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

ENVIRONMENTAL ASSESSMENT

For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. APPLICANT/CONTACT NAME AND ADDRESS:

KILE FAMILY REVOCABLE LIVING TRUST
1970 TAMARACK LN
COLUMBIA FALLS MT 59912-8816

2. TYPE OF ACTION:

Ground Water Application for Beneficial Water Use Permit No. 76LJ 30171928

3. WATER SOURCE NAME:

Ground Water (Deep Aquifer)

4. LOCATION AFFECTED BY PROJECT:

E2NENW Section 11, Township 30N, Range 21W, Flathead County, Montana.

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

The Applicant proposes to divert groundwater from a well drilled into the Deep Aquifer by means of a pump at a rate of 82.0 gallons per minute (GPM) up to 20.5 acre-feet (AF) per year. The Applicant proposes to divert 13.5 AF to irrigate 5.4 acres of lawn and garden from April 15th to October 15th and 7 AF for multiple domestic use year-round for 25 lots in the mobile home park.

The proposed point of diversion is located in NENENW Section 11, Township 30N, Range 21W, Flathead County (Figure 1). The proposed place of use is located in the E2NENW Section 11, Township 30N, Range 21W, Flathead 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 85-22-311 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

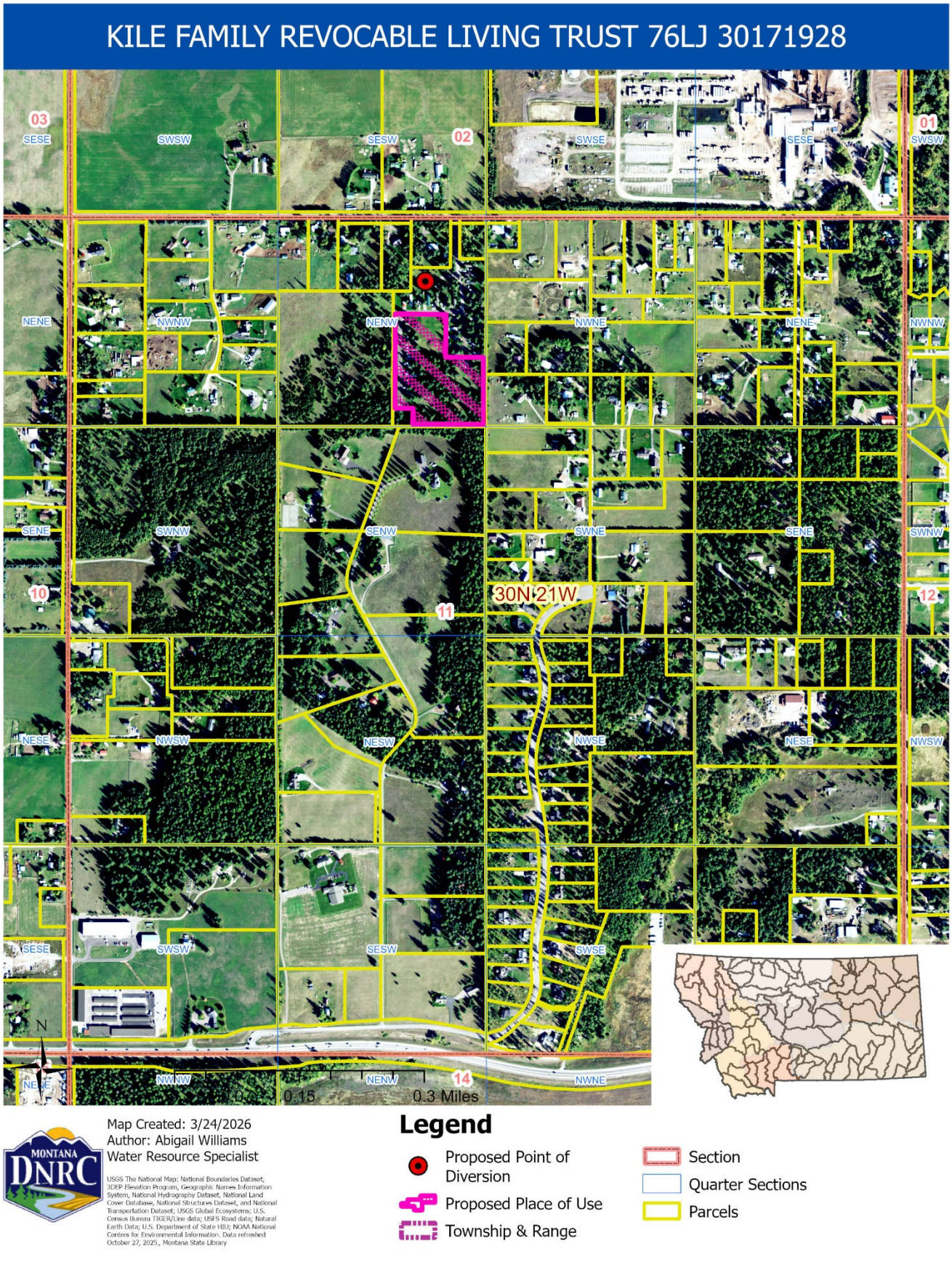


Figure 1. Map of the proposed place of use and points of diversion.

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 groundwater from a well that is approximately 2.7 miles northwest of Flathead River. The Flathead River is not 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.*

The Applicant proposes to divert and use groundwater. Diversions in this area may deplete the Flathead River.

Flathead River: MDEQ Clean Water Act Information Center's 2020 Water Quality Information report lists the Flathead River as:

i. Water Quality Category 3: Waters for which there is insufficient data to assess the use support of any applicable beneficial use, so no use support determinations have been made;

ii. Use Class B-1: Waters classified as suitable for drinking, culinary, and food processing purposes after conventional treatment; bathing, swimming and recreation; growth and propagation of salmonid fishes and associated aquatic life, waterfowl and furbearers; and agricultural and industrial water supply;

It is not anticipated that the appropriation of groundwater will result in significant water quality impacts to the nearby surface water sources.

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.*

The proposed well is completed to a depth of 160 feet below ground surface in the Deep Aquifer. The Applicant performed a 9-hour drawdown and yield test on GWIC No 86016 at an average rate of 120.0 GPM.

The Department determined the physically available volume of water in the source aquifer using aquifer properties derived from nearby aquifer tests and confirmed with the T value estimated from the 9-hour drawdown and yield test performed on the production well. An aquifer test was not performed on the production well because there was sufficient aquifer test data nearby to estimate the aquifer properties and the production well provides the only water for the mobile home park and associated water rights. The flow will be controlled to 82.0 GPM by eight pressure tanks and a pressure switch designed to turn the pump on at 50 psi and off once the system reaches 70 psi.

Surface water depletion resulting from the applicant's proposed wells pumping from the source aquifer will primarily occur from propagation drawdown through the source aquifer to the Flathead River. The Department conducted physical and legal availability analyses on the aquifer and the hydraulically connected surface waters and found water is legally available in all sources.

Determination: No significant impact.

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 Applicant will divert groundwater from the aquifer at a rate of 82.0 GPM up to 20.5 AF/year with 7.0 AF/year for multiple domestic use for 25 lots and 13.5 AF/year to irrigate 5.4 acres of lawn and garden. The Applicant will divert water for multiple domestic use year-round and irrigate lawn and garden from April 15th to October 15th.

The Applicant will utilize a Franklin Electric 4400 6-inch model 75FA7S6-PE submersible pump installed on a 120-foot drop pipe to divert water into the pump house. The pump house system is comprised of eight pressure tanks and a pressure switch set to turn the pump on and off when the system hits 50 psi and 70 PSI, respectively. From the pressure tanks the water is diverted into a 2-inch mainline and a 6-inch mainline. The 2-inch pip conveys water to lots 1-5 for associated water right 76LJ 46116-00. The 6-inch mainline conveys water to lots 6-11 and 33-43 serving associated water right 76LJ 75095-00. The proposed system will connect into the 6-inch mainline with a 3-inch mainline that will convey water to the proposed 25 lots and to the irrigation system for the common place of use. The lots will connect into the 3-inch mainline via ¾ inch service lines to provide the multiple domestic use water and a small portion for lawn and garden around each individual lot. The irrigation system has not been designed but will hook up to the 3-inch mainline once constructed.

The Applicant calculated a total dynamic head (TDH) of 258.5 ft based on a pumping water level of 92.3 ft, friction loss of 50.2 ft, and an output pressure of 116 ft (50 psi). The Applicant submitted the pump curves for the submersible pump. At the calculated TDH the pump performance curve demonstrated that the pump is capable of producing the requested flow rate of 82.0 GPM.

The proposed well is located approximately 2.7 miles northwest of Flathead River. The depletions caused by this appropriation will not negatively impact the surface water sources water quality nor the aquatic environment.

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. Six animal species, seven plant species, and one invertebrate of concern (Table 1) were identified within the project area. Of these species, the Grizzly Bear (*Ursus arctos*) and the Spalding's Catchfly (*Silene spaldingii*) are 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 proposed project will not create any barriers to the migration or movement of fish or wildlife.

Table 1. Species of Concern		
Species Group	**Common Name**	**Scientific Name**
Mammals	Grizzly Bear*	*Ursus arctos*
Birds	Bobolink	*Dolichonyx oryzivorus*
Birds	Brown Creeper	*Certhia americana*
Birds	Evening Grosbeak	*Coccothraustes vespertinus*
Birds	Pileated Woodpecker	*Dryocopus pileatus*
Birds	Varied Thrush	*Ixoreus naevius*
Invertebrates	Western Bumble Bee	*Bombus occidentalis*
Vascular Plants	Sparrow's-egg Lady's-slipper	*Cypripedium passerinum*
Vascular Plants	Meadow Horsetail	*Equisetum pratense*
Vascular Plants	Slender Cottongrass	*Eriophorum gracile*
Vascular Plants	Latah Tule Pea	*Lathyrus bijugatus*
Vascular Plants	Spalding's Catchfly*	*Silene spaldingii*
Mosses	Short-beaked Aloe Moss	*Aloina brevirostris*
Lichens	Easter Foam Lichen	*Stereocaulon paschale*

**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.*

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

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 multiple domestic use and lawn and garden irrigation will not negatively impact the soil quality, stability, or moisture content in the project area. The soil types in the project area are Half Moon silt loam, 0 to 3 percent slopes and Half Moon very fine sandy loam, 0 to 3 percent slopes. These soils have a moderately high capacity to transmit water and are nonsaline 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 beyond what has been cleared for construction in the project area. 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 groundwater.

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 groundwater at this location.

Part III. Conclusion

1. PREFFERED 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** _**X**_**No**

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