

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

**ENVIRONMENTAL ASSESSMENT**  
**For Routine Actions with Limited Environmental Impact**

Note: Instructions to DNRC staff for preparing this EA can be found at:  
[http://www.dnrc.state.mt.us/eis\\_ea.html](http://www.dnrc.state.mt.us/eis_ea.html)

**Part I. Proposed Action Description**

1. *Applicant/Contact name and address:* Jared Langley  
2425 West Central Avenue, Suite 201  
Missoula, MT 59801
2. *Type of action:* Application For Beneficial Water Use Permit No. 76M 30023166
3. *Water source name:* Groundwater
4. *Location affected by project:* E2E2NE Section 14, T13N, R20W, Missoula County
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*

Jared Langley submitted an Application For Beneficial Water Use Permit to DNRC seeking approval from the State of Montana to divert 200 gpm up to 27.20 acre-feet per year for multiple domestic and lawn and garden irrigation purposes from two groundwater wells. The applicant proposes to use water diverted from these wells to serve 35 residences and irrigate 5.36 acres of lawn and garden. The use of groundwater for public water supply and irrigation will benefit the applicant and residents of the subdivision served by these wells. The scope of this Environmental Analysis will focus mainly on the water use from these two wells to identify impacts, if any, from this requested action. Environmental review information as well as identified impacts for the overall subdivision can be found in the final plat approval located with the Missoula County Office of Planning and Grants. If the applicant meets the criteria for issuance of a permit, found in MCA 85-2-311, the State of Montana will grant a provisional water right permit for the above stated amount and purposes.

6. *Agencies consulted during preparation of the Environmental Assessment:  
(include agencies with overlapping jurisdiction)*

Montana Historical Society  
Montana Natural Heritage Program  
Montana Department of Fish, Wildlife and Parks  
Montana Department of Environmental Quality

Cultural Resource File Search  
Species of Concern  
2005 Dewatered Stream List  
303(d) list of impaired streams

**Part II. Environmental Review**

**1. Environmental Impact Checklist:**

<b>PHYSICAL ENVIRONMENT</b>
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**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.

Not applicable. The source of supply is groundwater diverted from two wells.

*Determination:* No 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.

Not applicable. The source of supply is groundwater diverted from two wells.

*Determination:* No 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 applicant conducted a 72 hour pump test on one production well at an average rate of 327 gpm and a 39 hour pump test on the other production well at an average rate of 330 gpm. An aquifer report was submitted based on the pump test data, and impacts to the groundwater aquifer were projected out for the entire 365-day period of appropriation. The results of the applicant's groundwater testing and modeling indicate that the groundwater aquifer would be drawn down no greater than 0.018 feet beyond the applicant's property boundaries at the end of one year. This amount of drawdown, by itself, is not great enough to impact other well users in the project vicinity. The applicant did not provide any information regarding treatment of wastewater. The Montana Department of Environmental Quality Public reviews public water supply and waste treatment designs, and information regarding sewer treatment may be obtained through their office or the Missoula County Office of Planning and Grants. The source of groundwater may be hydraulically connected to surface water, including the Clark Fork River. The applicant estimates a maximum depletion of 4.60 acre-feet per year from the Clark Fork River.

*Determination:* No significant impact.

**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.*

A well driller, licensed in accordance with MCA Administrative rules of Montana Title 36, Chapter 21, drilled and constructed the wells, and a licensed professional engineer designed the public water supply system. The possible 4.60 acre-feet depletion of water from the Clark Fork River will not be great enough to cause channel impacts, flow modifications, barriers, or impacts to riparian areas. There are no dams associated with this project. The applicant has demonstrated that there is sufficient groundwater available for the proposed project and that existing wells will not be impacted.

*Determination:* No impact.

**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 or 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 was contacted to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern”, that could be impacted by the proposed project.

The following sensitive plant and animal species occur within Township 14 North, Range 20 West;

Swainson's Hawk, Lewis's Woodpecker, Fringed Myotis (a bat), Zapada cordillera (a stonefly), Westslope Cutthroat Trout, Bull Trout, and Stygobromus tritus ( a cave obligate amphipod).

These animal species are found within the same Township and Range as the proposed project, but whether any are located on the applicant's property is not known.

The subdivision is located on land the previously was either open grassland or pasture. This may have provided habitat for species such as the Swainson's Hawk, and Lewis's Woodpecker. If these species used the site prior to development it is possible that the land use change will cause a decrease in available habitat.

Information on habitat preference and forage for fringed myotis in Montana is scarce. They are known to roost in abandoned buildings, cliffs, caves, and old tree snags. They feed primarily on insects. Modification of vegetation can cause a decrease in available forage (insects). The proposed project site was previously grassland, which most likely provided no cover for roosting. It is not known how conversion of grassland to subdivision will affect availability forage to existing populations.

Pump test data indicates that the proposed use of groundwater will not cause any affect in the amount of surface water flowing in nearby streams. Over 365 days, a depletion of 4.60 acre-feet equals a constant flow rate of 2.8 gpm. The loss of this amount of water would not be measurable in the Clark Fork River in the vicinity of the project. Since stream flows will remain relatively unchanged, Bull Trout, Westslope Cutthroat Trout and Zapada Cordillera should not be impacted.

It is not known whether the project will impact *Stygobromus tritus* ( a cave obligate amphipod). This invertebrate animal was collected from shallow wells (8 – 21 feet deep) within TWP 13N, RGE 20W. It is not known whether the applicant's groundwater use, and a groundwater aquifer drawdown of 0.018 feet (0.22 inches) will impact this species.

*Determination:* No significant impact.

**Wetlands** - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

*Determination:* No impact. The project does not involve any wetlands.

**Ponds** - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

*Determination:* No impact. The project does not involve any ponds.

**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.*

Soils will be disturbed during construction of roads and building sites. This disturbance will be engineered to protect and/or enhance soil quality and stability. Water will only be applied to soils during lawn and garden irrigation. Lawn and garden irrigation water will be applied using sprinklers at a rate of 13.5 acre-feet per year over 5.36 acres spread out over 35 residences. This amount of irrigation water will not be sufficient enough to alter soil stability or moisture content below the root zone of landscape plants and sod. The soils are not heavy in salts and saline seep will not occur due to lawn and garden irrigation.

*Determination:* No impact.

**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.*

The majority, or all of the existing vegetative cover will be removed. The Montana Natural Heritage Program did not indicate the presence of any sensitive or endangered plant species in the vicinity of the project site. The subdivision will be landscaped and irrigated, which should

limit noxious weed distribution. Since the land is privately owned, it is the landowner's responsibility to control the spread of noxious weeds.

*Determination:* No significant impact.

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

No source of increased air pollutants was identified. There will be a short-term increase in dust and noise during the construction phase of this subdivision development. Once construction is complete the source of dust and noise will abate.

*Determination:* No significant impact.

**HISTORICAL AND ARCHEOLOGICAL SITES** - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

The Montana Historical Society has determined that there are no known historical and/or cultural sites that will be impacted as a result of this project.

*Determination:* No impact.

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

*Determination:* None identified.

<b>HUMAN ENVIRONMENT</b>
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**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

*Determination:* No impact.

**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.*

*Determination:* No impact.

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

*Determination:* No impact.

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

Yes \_\_\_ No **XX** If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No impact.

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

Impacts on:

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

**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 identified.

**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:*** No alternatives identified.

*PART III. Conclusion*

1. *Preferred Alternative* N/A

2. *Comments and Responses* N/A

3. *Finding:*

Yes \_\_\_ No **XX** *Based on the significance criteria evaluated in this EA, is an EIS required?*

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

AN EA IS THE APPROPRIATE LEVEL OF ANALYSIS FOR THE PROPOSED ACTION BECAUSE NO SIGNIFICANT IMPACTS WERE IDENTIFIED.

*Name of person(s) responsible for preparation of EA:*

*Name:* Jim Nave

*Title:* Water Resource Specialist

*Date:* 11/20/2006