

Environmental Assessment & Public Notice for Public Comment

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

NOTICE AREA

Application No. 76LJ 30172339

Regional Office # 08

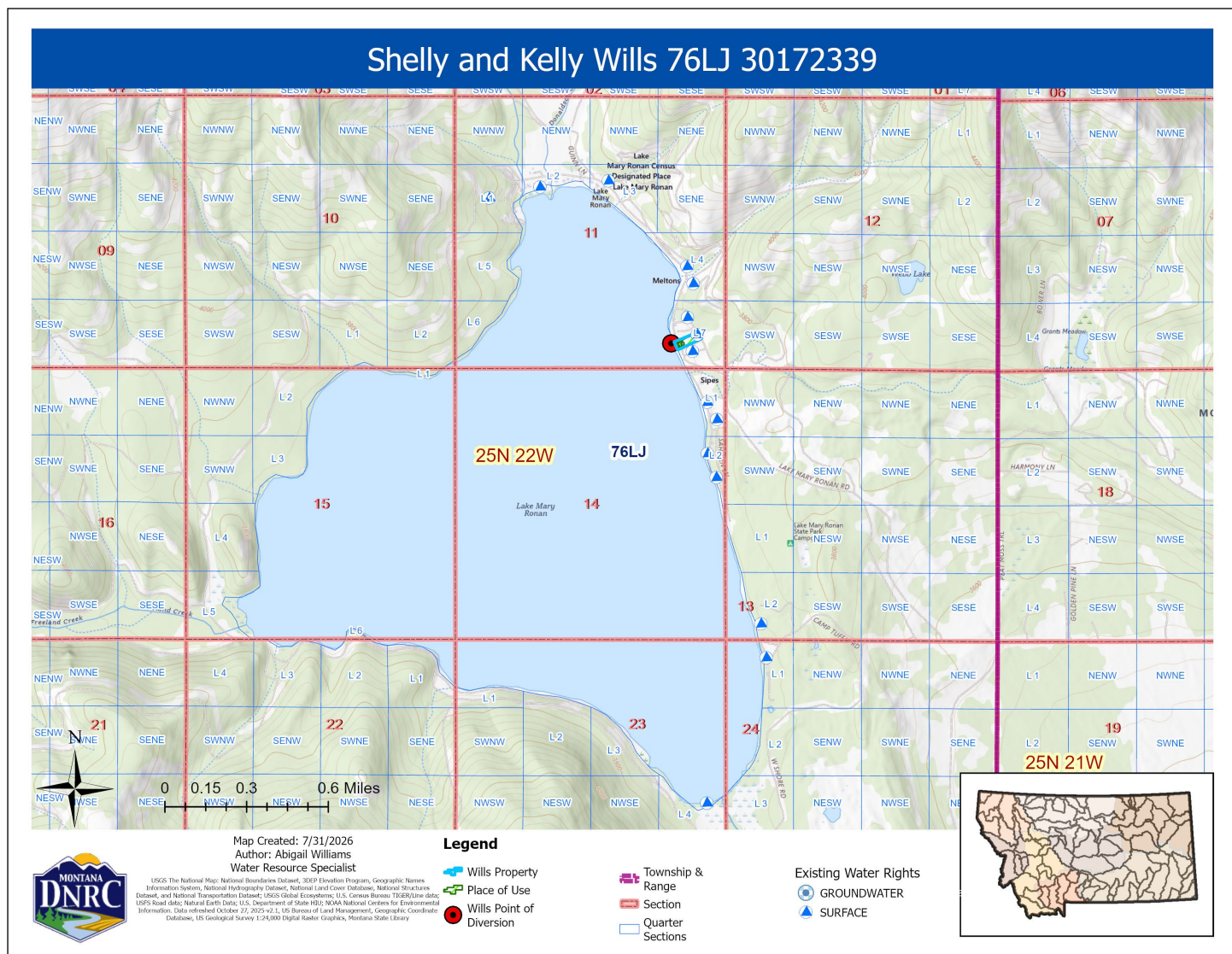
Applicant's Name Kelly and Shelly Wills

Indian Reservation ☐ Yes ☒ No If yes, Reservation _____

Irrigation District ☐ Yes ☒ No If yes, District _____

Specialist Abigail Williams

Date 8/10/2026



Water Right Owner	Water Right No. (Basin ID, and Number)
Applicants: Kelly and Shelly Wills	76LJ 30172339
Consultant: N/A	N/A
1CFC	KRO STANDARD NOTICE CONTACTS
1FWS	
1FWP	
1WQB	
1PPL	
1WWP	
1DSL	
2FWP	
2BIA	
8KAL	
1BRW	
8CON	
GAYLON F OWENS	76LJ 110785 00
GAYLON F OWENS	76LJ 110786 00
GREGORY G HULLA; GAYLON F OWENS	76LJ 110787 00
GAYLON F OWENS	76LJ 110789 00
GAYLON F OWENS	76LJ 110790 00
REBECCA MILASEVICH; ROBERT S STOLZ	76LJ 143853 00
CHLOE AND CHIEF LLC	76LJ 26581 00
HAER LIVING TRUST	76LJ 30005417
LARCH 7 LLC; DAVID C OLSON; JEANNINE K OLSON	76LJ 30006219
BUFFALO WALLOW LLC	76LJ 30008226
JUDITH M COTHERN; RICHARD D COTHERN	76LJ 30063101
PATRICIA D LENNON; PATRICK O LENNON	76LJ 30110395
JULIE A VON ESCHEN; KENNETH B VON ESCHEN	76LJ 30113323
BRADEN ROGNESS; MAGGIE ROGNESS	76LJ 32526 00
JEANNE L MAAS	76LJ 39634 00
HAWKINS, D & R LIMITED FAMILY PARTNERSHIP	76LJ 39786 00
WILLIAMS FAMILY TRUST	76LJ 41392 00
HAWKINS, D & R LIMITED FAMILY PARTNERSHIP; MONTANA A-1 LLC	76LJ 45090 00
HAWKINS, D & R LIMITED FAMILY PARTNERSHIP	76LJ 45093 00
HAWKINS, D & R LIMITED FAMILY PARTNERSHIP	76LJ 45094 00
GREGORY G HULLA	76LJ 664 00
BLUE WATER INVESTMENTS LLC	76LJ 99075 00
CYNTHIA B MELTON; LANCE L MELTON	76LJ 99148 00
PUBLISHED: LAKE COUNTY LEADER Legal land description of notice area: Sections 11, 13, 14, 23, and 24 Township 25N, Range 22W, Lake County, Montana	

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

***Notice area: All Water rights on Ronan Creek (Lake Mary Ronan).*

5. NARRATIVE SUMMARY OF THE PROPOSED PROJECT, PURPOSE, ACTION TO BE TAKEN, AND BENEFITS:

The Applicant proposes to divert water from Lake Mary Ronan, by means of a pump, from April 15th to October 15th at a flow rate of 25.0 GPM. The Applicant proposes to divert up to 3.73 acre-feet (AF) per year, from a point in the S2SESE Section 11, Township 25N, Range 22W, Lake County, to irrigate 1.5 acres of lawn and garden from April 15th to October 15th. The place of use is Government Lot 7, S2SESE, Section 11, Township 25N, Range 22W, Lake County, Montana (Figure 1).

The project is in the Flathead River Basin (76LJ) in an area that is not subject to water right basin closures or controlled groundwater area restrictions.

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

6. AGENCIES CONSULTED DURING PREPARATION OF THE ENVIRONMENTAL ASSESSMENT:

- U.S. Fish and Wildlife Service (USFWS): National Wetlands Inventory Wetlands Mapper
- Montana Natural Heritage Program: Endangered, Threatened Species, and Species of Special Concern
- Montana Department of Fish Wildlife & Parks (DFWP): Dewatered Stream Information
- Montana Department of Environmental Quality (MDEQ): Clean Water Act Information Center
- U.S. Natural Resource Conservation Service (NRCS): Web Soil Survey
- U.S. National Park Service (NPS) Water Rights Branch

Part II. Environmental Review

1. ENVIRONMENTAL IMPACT CHECKLIST:

PHYSICAL ENVIRONMENT

1.1 WATER QUANTITY, QUALITY AND DISTRIBUTION

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

The Applicant proposes to divert water from Lake Mary Ronan which is not identified on the DFWP list of chronically or periodically dewatered streams.

Determination: No significant impact.

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

Lake Mary Ronan: MDEQ Clean Water Act Information Center's 2020 Water Quality Information report lists Lake Mary Ronan as:

- i. Water Quality Category 4C: Identified threats or impairments result from pollution categories such as dewatering or habitat modification and, thus, the calculation of a Total Maximum Daily Load (TMDL) is not required.
- ii. Use Class A-1: Waters classified as suitable for drinking, culinary and food processing purposes after conventional treatment for removal of naturally present impurities;

- iii. Lake Mary Ronan is assessed as “Fully Supporting” of Agriculture, Aquatic Life, and Primary Contact Recreation. Lake Mary Ronan has not been assessed for drinking water. The proposed diversion of water to irrigate lawn and garden is not expected to significantly affect the water quality on the source.

Determination: No significant impact.

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

Determination: N/A, project does not involve groundwater.

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

The Applicants propose to divert water from Lake Mary Ronan at a rate of 25.0 GPM up to 3.73 AF to irrigate 1.5 acres of lawn and garden by either a Munro MXS 204 or Munro MXS 205 (or equivalent) submersible pump located 60 feet from the high-water mark. The pump is equipped with a screen to prevent debris from entering the system and a backflow preventor to prevent backflow into the lake. The pump outlet is connected to a 2-inch high density polyethylene (HDPE) mainline that extends 595-feet northeast to the top edge of the property. There are 9 irrigation zones controlled by a control box allowing each zone to operate individually. Each zone is served by 1-inch HDPE lines that connect to K-Rain rotors with an operation pressure of 30 PSI to ensure head-to-head coverage. Applicants have approximately 78 feet of lateral 1-inch HDPE line for all 9 zones to connect sprinklers to the main line.

The installation of the pump and intake pipe is not anticipated to have lasting effects on the riparian area. The installation will not create any barriers or dams on Lake Mary Ronan. The Applicant must have approval from all relevant agencies before disturbing the lake banks along with the riparian areas for installation of the diversion.

Determination: No significant impact.

1.3 UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

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

The Montana Natural Heritage Program website was reviewed to determine if there are any threatened or endangered fish, wildlife, plants, aquatic species, or any “species of special concern” in the project area that could be impacted by the proposed project. Nine animal species (Table 1) were identified within the project area. Of these species, the Grizzly Bear (*Ursus arctos*) is listed as threatened by the USFWS. This area is already developed. It is not anticipated that any species of concern will be impacted by the proposed project. The project will not create any barriers to the migration of fish or wildlife.

Table 1. Species of Concern		
Species Group	Common Name	Scientific Name
Mammals	Grizzly Bear*	<i>Ursus arctos</i>
Mammals	Little Brown Myotis	<i>Myotis lucifugus</i>
Mammals	Northern Hoary Bat	<i>Lasiurus cinereus</i>
Mammals	Silver-haired Bat	<i>Lasionycteris noctivagans</i>
Birds	Evening Grosbeak	<i>Coccothraustes vespertinus</i>
Birds	Great Blue Heron	<i>Ardea herodias</i>
Birds	Pileated Woodpecker	<i>Dryocopus pileatus</i>
Fish	Westslope Cutthroat Trout	<i>Oncorhynchus lewisi</i>
Invertebrates	Western Bumble Bee	<i>Bombus occidentalis</i>

*Listed as "Threatened" by the USFWS.

Determination: No significant impact.

Wetlands & Ponds - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted. For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

N/A there are no wetlands in the proposed place of use or point of diversion.

Determination: No significant impact.

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

The proposed irrigation of lawn and garden will not negatively impact the soil quality, stability, or moisture content in the project area. The soil type in the project area is, "Kingspoint gravelly loam, 4 to 15 percent slopes" which came from glacial till parent material. This soil has a moderately high to high capacity to transmit water. Soil in this area is non-saline to very slightly saline and are therefore not likely susceptible to saline seep.

Determination: No significant impact.

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

It is not anticipated that this project will impact the existing vegetative cover as the home and lawn are already established and no construction is planned. It is not anticipated that issuance of a water use permit will contribute to the establishment or spread of noxious weeds in the project area. Noxious weed prevention and control will be the responsibility of the landowners, who must follow local noxious weed regulations.

Determination: No significant impact.

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

There will be no impact to air quality associated with issuance of the proposed permit for beneficial use of surface water from Lake Mary Ronan.

Determination: No significant impact.

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

Determination: N/A, project not located on State or Federal Lands.

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

All impacts to land, water, and energy have been identified and no further impacts are anticipated.

Determination: No significant impact.

HUMAN ENVIRONMENT

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

The project is consistent with planned land uses.

Determination: No significant impact.

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

The proposed project will not inhibit, alter, or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No significant impact.

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

This proposed use will not adversely impact human health.

Determination: No impact.

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

No government regulatory impacts on private property rights.

Determination: No impact.

- 1.13 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? None identified.
- (b) Local and state tax base and tax revenues? None identified.

- (c) Existing land uses? None identified.
- (d) Quantity and distribution of employment? None identified.
- (e) Distribution and density of population and housing? None identified.
- (f) Demands for government services? None identified.
- (g) Industrial and commercial activity? None identified.
- (h) Utilities? None identified.
- (i) Transportation? None identified.
- (j) Safety? None identified.
- (k) Other appropriate social and economic circumstances? None identified.

2. SECONDARY AND CUMULATIVE IMPACTS ON THE PHYSICAL ENVIRONMENT AND HUMAN POPULATION:

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. DESCRIBE ANY MITIGATION/STIPULATION MEASURES:

None.

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 only alternative to the proposed action would be the no action alternative. The no action alternative would not authorize the diversion of water from Lake Mary Ronan at this location.

Part III. Conclusion

1. PREFERRED ALTERNATIVE:

Issue a water use permit if the Applicant proves the criteria in 85-2-311 MCA are met.

2. COMMENTS AND RESPONSES:

None.

3. FINDING:

Based on the significance criteria evaluated in this EA, is an EIS required? ___Yes XNo

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

No significant impacts related to the proposed project have been identified.

4. NAME OF PERSON(S) RESPONSIBLE FOR PREPARATION OF EA:

Name: Abigail Williams

Title: Water Resource Specialist

Date: 7/27/2026



Montana Fish, Wildlife & Parks

FWP DEWATERING CONCERN AREAS

Revised, May 2005

The following is a list of Montana streams that support important fisheries or contribute to important fisheries (i.e., provide spawning and rearing habitats) that are significantly dewatered. Dewatering refers to a reduction in streamflow below the point where stream habitat is adequate for fish.

This is the third revision of the Dewatered Streams List compiled by FWP dated January 24, 1991 and last updated in May 2003. List entries and updates were provided by FWP regional fisheries biologists from field observations. Further revisions may be necessary as water use patterns change, and additional or more detailed information becomes available.

This revised list includes a total of 323 stream reaches on 314 streams, which are chronically dewatered, and 113 stream reaches on 109 streams, which are periodically dewatered. The reaches do not overlap between categories.

The two categories of dewatering are:

1. **Chronic dewatering** -- streams where dewatering is a significant problem in virtually all years; and
2. **Periodic dewatering** -- streams where dewatering is a significant problem only in drought or water-short years.

Most man-made dewatering occurs during the irrigation season (July-September). Although most dewatering is caused by irrigation withdrawals, a few of the listed waters are dewatered through dam regulation for agricultural and power production purposes or by natural causes.

Each listed stream shows the length (in miles) of the dewatered reach. For larger/longer streams, the boundaries of the dewatered reach (Point A - Point B) are given. For streams that have no reach boundaries given, the miles shown as dewatered are from the mouth upstream. All mileages are approximate.

The dewatered reaches shown are typical for the stream. However, the number of miles dewatered may vary from year to year depending upon the amount of water available in the stream system.

CHRONIC DEWATERING

<u>STREAM AND REACH</u>	<u>MILES DEWATERED</u>
Beaverhead-Red Rock River Drainage	
Beaverhead River: West Side Canal – mouth	39
Big Sheep Creek: BLM Boundary - Red Rock River	3
Blacktail Deer Creek: Axes Canyon Rd - Beaverhead River	5.5
Horse Prairie Creek: Red Butte - Clark Canyon Reservoir	15
Junction Creek: I-15 - Red Rock River	4
Rattlesnake Creek: Dillon/Argenta Rd - mouth	7.5
Red Rock River: Dell-Briggs Ranch	<u>6</u>
Subtotal for Drainage	80.0
Big Hole River Drainage	
Alder Creek	0.1
Big Hole River:	
Big Lake Creek - Swamp Creek	9
Glen Bridges - mouth	24.4
Birch Creek: Beaverhead/Willow Ditch - mouth	9.8
Governor Creek	5
Wise River: Wise River Ditch - mouth	<u>5</u>
Subtotal for Drainage	53.3
Bitterroot River Drainage	
Baker Creek	1
Bass Creek	1
Bear Creek:	
North Channel	4
South Channel	4
Big Creek	3
Bitterroot River: Corvallis-Stevensville	17
Blodgett Creek	2
Burnt Fork Creek	5
Carlton Creek	5
Chaffin Creek	2
Eightmile Creek	3
Kootenai Creek	2
Lolo Creek	3
Lost Horse Creek	4
Mill Creek	3
Mill Creek (Trib. to Lolo Creek)	0.5
O'Brien Creek	1.5
Reimel Creek	1
Rock Creek	5
Skalkaho Creek	4
South Fork of Lolo Creek	0.5
Sweathouse Creek	2

Dearborn River Drainage

Dearborn River: Bean Lake Canal – mouth	44
Middle Fork Dearborn River	<u>4</u>
Subtotal for Drainage	48

Flathead River Drainage

Lost Creek: 4 miles Above Lore Lake - Stillwater River	7
Mount Creek: Welcome Springs - mouth	5
South Fork Flathead River: Hungry Horse Dam - mouth	5.3
Walker Creek: Entire Length	<u>7</u>
Subtotal for Drainage	24.3

Flint Creek Drainage (Clark Fork)

Cow Creek	3
Douglas Creek	2
Flint Creek: Georgetown Lake - mouth	42.4
Gird Creek	1
Henderson Creek: USFS Boundary - mouth	4
Lower Willow Creek: Reservoir - mouth	9.4
Marshall Creek: USFS Boundary - mouth	<u>5</u>
Subtotal for Drainage	66.8

Gallatin River Drainage

Baker Creek	10
Big Bear Creek	5
Bridger Creek	10
Gallatin River: Shedd's Bridge - Mouth	32.7
Hyalite (Middle) Creek	20
South Cottonwood Creek	<u>6</u>
Subtotal for Drainage	83.7

Jefferson River Drainage

Antelope Creek	7
Boulder River: Boulder - Cold Springs	36
Fish Creek	10
Jefferson River: Headwaters - mouth	84
Little Boulder River	10
North Willow Creek	9
Pipestone Creek	8
South Boulder River	10
South Willow Creek	8
Whitetail Creek	<u>24</u>
Subtotal for Drainage	206

Judith River Drainage

Cottonwood Creek: McMillan ditch to Big Spring Creek	17
Judith River: Ackley Lake diversion – Big Spring Creek	37
Ross Fork Creek	<u>10</u>
Subtotal for Drainage	64

PERIODIC DEWATERING

<u>STREAM AND REACH</u>	<u>MILES DEWATERED</u>
Beaverhead - Red Rock River Drainage	
Beaverhead River: Clark Canyon Dam - West Side Canal	21
Big Beaver Creek	0.7
Blacktail Deer Creek: West Fork - Axes Canyon Rd.	19.8
Bloody Dick Creek (Tributary to Horse Prairie Cr.)	10
Grasshopper Creek:	
Polaris - Bannock	14
Frenzy Place Placer - mouth	6
Jones Creek: BLM boundary - mouth	1.5
Little Sheep Creek: Road crossing - mouth	7.5
Medicine Lodge Creek (Tributary to Horse Prairie Cr.): Ayers Cyn - mouth	16.8
Peet Creek: Jones Diversion - mouth	1.7
Sage Creek: Rock Island Ranch - mouth	11
Trail Creek (Tributary to Horse Prairie Cr.): Source - mouth	<u>7</u>
Subtotal for Drainage	117.0
Big Hole River Drainage	
Big Hole River:	
Hamby Creek - Big Lake Creek	23.4
Swamp Creek - Glen Bridges	84.5
Big Lake Creek	7.5
Canyon Creek	6
Deep Creek	5.1
Divide Creek	9.5
Doolittle Creek	1.5
Fishtrap Creek	2.4
Francis Creek	7.7
Jerry Creek	3.1
Johnson Creek	3.7
Moose Creek	3.0
Mussigbrod Creek	9.4
North Fork Big Hole River	25
Pintlar Creek	10.8
Rock Creek	3
Rock Creek (Tributary to Big Lake Cr)	7
Ruby Creek	4.3
Sandhollow Creek	4.8
Steel Creek	8.6
Swamp Creek	17.4
Trapper Creek	6
Warm Springs Creek	9
Willow Creek	<u>5.5</u>
Subtotal for Drainage	268.2

Bitterroot River Drainage

Lolo Creek

1

Subtotal for Drainage 1

Blackfoot River Drainage

Arkansas Creek

2

Ashby Creek

2

Blackfoot River: Stream mile 84.9-54.1

30.8

Clearwater River

3.5

Elk Creek

3

Hoyt Creek

1

Nevada Creek: Stream mile 34.0-40.0

6

Shanley Creek

1.6

Subtotal for Drainage 49.9

Dearborn River Drainage

South Fork Dearborn River

10

Subtotal for Drainage 10

Flathead River Drainage

Ashley Creek: US Hwy. 2 Bridge – mouth

20

Blaine Creek: Above Lake Blaine - Lake Blaine

3

Bowser Spring Creek: Hwy 424 - Kalispell

8

Dayton Creek: Co. Line - mouth

10

Echo Creek: Sec. 27 - mouth

3

Evergreen Spring Creek

5

Garnier Creek: USFS - mouth

3

Lynch Creek: Sec. 12 - mouth

5

Meadow Creek (Big Fork): USFS - mouth

3

Ronan Creek: Lake Mary Ronan - mouth

5

Spring Creek: North of Kalispell

5

Trumbull Creek: USFS - Rose Crossing

20

Subtotal for Drainage 90

Gallatin River Drainage

Bozeman (Sourdough) Creek

8

Gallatin River: Gallatin Gateway - Shedd's Bridge

5.3

Subtotal for Drainage 13.3

Jefferson River Drainage

Hells Canyon Creek*

0.3

Willow Creek

10

Subtotal for Drainage 10.3

Judith River Drainage

Judith River: Utica to Ackley Lake diversion

5

Subtotal for Drainage 5

Assessment Record Summary

Reporting Cycle: 2020 Assessment Record: MT76O004_020 Status: Completed

WATER INFORMATION		Status: Completed
Reporting Cycle:	2020	
Assessment Unit:	MT76O004_020	
Name:	Lake Mary Ronan	
Location Description:	LAKE MARY RONAN	
Water Type:	Size (Miles/Acres)	Use Class:
FRESHWATER LAKE	1517.2 ACRES	A-1
Trophic Status:	MESOTROPHIC	
Trophic Trend:	Degrading	
1 - Hydrologic Unit Code:	17010208	
2 - HUC Name:	Flathead Lake	
3 - Watershed:	Pend Oreille	
4 - Basin:	Columbia	
5 - TMDL Planning Area:	Flathead Lake	
6 - Ecoregion:	Northern Rockies	
7 - County:	Lake County	
Water Quality Category:	4C - Identified threats or impairments result from pollution categories such as dewatering or habitat modification and, thus, the calculation of a Total Maximum Daily Load (TMDL) is not required	

Assessment Record Summary

Reporting Cycle: 2020 Assessment Record: MT76O004_020 Status: Completed

Beneficial Use Support Information					
Use Name	Fully Supporting	Not Fully Supporting	Threatened	Insufficient Information	Not Assessed
Aquatic Life	X		X		
Agricultural	X				
Drinking Water					X
Primary Contact Recreation	X				

Assessment Information		
Use Name	Assessment Type	Assessment Confidence
NA		

Use Name	Assessment Methods
NA	

Impairment Information			
Use Name	Probable Causes	Probable Sources	TMDL Completed
Aquatic Life	Chlorophyll-a	Grazing in Riparian or Shoreline Zones	N
		Agriculture	
		Silviculture Activities	

Assessment Record Summary

Reporting Cycle: 2020 Assessment Record: MT76O004_020 Status: Completed

Use Name	Observed Effects
NA	

Delisting / Category Changes			
Cause	Reason for Change	Change Date	Comments
Chlorophyll-a	Not caused by a pollutant (4C)	01/28/2008	The pollutant/non-pollutant effect designation was changed from pollutant to non-pollutant.



Charts and Data

Printable Report [↗](#) [Export to Excel](#)

☰

📁 Map Title and Filters

SOC Occurrences

with MT Status = Species of Concern

Reports based on Visible Map Extent

☰

📁 Species Occurrences

Species List

 |

plus Occurrences

 |

plus Obs (may take a while)

+	Mammals - Fisher	(<i>Pekania pennanti</i>)	SO Count: 1	Obs Count: 91	Earliest Obs: 1965	Recent Obs: 2022
+	Mammals - Grizzly Bear	(<i>Ursus arctos</i>)	SO Count: 1	Obs Count: 1551	Earliest Obs: 1895	Recent Obs: 2026
+	Mammals - Little Brown Myotis	(<i>Myotis lucifugus</i>)	SO Count: 2	Obs Count: 2	Earliest Obs: 2010	Recent Obs: 2010
+	Mammals - Northern Hoary Bat	(<i>Lasiurus cinereus</i>)	SO Count: 1	Obs Count: 1	Earliest Obs: 2010	Recent Obs: 2010
+	Mammals - Silver-haired Bat	(<i>Lasionycteris noctivagans</i>)	SO Count: 3	Obs Count: 3	Earliest Obs: 2010	Recent Obs: 2010
+	Birds - Evening Grosbeak	(<i>Coccothraustes vespertinus</i>)	SO Count: 1	Obs Count: 3	Earliest Obs: 2022	Recent Obs: 2024
+	Birds - Great Blue Heron	(<i>Ardea herodias</i>)	SO Count: 1	Obs Count: 1	Earliest Obs: 1979	Recent Obs: 1979
+	Birds - Pileated Woodpecker	(<i>Dryocopus pileatus</i>)	SO Count: 1	Obs Count: 2	Earliest Obs: 2022	Recent Obs: 2023
+	Fish - Westslope Cutthroat Trout	(<i>Oncorhynchus lewisi</i>)	SO Count: 1	Obs Count: 342	Earliest Obs: 1980	Recent Obs: 2022
+	Invertebrates - <i>Bombus occidentalis</i>	(Western Bumble Bee)	SO Count: 1	Obs Count: 1	Earliest Obs: 1932	Recent Obs: 1932

Soil Map—Lake County Area, Montana



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

7/16/2026
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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 1:20,000.

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: Lake County Area, Montana

Survey Area Data: Version 27, Aug 30, 2025

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

Date(s) aerial images were photographed: Jun 30, 2021—Oct 11, 2021

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
90	Kingspoint gravelly loam, 4 to 15 percent slopes	1.8	100.0%
Totals for Area of Interest		1.8	100.0%

Lake County Area, Montana

90—Kingspoint gravelly loam, 4 to 15 percent slopes

Map Unit Setting

National map unit symbol: 4w86

Elevation: 2,900 to 5,000 feet

Mean annual precipitation: 15 to 30 inches

Mean annual air temperature: 37 to 45 degrees F

Frost-free period: 70 to 125 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Kingspoint and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kingspoint

Setting

Landform: Moraines

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Glacial till

Typical profile

Oi - 0 to 3 inches: mucky peat

E - 3 to 20 inches: gravelly loam

Bw - 20 to 36 inches: very gravelly loam

Bk - 36 to 60 inches: very gravelly loam

Properties and qualities

Slope: 4 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: B

Ecological site: F043AP909MT - Upland Cool Woodland Group

Hydric soil rating: No

Minor Components

Mcdonald

Percent of map unit: 4 percent

Landform: Moraines

Down-slope shape: Linear

Across-slope shape: Linear

Ecological site: R044AB032MT - Loamy (Lo) LRU 44A-B

Hydric soil rating: No

Eaglewing

Percent of map unit: 4 percent

Landform: Moraines

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Kingspoint, stony loam

Percent of map unit: 3 percent

Landform: Moraines

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Poorly drained soils

Percent of map unit: 2 percent

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

Somewhat poorly drained soils

Percent of map unit: 2 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Lake County Area, Montana

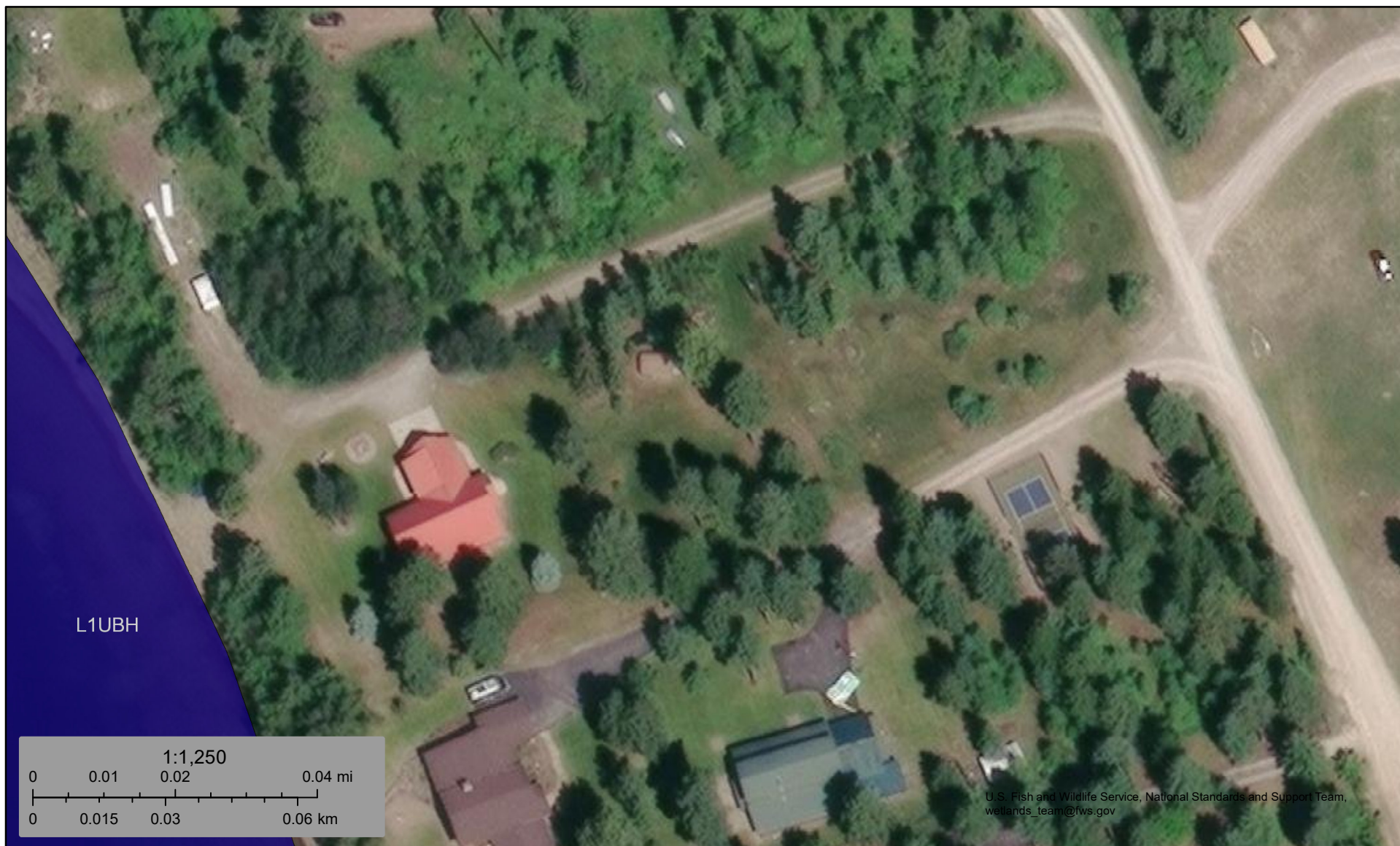
Survey Area Data: Version 27, Aug 30, 2025



U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



July 16, 2026

Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

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

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

GOVERNOR GREG GIANFORTE



DNRC DIRECTOR AMANDA KASTER

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

July 30, 2026

KELLY AND SHELLY WILLS
3032 QUEEN ST
MISSOULA MT 59801-8651

Subject: Draft Preliminary Determination to Grant Beneficial Water Use Permit Application No. 76LJ 30172339

Dear Applicants,

The Department of Natural Resources and Conservation (Department) has completed a preliminary review of your application. This review consists of an evaluation of the criteria for issuance of a permit found in §85-2-311, MCA. The Department has preliminarily determined that the criteria are met, and this application should be granted. A copy of the Draft Preliminary Determination to Grant for your application is attached.

You have the opportunity to request an extension of time to submit additional information for the Department to consider in the decision within 15 business days of the date of this letter. If no response is received by August 20, 2026, the Department will prepare a notice of opportunity to provide public comment per §85-2-307(4), MCA.

Please contact me at (406) 752-2735 or Abigail.Williams@mt.gov if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Abigail Williams". The signature is written in a cursive, flowing style.

Abigail Williams
Water Resource Specialist
Kalispell Regional Office

Encl.: Draft Preliminary Determination to Grant Water Right Permit Application No. 76LJ 30172339



DNRC.MT.GOV

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

* * * * *

APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 76LJ 30172339 BY KELLY M WILLS AND SHELLEY WILLS	))	DRAFT PRELIMINARY DETERMINATION TO GRANT PERMIT
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* * * * *

On May 8, 2026, Kelly M Wills and Shelly Wills (Applicants) submitted Application for Beneficial Water Use Permit No. 76LJ 30172339 to the Kalispell Regional Office of the Department of Natural Resources and Conservation (Department or DNRC) for 25.0 gallons per minute up to 3.73 acre-feet to irrigate 1.5 acres of lawn and garden from April 15th to October 15th annually. The Department published receipt of the application on its website on May 11, 2026. A preapplication meeting was held between the Department and the Applicants on November 17, 2025, in which the Applicants designated that the technical analyses for this application would be completed by the Department. The Applicants returned the completed Preapplication Meeting Form on December 15, 2025. The Department delivered the Department-Completed Technical Analyses on January 29, 2026. The Department sent the Applicants a letter identifying an error in the Department-completed Technical Analyses on May 26, 2026. The application was determined to be correct and complete as of June 1, 2026. An Environmental Assessment for this application was completed on July 27, 2026.

INFORMATION

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

Application as filed:

- Application for Beneficial Water Use Permit, Form 600
- Attachments:
 - Exhibit A & B: Vicinity Map and Parcel View

- Exhibit C: Total Dynamic Head Calculation
- Exhibit D: Water Use/Needs Calculation
- Exhibit E: Pump Curve and Specifications
- Exhibit F: Irrigation and K-Rain Sprinkler Information
- Department Completed Technical Analyses Report based on information provided in the Preapplication Meeting Form, dated January 29, 2026
- Department Completed Errata for Technical Analyses, dated May 26, 2026

Information within the Department's Possession/Knowledge

- Lake Mary Ronan's volume quantified using publicly available bathymetric data (dated July 18, 2011) from the Montana Department of Fish, Wildlife, and Parks' (MTFWP) FishMT website
- List of existing surface water rights on Lake Mary Ronan
- Photographs and Notes from Site Visit to Lake Mary Ronan by DNRC Hydrologist Melissa Brickl, dated July 17, 2019
- The Department also routinely considers the following information. The following information is not included in the administrative file for this application but is available upon request. Please contact the Kalispell Regional Office at 406-752-2288 to request copies of the following documents.
 - DNRC Technical Memorandum: Physical Availability of Surface Water With Gage Data, Dated November 1, 2019
 - DNRC Technical Memorandum: Physical Availability of Ponds, Dated April 22, 2019
 - DNRC Technical Memorandum: Physical Availability of Surface Water Without Gage Data, Dated April 18, 2019

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

For the purposes of this document:

Department or DNRC means the Department of Natural Resources and Conservation	
NRCS means the Natural Resource Conservation Service	
DEQ means the Montana Department of Environmental Quality	
GWIC ID means Groundwater Information Center Identification	
AF means acre-feet	AOPI means Area of Potential Impact
ARM means Administrative Rules of Montana	BGS means below ground surface
AU means Animal Units	CFS means cubic feet per second
BTC means below top of casing	GPD means gallons per day
FOF means finding(s) of fact	POD means point of diversion
GPM means gallons per minute	SWL means static water level
IWR means Irrigation Water Requirements	VFD means variable frequency drive
MCA means Montana Code Annotated	ZOI means zone of influence
TDH means total dynamic head	WSB means the Water Sciences Bureau
USDA means United States Department of Agriculture	
CSKT means Confederated Salish and Kootenai Tribes	

PROPOSED APPROPRIATION

FINDINGS OF FACT

1. The Applicants propose to divert water from Ronan Creek (Lake Mary Ronan) – hereafter referred to as Lake Mary Ronan, by means of a pump, from April 15th to October 15th at a flow rate of 25.0 GPM. The Applicants propose to divert up to 3.73 AF/year, from a point in the S2SESE Section 11, Township 25N, Range 22W, Lake County, to irrigate 1.5 acres of lawn and garden from April 15th to October 15th. The place of use is Government Lot 7, S2SESE, Section 11, Township 25N, Range 22W, Lake County, Montana (**Figure 1**). **Table 1** below provides a summary of the proposed use.

Table 1: Summary of Proposed Use					
Flow Rate	Volume	Purpose	Period Of Use	Place Of Use	Point(s) Of Diversion
25 GPM	3.73 AF	Lawn and Garden	4/15 to 10/15	Government Lot 7, S2SESE, Section 11, Township 25N, Range 22W, Lake County	S2SESE Section 11, Township 25N, Range 22W, Lake County

2. Groundwater Certificate 76LJ 30050229 is currently being used for domestic use for one household and to irrigate 1.8 acres of lawn and garden. Upon issuance of the permit the well will cease to provide irrigation to the property and the well will be utilized for domestic use only while the provisional permit covers the lawn and garden irrigation.



Figure 1: Map of Applicants' Proposed Point of Diversion and Place of Use

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

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 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 Applicants propose to divert water from Lake Mary Ronan at a rate of 25.0 GPM up to 3.73 AF to irrigate 1.5 acres of lawn and garden from May 15th to October 15th annually.

10. There are three major streams supplying water to Lake Mary Ronan: Donaldson, Freeland, and Hilburn Creeks. A single stream, Ronan Creek, serves as the outlet of the lake. Ronan Creek flows southeast, discharging to Dayton Creek, a tributary to Flathead Lake.

11. A dam structure on private land at the head of Ronan Creek impounds water approximately 4 feet above the natural level of Lake Mary Ronan. A site visit was conducted by Mark Paulson of Aquatek Consulting for water right application 76LJ 30063101 on October 13, 2012. This site visit confirmed a dike with concrete weir structure approximately 25 ft long, 12 to 14 feet wide, and approximately four feet tall holding back lake waters. The weir structure acts as an overflow structure (**Figure 2**). DNRC's Melissa Brickl visited the site of the dam on July 17, 2019, and photographed the system. The bottom of the corrugated metal pipe (CMP) lies at the top of the natural lake storage and at the bottom of the volume impounded by the dam, which allows the owner to divert the water impounded by the dam for their water rights.



Figure 2: The weir structure that acts as an overflow structure for high lake levels.

12. Approximately 30 feet west of the overflow structure was an elliptical CMP buried in the dike that extends from its upstream (lake) side to its downstream (creek) side. The CMP pipe measured 36 inches in diameter and was 56 inches long. The upstream end of the pipe was

fitted with an adjustable steel slide gate embedded in a concrete headwall and secured with a padlock (**Figure 3**). The CMP is the primary means of releasing water for irrigation Claims 76LJ 45094, 76LJ 39786, 76LJ 45090, and 76LJ 45093 downstream on Ronan Creek.



Figure 3: Headgate holding water in Lake Mary Ronan that allows the dam and headgate owner to release water into the CMP and into Ronan Creek on an unknown schedule.

13. The maximum water surface elevation of Lake Mary Ronan, including the dam storage, is 3,701 feet according to the US Geological Survey (USGS) Topographic map (**Figure 4**).

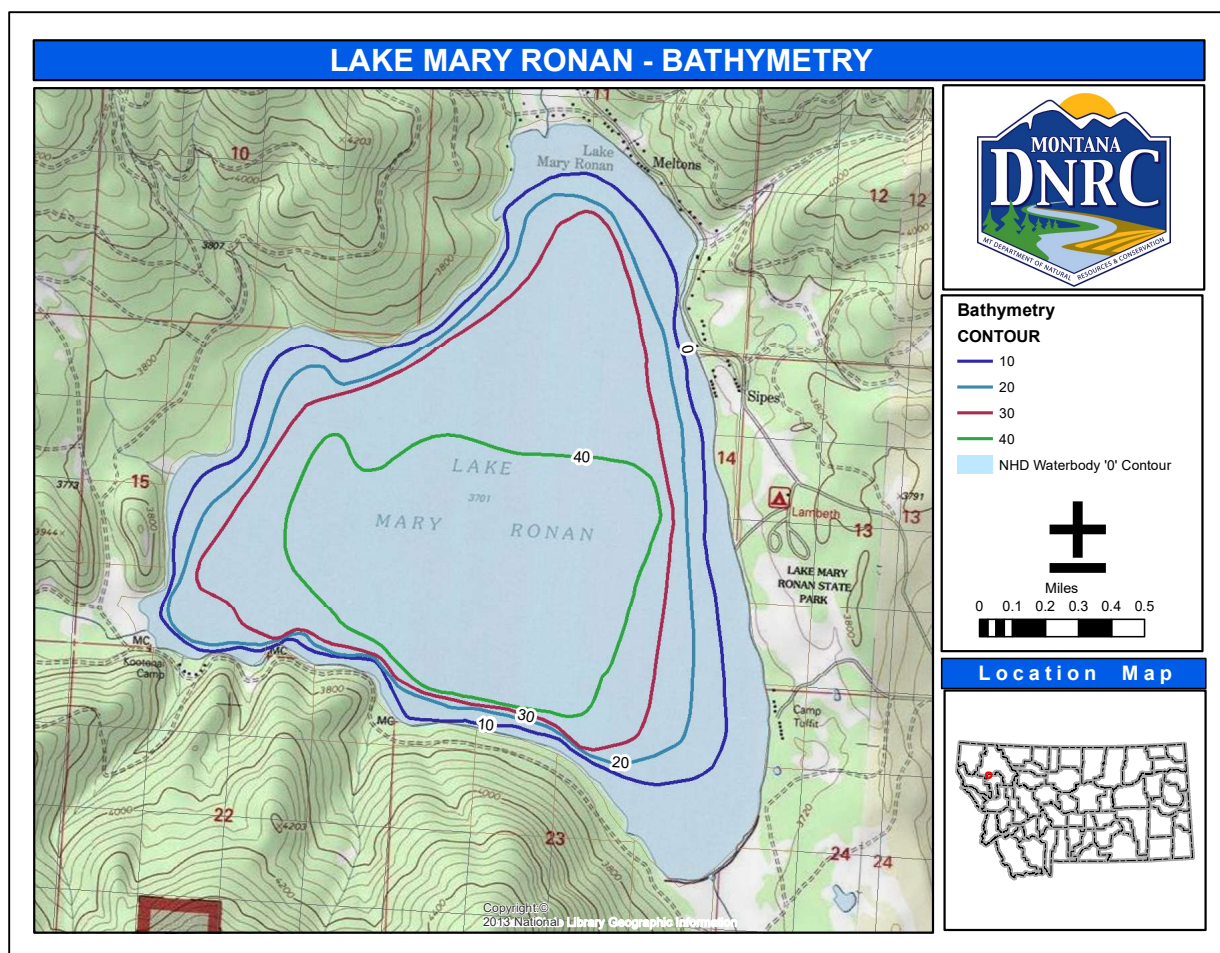


Figure 4: Bathymetric Map of Lake Mary Ronan showing the strata of the lake.

14. The Department quantified Lake Mary Ronan's volume using publicly available bathymetric data from the MT Department of Fish, Wildlife, and Parks (MTFWP) and adjusted using the following methodology. Lake Mary Ronan was surveyed on July 18, 2011, by MTFWP. The Department used ArcGIS to generate polygons of depth strata from this data, **Figure 4**, allowing the Department to quantify the total area of each depth stratum. The National Hydrography Dataset (NHD) Waterbody ArcGIS Polygon area was used for the zero-foot contour extent. This data was used in place of the MTFWP zero-foot contour because it appears to provide a more accurate representation of the lake boundary when compared to the USGS topographic map and aerial imagery. Lake Mary Ronan's area was calculated as 1,515.7 acres based on the sum of all depth strata areas. The end-area formula used for finding the volume of prismoidal forms was used to quantify the total volume of water within

each depth stratum, **Table 2**. The process for applying the end area formula to compute lake volume is found in the DNRC Technical Memorandum: Physical Availability of Ponds, dated April 22, 2019. The Department calculated 41,564.5 AF as Lake Mary Ronan’s total volume. The Department used the following equation to calculate the volume of Lake Mary Ronan:

End Area Formula

$$V = \frac{1}{2} H(A_1 + A_2)$$

H= The difference in depth between two successive depth contours;

A₁ = area of the lake within the outer depth contour being considered;

A₂ = area of the lake within the inner contour line under consideration

15. Due to the construction of the dam on private land affecting the capacity of the lake, storage from the dam structure needed to be quantified. Per a US Army Corps of Engineers (ACOE) Report entitled “Flood Plain Determination Lake Mary Ronan, Lake County Montana” dated September 1996, the minimum elevation of the CMP is 3,696.74 feet. The ACOE report calculated that 4.26 feet (3,701.0 feet – 3,696.74 feet = 4.26 feet) or approximately **6,456.9 AF** (4.26 feet x 1,515.7 acres = 6,456.9) of water could be stored and released by the CMP.

16. To be conservative, the Department estimated the physical availability of Lake Mary Ronan by subtracting the volume stored by the dam/dike structure from the maximum lake volume. As the Department has no way to quantify the annual volume and/or the timing of water released from Lake Mary Ronan, physical availability is limited to pre-dam/dike construction volume of Lake Mary Ronan. The volume of water physically available in Lake Mary Ronan below the bottom of the dam is **35,107.6 AF (Table 2)**.

Table 2: Physical Availability Bathymetric Analysis of Lake Mary Ronan Using the End-Area Formula					
Contour Interval (ft)	H (ft)	Area (ac)	Total Area (ac)	Depth Strata (ft)	Volume (AF)
0	10	274.6	1,515.7	0-10	13,784.0
10	10	187.8	1,241.1	10-20	11,472.0
20	10	173.7	1,053.3	20-30	9,664.5
30	10	430.4	879.6	30-40	6,644.0
40	10	449.2	449.2		
TOTAL VOLUME (AF)					41,564.5
VOLUME STORED BY DAM (AF)					6,456.9
PHYSICALLY AVAILABLE VOLUME (AF)					35,107.6

17. Based on the physical availability analysis of Lake Mary Ronan at the Applicants' POD, the Department finds that the requested flow rate of 25.0 GPM (0.056 CFS) up to 3.73 AF of volume is physically available in Lake Mary Ronan during the proposed period of diversion spanning from April 15th to October 15th.

LEGAL AVAILABILITY

FINDINGS OF FACT

18. The Applicants propose to divert water from Lake Mary Ronan at a rate of 25.0 GPM up to 3.73 AF to irrigate 1.5 acres of lawn and garden from April 15th to October 15th annually.

19. The Department determined the AOPI for this application to be Lake Mary Ronan, from the inlet to the privately controlled dam above Ronan Creek. Lake Mary Ronan has a private dam that allows the dam owner to store and release up to 6,456.9 AF of water as needed for his Statements of Claims 76LJ 45094 00, 76LJ 45093 00, 76LJ 45090 00 and 76LJ 39786 00 (see FOF 15). The owner of the private dam releases water via the headgate and CMP system as needed for these four appropriations. These releases provide a direct flow of water into Ronan Creek immediately downstream of the dam.

20. The area around the private dam is marshy allowing seepage into Ronan Creek. The owner of the dam told DNRC during a site visit on July 19, 2016, that the dam "leaks just right". This description of leakage through/around the dam is supported by previous

discussions between department staff and various landowners in the area where landowners stated that there is a known baseflow in Ronan Creek that is the result of seepage through or around the dam into Ronan Creek. This baseflow has not been quantified and may fluctuate seasonally. Any additional flows, beyond what seeps through the marshy area or overflows the spillway, out of Lake Mary Ronan into Ronan Creek are dependent upon the management of the private dam structure.

21. The flow of Ronan Creek below the dam is unknown. There are no measurement records on Ronan Creek, and the department is unaware of any measurement records associated with the private dam operations. Additionally, the property surrounding Ronan Creek is almost all privately owned, mostly by the owner of the dam, which limits access to the creek for the purpose of taking measurements. The closest location measurements could theoretically be taken is on CSKT land approximately 3 miles downstream of the dam outlet. However, at this location it is unknown if the area would be suitable for representative measurements to be taken because between the outlet of the lake and the theoretical measurement location, additional inflows enter the creek, allowing for a possibility of inaccurate flows being measured.

22. The Department did not reach out to the private dam owner to gather information on the dam operations as there is no requirement for the dam owner to have a plan of operation. Nor is it possible for the Department to hold the private dam owner to release water on a fixed schedule. If the Applicants went to take measurements based on the schedule (if one were to exist) and the owner deviated from his proposed schedule, the Department would be unable to ensure the measurements taken were valid and representative of the baseflow.

23. The Department has the ability to validate measurements taken by Applicants on ungaged streams by utilizing one or more of the three approved methods; Stream stats, USGS Reports, and Drainage Area Ratio Method. Under most conditions, these methods are used to validate the measurements taken by Applicants due to regression modeling using basin characteristics. However, these methods require certain parameters to be met for them to work as designed. For accurate stream modeling using regression equations the stream must

be free flowing with unmodified (natural) streams whose flow is driven by overland flow in the basin. Ronan Creek does not fit the modeling criteria needed due to the management of the dam on Lake Mary Ronan adding flow on top of the baseflows caused by seepage and overland flows from precipitation. As such, Ronan Creek is not suitable for regression modeling to verify measurements. If an Applicant sought to take measurements on Ronan Creek, the Department would have no valid way to verify them. As a result, the Department finds that Ronan Creek would not be suitable for regression modeling to verify measurements taken on the creek and therefore did not require the applicants to take measurements.

24. The dam owner has no requirement to release water for water rights holders downstream of the dam. Nor is the release of water on a schedule that the Department is aware of, but rather on the whim of the owner. Lake Mary Ronan has a large volume of water physically available, 35,107.6 AF, that is stored below the volume impounded by the private dam and is unable to be diverted by the CMP and headgate system. Due to private management of the dam on Lake Mary Ronan causing inconsistent and unnatural flows into Ronan Creek, lack of measurement information for the creek, lack of a viable method to verify measurements, had they been available, the Department did not consider the existing water rights on Ronan Creek as part of this Application's AOPI. The Department finds Lake Mary Ronan to be a reasonable AOPI.

25. The DNRC used the following method below to quantify legally available monthly volumes in Lake Mary Ronan at the proposed POD during the proposed period of diversion:

- a. The Department generated a list of existing water rights on Lake Mary Ronan to quantify the legal demand on the source shown in **Table 3**.
- b. Four of the water rights found are associated (76LJ 45094 00, 76LJ 45093 00, 76LJ 45090 00 and 76LJ 39786 00) due to them sharing the same method of conveyance, headgate, and storage. The legal demand for the four associated water rights is broken out in **Table 4**.
 - The Department found the associated water rights legal demand on Lake Mary Ronan and the stored water by the dam summed to a volume of 14,000 AF (**Table 4**).

- The four water rights that use the approximate top 4 feet of the lake as storage via the dam structure. The Department found the private dam structure on Lake Mary Ronan can hold 6,456.9 AF (**Table 2**). As such the Department subtracted the stored dam volume from the legal demand on the associated water rights. This was done because the 6,456.9 AF stored by the dam is legally reserved for the four water rights. The remaining legal demand of 7,543.1 AF ($14,000 \text{ AF} - 6,456.9 \text{ AF} = 7,543.1 \text{ AF}$) is considered the legal demand on the lake storage for the four associated water rights (**Table 5**).
- c. The legal demand for Lake Mary Ronan sums to **7,595.1 AF** ($7,543.1 + 52.0 = 7,595.1 \text{ AF}$).
- d. The Department subtracted the legal demand from physically available water as quantified in the Physical Availability section above. The total volume of water physically available in Lake Mary Ronan is **35,107.6 AF**. The Department found the legal demand on Lake Mary Ronan summed to **7,595.1 AF** annually, leaving a total of 27,512.5 AF legally available annually for appropriations from Lake Mary Ronan (**Table 6**).

Table 3: Existing Water Rights on Lake Mary Ronan			
Water Right Number	Purposes	Volume (AF)	Period of Diversion
76LJ 143853 00	COMMERCIAL	14	01/01 to 12/31
76LJ 99075 00	DOMESTIC	1.5	01/01 to 12/31
76LJ 110786 00	DOMESTIC	0.8	01/01 to 12/31
76LJ 110789 00	DOMESTIC	0.3	01/01 to 12/31
76LJ 32526 00	DOMESTIC	1	06/01 to 09/30
76LJ 110785 00	DOMESTIC	0.3	01/01 to 12/31
76LJ 99148 00	DOMESTIC	1.5	01/01 to 12/31
76LJ 110790 00	DOMESTIC	0.3	01/01 to 12/31
76LJ 110787 00	DOMESTIC	1	01/01 to 12/31
76LJ 664 00	DOMESTIC	1.5	01/01 to 12/31
76LJ 26581 00	IRRIGATION	10.6	05/15 to 09/15
76LJ 30006219	IRRIGATION; LAWN AND GARDEN	7.6	01/01 to 12/31
76LJ 30063101	LAWN AND GARDEN	2.6	04/15 to 10/15
76LJ 30005417	LAWN AND GARDEN	2.5	04/15 to 10/15
76LJ 30113323	LAWN AND GARDEN	0.2	04/15 to 10/15
76LJ 30110395	LAWN AND GARDEN	2.7	04/15 to 10/15
76LJ 30008226	LAWN AND GARDEN	0.6	04/01 to 10/01
76LJ 41392 00	LAWN AND GARDEN; STOCK	1.4	01/01 to 12/31
76LJ 39634 00	MULTIPLE DOMESTIC	1.8	01/01 to 12/31
Total	-	52	-

Table 4: Associated Water Rights Legal Demand on Lake Mary Ronan			
Water Right Number	Purposes	Volume (AF)	Period of Diversion
76LJ 45093 00*	IRRIGATION	2,000.0	05/10 to 09/10
76LJ 39786 00*	IRRIGATION	2,000.0	01/01 to 12/31
76LJ 45094 00*	IRRIGATION	1,400.0	01/01 to 12/31
76LJ 45090 00*	IRRIGATION	8,600.0	01/01 to 12/31
Total	-	14,000.0	-
*Claims 76LJ 45093 00, 76LJ 39786 00, 76LJ 45094 00, and 76LJ 45090 00 are associated. They share the same place of storage, head gate, and means of conveyance.			

Table 5: Associated Water Rights Legal Demand on Lake Mary Ronan		
Volume Impounded by Private Dam for Associated Water Rights*	Legal Demand of Associated Rights	Remaining Legal Demand on Lake Mary Ronan
6,456.9 AF	14,000 AF	7,543.1 AF
*The private dam on Lake Mary Ronan accounts for approximately the top 4.26 feet of storage on the lake.		

Table 6: Legal Demand on Lake Mary Ronan		
Physically Available Volume of Lake Mary Ronan	Existing Legal Demand Volume (AF)	Legally Available Volume (AF)
35,107.6	7,595.1	27,512.5

26. The Department finds that the proposed annual diverted volume of 3.73 AF diverted at a flow rate of 25.0 GPM (0.056 CFS) is legally available for appropriation in Lake Mary Ronan.

ADVERSE EFFECT

FINDINGS OF FACT

27. The Applicants propose to divert water from Lake Mary Ronan at a rate of 25.0 GPM up to 3.73 AF to irrigate 1.5 acres of lawn and garden from April 15th to October 15th annually.

28. The Applicants provided a plan showing they can regulate their water uses during water shortages. To satisfy the water rights of senior appropriators the Applicants will;

- a. Regulate volume of water at start of water shortage;
- b. Suspend or reduce irrigation if the water shortage continues; and,
- c. In cases of a valid call being made on the source, the pump will be turned off, and irrigation will cease at that time.

29. The Applicants have shown that they can regulate their water use and they have a plan of implementation to protect senior water users. The Department finds the proposed diversion of 3.73 AF annually at a rate of 25.0 GPM will not have an adverse effect to existing surface water users.

ADEQUATE MEANS OF DIVERSION

FINDINGS OF FACT

30. The Applicants propose to divert water from Lake Mary Ronan at a rate of 25.0 GPM up to 3.73 AF to irrigate 1.5 acres of lawn and garden from April 15th to October 15th annually.

31. The Applicants propose to divert water from Lake Mary Ronan at a rate of 25.0 GPM up to 3.73 AF to irrigate 1.5 acres of lawn and garden by either a Munro MXS 204 or Munro MXS 205 (or equivalent) submersible pump located 60 feet from the high-water mark. The pump is equipped with a screen to prevent debris from entering the system and a backflow preventor to prevent backflow into the lake. The pump outlet is connected to a 2-inch high density polyethylene (HDPE) mainline that extends 595-feet northeast to the top edge of the property. There are 9 irrigation zones controlled by a control box allowing each zone to operate individually. Each zone is served by 1-inch HDPE lines that connect to K-Rain rotors with an operation pressure of 30 PSI to ensure head-to-head coverage. Applicants have approximately 78 feet of lateral 1-inch HDPE line for all 9 zones to connect sprinklers to the main line.

32. The Applicant's calculated a TDH of 133 feet for the system with an expected output of 30 PSI at a flow rate of 25.0 GPM. The Applicants are considering two pumps for this project, the Munro MXS 204 and the Munro MSX 205, depending on the availability. The Applicants provided pump curves for both the Munro MXS 204 and Munro MXS 205 demonstrating that each pump is capable of producing the proposed flow rate of 25.0 GPM at the operating TDH of 133 feet.

33. Applicant may substitute another pump in lieu of the Munro MXS 204 and Munro MXS 205 so long as it provides a flow rate of 25.0 GPM at a TDH of 133 feet.

34. Based on the system design and specifications, the Department finds that the diversion and conveyance system is adequate to supply the requested flow rate of 25.0 GPM (0.056 CFS) up to the annual volume 3.73 AF.

BENEFICIAL USE

FINDINGS OF FACT

35. The Applicants propose to divert water from Lake Mary Ronan at a rate of 25.0 GPM up to 3.73 AF to irrigate 1.5 acres of lawn and garden from May 15th to October 15th annually.

36. The Applicants calculated their water usage based on the DNRC/MSU Extension service recommendation for proper lawn and garden care that calls for 1 to 1.5 inches of water per week in the spring and fall, and 2.5 inches per week in the mid-summer. By alternating days for the watering schedule, the Applicants can apply 1.5 inches per week in the Spring and Fall and 2.5 inches per week in the Mid-Summer for each sprinkler zone. The Applicant created the following water schedule to calculate their water usage:

- Alternate water with zones 1-4 watering on Day 1 and zones 5-9 on Day 2
- Spring water period: April 15 to June 30 (77 days)
- Mid-Summer watering period: July 1 to August 31 (62 days)
- Fall watering period: September 1 to October 15 (45 days)

The Applicants plan to alternate watering days for the zones results in all zones having 7 watering days each 2-week period. The Applicants will water 61 days in the spring/fall period and 31 days in the mid-summer period. Watering days were calculated by summing the days for each period and dividing by 2 since Applicant plans to alternate watering days (62 days in summer / 2 = 31 watering days; 122 days in spring/fall / 2 = 61 watering days).

37. To calculate the requested volume of 3.73 AF/year for lawn and garden, the Applicants used the extension service standards and the precipitation rate for each zone to calculate each zones run time for the spring/fall periods and for the mid-summer period. The Applicants used the flow rate calculated for each zone along with the runtime and number of watering days to calculate the total gallons per day needed. Applicant submitted the “WATER NEEDS CALCULATION” (**Figure 5**) showing how the Applicants quantified the total volume requested for their planned lawn and garden.

WATER NEEDS CALCULATION											
Zone	GPM	SPRING AND FALL				SUMMER					
		Run Time Minutes	Gal/Day	# of Days	Total Each Zone	Run Time Minutes	Gal/Day	# of Days	Total Each Zone		
1	25	53	1,325	61	80,825	87	2,175	31	67,425		
2	21	54	1,134	61	69,174	89	1,869	31	57,939		
3	22	55	1,210	61	73,810	91	2,002	31	62,062		
4	24	56	1,344	61	81,984	93	2,232	31	69,192		
5	24	56	1,344	61	81,984	93	2,232	31	69,192		
6	21	56	1,176	61	71,736	93	1,953	31	60,543		
7	21	56	1,176	61	71,736	93	1,953	31	60,543		
8	21	56	1,176	61	71,736	93	1,953	31	60,543		
9	18	53	954	61	58,194	87	1,566	31	48,546		
				Total	661,179					Total	555,985
Total Usage							1,217,164				
Acre Feet							3.73				

Figure 5: Applicant submitted water need calculation

38. The Applicants calculated the total gallons needed to irrigate their lawn and garden to be 1,217,164 gallons (3.73 AF) annually.

39. Applicants property is in USDA Natural Resources Conservation Service climatic area III. The watering schedule created by the Applicant follows the requested period of diversion from April 15 to October 15 , which follows the standards in per ARM 36.12.112(1)(c)(ii).

40. The Department finds that the proposed water use is beneficial and that the requested flow rate of 25.0 GPM up to an annual volume of 3.73 AF are reasonably justified for the purpose of lawn and garden.

POSSESSORY INTEREST

FINDINGS OF FACT

41. The Applicants own the property where water is to be put to beneficial use, which demonstrates possessory interest. The Department finds the possessory interest criterion to be met.

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. 27665-41I 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 9-17)

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. Applicant has proven by a preponderance of the evidence that 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. Section 85-2-311(1)(a)(ii), MCA. (FOF 18-26)

ADVERSE EFFECT

49. 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.

50. 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).

51. 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).

52. 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).

53. 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.

54. 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).

55. 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 27-29)

ADEQUATE DIVERSION

56. 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.

57. 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.

58. Applicants have 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 30-34).

BENEFICIAL USE

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

60. 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; Toohey 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).

61. 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).

62. 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*.

63. Applicants propose to use water to irrigate 1.5 acres of lawn and garden which is a recognized beneficial use. Section 85-2-102(5), MCA. Applicants have proven by a preponderance of the evidence lawn and garden is a beneficial use and that 3.73 AF of diverted volume and 25.0 GPM is the amount needed to sustain the beneficial use. Section 85-2-311(1)(d), MCA. (FOF 35-40)

POSSESSORY INTEREST

64. 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.

65. 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.

66. The Applicants have proven by a preponderance of the evidence that they have a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. 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. 76LJ 30172339 should be GRANTED.

The Department determines the Applicant may divert water from Lake Mary Ronan, by means of a pump, from April 15th to October 15th at 25.0 GPM up to 3.73 AF, from a point in the S2SESE Section 11, Township 25N, Range 22W, Lake County, for lawn and garden use from April 15th to October 15th. The place of use is located in Government Lot 7, S2SESE Section 11, Township 25N, Range 22W, Lake County. The Applicant may irrigate lawn and garden on 1.5 acres.

NOTICE

The Department will provide a notice of opportunity for public comment on this application and the Department's Draft Preliminary Determination to Grant pursuant to § 85-2-307, MCA. The Department will set a deadline for public comments to this application pursuant to §§ 85-2-307, and -308, MCA. If this application receives public comment 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 30th day of July, 2026.



James Ferch, Manager
Kalispell Regional Office
Montana Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the DRAFT PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 30th day of July, 2026, by first class United States mail.

KELLY AND SHELLY WILLS
3032 QUEEN ST
MISSOULA MT 59801-8651



Abigail Williams
Kalispell Regional Office, (406)-752-2288

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

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

6/1/2026

KELLY AND SHELLY WILLS
3032 QUEEN ST
MISSOULA MT 59801-8651

Subject: Correct and Complete Application for Beneficial Water Use Permit No. 76LJ 30172339

Dear Applicant,

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

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

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

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

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

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

Best,

Abigail Williams
Water Resource Specialist
Kalispell Regional Office
Abigail.Williams@mt.gov



DNRC.MT.GOV

From: [Williams, Abby](#)
To: ["KELLY M WILLS"](#)
Subject: Errata for Technical Analysis
Date: Tuesday, May 26, 2026 2:08:00 PM
Attachments: [image001.png](#)
[TA Report 76LJ^30172339 WILLS SW Permit Errata.docx](#)

Hi Kelly,

Please see attached for the Technical Analysis Errata to correct the volume and flow rate on the original document.

I will have a determination for you application to you by 6/1/26!

Best,



Abigail Williams | Water Resource Specialist

Water Rights Bureau, New Appropriations, Kalispell Regional Office

Montana Department of Natural Resources and Conservation

655 Timberwolf Pkwy, Ste. 4, Kalispell, MT 59901

DESK: 406-752-2735 **EMAIL:** Abigail.Williams@MT.gov

[Website](#) | [Facebook](#) | [X \(Twitter\)](#) | [Instagram](#)

How did we do? Let us know here: [Feedback Survey](#)



Surface Water Permit Technical Analyses Report- Notice of Errata

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

Abigail Williams, Water Resource Specialist, Kalispell Regional Office

Applicant	Kelly and Shelly Wills
Application No.	76LJ 30172339
Proposed Point of Diversion (POD)	S2SESE Section 11, Township 25N, Range 22W, Lake County

Overview

This memo documents a correction to the Groundwater Permit Technical Analyses Report prepared for Application No. 76LJ 30172339 by Kelly and Shelly Wills. An error was identified in the flow rate and diverted volume requested by the applicants. The flow rate of 30 gallons per minute and the diverted volume of 3.5 acre-feet is incorrect, and a flow rate of 25 gallons per minute and a volume of 3.73 acre-feet is what was proposed by the Applicant's on submitted form 600P-B. Therefore, the corrected report sections are shown below using the proposed flow rate and diverted volume. Table 1 and section 1.0 have been updated to the correct volume below.

1.0 Application Details

The Applicant proposes to divert water from Ronan Creek (Lake Mary Ronan) from April 15 to October 15 at a rate of 25 gallons per minute (GPM) up to a volume of 3.73-acre feet (AF) per year for lawn and garden. Water will be used from April 15 to October 15 to irrigate 1.5 acres of lawn and garden. The point of diversion from the lake is in S2SESE Section 11, Township 25N, Range 22W, Lake County, Montana (**Figure 1**). The proposed place of use is in Government Lot 7, S2SESE, Section 11, Township 25N, Range 22W, Lake County, Montana(**Figure 1**).

Table 1: Summary of the Proposed Use							
Source	Flow Rate (GPM)	Diverted Volume (AF)	Purpose	Period of Diversion	Period of Use	Point of Diversion	Place of Use
Lake Mary Ronan	25	3.73	Lawn and Garden	04/15 to 10/15	04/15 to 10/15	S2SESE Section 11, Township 25N, Range 22W, Lake County	Government Lot 7, S2SESE Section 11, Township 25N, Range 22W, Lake County

PURPOSE AND DIVERSION INFORMATION**WORK COPY**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? Surface16. What is the source name? Lake Mary Ronan

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. See Ex. A and B.

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 ☒ GPM ☐ CFS	Volume (Acre-Feet)
Lawn & Garden	Pump	1.5	4/15-10/15	4/15-10/15	25	3.73
Total Flow Rate and Volume Required					25	3.73

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	
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	

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

RECEIVED
DNRC Water Resources

MAY 08 2026

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.

Kalispell Unit
Application # 30172339 Basin 76LJ
Priority Date 5/8/26 Time 11:30 AM/PM
Rec'd By AW
Fee Rec'd \$ 700.00 Check # CASH
Deposit Receipt # KW102625086
Payor Shelly & Kelly Wills
Refund \$ _____ Date _____

Applicant Information: Add more as necessary.

Applicant Name Kelly M. and Shelly Wills

Mailing Address 3032 Queen City Missoula State MT Zip 59801

Phone Numbers: Home 406.370.8559 Work _____ Cell 406.370.1790

Email Address kmwills@willslawpc.com

Applicant Name _____

Mailing Address _____ City _____ State _____ Zip _____

Phone Numbers: Home _____ Work _____ Cell _____

Email Address _____

Applicant Name _____

Mailing Address _____ City _____ State _____ Zip _____

Phone Numbers: Home _____ Work _____ Cell _____

Email Address _____

Contact/Representative Information: Add more as necessary.

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

Contact/Representative Name _____

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

16. What is the source name? Lake Mary Ronan

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Total Flow Rate and Volume Required						

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.

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Domestic or multiple domestic	Number of households and bedrooms served per household	
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	

POINT(S) OF DIVERSION

20. Describe the proposed location of the point(s) diversion to the nearest $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ Section. Label each POD with the POD ID number used for the project map (question 17).

POD #	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	Sec.	Twp.	Rge.	County	Lot	Block	Tract	Subdivision	Gov. Lot
1	SW	SE	SE	11	25N	22W	LAKE	7			South Mary Coves	7

PLACE OF USE

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

15-3581-11-4-01-12-0000	

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	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	Sec.	Twp.	Rge.	County
1.5	7		SW	SE	SE	11	25N	22W	LAKE

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). *KMW/SW* *KMW/SW*

76LJ 30050229 is primarily for domestic use, with limited lawn and garden use. It will not be used in conjunction with this permit.

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
76LJ 30050229	04/01-10/31	04/01-0/31	19 GPM	4.5 AF

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 power supply to the pump can be interrupted/turned off and irrigation suspended in response to a call being made.



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

Applicant will regulate/reduce the volume of water diverted during times of water shortage. The irrigation system will be controlled by a control box that allows for easy regulation of the water use so volume/use can be reduced or suspended in the event of a water shortage to protect senior water rights.

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.

Please see the attached vicinity map (Ex. A) and parcel view (Ex. B). The parcel view is marked to show the point of diversion, the route of the main line and the different irrigation zones. The system will utilize a submersible pump with the pump intake located approximately 60 feet from the high water mark - the point of diversion. The intake will be have a backflow preventer/check valve to prevent backflow into the lake/water supply. The intake will have a filter to protect the pump from large debris. The main line will be 2" high density polyethylene (HDPE), total length of approximately 595 ft. The irrigation zones will be served by 1" HDPE. Elevation gain is 36 ft, friction loss is 27.6 ft based on length of main line to furthest zone and the 1" HDPE serving the zone. Based on the 30 psi design, total dynamic head (TDH) is 133. See Ex. C for TDH calculation worksheet. See Ex. D for water use calculations.

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.

Water will be diverted from Lake Mary Ronan using a submersible pump. Based on a TDH of 133 and a maximum flow of 25 gpm, a Munro MXS206 submersible pump will satisfy the irrigation system's needs and will be utilized. See Ex. E pump sizing. Should the Munro MXS206 submersible pump or comparable pump be unavailable or is cost prohibitive, a centrifugal pump that is properly sized to the system such as the LP300B will be used.

Will use the MX205 or MX204 per the pump curve

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.

Because this is a closed system, no conveyance losses should be experienced. As explained above, the conveyance infrastructure is designed to provide sufficient flow and volume to service the system throughout the period of diversion.

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.
The point of diversion and the irrigation zones are noted on Ex. B. The 1.5 acres to be irrigated will be divided into 9 irrigation zones. Each zone will be separately controlled by a control valve and will utilize either K-Rain RN 200/300 fully adjustable rotary nozzles or K-Rain RPS75i rotors at an operating pressure of 30 psi. Additional detail concerning the irrigation zones and specifications for the K-Rain sprinklers is attached as Ex. F.

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.



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.

We anticipate completing the irrigation system in 3 phases with the first phase consisting of Zone 1, 2, and 3, the second phase Zones 4, 5 and 6, and the final phase Zones 7, 8 and 9. Three years should be sufficient to complete the project.



AFFIDAVIT & CERTIFICATION

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

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

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

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

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

Printed Name Kelly M. Wills

Applicant Signature [Signature] Date: 5/8/26

Printed Name Shelly Wills

Applicant Signature [Signature] Date: 5.8.26

Printed Name _____

Applicant Signature _____ Date: _____



Application for Beneficial Water Use

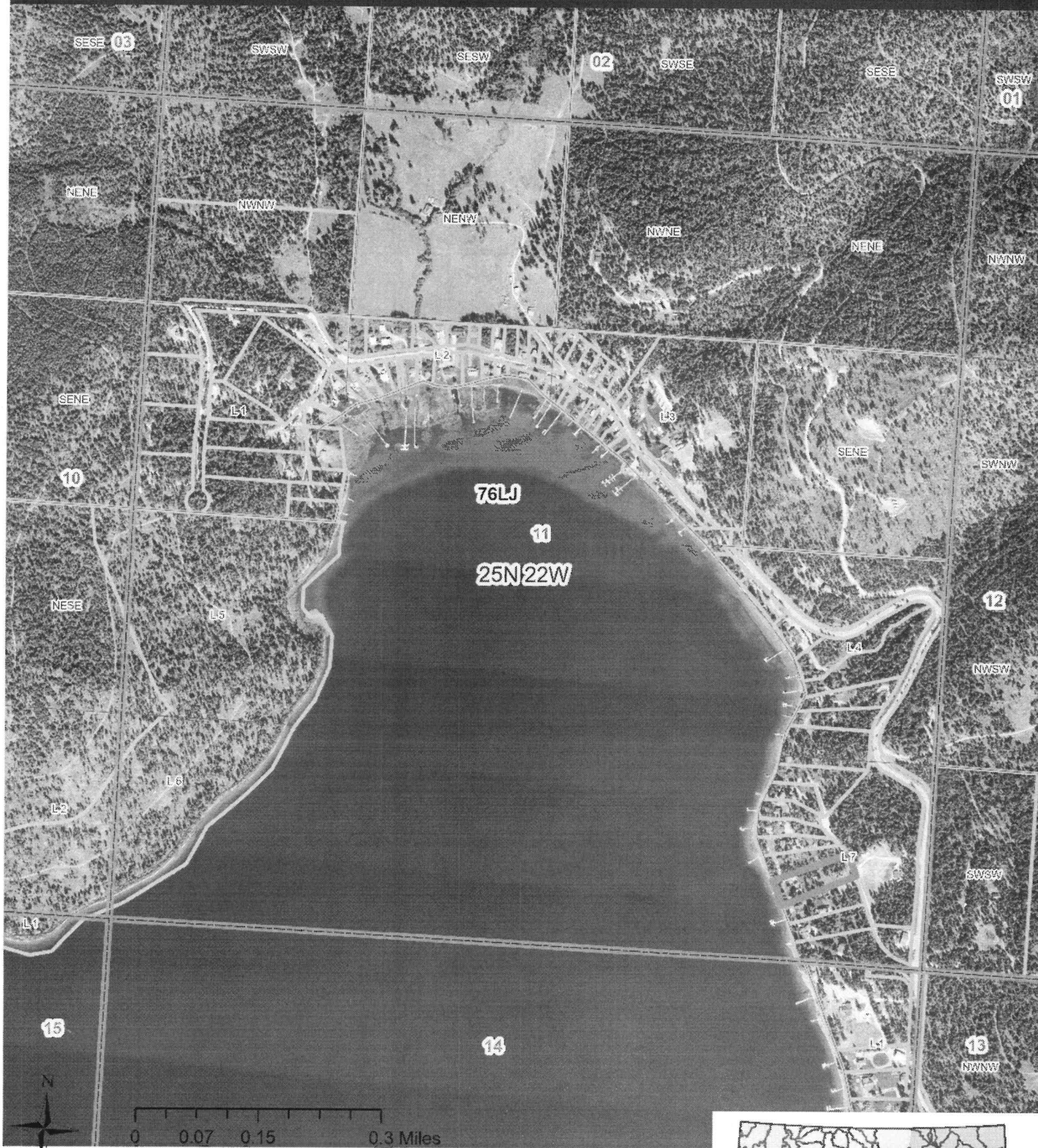
Kelly M. and Shelly Wills

No. 76LJ 30172339

EXHIBIT A and B

Vicinity map and parcel view

Preapplication 76LJ 30172339, Kelly and Shelly Wills



Map Created: 11/17/2025
Author: Abigail Williams
Water Resource Specialist

Legend



Township &
Range



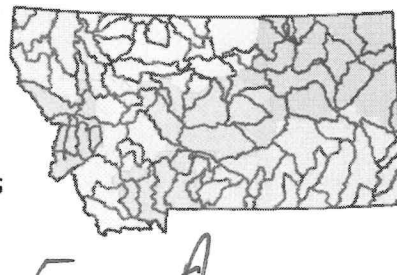
Section



Quarter Sections



Parcels



Preapplication 76LJ 30172339, Kelly and Shelly Wills



Map Created: 11/17/2025
Author: Abigail Williams
Water Resource Specialist
Elements depicted on this map are for illustrative
purposes and have not been surveyed by the
Department, MSDI PLSS:
USA Topo Maps: Copyright: 2011 National

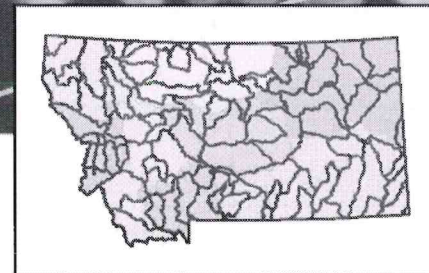
Legend

- Quarter Sections
- Section

- Township & Range
- Parcels

- Parcels selection

Ex. B



Application for Beneficial Water Use

Kelly M. and Shelly Wills

No. 76LJ 30172339

EXHIBIT C

Total Dynamic Head calculation worksheet

D Pump Sizing Worksheet

If you have any questions, email us at support@dripdepot.com

Bigger is **NOT** always better when it comes to irrigation pumps.



Irrigation System Gallons Per Minute (GPM)

Pumping Requirements

To size a pump, first figure total GPM needed. Add up the flow rate of all the emitters on the system (or zone). Emitter spec sheets will note emitter flow rates at the PSI you plan to operate them at.

25 GPM

Note: Drip emitters are often listed in GPH instead of GPM. Divide GPH by 60 to get GPM. Ex. $GPH \div 60 = GPM$

Total Dynamic Head (TDH)

Suction Lift

To determine Suction Lift, measure the vertical distance between the water level at the lowest point and the pump inlet. (Total distance in feet).

0 Feet

? **How to calculate this:** This is the vertical distance between the water level and the pump inlet. (If using a submersible pump this will be zero.)

Elevation Change

To figure Elevation Change, measure the vertical distance from the pump inlet to the highest point in the system. (Total distance in feet.)

36 Feet

? **How to calculate this:** This is the vertical distance between the pump inlet and the highest point in your system. The highest point can be an emitter or simply a run of tubing or pipe.

Friction Loss

To determine Friction Loss you will need to know the pipe or tubing type, its inside diameter and the flow rate going through it. Once you have this information you can reference the manufacturer's friction loss charts on the following pages. Charts are available for Schedule 40 and 80 PVC, Oval Hose and Layflat. If you are using 1/2" to 1" poly tubing, you can input the variables into our Friction Loss Calculator here.

$$\begin{aligned} .55 \times 5.95 &= 3.27 \text{ (main)} \\ 9.84 \times .78 &= 7.67 \text{ (zone 9)} \end{aligned}$$

? **How to calculate this:** Determine the total Friction Loss in PSI by referencing the charts or friction loss calculator. You only need to know the material (PVC, Poly, etc), its inside diameter and the flow rate going through it in GPM or GPH. To convert this friction loss to head in feet, simply multiply it by 2.31. Ex. Friction Loss PSI 10.94 x 2.31 = Head in Feet (or Feet of Head).

27.6 Feet

Required PSI

To determine the Required PSI, check the spec sheets for your emitters and find the ones with the highest optimal operating pressure. This will be your Required PSI.

? **How to calculate this:** Locate the highest operating pressure for your emitters and multiply that by 2.31 to convert it to head in feet.

69.3 Feet

Ex. PSI required on highest PSI zone 30 x 2.31 = 69.3 Feet.

Total Dynamic Head (TDH)

Total the sum of Suction Lift, Elevation Change, Friction Loss, Required PSI. This total equals TDH.

133 TDH

Take your **GPM** and **TDH** and reference our Pump Chart to determine the right pump for you!

Dripdepot

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support@dripdepot.com

Ex. C

FRICTION LOSS CHARACTERISTICS
POLYETHYLENE (PE)
SDR-PRESSURE RATED TUBE
 (2306, 3206, 3306) SDR 7, 9, 11.5, 15 C = 140
 PSI loss per 100 feet of tube (PSI/100 FT)

Sizes 1/2" thru 6"

Flow GPM 1 thru 600

SIZE		1/2"		3/4"		1"		1 1/4"		1 1/2"		2"		2 1/2"		3"		4"		6"		SIZE	
ID		0.622		0.824		1.049		1.380		1.610		2.067		2.469		3.068		4.026		6.065		ID	
FLOW G.P.M.	VELOCITY F.P.S.	PS.I. LOSS	VELOCITY F.P.S.	PS.I. LOSS	VELOCITY F.P.S.	PS.I. LOSS	VELOCITY F.P.S.	PS.I. LOSS	VELOCITY F.P.S.	PS.I. LOSS	VELOCITY F.P.S.	PS.I. LOSS	VELOCITY F.P.S.	PS.I. LOSS	VELOCITY F.P.S.	PS.I. LOSS	VELOCITY F.P.S.	PS.I. LOSS	VELOCITY F.P.S.	PS.I. LOSS	VELOCITY F.P.S.	PS.I. LOSS	FLOW G.P.M.
1	1.05	0.49	0.60	0.12	0.37	0.04	0.21	0.01	0.15	0.00	0.09	0.00											1
2	2.10	1.76	1.20	0.45	0.74	0.14	0.42	0.04	0.31	0.02	0.19	0.01											2
3	3.16	3.73	1.80	0.95	1.11	0.29	0.64	0.08	0.47	0.04	0.28	0.01											3
4	4.21	6.35	2.40	1.62	1.48	0.50	0.85	0.13	0.62	0.06	0.38	0.02	0.26	0.01									4
5	5.27	9.60	3.00	2.44	1.85	0.76	1.07	0.20	0.78	0.09	0.47	0.03	0.33	0.01	0.21	0.00							5
6	6.32	13.46	3.60	3.43	2.22	1.06	1.28	0.28	0.94	0.13	0.57	0.04	0.40	0.02	0.26	0.01							6
7	7.38	17.91	4.20	4.56	2.59	1.41	1.49	0.37	1.10	0.18	0.66	0.05	0.46	0.02	0.30	0.01							7
8	8.43	22.93	4.80	5.84	2.96	1.80	1.71	0.47	1.25	0.22	0.76	0.07	0.53	0.03	0.34	0.01							8
9	9.49	28.52	5.40	7.26	3.33	2.24	1.92	0.59	1.41	0.28	0.85	0.08	0.60	0.03	0.39	0.01							9
10	10.54	34.67	6.00	8.82	3.70	2.73	2.14	0.72	1.57	0.34	0.95	0.10	0.66	0.04	0.43	0.01							10
11	11.60	41.36	6.00	10.53	4.07	3.25	2.35	0.86	1.73	0.40	1.05	0.12	0.73	0.05	0.47	0.02	0.27	0.00					11
12	12.65	48.60	7.21	12.37	4.44	3.82	2.57	1.01	1.88	0.48	1.14	0.14	0.80	0.06	0.52	0.02	0.30	0.01					12
14	14.76	64.65	8.41	16.46	5.19	5.08	2.99	1.34	2.20	0.63	1.33	0.19	0.93	0.08	0.60	0.03	0.35	0.01					14
16	16.87	82.79	9.61	21.07	5.93	6.51	3.42	1.71	2.51	0.81	1.52	0.24	1.07	0.10	0.69	0.04	0.40	0.01					16
18	18.98	02.97	10.81	26.21	6.67	8.10	3.85	2.13	2.83	1.01	1.71	0.30	1.20	0.13	0.78	0.04	0.45	0.01					18
20			12.01	31.86	7.41	9.84	4.28	2.59	3.14	1.22	1.90	0.36	1.33	0.15	0.86	0.05	0.50	0.01					20
22			13.21	38.01	8.15	11.74	4.71	3.09	3.46	1.46	2.10	0.43	1.47	0.18	0.95	0.06	0.55	0.02					22
24			14.42	44.65	8.89	13.79	5.14	3.63	3.77	1.72	2.29	0.51	1.60	0.21	1.04	0.07	0.60	0.02					24
26			15.62	41.79	9.64	16.00	5.57	4.21	4.09	1.99	2.48	0.59	1.74	0.25	1.12	0.09	0.65	0.02					26
28			16.82	59.41	10.38	18.35	5.99	4.83	4.40	2.28	2.67	0.68	1.87	0.29	1.21	0.10	0.70	0.03					28
30			18.02	67.50	11.12	20.85	6.42	5.49	4.72	2.59	2.86	0.77	2.00	0.32	1.30	0.11	0.75	0.03	0.33	0.00			30
35					12.97	27.74	7.49	7.31	5.50	3.45	3.34	1.02	2.34	0.43	1.51	0.15	0.88	0.04	0.38	0.01			35
40					14.83	35.53	8.56	9.36	6.29	4.42	3.81	1.31	2.67	0.55	1.73	0.19	1.00	0.05	0.44	0.01			40
45					16.68	44.19	9.64	11.64	7.08	5.50	4.29	1.63	3.01	0.69	1.95	0.24	1.13	0.06	0.49	0.01			45
50					18.53	53.71	10.71	14.14	7.87	6.68	4.77	1.98	3.34	0.83	2.16	0.29	1.25	0.08	0.55	0.01			50
55							11.78	16.87	8.65	7.97	5.25	2.36	3.68	1.00	2.38	0.35	1.38	0.09	0.61	0.01			55
60							12.85	19.82	9.44	9.36	5.72	2.78	4.01	1.17	2.60	0.41	1.51	0.11	0.66	0.01			60
65							13.92	22.99	10.23	10.86	6.20	3.22	4.35	1.36	2.81	0.47	1.63	0.13	0.72	0.02			65
70							14.99	26.37	11.01	12.46	6.68	3.69	4.68	1.56	3.03	0.54	1.76	0.14	0.77	0.02			70
75							16.06	29.97	11.80	14.16	7.16	4.20	5.01	1.77	3.25	0.61	1.88	0.16	0.83	0.02			75
80							17.13	33.77	12.59	15.95	7.63	4.73	5.35	1.99	3.46	0.69	2.01	0.18	0.88	0.03			80
85							18.21	37.79	13.37	17.85	8.11	5.29	5.68	2.23	3.68	0.77	2.13	0.21	0.94	0.03			85
90							19.28	42.01	14.16	19.84	8.59	5.88	6.02	2.48	3.90	0.86	2.26	0.23	0.99	0.03			90
95									14.95	21.93	9.07	6.50	6.35	2.74	4.11	0.95	2.39	0.25	1.05	0.03			95
100									15.74	24.12	9.54	7.15	6.69	3.01	4.33	1.05	2.51	0.28	1.10	0.04			100
110									17.31	28.77	10.50	8.53	7.36	3.59	4.76	1.25	2.76	0.33	1.22	0.05			110
120									18.88	33.80	11.45	10.02	8.03	4.22	5.20	1.47	3.02	0.39	1.33	0.05			120
130											12.41	11.62	8.70	4.90	5.63	1.70	3.27	0.45	1.44	0.06			130
140											13.36	13.33	9.37	5.62	6.06	1.95	3.52	0.52	1.55	0.07			140
150											14.32	15.15	10.03	6.38	6.50	2.22	3.77	0.59	1.66	0.08			150
160											15.27	17.08	10.70	7.19	6.93	2.50	4.02	0.67	1.77	0.09			160
170											16.23	19.11	11.37	8.05	7.36	2.80	4.27	0.75	1.88	0.10			170
180											17.18	21.24	12.04	8.95	7.08	3.11	4.53	0.83	1.99	0.11			180
190											18.14	23.48	12.71	9.89	8.23	3.44	4.78	0.92	2.10	0.12			190
200											19.09	25.81	13.38	10.87	8.66	3.78	5.03	1.01	2.21	0.14			200
225													15.05	13.52	9.75	4.70	5.66	1.25	2.49	0.17			225
250													16.73	16.44	10.83	5.71	6.29	1.52	2.77	0.21			250
275													18.40	19.61	11.92	6.82	6.92	1.82	3.05	0.25			275
300															13.00	8.01	7.55	2.13	3.32	0.29			300
325															14.08	9.29	8.18	2.48	3.60	0.34			325
350															15.17	10.65	8.81	2.84	3.88	0.39			350
375															16.25	12.10	9.43	3.23	4.15	0.44			375
400															17.33	13.64	10.06	3.64	4.43	0.50			400
425															18.42	15.26	10.69	4.07	4.71	0.55			425
450															19.50	16.97	11.32	4.52	4.99	0.62			450
475																	11.95	5.00	5.26	0.68			475
500																	12.58	5.50	5.54	0.75			500
550																	13.84	6.56	6.10	0.89			550
600																	15.10	7.70	6.65	1.05			600

Note: Shaded areas of chart indicate velocities over 5' per second. Use with Caution.

Application for Beneficial Water Use

Kelly M. and Shelly Wills

No. 76LJ 30172339

EXHIBIT D

Water use/needs calculations

The system utilizes a submersible pump with the intake located approximately 60 feet from the high-water mark. The intake will have a backflow preventer/check valve to prevent backflow into the lake/water supply. The intake will also utilize a filter to protect the pump from large debris. The main line will consist of 2" HDPE pipe and have a total length of $\approx$ 595 ft. Control boxes with control valves will be utilized to control water flow to the 9 irrigation zones. The irrigation zones will be served by 1" HDPE pipe. The irrigation system is sized at 30 psi and is designed with head-to-head coverage.

➤ Zone 1 consists of 22 K-Rain RN200 and RN300 fully adjustable rotary nozzles as follows:

- 2 RN200 90° nozzles and 16ft radius at .34 gpm
- 11 RN200 180° nozzles and 16ft radius at .67 gpm
- 6 RN200 360° nozzles and 16ft radius at 1.35 gpm
- 3 RN300 360° nozzles and 26ft radius at 3 gpm

Zone 1 requires < 25 gpm (25.11 gpm actual)

➤ Zone 2 consists of 16 K-Rain RN200 and RN300 fully adjustable rotary nozzles as follows:

- 4 RN200 180° nozzles and 16 ft radius at .67 gpm
- 6 RN300 180° nozzles and 26 ft radius at 1.5 gpm
- 6 RN300 360° nozzles and 26 ft radius at 1.5 gpm

Zone 2 requires < 21 gpm (20.68 gpm actual)

➤ Zone 3 consists of 12 K-Rain RN200 and RN300 fully adjustable rotary nozzles as follows:

- 6 RN200 180° nozzles and 16ft radius at .67
- 6 RN300 360° nozzles and 26ft radius at 3 gpm

Zone 3 requires < 22 gpm (22.02 gpm actual)

➤ Zones 4 and 5 each consist of 4 K-Rain RPS 75i rotors and 6 RN300 fully adjustable rotary nozzles as follows:

- 4 RPS 75i using #2.5 nozzle @ 180° and 26ft radius at 1.5 gpm
- 6 RN300 360° nozzles and 26ft radius at 3 gpm

Zones 4 and 5 each require 24 gpm

➤ Zones 6, 7 and 8 each consist of 4 K-Rain RPS 75i rotors and 5 RN300 fully adjustable rotary nozzles as follows:

- 4 RPS 75i using #2.5 nozzle @ 180° and 26ft radius at 1.5 gpm
- 5 RN300 360° nozzles and 26ft radius at 3 gpm

Zones 6, 7 and 8 each require 21 gpm

E v n

➤ Zone 9 consist of 10 K-Rain RN200 and RN300 fully adjustable rotary nozzles as follows:

- 2 RN 200 180° nozzles and 16 ft radius at .67 gpm
- 5 RN300 180° nozzles and 26 ft radius at 1.5 gpm
- 3 RN300 360° nozzles and 26ft radius at 3 gpm

Zones requires 18 gpm (17.87 gpm actual)

Based on a maximum flow requirement of 25 gpm (Zone 1) and elevation gain of ≈ 36 ft, a friction loss of 27.6 ft based on length of mainline from inlet to furthest zone plus the length of 1" poly pipe serving the sprinklers on the furthest zone (Zone 9), and utilizing the required psi of 30, the total dynamic head (TDH) is 133. The system will utilize a Munro MXS206 submersible¹ pump. Utilizing a TDH of 133 and a maximum flow of 25 gpm, the pump will satisfy the irrigation system's needs. See Ex. D pump curve and pump information.

Specifications for the K-Rain fully adjustable rotary nozzles and K-Rain RPS 75i rotors are attached.

¹ An alternate pump may be utilized based on availability and cost. If an alternate pump is used, it will be properly sized to meet the TDH and maximum flow/gpm of the irrigation system.

Application for Beneficial Water Use

Kelly M. and Shelly Wills

No. 76LJ 30172339

EXHIBIT E

Pump curve and specifications

Pump Sizing Worksheet

If you have any questions, email us at support@dripdepot.com

Bigger is **NOT** always better when it comes to irrigation pumps.



Shop our Pump Selection

Submersible Pumps						
Pump	HP	GPM Range	Head Ft Range	Max Head Ft	Max GPM Capacity	MFR Part Number
Munro Pond-Residential Submersible Pump	1/7	0 - 21	8 - 25'	25'	21	POND100
	1/5	0 - 28	12 - 34'	34'	28	POND150
	1/3	0 - 47	4 - 34'	34'	47	POND250
Munro MXS 5" Multistage Submersible Pumps	3/4	0 - 37	10 - 95'	95'	37	MXS202
	1	0 - 30	20 - 160'	160'	30	MXS203
	1.2	0 - 38	20 - 210'	210'	38	MXS204
	1.5	0 - 30	20 - 255'	255'	30	MXS205
	2	0 - 40	10 - 325'	325'	40	MXS206
Munro FS Series Pumps	1/3	0 - 50	7 - 28'	28'	50	FS-250
	1/2	0 - 60	7 - 35'	35'	60	FS-400
	1	0 - 90	4 - 50'	50'	90	FS-750
	2	0 - 125	10 - 70'	70'	125	FS-215
	2	0 - 175	9 - 55'	55'	175	FS-315
Munro Submersible Sump 1/7 hp	1/7	0 - 21	8 - 25'	25'	21	Sump100 F

Pump Sizing Worksheet

If you have any questions, email us at support@dripdepot.com

Bigger is **NOT** always better when it comes to irrigation pumps.



Shop our Pump Selection

Centrifugal Pumps						
Pump	HP	GPM Range	Head Ft Range	Max Head Ft	Max GPM Capacity	MFR Part Number
Munro LP Series Centrifugal Booster Pump	3/4	0 - 60	50 - 105'	105'	60	LP075B
	1	0 - 70	50 - 110'	110'	70	LP100B
	1.5	0 - 75	50 - 115'	115'	75	LP150B
	2	0 - 103	50 - 140'	140'	103	LP200B
	3	0 - 115	50 - 145'	145'	115	LP300B
Munro Centrifugal LP 1502 Pump	2.5	0 - 80	60 - 185'	185'	80	LP1502B

Application for Beneficial Water Use

Kelly M. and Shelly Wills

No. 76LJ 30172339

EXHIBIT F

Irrigation and K-Rain sprinkler information

The system design is based on the DNRC/MSU Extension service research-based recommendation for proper lawn and garden care that calls for 1 to 1.5 inches of water per week in the spring and fall, and 2.5 inches per week in mid-summer. For purposes of this permit request, we based our calculation on the following watering schedule:

- Alternate watering with Zones 1-4 watering on day 1 and Zones 5-9 on day 2.
- Spring watering period = April 15 – June 30 or 77 days
- Mid-Summer watering period = July 1 – August 31 or 62 days
- Fall watering period = September 1 – October 15 or 45 days

Using an alternate date watering schedule the Spring and Fall watering period is 1.5 in/wk week or 3 in/2 wks and the mid-summer is 2.5 in/wk or 5 in/2wks. Zones 1-4 will have 7 watering days during each 2-week period and Zones 5-9 will also have 7 watering days during each 2-week period.

ZONE 1: Using an average precipitation rate of .49in/hr, for Zones 1 which utilizes the K-Rain RN 200 and 300 fully adjustable rotary nozzles, the watering time for Spring and Fall is 53 minutes per watering day and the mid-Summer watering time is 87 minutes per day calculated as follows:

Spring and Fall

$$3" \div 7 \text{ watering days} = .43 \text{ in/watering day}$$

$$.43 \text{ in} \div .49 \text{ in.hr} = .88\text{hr} \times 60 \text{ minutes/hr} = 53 \text{ minutes watering time}$$

Mid-Summer

$$5" \div 7 \text{ watering days} = .71 \text{ in/watering day}$$

$$.71 \text{ in} \div .49 \text{ in.hr} = 1.45\text{hr} \times 60 \text{ minutes/hr} = 87 \text{ minutes watering time}$$

ZONE 2: Using an average precipitation rate of .48in/hr for Zone 2 which utilizes the K-Rain RN 200 and 300 fully adjustable rotary nozzles, the watering time for Spring and Fall is 54 minutes per watering day and the mid-Summer watering time is 89 minutes per day calculated as follows:

Spring and Fall

$$3" \div 7 \text{ watering days} = .43 \text{ in/watering day}$$

$$.43 \text{ in} \div .48 \text{ in/hr} \times 60 \text{ minutes/hr} = 54 \text{ minutes watering time}$$

Mid-Summer

$$5" \div 7 \text{ watering days} = .71 \text{ in/watering day}$$

$$.71 \text{ in} \div .48 \text{ in.hr} \times 60 \text{ minutes/hr} = 89 \text{ minutes watering time}$$

ZONE 3: Using an average precipitation rate of .47in/hr for Zone 3 which utilizes the K-Rain RN 200 and RN300 fully adjustable rotary nozzles, the watering time for Spring and Fall is 55 minutes per watering day and the mid-Summer watering time is 91 minutes per day calculated as follows:

Fv F

Spring and Fall

$$3" \div 7 \text{ watering days} = .43 \text{ in/watering day}$$

$$.43 \text{ in} \div .47 \text{ in/hr} \times 60 \text{ minutes/hr} = 55 \text{ minutes watering time}$$

Mid-Summer

$$5" \div 7 \text{ watering days} = .71 \text{ in/watering day}$$

$$.71 \text{ in} \div .47 \text{ in/hr} \times 60 \text{ minutes/hr} = 91 \text{ minutes watering time}$$

ZONES 4 -8: Using an average precipitation rate of .46in/hr for Zones 4-8 which utilize the K-Rain RN 300 fully adjustable rotary nozzles, the watering time for Spring and Fall is 56 minutes per watering day and the mid-Summer watering time is 93 minutes per day calculated as follows:

Spring and Fall

$$3" \div 7 \text{ watering days} = .43 \text{ in/watering day}$$

$$.43 \text{ in} \div .46 \text{ in/hr} \times 60 \text{ minutes/hr} = 56 \text{ minutes watering time}$$

Mid-Summer

$$5" \div 7 \text{ watering days} = .71 \text{ in/watering day}$$

$$.71 \text{ in} \div .46 \text{ in/hr} \times 60 \text{ minutes/hr} = 93 \text{ minutes watering time}$$

ZONE 9: Using an average precipitation rate of .49in/hr, for Zones 1 which utilizes the K-Rain RN 200 and 300 fully adjustable rotary nozzles, the watering time for Spring and Fall is 53 minutes per watering day and the mid-Summer watering time is 87 minutes per day calculated as follows:

Spring and Fall

$$3" \div 7 \text{ watering days} = .43 \text{ in/watering day}$$

$$.43 \text{ in} \div .49 \text{ in/hr} = .88\text{hr} \times 60 \text{ minutes/hr} = 53 \text{ minutes watering time}$$

Mid-Summer

$$5" \div 7 \text{ watering days} = .71 \text{ in/watering day}$$

$$.71 \text{ in} \div .49 \text{ in/hr} = 1.45\text{hr} \times 60 \text{ minutes/hr} = 87 \text{ minutes watering time}$$

Total water use is calculated based on 122 total watering days in the Spring/Fall and 62 total watering days in Mid-Summer. Because Zones 1-4 watering days alternate with Zones 5-9, each zone will water 61 watering days on the Spring/Fall schedule, and 31 watering days on the Mid-Summer schedule. The total water needs calculation is set forth below in the Water Needs Calculation table.

WATER NEEDS CALCULATION

SPRING AND FALL						SUMMER				
Zone	GPM	Run Time Minutes	Gal/Day	# of Days	Total Each Zone	Run Time Minutes	Gal/Day	# of Days	Total Each Zone	
1	25	53	1,325	61	80,825	87	2,175	31	67,425	
2	21	54	1,134	61	69,174	89	1,869	31	57,939	
3	22	55	1,210	61	73,810	91	2,002	31	62,062	
4	24	56	1,344	61	81,984	93	2,232	31	69,192	
5	24	56	1,344	61	81,984	93	2,232	31	69,192	
6	21	56	1,176	61	71,736	93	1,953	31	60,543	
7	21	56	1,176	61	71,736	93	1,953	31	60,543	
8	21	56	1,176	61	71,736	93	1,953	31	60,543	
9	18	53	954	61	58,194	87	1,566	31	48,546	
Total					661,179	Total				555,985
Total Usage							1,217,164			
Acre Feet							3.73			

The total water needed is calculated to be 1,217,507 gallons. This converts to 3.73AF of water:

Acre-feet conversion:

1,217,164 gallons

÷ 325,851 gallons/acre-feet (AC)

3.73 AF of water

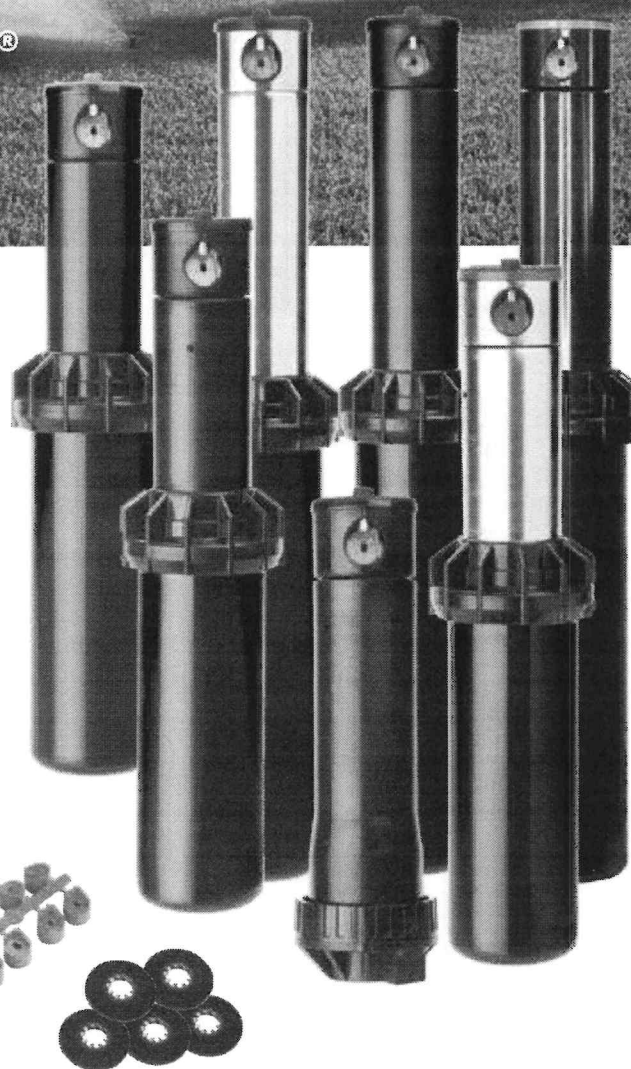
The volume standards set forth by the DNRC provide for 2.5AF/acre. The total acreage to be irrigated is 1.5 acres. Pursuant to DNRC volume standards, the acceptable volume based on the acreage is 3.75 AF (2.5 AF x 1.5A = 3.75AF). Thus, the water allocation that we request – 3.73AF – is within the volume standards of the DNRC.



RPS™ 75i Rotors

With Intelligent Flow Technology®

- ▶ Right position start
- ▶ Patented Intelligent Flow Technology® – Reduce distance and water flow simultaneously and proportionately
- ▶ Shut off flow from the head
- ▶ Patented Reversing Mechanism – Continuous reverse and return
- ▶ Wide Selection of Nozzles – Including standard and low angle for flexibility in system design
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- ▶ Includes 5 Free Check Valve Assemblies Per Box
- ▶ Universal Riser Assembly – Fits into existing Hunter® PGP® and PGP® Ultra cans
- ▶ Pressure Regulated – 45 PSI available (6" only)



Intelligent Flow Technology®

- Reduces distance and water flow simultaneously and proportionately
- Provides full on/off control

INLET SIZE
3/4"

RADIUS
26' – 48'

FLOW RATE
0.9 – 9.7 GPM

BEST IN THE INDUSTRY
WARRANTY
7 YEARS

Performance Data

NOZZLE	PRESSURE PSI kPa Bar	NO ADJUSTMENT								-30% ADJUSTMENT								-50% ADJUSTMENT							
		RADIUS		FLOW		PRECIP in/hr mm/hr				RADIUS		FLOW		PRECIP in/hr mm/hr				RADIUS		FLOW		PRECIP in/hr mm/hr			
		Ft.	M.	GPM	L/M	■	▲	■	▲	Ft.	M.	GPM	L/M	■	▲	■	▲	Ft.	M.	GPM	L/M	■	▲	■	▲
#1.0	30 207 2.1	31'	9.4	1.1	4.2	.22	.25	6	6	22'	7	0.8	3.0	.31	.36	8	9	16	5	0.6	2.3	.44	.51	11	13
	40 276 2.8	32'	9.8	1.4	5.3	.26	.30	7	8	22'	7	1.0	3.8	.38	.43	10	11	16	5	0.7	2.7	.53	.61	13	15
	50 345 3.4	33'	10.1	1.6	6.1	.28	.33	7	8	23'	7	1.1	4.1	.40	.47	10	12	17	5	0.8	3.0	.57	.65	14	17
	60 414 4.1	34'	10.4	1.8	6.8	.30	.35	8	9	24'	7	1.3	4.9	.43	.49	11	13	17	5	0.9	3.4	.60	.69	15	18
#1.5	30 207 2.1	33'	10.1	1.5	5.7	.27	.31	7	8	23'	7	1.1	4.1	.38	.44	10	11	17	5	0.8	3.0	.53	.61	13	16
	40 276 2.8	35'	10.7	1.8	6.8	.28	.33	7	8	25'	8	1.3	4.9	.40	.47	10	12	18	5	0.9	3.4	.57	.65	14	17
	50 345 3.4	35'	10.7	2.0	7.6	.31	.36	8	9	25'	8	1.4	5.3	.45	.52	11	13	18	5	1.0	3.8	.63	.73	16	18
	60 414 4.1	36'	11.0	2.2	8.3	.33	.38	8	10	25'	8	1.5	5.7	.47	.54	12	14	18	5	1.1	4.2	.65	.76	17	19
#2.0	30 207 2.1	33'	10.1	1.8	6.8	.32	.37	8	9	23'	7	1.3	4.9	.45	.53	11	13	17	5	0.9	3.4	.64	.74	16	19
	40 276 2.8	34'	10.4	2.1	7.9	.35	.40	9	10	24'	7	1.5	5.7	.50	.58	13	15	17	5	1.1	4.2	.70	.81	18	21
	50 345 3.4	36'	11.0	2.4	9.1	.36	.41	9	10	25'	8	1.7	6.4	.51	.59	13	15	18	5	1.2	4.5	.71	.82	18	21
	60 414 4.1	38'	11.6	2.7	10.2	.36	.42	9	11	27'	8	1.9	7.2	.51	.59	13	15	19	6	1.4	5.3	.72	.83	18	21
#2.5 Pre- installed	30 207 2.1	35'	10.7	2.2	8.3	.35	.40	9	10	25'	8	1.5	5.7	.49	.57	12	14	18	5	1.1	4.2	.69	.80	18	20
	40 276 2.8	38'	11.6	2.6	9.8	.35	.40	9	10	27'	8	1.8	6.8	.50	.57	13	15	19	6	1.3	4.9	.69	.80	18	20
	50 345 3.4	39'	11.9	3.0	11.4	.38	.44	10	11	27'	8	2.1	7.9	.54	.63	14	16	20	6	1.5	5.7	.76	.88	19	22
	60 414 4.1	40'	12.2	3.3	12.5	.40	.46	10	12	28'	9	2.3	8.7	.57	.66	14	17	20	6	1.7	6.4	.79	.92	20	23
#3.0	30 207 2.1	38'	11.6	2.7	10.2	.36	.42	9	11	27'	8	1.9	7.1	.51	.59	13	15	19	6	1.4	5.3	.72	.83	18	21
	40 276 2.8	40'	12.2	3.1	11.7	.37	.43	9	11	28'	9	2.2	8.3	.53	.62	13	16	20	6	1.6	6.1	.75	.86	19	22
	50 345 3.4	41'	12.5	3.5	13.3	.40	.46	10	12	29'	9	2.5	9.5	.57	.66	14	17	21	6	1.8	6.8	.80	.93	20	24
	60 414 4.1	41'	12.5	3.9	14.8	.45	.52	11	13	29'	9	2.7	10.2	.64	.74	16	19	21	6	2.0	7.6	.89	1.03	23	26
#4.0	30 207 2.1	38'	11.6	3.5	13.3	.47	.54	12	14	27'	8	2.5	9.5	.67	.77	17	20	19	6	1.8	6.8	.93	1.08	24	27
	40 276 2.8	40'	12.2	4.0	15.1	.48	.56	12	14	28'	9	2.8	10.6	.69	.79	18	20	20	6	2.0	7.6	.96	1.11	24	28
	50 345 3.4	43'	13.1	4.4	16.7	.46	.53	12	13	30'	9	3.1	11.7	.65	.76	17	19	22	7	2.2	8.3	.92	1.06	23	27
	60 414 4.1	43'	13.1	4.9	18.6	.51	.59	13	15	30'	9	3.4	12.9	.73	.84	19	21	22	7	2.5	9.5	1.02	1.18	26	30
#5.0	30 207 2.1	43'	13.1	4.4	16.7	.46	.53	12	13	30'	9	3.1	11.7	.65	.76	17	19	22	7	2.2	8.3	.92	1.06	23	27
	40 276 2.8	43'	13.1	5.0	18.9	.52	.60	13	15	30'	9	3.5	13.3	.74	.86	19	22	22	7	2.5	9.5	1.04	1.20	26	31
	50 345 3.4	44'	13.4	5.5	20.8	.55	.63	14	16	31'	9	3.9	14.8	.78	.90	20	23	22	7	2.8	10.6	1.09	1.26	28	32
	60 414 4.1	42'	12.8	5.9	22.3	.64	.74	16	19	29'	9	4.1	15.5	.92	1.06	23	27	21	6	3.0	11.4	1.29	1.49	28	38
#6.0	30 207 2.1	40'	12.2	5.0	18.9	.60	.70	15	18	28'	9	3.5	13.3	.86	.99	22	25	20	6	2.5	9.5	1.20	1.39	30	35
	40 276 2.8	43'	13.1	5.9	22.3	.61	.71	15	18	30'	9	4.1	15.5	.88	1.01	22	26	22	7	3.0	11.4	1.23	1.42	31	36
	50 345 3.4	43'	13.1	6.6	25.0	.69	.79	18	20	30'	9	4.6	17.4	.98	1.13	25	29	22	7	3.3	12.5	1.37	1.59	35	40
	60 414 4.1	44'	13.4	7.3	27.6	.73	.84	19	21	31'	9	5.1	19.3	1.04	1.20	26	30	22	7	3.7	14.0	1.45	1.68	37	43
#8.0	30 276 2.8	43'	13.1	6.8	25.7	.71	.82	18	21	30'	9	4.8	18.2	1.01	1.17	26	30	22	7	3.4	12.9	1.42	1.64	36	42
	40 345 3.4	47'	14.3	7.9	29.9	.69	.80	18	20	33'	10	5.5	20.8	.98	1.14	25	29	24	7	4.0	15.1	1.38	1.59	35	40
	50 414 4.1	48'	14.6	8.8	33.3	.74	.85	19	22	34'	10	6.2	23.5	1.05	1.21	27	31	24	7	4.4	16.7	1.47	1.70	37	43
	60 483 4.8	47'	14.3	9.7	36.7	.85	.98	22	25	33'	10	6.8	25.7	1.21	1.40	31	35	24	7	4.9	18.6	1.69	1.95	43	50

Low Angle Performance Data

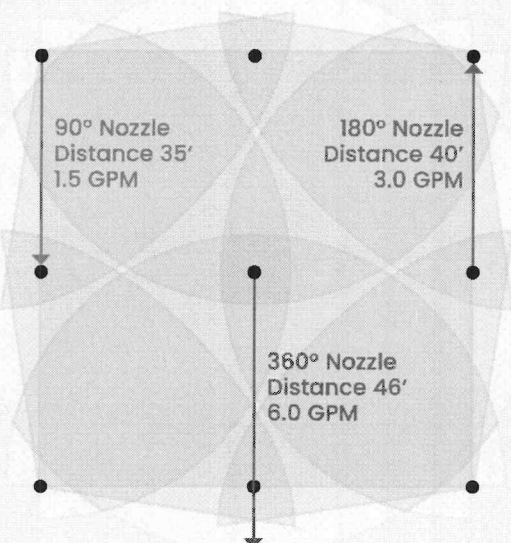
NOZZLE	PRESSURE PSI kPa Bar	NO ADJUSTMENT								-30% ADJUSTMENT								-50% ADJUSTMENT							
		RADIUS		FLOW		PRECIP in/hr mm/hr				RADIUS		FLOW		PRECIP in/hr mm/hr				RADIUS		FLOW		PRECIP in/hr mm/hr			
		Ft.	M.	GPM	L/M	■	▲	■	▲	Ft.	M.	GPM	L/M	■	▲	■	▲	Ft.	M.	GPM	L/M	■	▲	■	▲
#1.0	30 207 2.1	26'	7.9	0.9	3.4	.25	.29	6	7	18'	5	0.6	2.3	.35	.41	9	10	13	4	0.4	1.5	.50	.57	13	15
	40 276 2.8	27'	8.2	1.0	3.8	.26	.31	7	8	19'	6	0.7	2.7	.38	.44	10	11	14	4	0.5	1.9	.53	.61	13	15
	50 345 3.4	27'	8.2	1.2	4.5	.32	.37	8	9	19'	6	0.8	3.0	.45	.52	11	13	14	4	0.6	2.3	.63	.73	16	19
	60 414 4.1	26'	7.9	1.4	5.3	.40	.46	10	12	18'	5	1.0	3.8	.57	.66	14	17	13	4	0.7	2.7	.80	.92	20	24
#1.5	30 207 2.1	28'	8.5	1.3	4.9	.32	.37	8	9	20'	6	0.9	3.4	.46	.53	12	13	14	4	0.7	2.7	.64	.74	16	19
	40 276 2.8	29'	8.8	1.5	5.7	.34	.40	9	10	20'	6	1.1	4.2	.49	.57	12	14	15	5	0.8	3.0	.69	.79	18	20
	50 345 3.4	30'	9.1	1.7	6.4	.36	.42	9	11	21'	6	1.2	4.5	.52	.60	13	15	15	5	0.9	3.4	.73	.84	19	21
	60 414 4.1	31'	9.4	1.9	7.2	.38	.44	10	11	22'	7	1.3	4.9	.54	.63	14	16	16	5	1.0	3.8	.76	.88	19	22
#2.0	30 207 2.1	29'	8.8	1.9	7.2	.44	.50	11	13	20'	6	1.3	4.9	.62	.72	16	18	15	5	1.0	3.8	.87	1.00	22	26
	40 276 2.8	32'	9.8	2.2	8.3	.41	.48	10	12	22'	7	1.5	5.7	.59	.68	15	17	16	5	1.1	4.2	.83	.96	21	24
	50 345 3.4	33'	10.1	2.5	9.5	.44	.51	11	13	23'	7	1.8	6.8	.63	.73	16	19	17	5	1.3	4.9	.88	1.02	22	26
	60 414 4.1	34'	10.4	2.8	10.6	.47	.54	12	14	24'	7	2.0	7.6	.67	.77	17	20	17	5	1.4	5.3	.93	1.08	24	27
#3.0	30 207 2.1	32'	9.8	2.5	9.5	.47	.54	13	14	22'	7	1.8	6.8	.67	.78	17	20	16	5	1.3	4.9	.94	1.09	24	28
	40 276 2.8	34'	10.4	3.0	11.4	.50	.58	14	15	24'	7	2.1	7.9	.71	.82	18	21	17	5	1.5	5.7	1.00	1.15	25	29
	50 345 3.4	35'	10.7	3.5	13.3	.55	.64	15	16	25'	8	2.5	9.5	.79	.91	20	23	18	5	1.8	6.8	1.10	1.27	28	32
	60 414 4.1	36'	11.0	4.0	15.1	.59	.69	17	17	25'	8	2.8	10.6	.85	.98	22	25	18	5	2.0	7.6	1.19	1.37	30	33



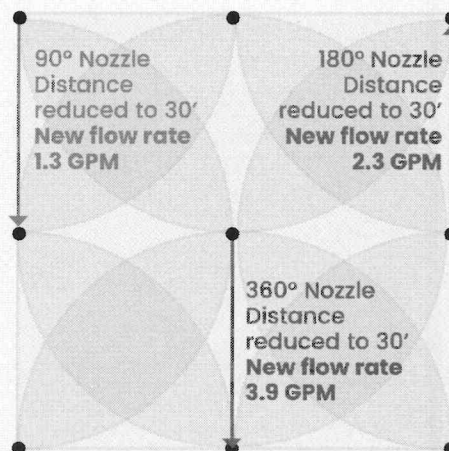
Turn the Flow Control on the RPS™ 75i Rotor with Intelligent Flow Technology® and something amazing happens—you get even landscape watering while also saving water. It reduces distance and flow rate simultaneously and proportionately. Also provides full on/off control from the head.

✓ Contractors stay dry ✓ Landscapes are evenly watered ✓ Water is saved

BEFORE Intelligent Flow Technology®
Total flow is 24 GPM - Precipitation rate is .64 in/hr



AFTER Intelligent Flow Technology®
Total flow is 18.3 GPM - Precipitation rate is .49 in/hr
24% Less Water Used!



Specifications

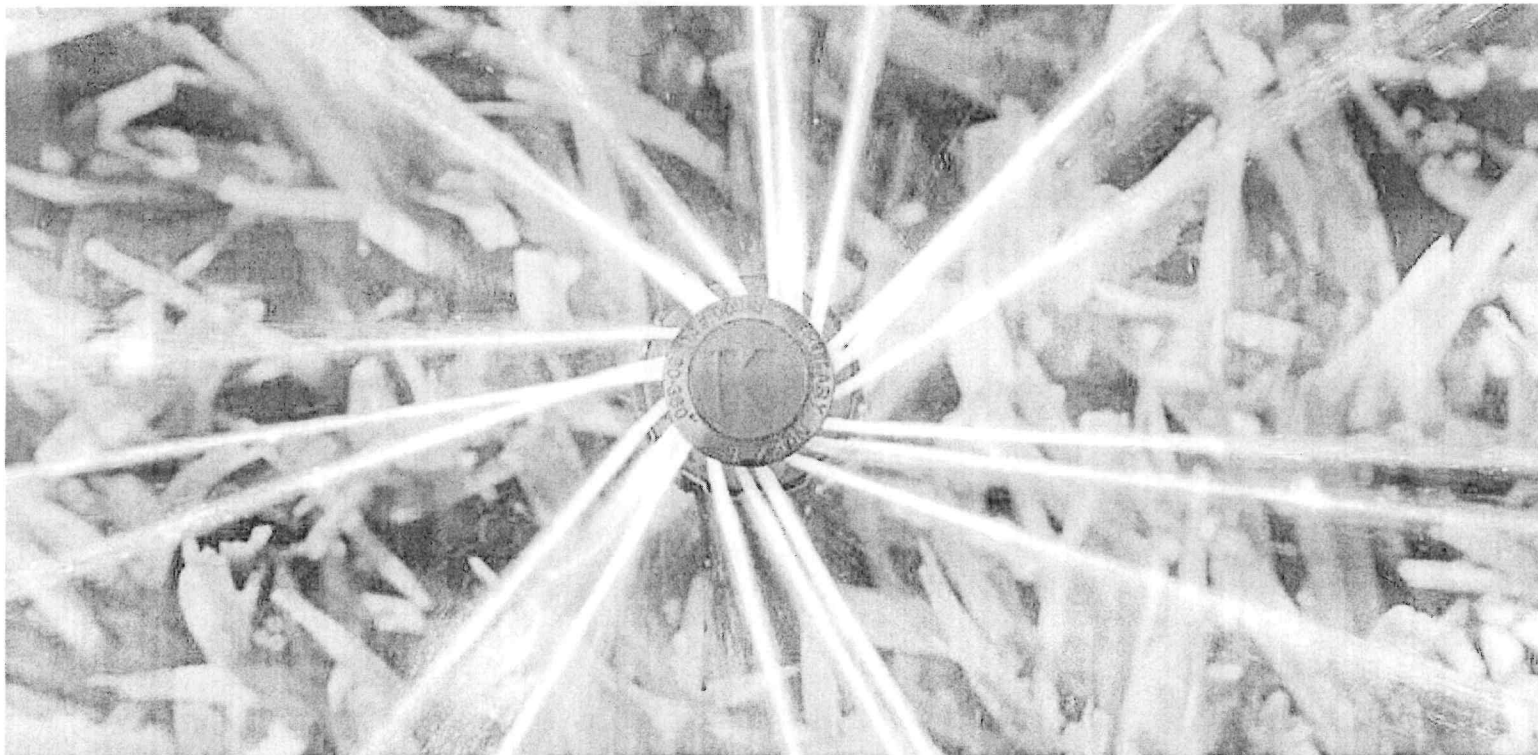
Radius	26' – 48' (7,9 – 14,6 m)	
Flow Rate	0.9 – 9.7 GPM (3,4 – 36,7 LPM)	
Pressure Range	20 – 70 PSI (1,4 – 4,8 bar)	
Precipitation Rate	.22 – .85 in/hr (6 – 22 mm/hr)	
Arc Setting Range	40° – 360°	
Nozzle Trajectory	26°	
Low Angle Nozzle Trajectory	11°	
Nozzles Included	8 Standard – 4 Low Angle	
4 inch	Riser height:	4 1/4" (10,81 cm)
	Retracted height:	7 3/8" (18,7 cm)
6 inch	Riser height:	6 1/4" (15,9 cm)
	Retracted height:	9 1/2" (24,1 cm)
Shrub	Height: 7 1/2" (19,1 cm)	
Inlet Size	3/4" (1,9 cm) Female Thread NPT	
Warranty	7 years	



- Reduces distance and water flow simultaneously and proportionately
- Provides full on/off control



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Fully Adjustable Rotary Nozzle

A recognized water conserving tool

The K-Rain Fully Adjustable Nozzles use up to 30% less water and are eligible for conservation rebates and incentives in many areas. Check with your local water utility for information.

No other nozzle on the market today is fully adjustable from 80° to 360° offering maximum flexibility in system design and eliminating the need for multiple nozzles. One nozzle does it all.

Models

RN100-ADJ (Green)

80°-360° Adjustable

13' - 15' (4 - 4,6 m)

RN200-ADJ (Blue)

80°-360° Adjustable

16' - 19' (4,9 - 5,8 m)

RN300-ADJ (Red)

80°-360° Adjustable

26' - 30' (7,9 - 9,1 m)

Performance Data

RN100-ADJ

ARC	PRESSURE		RADIUS		FLOW RATE		PRECIPITATION			
	PSI	Bars	Ft.	M.	GPM	L/M	■ in/hr	▲ mm/hr	■ in/hr	▲ mm/hr
90°	30	2.07	13	3.96	0.22	0.83	0.50	0.58	11	12
	40	2.76	14	4.27	0.25	0.95	0.49	0.57	10	12
	50	3.45	15	4.57	0.30	1.14	0.51	0.59	11	12
180°	30	2.07	13	3.96	0.44	1.67	0.50	0.58	11	12
	40	2.76	14	4.27	0.50	1.89	0.49	0.57	10	12
	50	3.45	15	4.57	0.60	2.27	0.51	0.59	11	12
360°	30	2.07	13	3.96	0.90	3.41	0.51	0.59	11	12
	40	2.76	14	4.27	1.00	3.79	0.49	0.57	10	12
	50	3.45	15	4.57	1.20	4.54	0.51	0.59	11	12

RN200-ADJ

ARC	PRESSURE		RADIUS		FLOW RATE		PRECIPITATION			
	PSI	Bars	Ft.	M.	GPM	L/M	■ in/hr	▲ mm/hr	■ in/hr	▲ mm/hr
90°	30	2.07	16	4.88	0.34	1.29	0.51	0.59	11	12
	40	2.76	18	5.49	0.41	1.55	0.49	0.56	10	12
	50	3.45	19	5.79	0.47	1.78	0.50	0.58	11	12
180°	30	2.07	16	4.88	0.67	2.54	0.50	0.58	11	12
	40	2.76	18	5.49	0.83	3.14	0.49	0.57	10	12
	50	3.45	19	5.79	0.94	3.56	0.50	0.58	11	12
360°	30	2.07	16	4.88	1.35	5.11	0.51	0.59	11	12
	40	2.76	18	5.49	1.70	6.44	0.51	0.58	11	12
	50	3.45	19	5.79	1.90	7.19	0.51	0.58	11	12

RN300-ADJ

ARC	PRESSURE		RADIUS		FLOW RATE		PRECIPITATION			
	PSI	Bars	Ft.	M.	GPM	L/M	■ in/hr	▲ mm/hr	■ in/hr	▲ mm/hr
90°	30	2.07	26	7.92	0.80	3.03	0.46	0.53	10	11
	40	2.76	27	8.23	0.90	3.41	0.48	0.55	10	12
	50	3.45	29	8.84	1.00	3.79	0.46	0.53	10	11
180°	30	2.07	26	7.92	1.50	5.68	0.43	0.49	9	10
	40	2.76	27	8.23	1.60	6.06	0.42	0.49	9	10
	50	3.45	29	8.84	1.80	6.81	0.41	0.48	9	10
360°	30	2.07	26	7.92	3.00	11.36	0.43	0.49	9	10
	40	2.76	27	8.23	3.20	12.11	0.42	0.49	9	10
	50	3.45	28	8.53	3.80	14.38	0.47	0.54	10	11

*Data represents test results in zero wind. Adjust for local conditions.



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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

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

GOVERNOR GREG GIANFORTE



DNRC DIRECTOR AMANDA KASTER

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

January 29, 2026

Kelly and Shelly Wills
3032 Queen St
Missoula MT 59801-8651

Subject: Completed Technical Analyses Report for Beneficial Water Use Permit Preapplication No. 76LJ 30172339

Dear Kelly and Shelly,

As designated on the submitted Preapplication Meeting Form per §85-2-302(3)(b), MCA, the Department of Natural Resources and Conservation (Department) has completed the technical analyses for Beneficial Water Use Permit Preapplication No. 76LJ 30172339 based on the information provided in your Preapplication Meeting Form accepted by the Department on December 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 a Form 600 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 in §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 Kalispell Regional Office by July 28, 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 contact me at (406) 752-2735 or Abigail.Williams@mt.gov if you have any questions about the application process.

Sincerely,

A handwritten signature in black ink that reads "Abigail Williams".

Abigail Williams
Water Resource Specialist
Kalispell Regional Office

Encl.: Surface Water Permit Technical Analyses Report for Beneficial Water Use Permit Preapplication No. 76LJ 30172339



DNRC.MT.GOV



Surface Water Permit Technical Analyses Report

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

Abigail Williams, Water Resource Specialist, Kalispell Regional Office

Applicant	Kelly and Shelly Wills
Application No.	76LJ 30172339
Proposed Point of Diversion (POD)	S2SESE Section 11, Township 25N, Range 22W, Lake County

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:

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Variances

No variances were requested for this application.



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



1.0 Application Details

The Applicant proposes to divert water from Ronan Creek (Lake Mary Ronan) from April 15 to October 15 at a rate of 30 gallons per minute (GPM) up to a volume of 3.5-acre feet (AF) per year for lawn and garden. Water will be used from April 15 to October 15 to irrigate 1.5 acres of lawn and garden. The point of diversion from the lake is in S2SESE Section 11, Township 25N, Range 22W, Lake County, Montana (**Figure 1**). The proposed place of use is in Government Lot 7, S2SESE, Section 11, Township 25N, Range 22W, Lake County, Montana (**Figure 1**).

Table 1: Summary of the Proposed Use							
Source	Flow Rate (GPM)	Diverted Volume (AF)	Purpose	Period of Diversion	Period of Use	Point of Diversion	Place of Use
Lake Mary Ronan	30	3.5	Lawn and Garden	04/15 to 10/15	04/15 to 10/15	S2SESE Section 11, Township 25N, Range 22W, Lake County	Government Lot 7, S2SESE Section 11, Township 25N, Range 22W, Lake County

2.0 Surface Water Analysis

2.1 Source Description

Proposed Source of Water: Ronan Creek (Lake Mary Ronan)

Proposed Source Type: Lake

Proposed Point of Diversion: S2SESE Section 11, Township 25N, Range 22W, Lake County

2.2 Method of Estimation

Lake Volume: Bathymetric Data

2.3 Monthly Flow Rate and Volume

Methodology:

The Department quantified Lake Mary Ronan's volume using publicly available bathymetric data from the MT Department of Fish, Wildlife, and Parks (MTFWP) and adjusted using the following methodology. Lake Mary Ronan was surveyed on July 18, 2011 by MTFWP. The Department used ArcGIS to generate polygons of depth strata from this data, **Figure 2**, allowing the Department to quantify the total area of each depth stratum. The National Hydrography Dataset (NHD) Waterbody ArcGIS Polygon area was used for the zero-foot contour extent. This data was used in place of the MTFWP zero-foot contour because it appears to provide a more accurate representation of the lake boundary when compared to the USGS topographic map and aerial imagery. Lake Mary Ronan's area was calculated as 1,515.7 acres based on the sum of all depth strata areas. The end-area formula used for finding the volume of prismatic forms was used to quantify the total volume of water within each depth stratum, **Table 2**. The process for applying



the end area formula to compute lake volume is found in the DNRC Technical Memorandum: Physical Availability of Ponds, dated April 22, 2019. The Department calculated **41,564.5 AF** as Lake Mary Ronan's total volume. The Department used the following equation to calculate the volume of Lake Mary Ronan:

End Area Formula

$$V = \frac{1}{2}H(A_1 + A_2)$$

H= The difference in depth between two successive depth contours;

A₁ = area of the lake within the outer depth contour being considered;

A₂ = area of the lake within the inner contour line under consideration.

Table 2: Physical Availability Bathymetric Analysis of Lake Mary Ronan Using the End-Area Formula					
Contour Interval (ft)	H (ft)	Area (ac)	Total Area (ac)	Depth Strata (ft)	Volume (AF)
0	10	274.6	1,515.7	0-10	13,784.0
10	10	187.8	1,241.1	10-20	11,472.0
20	10	173.7	1,053.3	20-30	9,664.5
30	10	430.4	879.6	30-40	6,644.0
40	10	449.2	449.2		
				TOTAL VOLUME (AF)	41,564.5
---				VOLUME STORED BY DAM (AF)	6,456.88
---				PHYSICALLY AVAILABLE VOLUME (AF)	35,107.62

Three major streams supplying water to Lake Mary Ronan: Donaldson, Freeland, and Hilburn Creeks. A single stream, Ronan Creek, serves as the outlet of the lake. Ronan Creek flows southeast, discharging to Dayton Creek, a tributary to Flathead Lake.

A dam/dike structure on private land at the head of Ronan Creek holds and controls the waters of the reservoir known today as Lake Mary Ronan. A site visit was conducted by Mark Paulson of Aquatek Consulting for water right application 76LJ 30063101 on October 13, 2012. This site visit confirmed a dike with concrete weir structure approximately 25 ft long, 12 to 14 feet wide, and approximately four feet tall held back lake waters. The weir structure acted as an overflow structure.

Approximately 30 feet west of the overflow structure was an elliptical corrugated metal pipe (CMP) buried in the dike that extends from its upstream (lake) side to its downstream (creek) side. The CMP pipe measured 36 inches in diameter and was 56 inches long. The upstream end of the pipe was fitted with an adjustable steel slide gate embedded in a concrete headwall and secured with a padlock. The CMP is the primary means of releasing water for irrigation Claims

76LJ 45094, 76LJ 39786, 76LJ 45090, and 76LJ 45093 downstream on Ronan Creek. The maximum water surface elevation of Lake Mary Ronan, including the dam storage, is 3,701 feet according to the US Geological Survey (USGS) Topographic map (**Figure 2**).

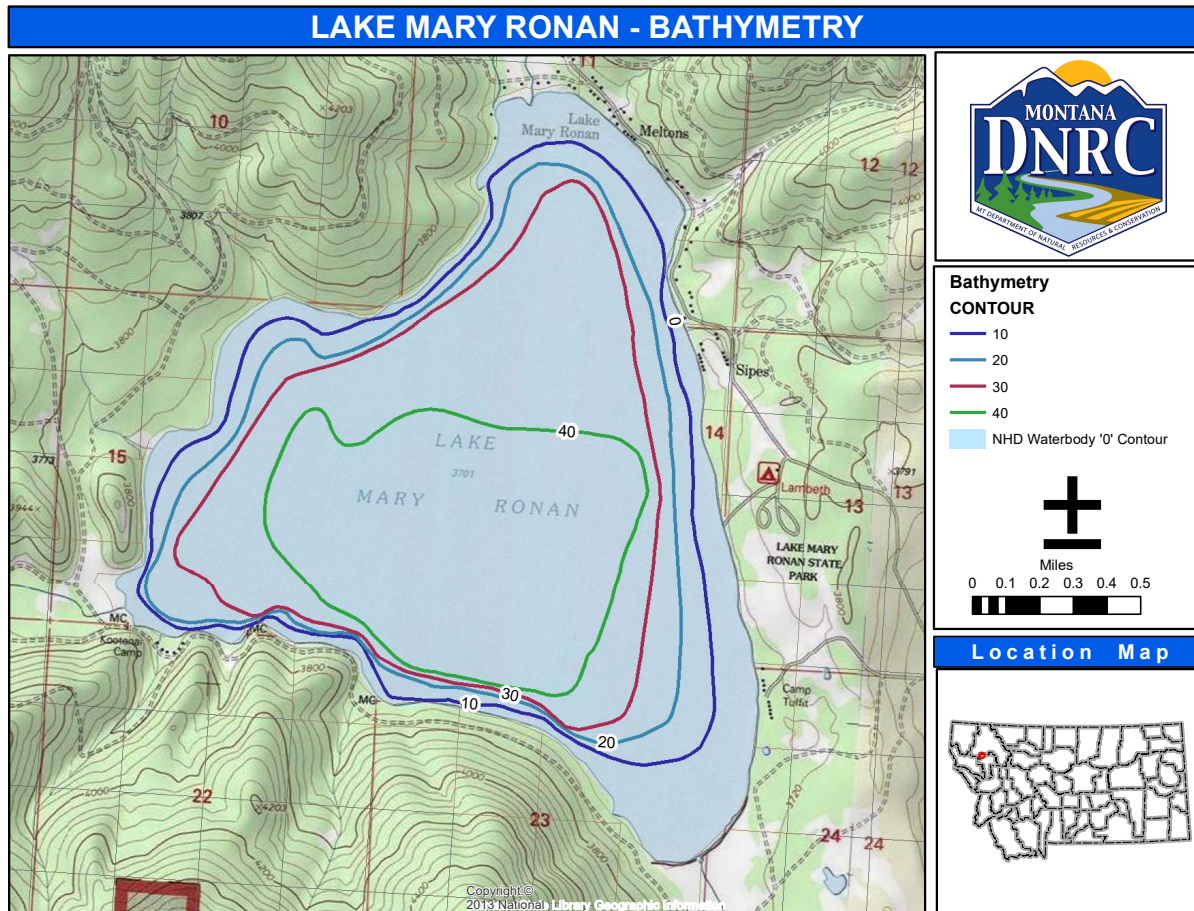


Figure 2: Bathymetric Map of Lake Mary Ronan showing the strata of the lake.

Due to the construction of the dam/dike on private land affecting the capacity of the lake, storage from the dam/dike structure needed to be quantified. Per a US Army Corps of Engineers Report entitled “Flood Plain Determination Lake Mary Ronan, Lake County Montana” dated September 1996, the minimum elevation of the CMP is 3,696.74 feet. It was found that 4.26 feet (3,701.0 feet – 3,696.74 feet = 4.26 feet) or approximately **6,456.9 AF** (4.26 feet x 1,515.7 acres = 6,456.9) of water could be stored and released by the CMP.

To be conservative, the Department estimated the physical availability of Lake Mary Ronan by subtracting the volume stored by the dam/dike structure from the maximum lake volume. As the Department has no way to quantify the annual volume and/or the timing of water released from Lake Mary Ronan; physical availability is limited to pre-dam/dike construction volume of Lake Mary Ronan. The volume of water physically available in Lake Mary Ronan is **35,107.6 AF** (**Table 2**)



3.0 Area of Potential Impact Analysis

The Area of Potential Impact (AOPI) for this application is:

The AOPI is the entirety of Lake Mary Ronan which is located within sections 10, 11, 13, 14, 15, 22, 23, and 24 in Township 25N, Range 22W, Lake County, Montana. A total of 24 surface water rights exist within the AOPI. A list of these water rights is in Appendix A.

Why this is an appropriate Area of Potential Impact:

Lake Mary Ronan has 3 streams inputting water along with potential groundwater upwelling to fill the lake. A single stream, Ronan Creek, serves as the outlet to Lake Mary Ronan. The entirety of the lake was chosen as the AOPI as the dam structure limits flow into Ronan Creek. A dam/dike structure on private land approximately 25 feet long, 12 to 14 feet wide, and approximately 4 feet deep holds back lake waters and the CMP is used to diver water for some appropriations.

Methodology:

The Department considered the source characteristics of Lake Mary Ronan and the dike/dam structure existing on private land that controls the flows into Ronan Creek. Flows into Ronan Creek are directly controlled by how the dam/dike is managed. As a result of the dam/dike structure the Department finds the AOPI of Lake Mary Ronan sufficient to evaluate physical availability.

Review

This document has been reviewed by the Department on January 28, 2026.

References

Department Standard Practice for Determining Physical Availability of Surface Water
Department Standard Practice for Area of Potential Impact Analysis



Appendix A: Water Rights within the Area of Potential Impact

Appendix A: Summary of Water Rights on Lake Mary Ronan			
Water Right Number	Purpose	Volume	Period of Diversion
76LJ 143853 00	COMMERCIAL	14	01/01 to 12/31
76LJ 664 00	DOMESTIC	1.5	01/01 to 12/31
76LJ 110789 00	DOMESTIC	0.25	01/01 to 12/31
76LJ 110790 00	DOMESTIC	0.25	01/01 to 12/31
76LJ 32526 00	DOMESTIC	1	06/01 to 09/30
76LJ 110787 00	DOMESTIC	1	01/01 to 12/31
76LJ 110785 00	DOMESTIC	0.25	01/01 to 12/31
76LJ 110786 00	DOMESTIC	0.75	01/01 to 12/31
76LJ 99148 00	DOMESTIC	1.5	01/01 to 12/31
76LJ 99075 00	DOMESTIC	1.5	01/01 to 12/31
76LJ 39786 00	IRRIGATION	2000	01/01 to 12/31
76LJ 45093 00	IRRIGATION	2000	05/10 to 09/10
76LJ 26581 00	IRRIGATION	10.6	05/15 to 09/15
76LJ 45094 00	IRRIGATION	1400	01/01 to 12/31
76LJ 45090 00	IRRIGATION	8600	01/01 to 12/31
76LJ 30006219	IRRIGATION; LAWN AND GARDEN	7.62	01/01 to 12/31
76LJ 30150632	LAWN AND GARDEN	1.97	04/15 to 10/15
76LJ 30113323	LAWN AND GARDEN	0.2	04/15 to 10/15
76LJ 30110395	LAWN AND GARDEN	2.7	04/15 to 10/15
76LJ 30063101	LAWN AND GARDEN	2.58	04/15 to 10/15
76LJ 30008226	LAWN AND GARDEN	0.63	04/01 to 10/01
76LJ 30005417	LAWN AND GARDEN	2.5	04/15 to 10/15
76LJ 41392 00	LAWN AND GARDEN; STOCK	1.35	01/01 to 12/31
76LJ 39634 00	MULTIPLE DOMESTIC	1.8	01/01 to 12/31

Preapplication Materials

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

Preapplication Materials

THE MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

GOVERNOR GREG GIANFORTE



DNRC DIRECTOR AMANDA KASTER

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

December 22, 2025

KELLY & SHELLY WILLS
3032 QUEEN ST
MISSOULA MT 59801

Subject: Complete Preapplication Form for Beneficial Water Use Permit Application No. 76LJ 30172339

Dear Applicant,

The Kalispell Regional Office of the Department of Natural Resources and Conservation (DNRC or Department) received your Preapplication Meeting Form 600P-Part B and preapplication meeting fee December 15, 2025. The Department deemed the submitted Preapplication Meeting Form to be successfully completed per ARM 36.12.1302 on December 22, 2025.

As designated on the submitted Preapplication Meeting Form per § 85-2-302(3)(b), MCA, the Department will produce the technical analyses based on the parameters included in the Preapplication Meeting Form (ARM 36.12.1302(4)) within 45 days of December 22, 2025 (on or before February 5, 2026).

If you have any questions, please contact me at (406) 752-2735 or Abigail.Williams@mt.gov

Best,

A handwritten signature in black ink, appearing to read "Abigail Williams".

Abigail Williams
Water Resource Specialist
Kalispell Regional Office
Abigail.Williams@mt.gov



DNRC.MT.GOV



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

For Department Use Only

Application # 30172339 Basin 76LT
Form Received AW
Fee Rec'd \$ 500.00 Check # 1061
Deposit Receipt # KW2611225
Payor Wills Properties, LLP
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)).

RECEIVED
DNRC Water Resources

DEC 15 2025

Kalispell Unit

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?

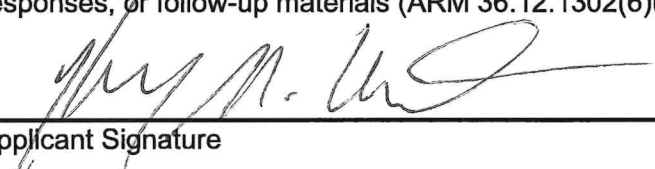
If yes,

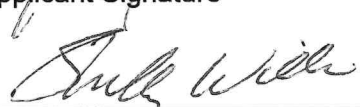
- a. ☒ S Submit "Follow-up Responses" document for all questions requiring follow-up.



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))."

 12/15/25
Applicant Signature Date

 12/15/25
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))."

 12/22/2025
Department Signature Date

Department Signature Date



FOLLOW-UP/AMENDED RESPONSES

QUESTION 2:

Please see the attached vicinity map (Ex. A) and parcel view (Ex. B) that consists of arial photographs. The parcel view is marked to show the point of diversion, the route of the mainline and the different irrigation zones.

QUESTION 5:

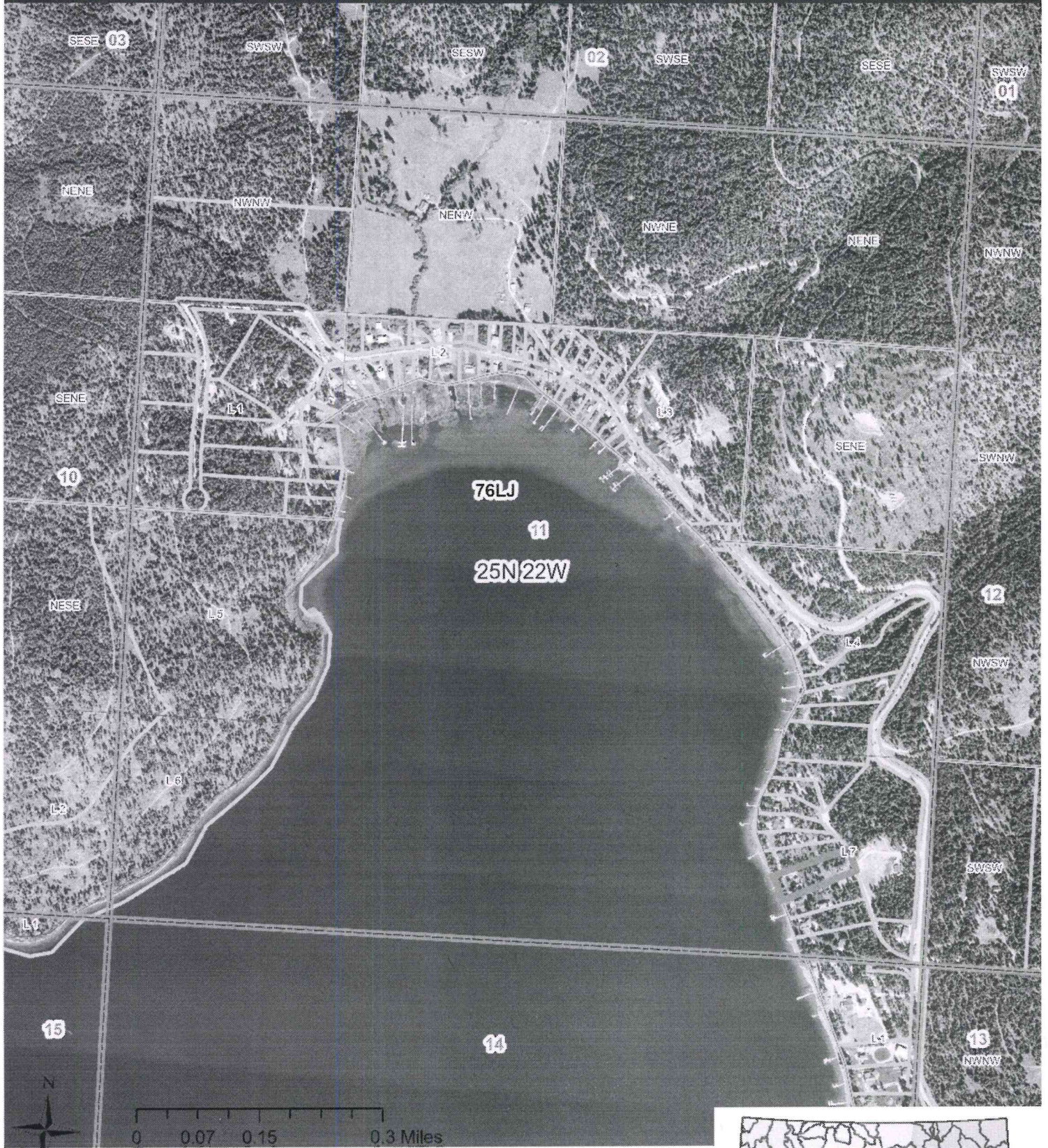
Calculations have been run using the GPM for each zone, the water run time for each zone in the Spring/Fall period (April 15 – June 30 and September 1 – October 15) and the run time for each zone in the Summer period (July 1 – August 31). The run time took into consideration both the precipitation rate of the sprinkler heads and the DNRC¹ guidelines for lawn and garden watering. The maximum flow rate for the different zones is 25 GPM. Using these calculations, the volume of water needed is 3.73 acre feet (AF).

QUESTION 20:

The point of diversion (POD 1) is noted on Ex. B and is a perennial source. The maximum flow rate for the different zones is 25 GPM. The period of diversion is from April 15 through October 15. The total volume of water needed is 3.73 acre feet (AF).

¹ MSU Extension Service research-based recommendation for proper lawn and garden care that calls for 1 to 1.5 inches of water per week in the spring and fall, and 2.5 inches per week in mid-summer.

Preapplication 76LJ 30172339, Kelly and Shelly Wills



Map Created: 11/17/2025
Author: Abigail Williams
Water Resource Specialist

Legend



Township &
Range



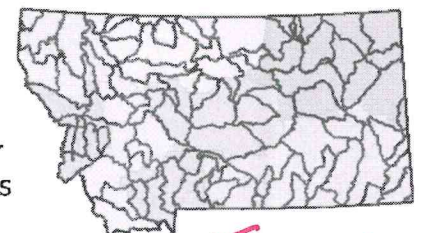
Section



Quarter
Sections

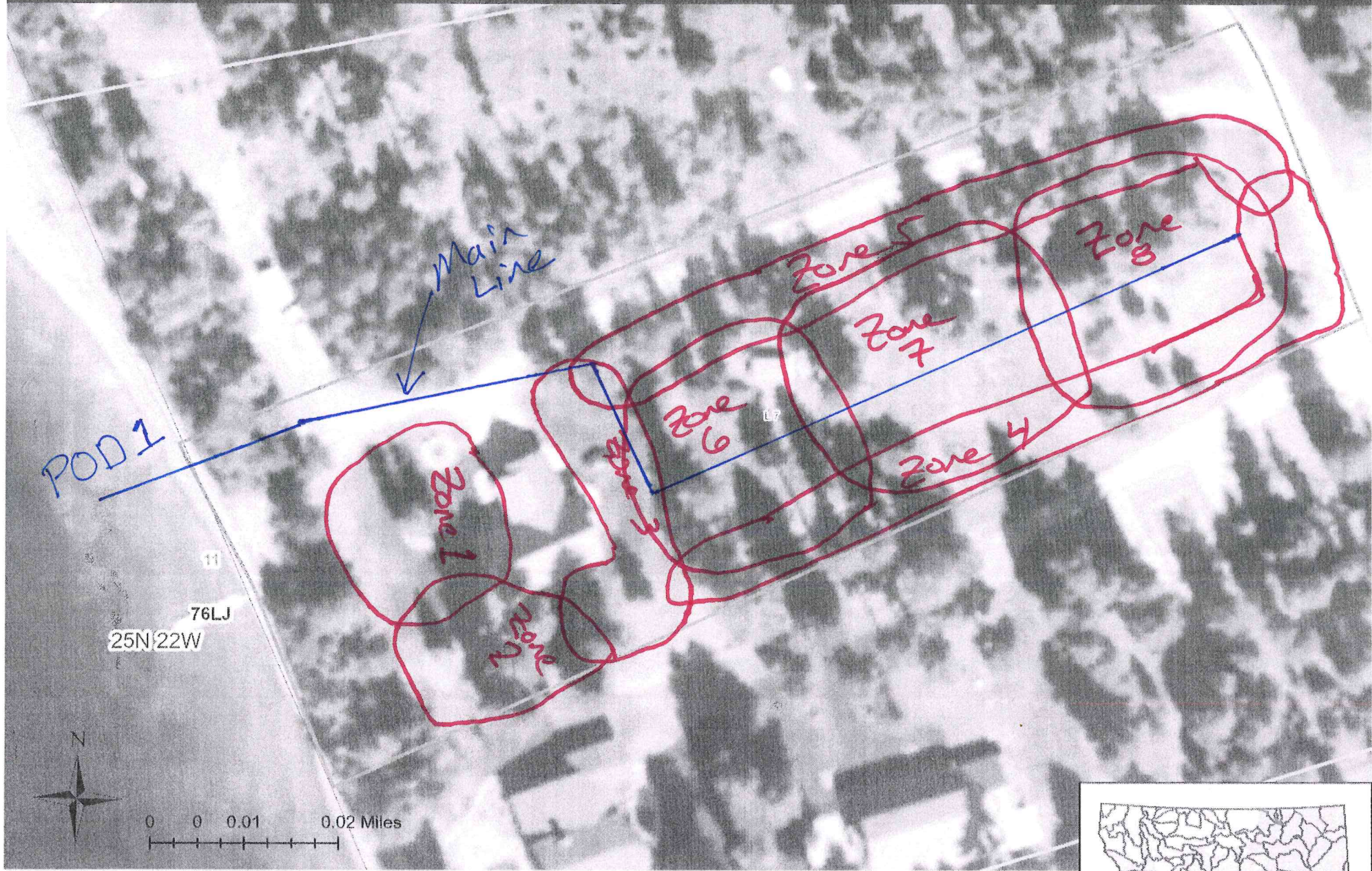


Parcels



5v. 1

Preapplication 76LJ 30172339, Kelly and Shelly Wills



Map Created: 11/17/2025
Author: Abigail Williams
Water Resource Specialist

Elements depicted on this map are for illustrative purposes and have not been surveyed by the Department. MSD PL55:
USA Topo Maps: Copyright: 2011 National

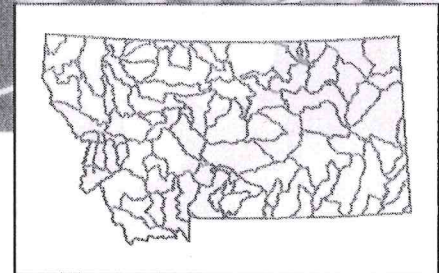
Legend

- Quarter Sections
- Section

- Township & Range
- Parcels

- Parcels selection

Ex. B





**PREAPPLICATION MEETING
FORM: PART A
PERMIT**
§ 85-2-302, MCA
Form No. 600P-A (Revised 10/2025)

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)).

For Department Use Only

Application # 30172339 Basin # 76LJ
Meeting Date 11/17/2025 Time 13:00
Variance Request Deadline 4/4/2026
Completed Form Deadline 5/16/2026

**RECEIVED
11/17/2025
DNRC
KALISPELL WATER RESOURCES**

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 Kelly M. Wills and Shelly Wills
Mailing Address 3032 Queen City Missoula State MT Zip 59801
Phone Numbers: Home 406-370-8559 Work _____ Cell 406-370-1790
Email Address kmwills4@msn.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
Travis Wilson	DNRC - Water Resource Specialist		
James Ferch	DNRC - Kalispell Regional Manager		
Abigail Williams	DNRC - Water Resource Specialist		
Kelly M. Wills	Applicant		
Shelly Wills	Applicant		



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APPLICATION DETAILS

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

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

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

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

Questions, Narrative Responses, and Tables	Check-boxes	Follow-up
1. Do you elect to have DNRC conduct Technical Analyses?	☒ Y ☐ N	☐ F
2. 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.	☐ S	☒ 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.	☐ Y ☒ N	☐ F
4. Is the proposed use temporary?	☐ Y ☒ N	☐ F
a. If yes, when will the appropriation cease? _____	☐ A	☐ F



5. Describe the proposed purpose information, including period of diversion (MM/DD-MM/DD), period of use (MM/DD-MM/DD), flow rate (GPM or CFS) and volume (AF).	☐ A	☐ F
---	----------------------------	----------------------------

Purpose	Period of Diversion	Period of Use	Flow Rate			Volume
	(MM/DD-MM/DD)	(MM/DD-MM/DD)	Flow Rate	GPM	CFS	(AF)
Lawn and Garden	4/15-10/15	4/15-10/15	30	☒	☐	3.5
				☐	☐	
				☐	☐	
				☐	☐	
				☐	☐	
Total			30	☐	☐	3.5

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 households and bedrooms served per household	
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	SW	SE	SE	11	25N	22W	LAKE	7			S Mary Cov	7	SW	Mary Ronan	Pump



8. What are the geocodes of the place of use?		☐ A	☐ F
15-3581-11-4-01-12-0000			

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.									☐ A	☐ F
Acres	Gov't Lot	Block	¼	¼	¼	Sec	Twp	Rge	County	
1.5	7		S2	SE	SE	11	25N	22W	Lake	
Total										

10. Will other water rights supplement or overlap the place of use to contribute to the purpose(s)?		☒ Y ☐ N	☐ F
a. If yes, summarize how the water rights will be operated as a whole to serve the purpose(s). 76LJ 30050229 serves partial lawn and garden area, wont be used in conjunction with this permit _____ _____ _____ _____ _____		☐ A	☐ 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. ☐ A ☐ F

Water Right No.	Avg. Period of Diversion	Avg. Period of Use	Flow Rate			Volume Contributed
	MM/DD-MM/DD	MM/DD-MM/DD	Flow Rate	GPM	CFS	AF
76LJ 30050229	04/01-10/31	04/01-10/31	19	☒	☐	4.5
				☐	☐	
				☐	☐	
				☐	☐	
				☐	☐	

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

a. If yes, explain. ☐ A ☐ 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. ☐ Y ☒ N ☐ F

a. Is this application to enlarge an existing reservoir? If yes, list the water right numbers for the existing reservoir. ☐ Y ☐ N ☐ F

b. Is the place of storage located on-stream? ☐ Y ☐ N ☐ 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:

Surface Acres x Maximum Depth (FT) x 0.5 = Capacity (AF)

_____ ☐ A ☐ F



d. What is the surface area of the place of storage? _____ _____	☐ A	☐ F
14. Will your system be designed to discharge water from the project?	☐ Y ☒ N	☐ F
a. If yes, explain the wastewater disposal method. A discharge permit may be required to comply with §§ 75-5-410 and 85-2-364, MCA. _____ _____ _____	☐ A	☐ F
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.	☐ Y ☒ N	☐ F
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.	☐ Y ☒ N	☐ F
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.	☐ Y ☒ N	☐ F
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.	☐ Y ☒ N	☐ F
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.	☐ Y ☒ N	☐ 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.							☐ A	☒ F
POD #	Flow Rate			Volume	Period Start	Period End		
	Flow Rate	GPM	CFS	AF	MM/DD	MM/DD		
1	30	☒	☐	3.5	04/15-10/15	04/15-10/15		
		☐	☐					
		☐	☐					
		☐	☐					
		☐	☐					
21. Is the source type of the diversion perennial or intermittent, ephemeral, lake, or other? Lake							☐ A	☐ 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?	☐ Y ☐ N	☐ 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?		☐ Y ☐ N	☐ F
i. If no, is only one stream gage located near the most upstream POD?		☐ Y ☐ N	☐ F
1. If yes, is the stream gage located upstream or downstream? _____			☐ F
b. List the gage name(s). Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____			☐ 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: _____ Gage 2: _____			☐ 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.		☐ Y ☐ N	☐ F
i. If yes, explain. _____ _____ _____		☐ A	☐ F
e. How long is the period of record? Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____			☐ F
f. Who operates and maintains the gage(s)? Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____			☐ F



g. Is each available stream gage operated and maintained by USGS or DNRC?	☐ Y ☐ N	☐ 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: _____		☐ 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. _____	☐ Y ☐ N	☐ 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. _____	☐ Y ☐ N	☐ 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. _____	☐ Y ☐ N	☐ 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. _____	☐ Y ☐ N	☐ F
4. Were requirements established and followed for maintaining a permanent gage datum and meeting specified accuracy limits?		
a. Gage 1. _____	☐ Y ☐ N	☐ 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. _____	☐ Y ☐ N	☐ F



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?	☐ Y ☐ N	☐ F
i. If yes, record how many meet the standard, then skip to question 54 because this section is complete. _____		☐ F
ii. If no, answer question 24.		
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?	☐ Y ☐ N	☐ F
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.		
b. If yes,		
i. Submit available measurements to the Department.	☐ S	☐ F
ii. Who collected the measurements? _____	☐ A	☐ F
iii. With what method were the data collected? _____ _____	☐ A	☐ F
iv. What is the period of record? _____		☐ F
v. What is the frequency of measurement? _____		☐ F
vi. Are there gaps in the data?	☐ Y ☐ N	☐ F



1. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? _____ _____ _____	☐ A	☐ F
vii. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N	☐ F
1. If yes, explain. _____ _____ _____	☐ A	☐ F
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?	☐ Y ☐ N	☐ F
1. If yes, this section is complete. Skip to question 54.		
2. If no, answer question 25.		
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?	☐ Y ☐ N	☐ F
a. If yes,		
i. Describe how the measurements are representative of high, moderate, and low flows. _____ _____ _____ _____	☐ A	☐ F
ii. Describe the estimation technique. _____ _____ _____ _____ _____	☐ A	☐ F
b. If no, but a Department-accepted estimation technique will be appropriate for the source:		



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?	☐ Y ☐ N	☐ F
1. If yes,		
a. With what method will the data be collected? _____ _____	☐ A	☐ F
b. What will be the interval of measurement? _____		☐ F
c. Describe the proposed estimation technique. _____ _____ _____ _____ _____	☐ A	☐ F
2. If no, 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.	☐ Y ☐ N	☐ F
c. If no, because no Department-accepted estimation technique will be appropriate for the source:		
i. Describe why no Department-accepted estimation technique is appropriate for the source characteristics. _____ _____ _____	☐ A	☐ F
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)?	☐ Y ☐ N	☐ F



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?	☐ Y ☐ N	☐ F
a. If yes, with what method will the data be collected? _____ _____	☐ A	☐ F
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.	☐ Y ☐ N	☐ F

Surface Water Analysis: Ephemeral

☐ Applicable ☒ Not Applicable

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



iii. What is the drainage area upstream of the point of diversion and how was this figure calculated? _____ _____ _____	☐ A	☐ 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?	☒ Y ☐ N	☐ F
a. If yes, provide this information to DNRC.	☒ S	☐ F
b. If no, answer the following questions,		
i. When do you plan to collect this information? _____		☐ F
ii. What data collection method will you use? _____ _____	☐ A	☐ F

Surface Water Analysis: Other

☐ Applicable ☒ Not Applicable

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



ii. What is the measurement interval? _____		☐ 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)?	☐ Y ☐ N	☐ 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.	☐ Y ☐ N	☐ F
b. If no,		
i. When do you plan to measure? _____		☐ F
ii. What data collection method will be used? _____ _____ _____	☐ A	☐ 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.	☐ Y ☐ N	☐ 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? _____				☐ A	☐ 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.	☐ Y ☐ N	☐ F
a. If yes, explain. The Department will let you know if the request is reasonable and identify additional data needs. _____ _____ _____ _____ _____	☐ A	☐ F



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)).	☐ S	☐ F
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)).	☐ S	☐ F
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.	☐ Y ☐ N	☐ F
a. If yes, submit Form 653, Form 600/606-ATA, and Form 633 together on or before the Variance Request Deadline.	☐ S	☐ F
b. If no, you may choose to submit Form 600/606-ATA and Form 633 before the Variance Request Deadline, and the Department will review these two forms. 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)).		
35. Have all proposed wells/pumping pits been constructed?	☐ Y ☐ N	☐ F
a. If no, answer the following questions:		
i. Submit a list of the POD IDs for all wells/pumping pits and mark whether they have or have not been constructed.	☐ S	☐ F
ii. When will all proposed wells/pumping pits be constructed? _____		☐ F
iii. Is the requested volume for each proposed well/pumping pit known?	☐ Y ☐ N	☐ F
1. If yes, list the flow rate and volume requested for each proposed well/pumping pit. Label with POD ID. _____ _____ _____	☐ A	☐ F



2. If no, what is the total requested volume (AF) and the number of proposed PODs? _____		☐ F
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Groundwater Analysis for Permits: Developed Spring

☐ Applicable ☐ Not Applicable

36. Have you measured the source?	☐ Y ☐ N	☐ F
a. If yes, submit the measurements and answer the following questions,	☐ S	☐ F
i. Do you have flow rate (GPM or CFS) and volume measurements?	☐ Y ☐ N	☐ F
ii. With what method were measurements collected? _____ _____	☐ A	☐ F
iii. What is the interval of measurements? _____		☐ F
iv. Is the interval of measurements sufficient to comply with ARM 36.12.1703(1)?	☐ Y ☐ N	☐ 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? _____		☐ F
ii. With what method and at what interval will measurements be collected? _____ _____	☐ A	☐ 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.	☐ S	☐ F
38. Submit pond bathymetry data, survey, or engineering plans to the Department.	☐ S	☐ F
39. Is the pond fed or drained by surface water?	☐ Y ☐ N	☐ F
a. If yes,		
i. Explain.	☐ A	☐ F

ii. Submit measurements of the connected surface water source. These may include inflow and outflow measurements.	☐ S	☐ F

Surface Water Depletion Analysis

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.	☐ Y ☐ N	☐ 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.	☐ Y ☐ N	☐ 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)?	☐ Y ☐ N	☐ 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.	☐ A	☐ 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.	☐ A	☐ 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	
		☐	☐				
		☐	☐				
		☐	☐				
		☐	☐				
		☐	☐				

43. Will any of the <i>new</i> 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)?	☐ Y ☐ N	☐ F
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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.	☐ A	☐ F
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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?				☐ Y ☐ N	☐ 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)?				☐ Y ☐ N	☐ 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.				☐ A	☐ 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.	☐ A	☐ 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? _____		☐ F
47. Are stream gage data available?	☐ Y ☐ N	☐ 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?	☐ Y ☐ N	☐ F
i. If no, is only one stream gage located near the start of the depleted reach?	☐ Y ☐ N	☐ F
1. If yes, is the stream gage upstream or downstream? _____		☐ F
b. List the gage name(s). Write "N/A" for Gage 2 if one gage available. Gage 1: _____ Gage 2: _____		☐ 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: _____		☐ 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.	☐ Y ☐ N	☐ F
i. If yes, explain. _____ _____ _____	☐ A	☐ F
e. How long is the period of record? Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____		☐ F
f. Who operates and maintains the gage(s)? Write "N/A" for Gage 2 if one gage is available. Gage 1: _____ Gage 2: _____		☐ F
g. Is each available stream gage operated and maintained by USGS or DNRC?	☐ Y ☐ N	☐ 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.		



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: _____		☐ 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?	☐ Y ☐ N	☐ F
a. Gage 1. _____	☐ Y ☐ N	☐ 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. _____	☐ Y ☐ N	☐ 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?	☐ Y ☐ N	☐ F
a. Gage 1. _____	☐ Y ☐ N	☐ 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. _____	☐ Y ☐ N	☐ F
4. Were there requirements for maintaining a permanent gage datum and meeting specified accuracy limits?	☐ Y ☐ N	☐ F
a. Gage 1. _____	☐ Y ☐ N	☐ 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. _____	☐ Y ☐ N	☐ F
h. Do the data for one or more available stream gages meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions?	☐ Y ☐ N	☐ F
i. If yes, record how many meet the standard, then skip to question 54 because this section is complete. _____		
ii. If no, answer question 49.		
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?	☐ Y ☐ N	☐ F



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.		
b. If yes,		
i. Submit measurements to the Department.	☐ S	☐ F
ii. Who collected the measurements? _____	☐ A	☐ F
iii. With what method was the data collected? _____ _____	☐ A	☐ F
iv. What is the period of record? _____		☐ F
v. What is the frequency of measurement? _____		☐ F
vi. Are there gaps in the data?	☐ Y ☐ N	☐ F
1. If yes, what is the nature of the gaps and how are gaps handled to ensure data quality? _____ _____ _____	☐ A	☐ F
vii. Is there a process for maintaining the data and meeting specified accuracy limits?	☐ Y ☐ N	☐ F
1. If yes, explain. _____ _____ _____	☐ A	☐ F
viii. Do available measurement data meet the Department's standard to be sufficient to calculate the median of the mean monthly flow rate and volume during the months with net depletions?	☐ Y ☐ N	☐ F
1. If yes, this section is complete. Skip to question 54.		
2. If no, answer question 50.		



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?	☐ Y ☐ N	☐ F
a. If yes,		
i. Describe how the measurements are representative of high, moderate, and low flows. _____ _____ _____ _____	☐ A	☐ F
ii. Describe the estimation technique. _____ _____ _____ _____ _____ _____	☐ A	☐ F
b. If no, but a Department-accepted estimation technique will be appropriate for the hydraulically connected surface water source:		
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?	☐ Y ☐ N	☐ F
1. If yes,		
a. With what method will the data be collected? _____ _____	☐ A	☐ F
b. What will be the interval of measurement? _____		☐ F



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



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.	☐ Y ☐ N	☐ 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

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.	☐ Y ☐ N	☐ F
52. Did you elect in question 1 for the Department to conduct the Technical Analyses?	☐ Y ☐ N	☐ F
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.		
b. If no, submit the Basin Closure Area Addendum (Form 600-BCA) and Hydrogeologic Report Addendum (600-HRA) with your Technical Analyses.	☐ S	☐ F
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. ☐ Application to Change a Water Right to mitigate the adverse effects created ☐ Alternative mitigation plan ☐ Documentation to show a mitigation plan is not required		
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>	☐ S	☐ F
b. Alternative mitigation plan: Submit a summary of your initial proposal.	☐ S	☐ F



i. Do you propose to use water with a marketing for mitigation/aquifer recharge purpose?	☐ Y ☐ N	☐ F
1. If yes,		
a. List the change authorization number(s) for all water rights proposed for use. _____	☐ A	☐ F
b. What is the area defined for marketing for all water rights proposed for use? _____	☐ A	☐ F
c. If Marketing for aquifer recharge, submit the analysis of the monthly accretions to hydraulically connected surface water(s); otherwise write "NA". _____	☐ S	☐ F
c. Documentation to show a mitigation plan is not required: Submit all documentation.	☐ S	☐ 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)?	☐ Y ☒ N	☐ F
a. If yes, is the use over 35 GPM or 10 AF/YR?	☐ Y ☐ N	☐ 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. 	☐ A	☐ 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?	☐ Y ☒ N	☐ F
a. If yes, is the proposed flow rate and volume over 35 GPM or 10 AF/YR?	☐ Y ☐ N	☐ 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?	☐ Y ☐ N	☐ 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.		



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?	☐ Y ☐ N	☐ F
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.	☐ A	☐ 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. Turn the pump off _____ _____ _____ _____ _____ _____ _____ _____	☐ A
58. Explain how you can control your diversion in response to call being made. Turn the pump off _____ _____ _____	☐ A
59. Are you aware of any calls that have been made on the source of supply or depleted surface water source? a. If yes, explain. _____ _____ _____	☐ Y ☒ N ☐ A
60. Does a water commissioner distribute water or oversee water distribution on your proposed source or depleted surface water source?	☐ Y ☒ N



61. Will the point of diversion or conveyance infrastructure be shared with one or more existing water rights?	☐ Y ☒ N
a. If yes, explain how capacity of the shared point of diversion and/or conveyance infrastructure is sufficient for all water rights. 	☐ 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.	☐ S
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. <u>pump curves and total dynamic head</u> 	☐ 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. mainline from pump to place of use and line from water to pump	☐ 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?	☐ Y ☒ N
a. If yes, explain. _____ _____ _____	☐ A
68. Do you own the land where all proposed points of diversion are located?	☒ Y ☐ 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. _____ _____ _____ _____	☐ A
70. Do you have any plans to measure your diversion and use?	☐ Y ☒ N
a. If yes, describe the plan and the type of measurements you will take. _____ _____ _____	☐ A

Beneficial Use

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.	☒ Y ☐ 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. <u>requested volume falls under the DNRC standard</u> _____ _____	



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.	☐ A
73. Will your proposed project be subject to DEQ requirements for a public water supply (PWS) system or Certificate of Subdivision Approval (COSA)?	☐ Y ☒ N
a. If yes,	
i. Have you researched or consulted with DEQ regarding those requirements?	☐ Y ☐ N
74. Are you proposing to use surface water for in-house domestic use?	☐ Y ☒ N
a. If yes, does a COSA exist for the proposed place of use?	☐ Y ☐ N
i. If yes, please submit the COSA.	☐ S
ii. If no, have you researched or consulted with DEQ regarding their requirements?	☐ Y ☐ N

Possessory Interest

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.	☐ Y ☒ N
a. If yes, explain.	☐ A



b. If no,	
i. Do you own all proposed places of use?	☒ Y ☐ 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. _____ _____ _____ _____	☐ 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.	☐ Y ☐ N
i. If no, explain. _____ _____ _____	☐ 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.	☐ Y ☒ N
77. Are preliminary designs available? Preliminary designs will be required at application submittal.	☐ S
a. If yes, submit preliminary designs.	☐ Y ☐ N
78. Will the place of storage be lined?	☐ Y ☐ 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. _____	☐ A



80. Is the place of storage capacity calculated to be greater than 50 AF?	☐ Y ☒ N
a. If yes, have you made an application to the DNRC Water Operations Bureau for a determination of whether the dam or reservoir is a high-hazard dam? This will be required by application submittal.	☐ Y ☐ 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.	☐ Y ☒ N
82. For what purpose(s) will the marketed water be used? _____ _____ _____	☐ A
83. How will you control or limit access to the water? _____ _____ _____	☐ A
84. Do you have contracts for the entire volume and flow rate sought?	☐ Y ☒ 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.	☐ 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	Maps
5	Volume and Flow Rate
20	Volume and Flow Rate



PREAPPLICATION MEETING AFFIDAVIT & CERTIFICATION

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

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

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

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

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

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

Applicant Signature

Date

Applicant Signature

Date

Department Signature

Date



FORM 600P-A

PREAPPLICATION MEETING AFFIDAVIT & CERTIFICATION