden at 127 North Yellowstone Trail, 8 miles West of Big Timber that I would like to water from the Yellowstone River. The property is on the river so I would only need a small 3hp pump to accomplish what I need. I am only at the property 3 days a week.



5. Identify the following elements of the proposed permit or change in appropriation.

a) The flow rate and volume of water required:

Flow Rate 50 GPM CFS Volume _____ Acre-Feet

b) The point of diversion:

Point of Diversion #1 _____ 1/4 _____ 1/4 _____ 1/4 Section _____, Township _____ N S, Range _____ E W

County Sweetgrass

Lot/Tract _____ Block _____ Subdivision Name _____

Point of Diversion #2 _____ 1/4 _____ 1/4 _____ 1/4 Section _____, Township _____ N S, Range _____ E W

County _____

Lot/Tract _____ Block _____ Subdivision Name Sky Minor Subdivision

c) The place of use:

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ N S, Rge _____ E W

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ N S, Rge _____ E W

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ N S, Rge _____ E W

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ N S, Rge _____ E W

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ N S, Rge _____ E W

d) The source of water: Yellowstone River

e) The proposed purpose: lawn and garden watering

f) For a change in appropriation right, the water right(s) proposed for change:

Type of water right _____ Basin _____ Water Right # _____

Type of water right _____ Basin _____ Water Right # _____

Type of water right _____ Basin _____ Water Right # _____

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

Water Right #					
Point of diversion	<input type="checkbox"/>				
Place of use	<input type="checkbox"/>				
Purpose of use	<input type="checkbox"/>				
Place of storage	<input type="checkbox"/>				



g) For a change in appropriation right, an explanation of historical use of the right(s) proposed for change:

h) Any proposed place of storage, if applicable (only if storage capacity is greater than 0.1 acre-feet):

#1 Capacity: Surface Acres _____ x Max Depth (feet) _____ x (.4 for dams/.5 for pits) = _____ Acre-Feet

Location: ___ 1/4 ___ 1/4 ___ 1/4 Section ___, Township ___ N S, Range ___ E W

#2 Capacity: Surface Acres _____ x Max Depth (feet) _____ x (.4 for dams/.5 for pits) = _____ Acre-Feet

Location: ___ 1/4 ___ 1/4 ___ 1/4 Section ___, Township ___ N S, Range ___ E W

#3 Capacity: Surface Acres _____ x Max Depth (feet) _____ x (.4 for dams/.5 for pits) = _____ Acre-Feet

Location: ___ 1/4 ___ 1/4 ___ 1/4 Section ___, Township ___ N S, Range ___ E W

i) For applications proposing a well or wells, the well depth(s) and location. If more than two wells, attach a separate sheet to this request:

Well #1 New Well Existing Well

For existing well, if available, Water Right # _____ GWIC ID _____

1/4 ___ 1/4 ___ 1/4 Section ___, Township ___ N S, Range _____ E W

County _____

Lot/Tract _____ Block _____ Subdivision Name _____

Estimated Well Depth _____ Feet

Well #2 New Well Existing Well

For existing well, if available, Water Right # _____ GWIC ID _____

____ 1/4 ___ 1/4 ___ 1/4 Section _____, Township ___ N S, Range ___ E W

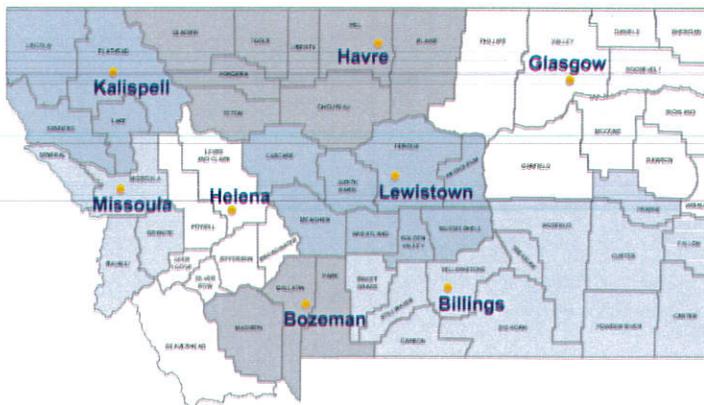
County _____

Lot/Tract _____ Block _____ Subdivision Name _____

Estimated Well Depth _____ Feet



WATER RESOURCES REGIONAL OFFICES



BILLINGS

Airport Industrial Park, 1371 Rimtop Dr
Billings, MT 59105-9702

PHONE 406-247-4415 FAX 406-247-4416
EMAIL DNRCBillingsWater@mt.gov

Big Horn, Carbon, Carter, Custer, Fallon, Powder River, Prairie, Rosebud, Stillwater, Sweet Grass, Treasure, and Yellowstone Counties



HELENA

1424 9th Ave., PO Box 201601,
Helena, MT 59620-1601

PHONE 406-444-6999 FAX 406-444-9317
EMAIL DNRCHelenaWater@mt.gov

Beaverhead, Broadwater, Deer Lodge, Jefferson, Lewis and Clark, Powell, and Silver Bow Counties



BOZEMAN

2273 Boot Hill Court, Suite 110
Bozeman, MT 59715-7249

PHONE 406-586-3136 FAX 406-587-9726
EMAIL DNRCBozemanWater@mt.gov

Gallatin, Madison, and Park Counties



KALISPELL

655 Timberwolf Parkway, Suite 4
Kalispell, MT 59901-1215

PHONE 406-752-2288
EMAIL DNRCKalispellWater@mt.gov

Flathead, Lake, Lincoln, and Sanders Counties



GLASGOW

222 6th Street South, PO Box 1269
Glasgow, MT 59230-1269

PHONE 406-228-2561
EMAIL DNRCGlasgowWater@mt.gov

Daniels, Dawson, Garfield, McCone, Phillips, Richland, Roosevelt, Sheridan, Valley, and Wibaux Counties



LEWISTOWN

613 Northeast Main St., Suite E
Lewistown, MT 59457-2020

PHONE 406-538-7459
EMAIL DNRCLewistownWater@mt.gov

Cascade, Fergus, Golden Valley, Judith Basin, Meagher, Musselshell, Petroleum, and Wheatland Counties



HAVRE

210 6th Ave., PO Box 1828
Havre, MT 59501-1828

PHONE 406-265-5516
EMAIL DNRCHavreWater@mt.gov

Blaine, Chouteau, Glacier, Hill, Liberty, Pondera, Teton, and Toole Counties



MISSOULA

2705 Spurgin Rd. Bldg. C, PO Box 5004
Missoula, MT 59806-5004

PHONE 406-721-4284 FAX 406-542-5899
EMAIL DNRCMissoulaWater@mt.gov

Granite, Mineral, Missoula, and Ravalli Counties





**PREAPPLICATION MEETING
FORM: PART A
PERMIT**
§ 85-2-302, MCA
Form No. 600P-A (Revised 03/2025)

For Department Use Only

Application # 30171298 Basin # 43B

Meeting Date 7/8/2025 Time 13:30

Variance Request Deadline _____

Completed Form Deadline _____

PREAPPLICATION MEETING FEE

\$ 500

FILING FEE REDUCTION & EXPEDITED TIMELINE

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

The Department will fill out Permit Preapplication Meeting Form Part A (Form 600P-A) and will identify items for follow-up during the preapplication meeting. The Department and Applicant will sign the Preapplication Meeting Affidavit and Certification within 10 business days. Within 180 days of the preapplication meeting, the Applicant will complete Preapplication Meeting Form Part B (Form 600P-B), including identified follow-up, any amended responses, and Follow-up and Amended Responses Affidavit & Certification. Variance requests must be submitted on Form 653 to the Department on or before the Variance Request Deadline, which is day 138 of the 180 day-deadline for a completed preapplication meeting form. Form 653 may be submitted earlier than the Variance Request Deadline. The Department has 30 business days to process the Form 653.

Applicant Information: Add more as necessary.

Applicant Name LKM Properties LLC (487461)
 Mailing Address 216 Moore Ln City Billings State MT Zip 59101
 Phone Numbers: Home 406-259-7935 Work _____ Cell _____
 Email Address garybrink@brinkincmt.com

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 _____
 Mailing Address _____ City _____ State _____ Zip _____
 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 (ARM 36.12.122(2)). If a contact person is identified as a consultant, employee, or lessee, the applicant will receive all correspondences, and a copy may be sent to the contact person (ARM 36.12.122(3)).

Meeting Attendees: Add more as necessary.

Name	Role	Name	Role
Gary Brink	Applicant		
Chris Schweigert	DNRC		
Veronica Corbett	DNRC		
Cassey Strebeck	DNRC		



Table of Contents

APPLICATION DETAILS	3
SURFACE WATER.....	8
Surface Water Analysis	8
Surface Water Analysis: Perennial or Intermittent	8
Surface Water Analysis: Ephemeral.....	14
Surface Water Analysis: Lakes	15
Surface Water Analysis: Other	15
Area of Potential Impact Analysis	16
GROUNDWATER.....	17
Groundwater Analysis for Permits	17
Groundwater Analysis for Permits: Well/Pumping Pit	17
Groundwater Analysis for Permits: Developed Spring.....	19
Groundwater Analysis for Permits: Pond.....	20
Surface Water Depletion Analysis	20
Surface Water Analysis of Depleted Surface Water.....	22
Area of Potential Impact Analysis of Depleted Surface Water.....	28
Hydrogeologic Report.....	28
MANDATORY PROJECT-SPECIFIC QUESTIONS	30
Project-Specific Questions: Controlled Groundwater Areas and Basin Closures	30
NON-MANDATORY QUESTIONS FOR CRITERIA ANALYSIS	32
Adverse Effect.....	32
Adequate Diversion Means and Operation	33
Beneficial Use	35
Possessory Interest.....	36
Non-Mandatory Project Specific Questions	37
Place of Storage	37
Project-Specific Questions: Water Marketing	38
FOLLOW-UP	39
PREAPPLICATION MEETING AFFIDAVIT & CERTIFICATION	41



APPLICATION DETAILS

The following questions are mandatory and must be filled out before the Preapplication Meeting Form is determined to be complete. Narrative responses that are larger than the space provided can be answered in an attachment. If an attachment is used, mark the see attachment (“A”) checkbox on this form and label the attachment with the question number. Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Responses in the form of a table may be entered into the table provided on this form or in an attachment. If an attachment is used, the table must have the exact headings found on this form, and the see attachment (“A”) checkbox must be marked. Label units in narrative responses and tables. Questions that require Applicant to submit items to the Department have a submitted (“S”) checkbox, which is marked when the required item is attached to the Preapplication Meeting Form. Label all submitted items with the question number for which they were submitted. For all questions where follow-up is necessary, mark the “F” checkbox in the “Follow-Up” column and write the question number on the “Follow-Up Page”.

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

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

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

Questions, Narrative Responses, and Tables	Check-boxes	Follow-up
1. Do you elect to have DNRC conduct Technical Analyses?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
2. Provide a map created on an aerial photograph or topographic map that shows the following: section corners, township and range, scale bar, north arrow, all proposed points of diversion labeled with a unique POD ID number (include GWIC ID, if available, for wells), all proposed places of use, all proposed conveyance structures (including ditches and pipelines), all proposed places of storage, and places of use for all overlapping water rights. More than one map may be submitted, if necessary to clearly convey all required information.	<input type="checkbox"/> S	<input checked="" type="checkbox"/> F
3. Is the project located in a Controlled Groundwater Area or Basin Closure Area? If yes, immediately go to Mandatory Project-Specific questions 54 to 56 because Form 600 may be the incorrect form, or this project may not meet the requirements for the Department to accept a Form 600.	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F
4. Is the proposed use temporary?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F
a. If yes, when will the appropriation cease? _____	<input type="checkbox"/> A	<input type="checkbox"/> 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	Period of Use	Flow Rate			Volume (AF)
	(MM/DD-MM/DD)	(MM/DD-MM/DD)	Flow Rate	GPM	CFS	
Lawn and Garden	04/15 / 10/15	04/15 - 10/15	50	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.1
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	
				<input type="checkbox"/>	<input type="checkbox"/>	
Total			50	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.1

6. Does the proposed use include one or more of the following purposes: domestic, multiple domestic, stock, or irrigation? If yes, fill out the following table, where applicable. Y N F

Purpose	Requested Information	Response
Domestic or multiple domestic	Number of dwellings	
Stock	Number of animal units	
Irrigation	Method of irrigation type (sprinkler or flood) and subtype (if flood: level border, graded border, furrow, contour ditch, or other; if sprinkler: center pivot, wheel line, or other)	
Irrigation (flood only)	Design slope	

7. 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 # 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 (Tran	SW	SW	SE	35	1N	13E	SG			3-A-1	Night Sky	2	SW	Yellowstone	Pump (Transitory)
2 (Tran	SW	SW	SE	35	1N	13E	SG			3-A-1	Night Sky	2	SW	Yellowstone	Pump (Transitory)

8. What are the geocodes of the place of use?	<input type="checkbox"/> A	<input type="checkbox"/> F
40-1019-35-3-01-04-0000		

9. 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.	<input type="checkbox"/> A	<input type="checkbox"/> F
------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------	----------------------------

Acres	Gov't Lot	Block	¼	¼	¼	Sec	Twp	Rge	County
1.25	2		SW	SW	SE	35	1N	13E	Sweet Grass
1.25	Total								

10. Will other water rights supplement or overlap the place of use to contribute to the purpose(s)?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F
a. If yes, summarize how the water rights will be operated as a whole to serve the purpose(s). _____ _____ _____ _____ _____	<input type="checkbox"/> A	<input type="checkbox"/> F

11. 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.						<input type="checkbox"/> A	<input type="checkbox"/> F
Water Right No.	Avg. Period of Diversion	Avg. Period of Use	Flow Rate			Volume Contributed	
	<i>MM/DD-MM/DD</i>	<i>MM/DD-MM/DD</i>	<i>Flow Rate</i>	<i>GPM</i>	<i>CFS</i>	<i>AF</i>	
				<input checked="" type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>		
				<input type="checkbox"/>	<input type="checkbox"/>		

12. Will this application supplement contract water from a Federal Project, ditch company, or other source?		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F
a. If yes, explain. _____ _____ _____		<input type="checkbox"/> A	<input type="checkbox"/> F
13. Does the project involve one or more places of storage? This does not include reservoirs, pits, pit-dams, or ponds with a capacity less than 0.1 AF; water tanks; or cisterns (ARM 36.12.113(6)). If yes, answer the following questions once for each place of storage. Use an "Additional Place of Storage (600P)" sheet if more than one. Additionally, you may choose to answer non-mandatory questions 76 to 80 for place of storage.		<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F
a. Is this application to enlarge an existing reservoir? If yes, list the water right numbers for the existing reservoir. _____		<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
b. Is the place of storage located on-stream?		<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
c. 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: $\text{Surface Acres} \times \text{Maximum Depth (FT)} \times 0.5 = \text{Capacity (AF)}$ _____		<input type="checkbox"/> A	<input type="checkbox"/> F

<p>d. What is the surface area of the place of storage?</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>14. Will your system be designed to discharge water from the project?</p>	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F
<p>a. If yes, explain the wastewater disposal method. A discharge permit may be required to comply with §§ 75-5-410 and 85-2-364, MCA.</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>15. 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 AF (Form 600-B) with application submittal. The criteria are found in §85-2-311(3), MCA.</p>	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F
<p>16. Will you be transporting water for use outside of Montana? If yes, you must 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.</p>	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F
<p>17. Does the project include the water marketing purpose? If yes, you may choose to answer non-mandatory questions 81 to 85 for water marketing. A Water Marketing Purpose Addendum (Form 600/606-WMA) will be required with application submittal.</p>	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F
<p>18. Are you proposing a point of diversion and/or place of use on State of Montana Trust Land? If yes, documentation of consent from the DNRC Trust Lands Management Division will be required at application submittal.</p>	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F
<p>19. Is the project located in designated sage grouse habitat? If yes, a review letter from the Montana Sage Grouse Habitat Conservation Program will be required at application submittal.</p>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F



SURFACE WATER

Applicable, move on to question 20. **Not Applicable**, skip to question 30.

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 Analysis

Questions, Narrative Responses, and Tables						Check-boxes	Follow-up
20. 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.						<input type="checkbox"/> A	<input type="checkbox"/> F
POD #	Flow Rate			Volume	Period Start	Period End	
	Flow Rate	GPM	CFS	AF	MM/DD	MM/DD	
1 (Transitory Start)	50	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.1	04/15	10/15	
2 (Transitory End)		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				

21. Is the source type of the diversion perennial or intermittent, ephemeral, lake, or other? Perennial _____						<input type="checkbox"/> A	<input type="checkbox"/> F
Perennial or intermittent	Answer questions 22 to 25	Ephemeral	Answer question 26	Lake	Answer question 27	Other	Answer questions 28 to 29

Surface Water Analysis: Perennial or Intermittent

Applicable **Not Applicable**

22. Are stream gage data available?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
a. If yes, answer question 23.		
b. If no, answer question 24.		



23. Stream gage data are available.			
a. Is one stream gage located above the most upstream POD and one stream gage located below the most upstream POD?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F	
i. If no, is only one stream gage located near the most upstream POD?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F	
1. If yes, is the stream gage located upstream or downstream? _____		<input type="checkbox"/> F	
b. List the gage name(s). Write "N/A" for Gage 2 if one gage is available. Gage 1: <u>Yellowstone at Livingston</u> Gage 2: <u>Yellowstone at Billings</u>		<input type="checkbox"/> F	
c. What is the distance between the gage(s) and the most upstream POD? Write "N/A" for Gage 2 if one gage is available. Gage 1: <u>31 miles</u> Gage 2: <u>90 miles</u>		<input type="checkbox"/> F	
d. Is there a limiting or controlling factor on the source between the stream gage(s) and the most upstream POD? This includes dams that control the flow and streams with large gaining and/or losing reaches. If you have questions about this, the Regional Office may provide assistance.	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F	
i. If yes, explain. _____ _____ _____	<input type="checkbox"/> A	<input type="checkbox"/> F	
e. How long is the period of record? Write "N/A" for Gage 2 if one gage is available. Gage 1: <u>128 years</u> Gage 2: <u>121 years</u>		<input type="checkbox"/> F	
f. Who operates and maintains the gage(s)? Write "N/A" for Gage 2 if one gage is available. Gage 1: <u>USGS</u> Gage 2: <u>USGS</u>		<input type="checkbox"/> F	



g. Is each available stream gage operated and maintained by USGS or DNRC?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
i. If yes, skip to question 23.h.		
ii. If no, answer the following questions for each gage not operated and maintained by USGS or DNRC.		
1. How frequently are stage data recorded? Write "N/A" for Gage 2 if only one gage is not operated or maintained by USGS. Gage 1: _____ Gage 2: _____		<input type="checkbox"/> F
2. If data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?		
a. Gage 1. _____	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
3. Was the rating curve established and maintained throughout the duration of the period of record using measurements taken near the reference gage and stage recorder according to USGS protocols?		
a. Gage 1. _____	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
4. Were requirements established and followed for maintaining a permanent gage datum and meeting specified accuracy limits?		
a. Gage 1. _____	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F



<p>h. Do the data for one or more available stream gages meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?</p>	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>i. If yes, record how many meet the standard, then skip to question 54 because this section is complete. <u>Both</u></p>		<input type="checkbox"/> F
<p>ii. If no, answer question 24.</p>		
<p>24. If no gage data are available or if available gage data do not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion, is the source otherwise measured?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. If no, measurements may be necessary. The Department cannot deem the preapplication meeting form adequately completed until the Department receives gage data and/or measurements that meet the requirements of ARM 36.12.1702 or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria. Skip to question 25.</p>		
<p>b. If yes,</p>		
<p>i. Submit available measurements to the Department.</p>	<input type="checkbox"/> S	<input type="checkbox"/> F
<p>ii. Who collected the measurements? _____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>iii. With what method were the data collected? _____ _____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>iv. What is the period of record? _____</p>		<input type="checkbox"/> F
<p>v. What is the frequency of measurement? _____</p>		<input type="checkbox"/> F
<p>vi. Are there gaps in the data?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F



<p>1. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality?</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>vii. Is there a process for maintaining the data and meeting specified accuracy limits?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>1. If yes, explain.</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>viii. Do available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the proposed months of diversion?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>1. If yes, this section is complete. Skip to question 54.</p>		
<p>2. If no, answer question 25.</p>		
<p>25. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for validation of a Department-accepted estimation technique?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. If yes,</p>		
<p>i. Describe how the measurements are representative of high, moderate, and low flows.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>ii. Describe the estimation technique.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>b. If no, but a Department-accepted estimation technique will be appropriate for the source:</p>		



<p>i. Will measurements be collected prior to submission of Form 600P-B that meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>1. If yes,</p>		
<p>a. With what method will the data be collected?</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>b. What will be the interval of measurement?</p> <p>_____</p>		<input type="checkbox"/> F
<p>c. Describe the proposed estimation technique.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>2. If no, do you plan on requesting a variance from measurement requirements pursuant to ARM 36.12.1702(1)(b)? If you plan to request a variance, you must submit Form 653 on or before the Variance Request Deadline. The Department cannot deem the preapplication meeting form adequately completed until the Department receives measurements that meet the requirements of ARM 36.12.1702(1)(b) or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>c. If no, because no Department-accepted estimation technique will be appropriate for the source:</p>		
<p>i. Describe why no Department-accepted estimation technique is appropriate for the source characteristics.</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>ii. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard for monthly measurements throughout the proposed period of diversion pursuant to ARM 36.12.1702(4)?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F



<p>1. If no, will measurements be collected prior to submission of a completed Form 600P that meet the Department's standard of monthly measurements throughout the proposed period of diversion?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. If yes, with what method will the data be collected?</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>b. If no, do you plan on requesting a variance from measurement requirements pursuant to ARM 36.12.1702(4)? If you plan to request a variance, you must submit Form 653 on or before the Variance Request Deadline. The Department cannot deem the preapplication meeting form adequately completed until the Department receives measurements that meet the requirements of ARM 36.12.1702(4) or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F

Surface Water Analysis: Ephemeral

Applicable **Not Applicable**

<p>26. Did you elect for the Department to conduct the Technical Analyses?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. If yes, do you have climate or drainage area data you would like the Department to consider during Technical Analyses?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>i. If yes, submit this information to the Department.</p>	<input type="checkbox"/> S	<input type="checkbox"/> F
<p>b. If no,</p>		
<p>i. Describe the estimation technique you propose to use to estimate physical availability at the point of diversion.</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>ii. What is the net annual precipitation? Include the source of this information.</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F



iii. What is the drainage area upstream of the point of diversion and how was this figure calculated? _____ _____ _____	<input type="checkbox"/> A	<input type="checkbox"/> F
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Surface Water Analysis: Lakes

Applicable **Not Applicable**

27. Has the lake volume been quantified by a qualified entity based on bathymetric data?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
a. If yes, provide this information to DNRC.	<input type="checkbox"/> S	<input type="checkbox"/> F
b. If no, answer the following questions,		
i. When do you plan to collect this information? _____		<input type="checkbox"/> F
ii. What data collection method will you use? _____ _____	<input type="checkbox"/> A	<input type="checkbox"/> F

Surface Water Analysis: Other

Applicable **Not Applicable**

28. Explain why the source type is "other". _____ _____	<input type="checkbox"/> A	<input type="checkbox"/> F
29. Have you measured the source?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
a. If yes, answer the following questions,		
i. With what method was the measurement data collected? _____ _____	<input type="checkbox"/> A	<input type="checkbox"/> F



ii. What is the measurement interval? _____		<input type="checkbox"/> F
1. Does the interval meet the Department’s standard for monthly measurements throughout the proposed period of diversion pursuant to ARM 36.12.1702(4)?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
a. If no, do you plan on requesting a variance from measurement requirements pursuant to ARM 36.12.1702(4)? If you plan to request a variance, you must submit Form 653 on or before the Variance Request Deadline.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
b. If no,		
i. When do you plan to measure? _____		<input type="checkbox"/> F
ii. What data collection method will be used? _____ _____ _____	<input type="checkbox"/> A	<input type="checkbox"/> F
iii. Do you plan on requesting a variance from measurement requirements pursuant to ARM 36.12.1702(4)? If you plan to request a variance, you must submit Form 653 on or before the Variance Request Deadline. The Department cannot deem the preapplication meeting form adequately completed until the Department receives measurements that meet the requirements of ARM 36.12.1702(4) or, in combination with an approved variance request, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F

Area of Potential Impact Analysis

No additional information needed for Technical Analyses.



GROUNDWATER

Applicable, move on to question 30. **Not Applicable**, skip to question 54.

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

Groundwater Analysis for Permits

Questions, Narrative Responses, and Tables					Check-boxes	Follow-up
30. What is the type of groundwater diversion? _____					<input type="checkbox"/> A	<input type="checkbox"/> F
Well/Pumping Pit	Answer questions 31 to 35	Developed Spring	Answer question 36	Pond	Answer questions 37 to 39	

Groundwater Analysis for Permits: Well/Pumping Pit

Applicable Not Applicable

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



<p>32. Submit Aquifer Test Data Form (Form 633). If a variance is requested, Form 633 must be submitted on or before the Variance Request Deadline. If no variance is requested, Form 633 is due by the time the preapplication meeting form is complete but may be submitted earlier. However, if the Department determines a variance is needed and the Variance Request Deadline has passed, to submit the Form 653 you must reschedule the preapplication meeting or submit the application without expedited fees and timelines (ARM 36.12.1302(6)).</p>	<input type="checkbox"/> S	<input type="checkbox"/> F
<p>33. Submit the Aquifer Testing Addendum (Form 600/606-ATA) and associated materials (e.g., well logs). If you request a variance, Form 600/606-ATA must be submitted on or before the Variance Request Deadline. If no variance is requested, Form 600/606-ATA is due by the time the preapplication meeting form is complete but may be submitted earlier. However, if the Department determines a variance is needed and the Variance Request Deadline has passed, to submit the Form 653 you must reschedule the preapplication meeting or submit the application without expedited fees and timelines (ARM 36.12.1302(6)).</p>	<input type="checkbox"/> S	<input type="checkbox"/> F
<p>34. Are you requesting a variance from ARM 36.12.121? If you are unsure if a variance request will be needed, mark follow-up and answer this question once Form 600/606-ATA and Form 633 are complete. A variance must be requested by the Variance Request Deadline.</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. If yes, submit Form 653, Form 600/606-ATA, and Form 633 together on or before the Variance Request Deadline.</p>	<input type="checkbox"/> S	<input type="checkbox"/> F
<p>b. If no, you may choose to submit Form 600/606-ATA and Form 633 before the Variance Request Deadline, and the Department will review these two forms. However, if the Department determines a variance is needed after the Variance Request Deadline, to submit the Form 653 you must reschedule the preapplication meeting or submit the application without expedited fees and timelines (ARM 36.12.1302(6)).</p>		
<p>35. Have all proposed wells/pumping pits been constructed?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. If no, answer the following questions:</p>		
<p>i. Submit a list of the POD IDs for all wells/pumping pits and mark whether they have or have not been constructed.</p>	<input type="checkbox"/> S	<input type="checkbox"/> F
<p>ii. When will all proposed wells/pumping pits be constructed? _____</p>		<input type="checkbox"/> F
<p>iii. Is the requested volume for each proposed well/pumping pit known?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>1. If yes, list the flow rate and volume requested for each proposed well/pumping pit. Label with POD ID. _____ _____ _____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F



2. If no, what is the total requested volume (AF) and the number of proposed PODs? _____		<input type="checkbox"/> F
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Groundwater Analysis for Permits: Developed Spring

Applicable Not Applicable

36. Have you measured the source?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
a. If yes, submit the measurements and answer the following questions,	<input type="checkbox"/> S	<input type="checkbox"/> F
i. Do you have flow rate (GPM or CFS) and volume measurements?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
ii. With what method were measurements collected? _____ _____	<input type="checkbox"/> A	<input type="checkbox"/> F
iii. What is the interval of measurements? _____		<input type="checkbox"/> F
iv. Is the interval of measurements sufficient to comply with ARM 36.12.1703(1)?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
b. If no, or if measurements do not comply with ARM 36.12.1703(1), answer the following questions. The Department cannot deem the preapplication meeting form adequately completed until the Department receives measurements that meet the requirements of ARM 36.12.1703(1). Variances from ARM 36.12.1703(1) are not allowed.		
i. When do you plan to measure? _____		<input type="checkbox"/> F
ii. With what method and at what interval will measurements be collected? _____ _____	<input type="checkbox"/> A	<input type="checkbox"/> F



Groundwater Analysis for Permits: Pond

Applicable Not Applicable

37. Submit Form 653 to apply for a variance from ARM 36.12.121 for the Aquifer Test on or before the Variance Request Deadline.	<input type="checkbox"/> S	<input type="checkbox"/> F
38. Submit pond bathymetry data, survey, or engineering plans to the Department.	<input type="checkbox"/> S	<input type="checkbox"/> F
39. Is the pond fed or drained by surface water?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
a. If yes,		
i. Explain. _____ _____ _____	<input type="checkbox"/> A	<input type="checkbox"/> F
ii. Submit measurements of the connected surface water source. These may include inflow and outflow measurements.	<input type="checkbox"/> S	<input type="checkbox"/> F

Surface Water Depletion Analysis

40. Is the type of groundwater diversion for your proposed project a developed spring? If yes, skip to question 45 because this section is complete. If no, move onto question 41.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
41. Is the type of groundwater diversion for your proposed project a pond? If yes, answer question 41.a, then skip to question 45 because this section is complete. If no, move onto question 42.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
a. Will any of the ponds have diversions for out-of-pond use that differ from, if year-round use, an allocation of diverted volume by the number of days in the month, or, if irrigation/lawn and garden use, the 80% dry year net irrigation requirement (IWR, NRCS 2003)?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
i. If yes, provide a schedule of the diversions for out-of-pond use in the table below. Use the same POD # as the project map (question 2). Attach any additional schedules with POD # labeled.	<input type="checkbox"/> A	<input type="checkbox"/> F

POD #			
Month	Diversions for Out-of-Pond Use Volume (AF)	Month	Diversions for Out-of-Pond Use Volume (AF)
January		July	
February		August	
March		September	
April		October	
May		November	
June		December	



42. What is the flow rate (GPM or CFS), volume (AF), and period of diversion required (MM/DD-MM/DD) at each well/pumping pit? What is the well/pumping pit depth (FT), if available, or estimated well/pumping pit depth (FT). Please use the same POD # as the project map (question 2) to match this information with the location information.

<input type="checkbox"/> A	<input type="checkbox"/> F
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POD #	Flow Rate			Volume	Period of Diversion	Depth	Measured or Estimated
	Flow Rate	GPM	CFS	AF	MM/DD-MM/DD	FT	
		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				
		<input type="checkbox"/>	<input type="checkbox"/>				

43. Will any of the *new* wells/pumping pits have a monthly pumping schedule that differs from, if year-round use, an allocation of diverted volume by the number of days in the month, or, if irrigation/lawn and garden use, the 80% dry year net irrigation requirement (IWR, NRCS 2003)?

<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
-------------------------------------------------------	----------------------------

a. If yes, provide the alternative pumping schedule(s) in the table below. Use the same POD # as the project map (question 2). Attach any additional pumping schedules with POD # labeled.

<input type="checkbox"/> A	<input type="checkbox"/> F
----------------------------	----------------------------

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

44. Will one or more <i>existing</i> wells/pumping pits be used for the proposed project?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
a. If yes, will any of the <i>existing</i> wells/pumping pits have a monthly pumping schedule, before or after the proposed project, that differs from an allocation of diverted volume by the number of days in the month (if year-round use) or the 80% dry year net irrigation requirement (if irrigation/lawn and garden use) (IWR, NRCS 2003)?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
i. If yes, provide the pumping schedules before and after the proposed project in the table below. Use the same POD # as the project map (question 2). Attach any additional pumping schedules with POD # and before/after proposed project labeled.	<input type="checkbox"/> A	<input type="checkbox"/> F

Before proposed project: POD #				After proposed project: POD #			
Month	Volume (AF)	Month	Volume (AF)	Month	Volume (AF)	Month	Volume (AF)
January		July		January		July	
February		August		February		August	
March		September		March		September	
April		October		April		October	
May		November		May		November	
June		December		June		December	

Surface Water Analysis of Depleted Surface Water

45. Based on the preliminary net depletion data provided by the Department at this preapplication meeting, what are the hydraulically connected surface water source(s)? <i>*Net depletion data provided by the Department at the preapplication meeting is preliminary and is subject to change during Technical Analyses. If the source or location of net depletion data changes during Technical Analyses, then surface water analysis of depleted surface water source(s) will reflect the Technical Analyses; this will not constitute a change of any element to the proposed application pursuant to ARM 36.12.1302(6)(a).</i> If the type of groundwater diversion for your proposed project is a developed spring, write "NA" and skip to question 51 because this section is complete.	<input type="checkbox"/> A	<input type="checkbox"/> F
46. Answer the questions in this section one time for each hydraulically connected source. Use the "Additional Hydraulically Connected Source (600P)" sheet, as necessary. For which hydraulically connected source are you answering questions 47 to 50? _____		<input type="checkbox"/> F
47. Are stream gage data available?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
a. If yes, answer question 48.		
b. If no, answer question 49.		



48. Stream gage data are available		
a. Is one stream gage located above and one stream gage located below the start of the depleted reach?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
i. If no, is only one stream gage located near the start of the depleted reach?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
1. If yes, is the stream gage upstream or downstream? _____		<input type="checkbox"/> F
b. List the gage name(s). Write "N/A" for Gage 2 if one gage available. Gage 1: _____ Gage 2: _____		<input type="checkbox"/> F
c. What is the distance between the gage(s) and the start of the depleted reach? Write "N/A" for Gage 2 if one gage available. Gage 1: _____ Gage 2: _____		<input type="checkbox"/> F
d. Is there a limiting or controlling factor on the source between the stream gage(s) and the start of the depleted reach? This includes dams that control the flow and streams with large gaining and/or losing reaches. If you have questions about this, the Regional Office may provide assistance.	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
i. If yes, explain. _____ _____ _____	<input type="checkbox"/> A	<input type="checkbox"/> F
e. How long is the period of record? Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____		<input type="checkbox"/> F
f. Who operates and maintains the gage(s)? Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____		<input type="checkbox"/> F
g. Is each available stream gage operated and maintained by USGS or DNRC?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
i. If yes, skip to question 48.h.		
ii. If no, answer the following questions for each gage not operated and maintained by USGS or DNRC.		



<p>1. How frequently is stage data recorded? Write "N/A" for Gage 2 if only one gage is not operated or maintained by USGS. Gage 1: _____ Gage 2: _____</p>		<input type="checkbox"/> F
<p>2. If data gaps were to occur, are they identified and left unfilled or estimated using interpolation, ice correction, or indirect discharge measurements methods?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. Gage 1. _____</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>3. Was the rating curve established and maintained throughout the duration of the period of record using measurements taken near the reference gage and stage recorder according to USGS protocols?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. Gage 1. _____</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>4. Were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. Gage 1. _____</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>b. Gage 2. Write "N/A" on the line instead of answering yes or no, if only one gage is not operated or maintained by USGS or DNRC. _____</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>h. Do the data for one or more available stream gages meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>i. If yes, record how many meet the standard, then skip to question 54 because this section is complete. _____</p>		
<p>ii. If no, answer question 49.</p>		
<p>49. If no gage data are available or if available gage data do not meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions, is the source otherwise measured?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F



<p>a. If no, measurements may be necessary. The Department cannot deem the preapplication meeting form adequately completed until the Department receives gage data and/or measurements that meet the Department's measurement standards or, in combination with an approved request to deviate from the Department's standards, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria. Skip to question 50.</p>		
<p>b. If yes,</p>		
<p>i. Submit measurements to the Department.</p>	<input type="checkbox"/> S	<input type="checkbox"/> F
<p>ii. Who collected the measurements? _____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>iii. With what method was the data collected? _____ _____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>iv. What is the period of record? _____</p>		<input type="checkbox"/> F
<p>v. What is the frequency of measurement? _____</p>		<input type="checkbox"/> F
<p>vi. Are there gaps in the data?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>1. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? _____ _____ _____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>vii. Is there a process for maintaining the data and meeting specified accuracy limits?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>1. If yes, explain. _____ _____ _____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>viii. Do available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>1. If yes, this section is complete. Skip to question 54.</p>		
<p>2. If no, answer question 50.</p>		



<p>50. Do the available measurement data, gage and/or otherwise measured, meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. If yes,</p>		
<p>i. Describe how the measurements are representative of high, moderate, and low flows.</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>ii. Describe the estimation technique.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>b. If no, but a Department-accepted estimation technique will be appropriate for the hydraulically connected surface water source:</p>		
<p>i. Will measurements be collected prior to submission of a completed Form 600P-B that meet the Department's standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>1. If yes,</p>		
<p>a. With what method will the data be collected?</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>b. What will be the interval of measurement?</p> <p>_____</p>		<input type="checkbox"/> F



<p>c. Describe the proposed estimation technique.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>2. If no, do you plan on requesting to deviate from the Department’s standard of including a minimum of high, moderate, and low flows to be sufficient to use for calibration of a Department-accepted estimation technique? The Department’s technical analyses or scientific credibility review of your technical analyses cannot commence until the Department receives measurements that meet Department measurement standards, or in combination with a request to deviate, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>c. If no, because no Department-accepted estimation technique will be appropriate for the hydraulically connected surface water source:</p>		
<p>i. Describe why no Department-accepted estimation technique is appropriate for the source characteristics.</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F
<p>ii. Do the available measurement data, gage and/or otherwise measured, meet the Department’s standard for monthly measurements throughout the months with net depletions?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>1. If no, will measurements be collected prior to submission of a completed Form 600P that meet the Department’s standard of monthly measurements throughout the months with net depletions?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. If yes, with what method will the data be collected?</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> F



<p>b. If no, do you plan on requesting to deviate from the Department’s standard for monthly measurements throughout the months with net depletions? The Department’s technical analyses or scientific credibility review of your technical analyses cannot commence until the Department receives measurements that meet Department measurement standards, or in combination with a request to deviate, are sufficient to complete any necessary technical analyses or scientific credibility reviews and to evaluate the applicable criteria.</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
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Area of Potential Impact Analysis of Depleted Surface Water

All information for area of potential impact of depleted surface water was collected in previous questions.

Hydrogeologic Report

<p>51. Does your project include one or more wells, pumping pits, or ponds that are in a basin closure area? If yes, fill out questions 52 to 53. Your project must have a Hydrogeologic Report that conforms with § 85-2-361 to comply with the requirements of § 85-2-360, MCA. A Hydrogeologic Report Addendum (Form 600-HRA) or Department Technical Analyses may be used to meet these requirements.</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>52. Did you elect in question 1 for the Department to conduct the Technical Analyses?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. If yes, the Basin Closure Area Addendum (Form 600-BCA), Form 600-HRA, and Hydrogeologic Report are not required at this time. The Department’s Technical Analyses will meet requirements of §85-2-360, MCA for a Hydrogeologic Report and Form 600-HRA. Form 600-BCA will be required with application submittal.</p>		
<p>b. If no, submit the Basin Closure Area Addendum (Form 600-BCA) and Hydrogeologic Report Addendum (600-HRA) with your Technical Analyses.</p>	<input type="checkbox"/> S	<input type="checkbox"/> F
<p>53. If the Hydrogeologic Report indicates that the proposed groundwater use will impact a surface water source, identify and explain which of the following three options best describes your plan to mitigate depletions of hydraulically connected surface water and respond to the relevant questions below.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Application to Change a Water Right to mitigate the adverse effects created <input type="checkbox"/> Alternative mitigation plan <input type="checkbox"/> Documentation to show a mitigation plan is not required 		
<p>a. Application to Change a Water Right to mitigate the adverse effects created: Submit a summary of your initial proposal. <i>A separate Preapplication Meeting will be required for each Application to Change a Water right to a mitigation or aquifer recharge purpose to qualify for expedited timelines and reduced filing fees for the project per ARM 36.12.1302(7)(a).</i></p>	<input type="checkbox"/> S	<input type="checkbox"/> F
<p>b. Alternative mitigation plan: Submit a summary of your initial proposal.</p>	<input type="checkbox"/> S	<input type="checkbox"/> F



i. Do you propose to use water with a marketing for mitigation/aquifer recharge purpose?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
1. If yes,		
a. List the change authorization number(s) for all water rights proposed for use. _____	<input type="checkbox"/> A	<input type="checkbox"/> F
b. What is the area defined for marketing for all water rights proposed for use? _____	<input type="checkbox"/> A	<input type="checkbox"/> F
c. If Marketing for aquifer recharge, submit the analysis of the monthly accretions to hydraulically connected surface water(s); otherwise write "NA". _____	<input type="checkbox"/> S	<input type="checkbox"/> F
c. Documentation to show a mitigation plan is not required: Submit all documentation.	<input type="checkbox"/> S	<input type="checkbox"/> F



MANDATORY PROJECT-SPECIFIC QUESTIONS

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

Project-Specific Questions: Controlled Groundwater Areas and Basin Closures

Questions, Narrative Responses, and Tables	Check-boxes	Follow-up
54. Does the project include one or more groundwater points of diversion located in the East Valley Controlled Groundwater Area (EVCGWA)?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F
a. If yes, is the use over 35 GPM or 10 AF/YR?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
i. If no, this is the incorrect form. Use instead Form 600-EVCGWA: East Valley Controlled Groundwater Area Permit Application.		
ii. If yes, how does this project meet the specific requirements of the East Valley Controlled Groundwater Area? Include any relevant documentation. _____	<input type="checkbox"/> A	<input type="checkbox"/> F
b. If no, skip to question 55.		
55. Does the project include one or more groundwater points of diversion located in the Yellowstone Controlled Groundwater Area?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	<input type="checkbox"/> F
a. If yes, is the proposed flow rate and volume over 35 GPM or 10 AF/YR?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
i. If no, this is the incorrect form. Use instead Form 600-YCGA: Yellowstone Controlled Groundwater Area Permit Application.		
ii. If yes, answer the remaining parts of question 55 and submit <i>Form 600 YCGA: A Yellowstone Controlled Groundwater Area Addendum Over 35 gallons per minute</i> with the application.		
1. Does the proposed use require a point of diversion with water temperature of 60 degrees Fahrenheit or more?	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
2. If an application is in a basin tributary to a category 3 or 4 stream (generally in or upstream of Yellowstone National Park), submit with the application a report prepared by a qualified professional verifying that the appropriation is not hydrologically connected to surface flow that is tributary to the reserved portion of category 3 or 4 streams.		
b. If no, skip to question 56.		



<p>56. Is the project for surface water or groundwater and subject to one or more of the Controlled Groundwater Areas; administrative, Department ordered, or legislative basin closures; or compact closures listed on the Department's website (https://dnrc.mt.gov/Water-Resources/Water-Rights/Basin-Closures-Stream-Depletion-Controlled-Ground-Water-Areas) not covered in questions 54 to 55?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> F
<p>a. If yes, identify each area and describe how the proposed project meets its requirements. An application must meet the specific requirements of the Controlled Groundwater Area or closure to be accepted by the Department.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A	<input type="checkbox"/> 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
57. Describe your plan to ensure that existing water rights will be satisfied during times of water shortage. The pump can be shut off. _____ _____ _____ _____ _____ _____ _____ _____ _____	<input type="checkbox"/> A
58. Explain how you can control your diversion in response to call being made. Pump can be shut off _____ _____ _____	<input type="checkbox"/> A
59. Are you aware of any calls that have been made on the source of supply or depleted surface water source?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
a. If yes, explain. _____ _____ _____	<input type="checkbox"/> A
60. Does a water commissioner distribute water or oversee water distribution on your proposed source or depleted surface water source?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N



61. Will the point of diversion or conveyance infrastructure be shared with one or more existing water rights?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
<p>a. If yes, explain how capacity of the shared point of diversion and/or conveyance infrastructure is sufficient for all water rights.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A

Adequate Diversion Means and Operation

62. Submit a diagram of how you will operate your system from the point of diversion to the place of use.	<input type="checkbox"/> S
<p>63. 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.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A



64. Describe the size, materials, capacity, and configuration of infrastructure to convey water from point of diversion to place of use. This may include but is not limited to, pipelines and ditches. Include a description of any losses related to the proposed conveyance. Ditch conveyance losses may be estimated numerous ways, which include a ditch loss rate or Department standard methods. You may work with the Department to estimate ditch conveyance losses but will need to provide sufficient baseline information; which includes ditch slope, dimensions, length, lining material, soil type, and location.

A

65. Describe how the proposed diversion and conveyance infrastructure can provide the required flow and volume, for the purposes plus any conveyance losses and storage, throughout the proposed period of diversion.

A

66. Provide a plan of operations, which includes 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.

A

67. Does the proposed conveyance require easements?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
a. If yes, explain. _____ _____ _____	<input type="checkbox"/> A
68. Do you own the land where all proposed points of diversion are located?	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
a. If no, documentation to show you have the right to use all points of diversion located on each property you do not own will be required upon application submittal. This may include, but is not limited to, a well agreement, an easement, or permission of the party that owns the property where the proposed point(s) of diversion are located.	
69. 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. _____ _____ _____ _____	<input type="checkbox"/> A
70. Do you have any plans to measure your diversion and use?	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
a. If yes, describe the plan and the type of measurements you will take. _____ _____ _____	<input type="checkbox"/> A

Beneficial Use

71. Does the Department have a standard for any of the purposes for which water is used? Department standards can be found in ARM 36.12.112 and ARM 36.12.115.	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
a. If yes, list the purposes for which the Department has a standard and note whether the proposed use falls within or outside the standard. Lawn and garden, in the standard _____ _____	



<p>72. If no Departmental standard exists for any proposed purpose, or if any proposed purpose falls outside of Department standards, explain how the use is reasonable for that purpose.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A
<p>73. Will your proposed project be subject to DEQ requirements for a public water supply (PWS) system or Certificate of Subdivision Approval (COSA)?</p>	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
<p>a. If yes,</p>	
<p>i. Have you researched or consulted with DEQ regarding those requirements?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N
<p>74. Are you proposing to use surface water for in-house domestic use?</p>	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
<p>a. If yes, does a COSA exist for the proposed place of use?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N
<p>i. If yes, please submit the COSA.</p>	<input type="checkbox"/> S
<p>ii. If no, have you researched or consulted with DEQ regarding their requirements?</p>	<input type="checkbox"/> Y <input type="checkbox"/> N

Possessory Interest

<p>75. 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.</p>	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
<p>a. If yes, explain.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	<input type="checkbox"/> A



b. If no,	
i. Do you own all proposed places of use?	<input type="checkbox"/> Y <input type="checkbox"/> N
1. If no,	
a. Explain. Documentation that shows you either have possessory interest or written permission of the parties with possessory interest of the place of use will be required at application submittal. _____ _____ _____	<input type="checkbox"/> A
b. Would you like the water right to be appurtenant to the land? Please note that if your water right is not appurtenant to land it will not transfer by default with the conveyance of the property, pursuant to § 85-2-403.	<input type="checkbox"/> Y <input type="checkbox"/> N
i. If no, explain. _____ _____ _____	<input type="checkbox"/> A

Non-Mandatory Project Specific Questions

Place of Storage

76. Does the proposal include at least one place of storage? If yes, answer questions 77 to 80 for each individual place of storage (use “Additional Place of Storage (600P)” sheet for additional places of storage). A Permit Storage Addendum (Form 600-SA) will be required at application submittal. If no, this section is complete, and you can skip to question 81.	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
77. Are preliminary designs available? Preliminary designs will be required at application submittal.	<input type="checkbox"/> S
a. If yes, submit preliminary designs.	<input type="checkbox"/> Y <input type="checkbox"/> N
78. Will the place of storage be lined?	<input type="checkbox"/> Y <input type="checkbox"/> N
79. What is the annual net evaporation of water from the place of storage, based on the Department's gridded net evaporation layer? If you propose a different method, attach an explanation and justification of the method. _____	<input type="checkbox"/> A



80. Is the place of storage capacity calculated to be greater than 50 AF?	<input type="checkbox"/> Y <input type="checkbox"/> N
a. If yes, have you made an application to the DNRC Water Operations Bureau for a determination of whether the dam or reservoir is a high-hazard dam? This will be required by application submittal.	<input type="checkbox"/> Y <input type="checkbox"/> N

Project-Specific Questions: Water Marketing

81. Does the proposal include water marketing? If yes, please answer the questions in this section (questions 82 to 85). A Water Marketing Addendum Purpose Addendum (600/606-WMA) will be required at application submittal. If no, this section is complete.	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
82. For what purpose(s) will the marketed water be used? _____ _____ _____	<input type="checkbox"/> A
83. How will you control or limit access to the water? _____ _____ _____	<input type="checkbox"/> A
84. Do you have contracts for the entire volume and flow rate sought?	<input type="checkbox"/> Y <input type="checkbox"/> N
85. Provide a service area map. Create map on an aerial photograph or topographic map and show the following: general service area boundary, section corners, township and range, scale bar, and north arrow.	<input type="checkbox"/> S



FOLLOW-UP

The tables below will identify all questions marked for follow-up. Applicant follow-up will be submitted with the completed Preapplication Meeting Form: Part B (Form 600P-B). Applicant will provide all responses to questions marked for follow-up on a separate document entitled "Follow-up Responses." At the preapplication meeting, the Department may offer to provide the Applicant with information pertinent to identified follow-up. In this case, record in the notes column what information the Department will provide and the date by which the Department will email this information to the Applicant. This information will supplement but not replace Applicant follow-up. It is the responsibility of the Applicant to provide all follow-up, including questions supplemented by Department information, in the "Follow-up Responses" document.

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

The Applicant may not alter the Preapplication Meeting Form: Part A (Form 600P-A) signed at the Preapplication Meeting. Instead, the Applicant must use the Amended Responses procedure defined in Form 600P-B. Do not include additional information for questions that were not marked for follow-up on this table; instead include any additional information pursuant to the process for amending responses defined in Form 600P-B.

QUESTION #	NOTES
2	Map meeting all criteria



PREAPPLICATION MEETING AFFIDAVIT & CERTIFICATION

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

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

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

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

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

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

<i>Gary Brink</i>	Gary Brink	President	7/8/2025
Applicant Signature			Date

Applicant Signature	<i>Christine Schweigert</i>		7/8/2025
Department Signature			Date



Certificate Of Completion

Envelope Id: AB7CE33D-EED9-486F-BC30-8AA51C79FD6A	Status: Completed
Subject: Complete with Docusign: Form-600P-A 43B 30171298.pdf	
Source Envelope:	
Document Pages: 41	Signatures: 2
Certificate Pages: 5	Initials: 0
AutoNav: Enabled	Envelope Originator:
Envelopeld Stamping: Enabled	Veronica Corbett
Time Zone: (UTC-07:00) Mountain Time (US & Canada)	1539 11th Avenue
	Helena, MT 59601
	Veronica.Corbett@mt.gov
	IP Address: 161.7.26.247

Record Tracking

Status: Original	Holder: Veronica Corbett	Location: DocuSign
7/8/2025 2:32:01 PM	Veronica.Corbett@mt.gov	
Security Appliance Status: Connected	Pool: StateLocal	
Storage Appliance Status: Connected	Pool: Montana Dept of Natural Resources & Conservation	Location: Docusign

Signer Events

Signer Events	Signature	Timestamp
Gary Brink garybrink@brinkincmt.com President Gary Brink Inc Security Level: Email, Account Authentication (None)		Sent: 7/8/2025 2:59:44 PM Viewed: 7/8/2025 3:01:09 PM Signed: 7/8/2025 3:02:04 PM
	Signature Adoption: Pre-selected Style Using IP Address: 72.174.33.42	

Electronic Record and Signature Disclosure:

Accepted: 7/8/2025 3:01:09 PM
ID: 674bab34-b774-4221-b992-728b260f14da

Christine Schweigert CSchweigert@mt.gov Hydrologist Montana Department of Natural Resources and Conservation Security Level: Email, Account Authentication (None)		Sent: 7/8/2025 3:02:08 PM Viewed: 7/8/2025 3:03:17 PM Signed: 7/8/2025 3:03:49 PM
	Signature Adoption: Pre-selected Style Using IP Address: 161.7.26.176	

Electronic Record and Signature Disclosure:

Not Offered via Docusign

In Person Signer Events

Signature

Timestamp

Editor Delivery Events

Status

Timestamp

Agent Delivery Events

Status

Timestamp

Intermediary Delivery Events

Status

Timestamp

Certified Delivery Events

Status

Timestamp

Carbon Copy Events

Status

Timestamp

Witness Events

Signature

Timestamp

Notary Events

Signature

Timestamp

Envelope Summary Events

Status

Timestamps

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	7/8/2025 2:59:44 PM
Certified Delivered	Security Checked	7/8/2025 3:03:17 PM
Signing Complete	Security Checked	7/8/2025 3:03:49 PM
Completed	Security Checked	7/8/2025 3:03:49 PM

Payment Events	Status	Timestamps
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Electronic Record and Signature Disclosure

ELECTRONIC RECORD AND SIGNATURE DISCLOSURE

From time to time, Montana Dept of Natural Resources & Conservation (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through the DocuSign system. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to this Electronic Record and Signature Disclosure (ERSD), please confirm your agreement by selecting the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

Getting paper copies

At any time, you may request from us a paper copy of any record provided or made available electronically to you by us. You will have the ability to download and print documents we send to you through the DocuSign system during and immediately after the signing session and, if you elect to create a DocuSign account, you may access the documents for a limited period of time (usually 30 days) after such documents are first sent to you. After such time, if you wish for us to send you paper copies of any such documents from our office to you, you will be charged a \$0.00 per-page fee. You may request delivery of such paper copies from us by following the procedure described below.

Withdrawing your consent

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

All notices and disclosures will be sent to you electronically

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact Montana Dept of Natural Resources & Conservation:

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:

To contact us by email send messages to: kgermaine@mt.gov

To advise Montana Dept of Natural Resources & Conservation of your new email address

To let us know of a change in your email address where we should send notices and disclosures electronically to you, you must send an email message to us at kgermaine@mt.gov and in the body of such request you must state: your previous email address, your new email address. We do not require any other information from you to change your email address.

If you created a DocuSign account, you may update it with your new email address through your account preferences.

To request paper copies from Montana Dept of Natural Resources & Conservation

To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an email to kgermaine@mt.gov and in the body of such request you must state your email address, full name, mailing address, and telephone number. We will bill you for any fees at that time, if any.

To withdraw your consent with Montana Dept of Natural Resources & Conservation

To inform us that you no longer wish to receive future notices and disclosures in electronic format you may:

- i. decline to sign a document from within your signing session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;
- ii. send us an email to kgermaine@mt.gov and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

Required hardware and software

The minimum system requirements for using the DocuSign system may change over time. The current system requirements are found here: <https://support.docusign.com/guides/signer-guide-signing-system-requirements>.

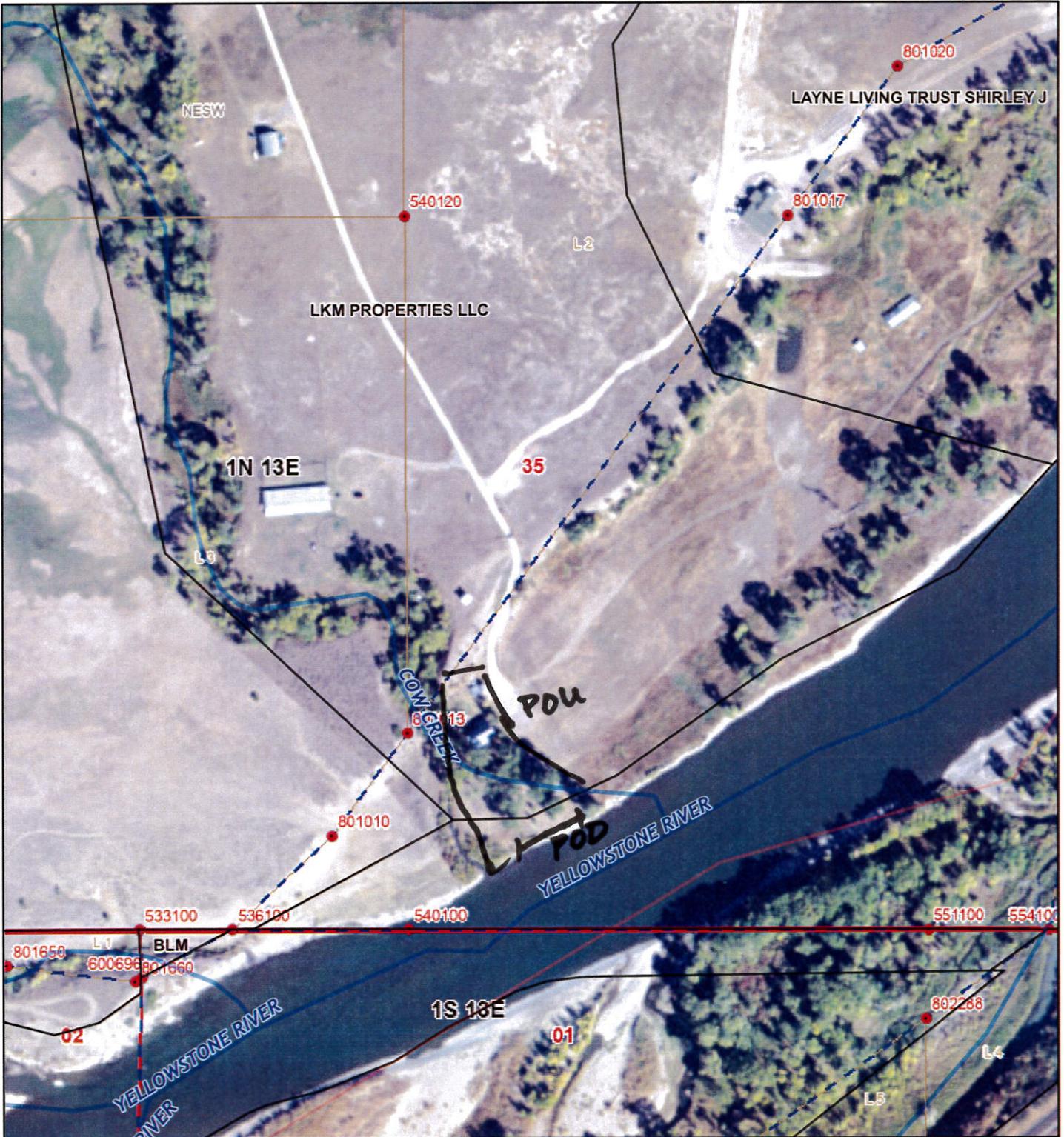
Acknowledging your access and consent to receive and sign documents electronically

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to ‘I agree to use electronic records and signatures’ before clicking ‘CONTINUE’ within the DocuSign system.

By selecting the check-box next to ‘I agree to use electronic records and signatures’, you confirm that:

- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify Montana Dept of Natural Resources & Conservation as described above, you consent to receive exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you by Montana Dept of Natural Resources & Conservation during the course of your relationship with Montana Dept of Natural Resources & Conservation.

LKM Properties Map - QZ

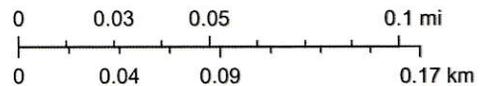


7/15/2025, 3:41:03 PM

1:4,514

- Dewatered Streams
- DNRC Basins
- NHD Flowlines
- 2025 Cadastral Parcels
- PLSS Second Division
- Aliquot Part
- Government Lot
- PLSS First Division
- Section
- PLSS Township
- PLSS Meandered Water
- PLSS Point

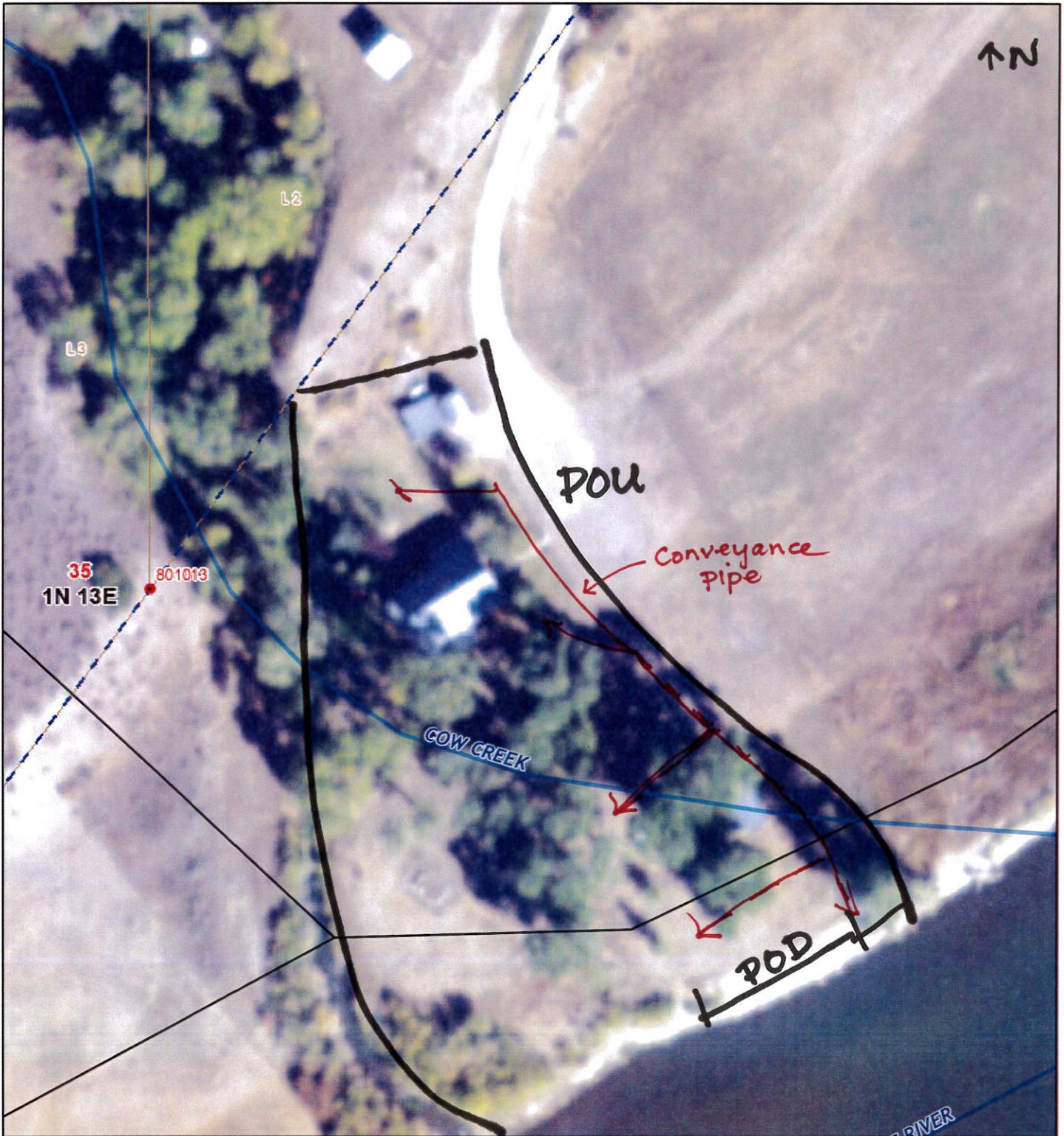
- 2021 Aerial Photos
- Red: Band_1
- Green: Band_2
- Blue: Band_3



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Sources: Esri, Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodastysrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community

ArcGIS Web AppBuilder

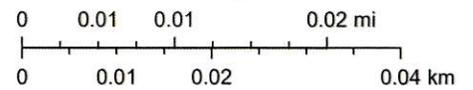
LKM Properties Map - QZ



7/15/2025, 3:42:47 PM

1:1,128

- | | | |
|------------------------|----------------------|--------------------|
| DNRC Basins | PLSS First Division | 2021 Aerial Photos |
| NHD Flowlines | Section | Red: Band_1 |
| 2025 Cadastral Parcels | PLSS Township | Green: Band_2 |
| PLSS Second Division | PLSS Meandered Water | Blue: Band_3 |
| Government Lot | PLSS Point | |



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Sources: Esri, Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodastystreisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community

ArcGIS Web AppBuilder



**PREAPPLICATION MEETING
FORM: PART B
PERMIT**
§ 85-2-302, MCA
Form No. 600P-B (Revised 02/2025)

For Department Use Only

Application # 30171298 Basin 43B
 Form Received HLW
 Fee Rec'd \$ 500.00 Check # 51657
 Deposit Receipt # BLS2100859
 Payor Early Brink Inc
 Form Returned _____
 Refund \$ _____ Date _____

PREAPPLICATION MEETING FEE
\$ 500

FILING FEE REDUCTION & EXPEDITED TIMELINE

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

The Applicant is responsible for providing a "Follow-up Responses" document for all follow-up identified in Preapplication Meeting Form Part A (Form 600P-A). The Applicant may not alter Form 600P-A. If a response has changed to a question answered at the preapplication meeting, the Applicant can provide a new response in a separate document entitled "Amended Responses" with the question number labeled.

The following guidelines are applicable to both the "Follow-up Responses" and "Amended Responses" documents. Clearly label all question numbers. Answer questions in the same format as Form 600P-A. For responses in the form of checkboxes, write "Y", "N", or "S". Constrain narrative responses to the specific question as is asked on the form; do not respond to multiple questions in one narrative. Label units in narrative responses and tables. Tables must have the exact headings found on the form. Questions that require items to be submitted to the Department may be marked "S" when the required item is included with the document.

1. Y N Are you submitting this form in response to a determination by the Department that a previously submitted Form 600P-B was inadequately completed?

If yes,

- a. Date form was returned ("Form Returned" date found in "For Department Use Only" box on the previously submitted Form 600P-B): _____
- b. If a "Follow-up Responses" or "Amended Responses" document is required by questions 2 or 3, submit complete updated documents with responses that stand-alone. The Department will only use the most recently submitted "Follow-up Responses" and "Amended Responses" documents for departmental technical analyses or scientific credibility review; the Department will not use multiple versions of a document.

2. Y N Were any questions identified as requiring follow-up on Form 600P-A?

If yes,

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



FOLLOW-UP AND AMENDED RESPONSES AFFIDAVIT & CERTIFICATION

"I attest that this preapplication meeting form (Form 600P-A and Form 600P-B), follow-up, and amended responses accurately portray the proposed project. I am aware that my application for this project will not qualify for a discounted filing fee and expedited timelines if, upon submittal of the application to the department, I change any element of the proposed application from the preapplication meeting form, amended responses, or follow-up materials (ARM 36.12.1302(6)(a))."

Jan Burt owner LKM Properties LLC 7/15/2025
Applicant Signature Date

Applicant Signature Date

"We confirm that the preapplication form (Form 600P-A and Form 600P-B), amended responses, and follow-up information are adequate for the Department to proceed with technical analyses in ARM 36.12.1303. Or, if the Applicant has elected to complete technical analyses, we confirm they have submitted each required element of technical analysis based on the proposed project and the Department is able to proceed with the scientific credibility review (ARM 36.12.1303(8))."

Department Signature Date

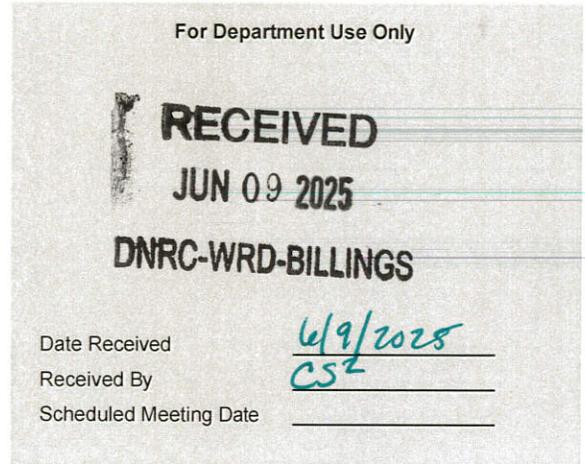
Department Signature Date





REQUEST FOR PREAPPLICATION MEETING

ARM 36.12.1302(2)
(Revised 02/2025)



Instructions

Use this optional form to submit a written request for a preapplication meeting, as required in ARM 36.12.1302(2) for applicants electing to complete a preapplication meeting with the department prior to submitting an application for a beneficial water use permit or change in appropriation right pursuant to § 85-2-302, MCA. Use additional sheets as necessary.

Submit this form to the appropriate regional office; see contact information on the last page of this form.

1. Applicant Name Gary Brink
Mailing Address 216 Moore Lane
City Billings State MT Zip 59101
Home Phone 406-652-7413 Other Phone 406-698-8491
Email: garybrink@brinkincmt.com

2. Representative Name (if other than Applicant) _____
 Representative is Consultant Representative is Attorney Representative is Other
Mailing Address _____
City _____ State _____ Zip _____
Home Phone _____ Other Phone _____
Email: _____

3. Are you requesting a preapplication meeting for a permit or change application?
 Permit Change

4. Describe your project:

I have a 1/2-acre lawn and a small garden at 127 North Yellowstone Trail, 8 miles West of Big Timber that I would like to water from the Yellowstone River. The property is on the river so I would only need a small 3hp pump to accomplish what I need. I am only at the property 3 days a week.



5. Identify the following elements of the proposed permit or change in appropriation.

a) The flow rate and volume of water required:

Flow Rate 50 GPM CFS Volume _____ Acre-Feet

b) The point of diversion:

Point of Diversion #1 _____ 1/4 _____ 1/4 _____ 1/4 Section _____, Township _____ N S, Range _____ E W

County Sweetgrass

Lot/Tract _____ Block _____ Subdivision Name _____

Point of Diversion #2 _____ 1/4 _____ 1/4 _____ 1/4 Section _____, Township _____ N S, Range _____ E W

County _____

Lot/Tract _____ Block _____ Subdivision Name Sky Minor Subdivision

c) The place of use:

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ N S, Rge _____ E W

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ N S, Rge _____ E W

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ N S, Rge _____ E W

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ N S, Rge _____ E W

_____ Acres _____ Lot _____ Block _____ 1/4 _____ 1/4 _____ 1/4 Sec _____, Twp _____ N S, Rge _____ E W

d) The source of water: Yellowstone River

e) The proposed purpose: lawn and garden watering

f) For a change in appropriation right, the water right(s) proposed for change:

Type of water right _____ Basin _____ Water Right # _____

Type of water right _____ Basin _____ Water Right # _____

Type of water right _____ Basin _____ Water Right # _____

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

Water Right #					
Point of diversion	<input type="checkbox"/>				
Place of use	<input type="checkbox"/>				
Purpose of use	<input type="checkbox"/>				
Place of storage	<input type="checkbox"/>				



g) For a change in appropriation right, an explanation of historical use of the right(s) proposed for change:

h) Any proposed place of storage, if applicable (only if storage capacity is greater than 0.1 acre-feet):

#1 Capacity: Surface Acres _____ x Max Depth (feet) _____ x (.4 for dams/.5 for pits) = _____ Acre-Feet

Location: ___ 1/4 ___ 1/4 ___ 1/4 Section ___, Township ___ N S, Range ___ E W

#2 Capacity: Surface Acres _____ x Max Depth (feet) _____ x (.4 for dams/.5 for pits) = _____ Acre-Feet

Location: ___ 1/4 ___ 1/4 ___ 1/4 Section ___, Township ___ N S, Range ___ E W

#3 Capacity: Surface Acres _____ x Max Depth (feet) _____ x (.4 for dams/.5 for pits) = _____ Acre-Feet

Location: ___ 1/4 ___ 1/4 ___ 1/4 Section ___, Township ___ N S, Range ___ E W

i) For applications proposing a well or wells, the well depth(s) and location. If more than two wells, attach a separate sheet to this request:

Well #1 New Well Existing Well

For existing well, if available, Water Right # _____ GWIC ID _____

1/4 ___ 1/4 ___ 1/4 Section ___, Township ___ N S, Range _____ E W

County _____

Lot/Tract _____ Block _____ Subdivision Name _____

Estimated Well Depth _____ Feet

Well #2 New Well Existing Well

For existing well, if available, Water Right # _____ GWIC ID _____

____ 1/4 ___ 1/4 ___ 1/4 Section _____, Township ___ N S, Range ___ E W

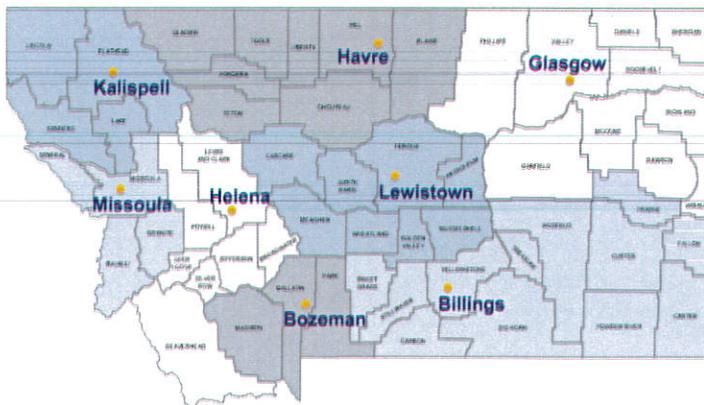
County _____

Lot/Tract _____ Block _____ Subdivision Name _____

Estimated Well Depth _____ Feet



WATER RESOURCES REGIONAL OFFICES



BILLINGS

Airport Industrial Park, 1371 Rimtop Dr
Billings, MT 59105-9702

PHONE 406-247-4415 FAX 406-247-4416
EMAIL DNRCBillingsWater@mt.gov

Big Horn, Carbon, Carter, Custer, Fallon, Powder River, Prairie, Rosebud, Stillwater, Sweet Grass, Treasure, and Yellowstone Counties



BOZEMAN

2273 Boot Hill Court, Suite 110
Bozeman, MT 59715-7249

PHONE 406-586-3136 FAX 406-587-9726
EMAIL DNRCBozemanWater@mt.gov

Gallatin, Madison, and Park Counties



GLASGOW

222 6th Street South, PO Box 1269
Glasgow, MT 59230-1269

PHONE 406-228-2561
EMAIL DNRCGlasgowWater@mt.gov

Daniels, Dawson, Garfield, McCone, Phillips, Richland, Roosevelt, Sheridan, Valley, and Wibaux Counties



HAVRE

210 6th Ave., PO Box 1828
Havre, MT 59501-1828

PHONE 406-265-5516
EMAIL DNRCHavreWater@mt.gov

Blaine, Chouteau, Glacier, Hill, Liberty, Pondera, Teton, and Toole Counties



HELENA

1424 9th Ave., PO Box 201601,
Helena, MT 59620-1601

PHONE 406-444-6999 FAX 406-444-9317
EMAIL DNRCHelenaWater@mt.gov

Beaverhead, Broadwater, Deer Lodge, Jefferson, Lewis and Clark, Powell, and Silver Bow Counties



KALISPELL

655 Timberwolf Parkway, Suite 4
Kalispell, MT 59901-1215

PHONE 406-752-2288
EMAIL DNRCKalispellWater@mt.gov

Flathead, Lake, Lincoln, and Sanders Counties



LEWISTOWN

613 Northeast Main St., Suite E
Lewistown, MT 59457-2020

PHONE 406-538-7459
EMAIL DNRCLewistownWater@mt.gov

Cascade, Fergus, Golden Valley, Judith Basin, Meagher, Musselshell, Petroleum, and Wheatland Counties



MISSOULA

2705 Spurgin Rd. Bldg. C, PO Box 5004
Missoula, MT 59806-5004

PHONE 406-721-4284 FAX 406-542-5899
EMAIL DNRCMissoulaWater@mt.gov

Granite, Mineral, Missoula, and Ravalli Counties



WORK COPY

438



REQUEST FOR PREAPPLICATION MEETING
ARM 36.12.1302(2)
(Revised 02/2025)



Instructions

Use this optional form to submit a written request for a preapplication meeting, as required in ARM 36.12.1302(2) for applicants electing to complete a preapplication meeting with the department prior to submitting an application for a beneficial water use permit or change in appropriation right pursuant to § 85-2-302, MCA. Use additional sheets as necessary.

Submit this form to the appropriate regional office; see contact information on the last page of this form.

1. Applicant Name Gary Brink - LKM Properties LLC
Mailing Address 216 Moore Lane
City Billings State MT Zip 59101
Home Phone 406-652-7413 Other Phone 406-698-8491
Email: garybrink@brinkincmt.com

2. Representative Name (if other than Applicant) _____
 Representative is Consultant Representative is Attorney Representative is Other
Mailing Address _____
City _____ State _____ Zip _____
Home Phone _____ Other Phone _____
Email: _____

WORK COPY

3. Are you requesting a preapplication meeting for a permit or change application?
 Permit Change

4. Describe your project:

I have a 1/2-acre lawn and a small garden at 127 North Yellowstone Trail, 8 miles West of Big Timber that I would like to water from the Yellowstone River. The property is on the river so I would only need a small 3hp pump to accomplish what I need. I am only at the property 3 days a week.

WORK COPY



5. Identify the following elements of the proposed permit or change in appropriation.

a) The flow rate and volume of water required:

Flow Rate 50 GPM CFS Volume 1.25 Acre-Feet

b) The point of diversion:

Point of Diversion #1 ___ 1/4 ___ 1/4 SE 1/4 Section 35, Township 1 N S, Range 13 E W
 County Sweetgrass

Lot/Tract 3-A-1 Block _____ Subdivision Name COS 160769 RCB

Point of Diversion #2 ___ 1/4 ___ 1/4 ___ 1/4 Section ____, Township ___ N S, Range ___ E W
 County _____

Lot/Tract _____ Block _____ Subdivision Name Night Sky Minor Subdivision

c) The place of use:

1/2 Acres ___ Lot ___ Block ___ 1/4 ___ 1/4 SE 1/4 Sec. 35, Twp 1 N S, Rge 13 E W
 ___ Acres ___ Lot ___ Block ___ 1/4 ___ 1/4 ___ 1/4 Sec ____, Twp ___ N S, Rge ___ E W
 ___ Acres ___ Lot ___ Block ___ 1/4 ___ 1/4 ___ 1/4 Sec ____, Twp ___ N S, Rge ___ E W
 ___ Acres ___ Lot ___ Block ___ 1/4 ___ 1/4 ___ 1/4 Sec ____, Twp ___ N S, Rge ___ E W
 ___ Acres ___ Lot ___ Block ___ 1/4 ___ 1/4 ___ 1/4 Sec ____, Twp ___ N S, Rge ___ E W

d) The source of water: Yellowstone River

e) The proposed purpose: lawn and garden watering

f) For a change in appropriation right, the water right(s) proposed for change:

Type of water right _____ Basin _____ Water Right # _____

Type of water right _____ Basin _____ Water Right # _____

Type of water right _____ Basin _____ Water Right # _____

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

Water Right #					
Point of diversion	<input type="checkbox"/>				
Place of use	<input type="checkbox"/>				
Purpose of use	<input type="checkbox"/>				
Place of storage	<input type="checkbox"/>				

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