

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: Westmont Developers, Inc.  
PO Box 17437  
Missoula, MT 59808
2. Type of action: Application for Beneficial Water Use Permit – 76H 30026290
3. Water source name: Groundwater
4. Location affected by project: W2 Sec. 5, E2 Sec. 6, TWP 10N, RGE 19W, Ravalli Co.
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

Westmont Developers, Inc. submitted an Application for Beneficial Water Use Permit to DNRC seeking approval from the State of Montana to divert 714 gpm up to 489 acre-feet per year for multiple domestic, lawn and garden irrigation and light commercial purposes from four groundwater wells. The applicant proposes to appropriate 385 gpm up to 177 acre-feet per year for multiple domestic use, 1.9 gpm up to 1.5 acre-feet per year for commercial use, and 327 gpm up to 309.9 acre-feet for lawn and garden irrigation. These water uses will occur in the proposed Aspen Springs subdivision east of Florence in the Eightmile Creek area. 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 primarily on the water use from these four wells to identify impacts, if any, from this requested action. An environmental assessment was completed by the developer and is on file with the Ravalli County Planning Office. Environmental review information as well as identified impacts for the overall proposed subdivision will be the responsibility of the Ravalli County Planning Office.

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

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

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

Cultural Resource File Search  
Species of Concern  
2005 Dewatered Stream List

## **Part II. Environmental Review**

### **1. Environmental Impact Checklist:**

<h2><b>PHYSICAL ENVIRONMENT</b></h2>
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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.

*Determination:* Not applicable

**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.

*Determination:* Not applicable.

**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 72 hour pump tests on each of the four production wells at average rates ranging from 500 to 675 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 maximum projected groundwater aquifer draw down at the closest privately owned well near the proposed project site would be 2.59 feet. Within the applicant's property boundaries aquifer draw down up to 5 feet would occur after pumping the well for 365 days. Simulated drawdown decreases as distance from the applicant's well field increases. The aquifer drawdown calculations presented by the applicant are conservative because the wells will not be pumped continuously for 365 days. Most deep wells throughout the Eightmile Valley generally have static water levels between 100 and 200 feet below ground surface and available drawdown of over 100 feet. The greatest draw down predicted at the end of the period of diversion in an existing well is less than 3 feet, while most of these wells have available drawdown of over 100 feet. This amount of drawdown, by itself, is not great enough to impact groundwater supply. The applicant modeled the amount of groundwater flowing through the zone of influence (flux) from pumping the applicant's wells, which was calculated to be 8,124 acre-feet of water. The existing legal demands for groundwater within the zone of influence is 4,586 acre-feet, leaving a volume of 3,535 acre-feet legally available for appropriation.

Water quality samples were collected from the four proposed production wells in compliance with Montana Department of Environmental Quality (DEQ) Title 17, Chapter 38, Sub-Chapter 2, Administrative Rules of Montana (ARM). Inorganic constituents, nutrients, metals, semi-volatile organic compounds, pesticides or herbicides were not detected at concentrations above

their respective applicable water quality standards. 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 Ravalli County Planning Office. The source of groundwater may be hydraulically connected to surface water, including the Bitterroot River. The applicant's stream depletion modeling suggests there would be negligible induced infiltration caused by the proposed pumping of these wells, however, the wells will capture groundwater that is tributary to the Bitterroot River. The applicant estimates 267.24 acre-feet of annual depletion from the Bitterroot River at an average annual depletion rate of 0.37 cfs (166 gpm). Due to this application being located in the Bitterroot River sub-basin temporary closure 85-2-344 MCA, DNRC cannot grant a permit to appropriate water that will result in any depletion to the Bitterroot River or other surface water sources unless the applicant provides DNRC with a plan to mitigate impacts to surface water, and the plan is approved.

*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 wells were constructed in a manner that will not allow contaminants to enter the groundwater aquifer via the well casing. The potential stream depletion will not have a measurable impact to the Bitterroot River, and will not reduce stream flows significantly to create channel impacts or barriers to aquatic life movement. There will be no construction in any riparian areas or construction of 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 10 North, Range 19 West, Ravalli County;

Lewis's Woodpecker, Townsend's Big-eared Bat, Westslope Cutthroat Trout and Chaffweed.

These animal and plant 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 that previously was open grassland or dry-land pasture, with Ponderosa pines present. This may have provided habitat for species such as the Chaffweed, Townsend's Big-eared Bat 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 Townsend's Big-eared Bat in Montana is limited. They are known to roost in abandoned mines, caves and buildings during summertime. Habitats in the vicinity of roosts include Douglas-fir and lodgepole pine forests, ponderosa pine woodlands, Utah juniper-sagebrush scrub, and cottonwood bottomland. They are nocturnal and feed primarily on insects with the main prey being moths. The diet and foraging behavior of Townsend's big-eared bat in Montana have not been reported or studied. The proposed project site is primarily grassland with some Ponderosa savanna, which may provide habitat for feeding. Townsend's Big-eared bats can travel up to 25 km (15 miles) from roost sites to feeding areas. The response by Townsend's big-eared bats to human activities is largely undocumented in Montana. It is not known how conversion of the subject property to a subdivision will affect availability of forage or roosting sites to existing populations.

Pump test data and groundwater modeling indicate that the proposed use of groundwater will not cause a measurable affect in the amount of surface water flowing in nearby streams. DNRC will not grant a water right for groundwater in the Bitterroot River Basin that has an impact to surface water because the Bitterroot Basin is legislatively closed to new surface water appropriations. The applicant will be required to mitigate any impacts to surface water by either retiring an existing consumptive use water right in the basin, or using an existing consumptive use water right to recharge the groundwater aquifer to offset stream depletion. With the mitigation plan in affect there should be no impact to surface water as a result of DNRC issuing a water right to the applicant. Since stream flows must remain relatively unchanged, Westslope Cutthroat Trout should not be impacted. To date the applicant has not submitted a mitigation plan for the potential stream depletion.

The applicant has not received subdivision approval from Ravalli County and the final plat boundaries are not known at this time. Plans previously submitted to the Ravalli County Planning Office indicated that of the 393 acres comprising the project site, 170 acres will remain open space, with 20 of those acres being landscaped parks. The applicant states that 25% of the plant communities within the development would be preserved in their near natural state and no major impacts to the trees on the property would result from project construction. The Montana Natural Heritage Program identifies the sensitive plant Chaffweed as occurring just north of the subdivision boundaries in habitat similar to what is being proposed for development. According to the applicant's environmental analysis there are no special status (i.e. threatened, endangered, or sensitive) plant or animal species found within the project site. If Chaffweed occurs on the applicant's property it could be impacted by development.

*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 2.55 acre-feet per acre over the 214 day period of use for lawn and garden irrigation. 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. The applicant conducted a soil survey of the project site and found no hydric soils or soil types with agricultural or statewide importance.

*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.*

Plans previously submitted to the Ravalli County Planning Office indicated that of the 393 acres comprising the project site, 170 acres will remain open space, with 20 of those acres being landscaped parks. The applicant states that 25% of the plant communities within the development would be preserved in their near natural state and no major impacts to the trees on the property would result from project construction. Of the 393 acres comprising the project site, approximately 98 acres, or 25% will become impervious areas, including streets, sidewalks, houses and driveways and 121.6 acres, or 31% will be irrigated lawn and garden. As proposed, the project will result in a minimum of 56% of existing vegetation being replaced with either impervious areas or lawn and garden. Any soil disturbance can result in the introduction of noxious weeds. 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. The Montana Historical Society recommended the applicant conduct a cultural resource inventory be conducted. The applicant contracted Historical Research Associates to conduct a preliminary resource assessment of the site, which concluded the parcel proposed for Aspen Springs Subdivision does not constitute a high-probability area for either prehistoric or historic properties. The preliminary resource assessment identified two rock cairns that could not be identified as having historical significance or use.

*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:* No significant impact.

<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 significant impact.

The proposed subdivision is under consideration by the Ravalli County Subdivision Review Body.

**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 site is private property and is surrounded by private property with limited recreational access. Development of the site will not reduce access to public lands or wilderness areas.

*Determination:* No impact.

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

*Determination:* No significant 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 significant impact.

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

The Aspen Springs Subdivision Environmental Analysis on file at the Ravalli County Planning Office addresses the following in some detail.

Impacts on:

- (a) Cultural uniqueness and diversity? See Aspen Springs Subdivision EA.
- (b) Local and state tax base and tax revenues? See Aspen Springs Subdivision EA.
- (c) Existing land uses? See Aspen Springs Subdivision EA.
- (d) Quantity and distribution of employment? See Aspen Springs Subdivision EA.
- (e) Distribution and density of population and housing? See Aspen Springs Subdivision EA.
- (f) Demands for government services? See Aspen Springs Subdivision EA.
- (g) Industrial and commercial activity? See Aspen Springs Subdivision EA.
- (h) Utilities? See Aspen Springs Subdivision EA.
- (i) Transportation? See Aspen Springs Subdivision EA.
- (j) Safety? See Aspen Springs Subdivision EA.
- (k) Other appropriate social and economic circumstances? See Aspen Springs Subdivision EA.

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

Secondary Impacts See Aspen Springs Subdivision EA.

Cumulative Impacts See Aspen Springs Subdivision EA.

**3. *Describe any mitigation/stipulation measures:*** There are no mitigation/stipulation measures identified for the proposed action.

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 no action alternative is the only alternative to the proposed action. Under the no action alternative the applicant would be unable to obtain a water use permit for the community water needs of the proposed Aspen Springs Subdivision.

*PART III. Conclusion*

1. **Preferred Alternative**
2. **Comments and Responses**
3. **Finding:**

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

*If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:* AN EA IS THE APPROPRIATE LEVEL OF ANALYSIS FOR THIS PROPOSED ACTION BECAUSE NO SIGNIFICANT IMPACTS HAVE BEEN IDENTIFIED AS A RESULT OF THE PROPOSED ACTION.

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

Name: Jim Nave  
Title: Water Resources Specialist  
Date: July 26, 2007