

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

Part I. Proposed Action Description

1. *Applicant/Contact name and address:* Alan Miller
331 Kunje Blvd.
Manhattan, Mt. 59741
2. *Type of action:* Application for Beneficial Water Use Permit #30005083-41H
3. *Water source name:* 2 Wells
4. *Location affected by project:* W2NW Sec 13 T1S R3E, Gallatin Co.
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*
The applicant proposes to drill (2) two new wells to supply the 69 unit Churchill North Subdivision, located in the W2NW Sec 13 T1S R3E, Gallatin County. A total of 200 GPM, up to 55.69 acre feet will be used. The DNRC shall issue a permit if the applicant proves that the criteria in #85-2-311, MCA, are met.
6. *Agencies consulted during preparation of the Environmental Assessment:*
(include agencies with overlapping jurisdiction) Montana State Historical Preservation Office, Montana Department of Fish, Wildlife & Parks, Montana Natural Heritage Program, Gallatin County Planning Office, Montana Department of Environmental Quality.

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

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: The source of water is groundwater from two wells, which has not been listed as chronically or periodically dewatered by the DFWP.

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: These wells are not listed on the DEQ, 303(d) list.

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: Groundwater quality should not be impacted by additional withdrawal from the aquifer. The supply of groundwater may be reduced by 200GPM, up to 55.69 acre-feet. This well is 280 feet deep, and perforated from 248 to 259 feet. When one well was pumped tested at 182 GPM the static water level dropped 38.3 feet after 16 hours of pumping.

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.*

Determination: Water will be diverted using a 15 HP pump in each well. The wells will be drilled by a licensed driller.

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."*

Determination: The Montana Natural Heritage Program was contacted. There are no species of special concern in the search area.

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: These wells will not be drilled in a wetland, and will have no impact on existing wetlands, if any exist.

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

Determination: This application does not involve a pond. There will be no impact to existing resources.

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.

Determination: It is unlikely that saline seep would be found in this area. The drilling of these wells will not degrade soil quality, alter soil stability, or moisture content.

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.

Determination: Existing vegetative cover will be altered by this new subdivision. Houses, garages, driveways, lawns and gardens will replace this irrigated pasture. Noxious weeds may spread if the lot owners do not control them.

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

Determination: Air quality may be altered if any of the homeowners have woodstoves, or fireplaces. Additional vehicles will create additional auto emissions.

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

Determination: SHPO was contacted. Their records indicate there have been no previously recorded historic or archaeological sites within the designated search locale.

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: There will be additional demand for energy to supply 69 new homes.

HUMAN ENVIRONMENT

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

Determination: The Gallatin County Planning board was contacted. The Churchill North Subdivision was given preliminary approval on 10/21/2002. They have three years to submit their final plan to the county for final approval.

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: This project is located on private land, with no access to recreational or wilderness activities. No impact is expected.

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

Determination: No impact on human health is expected.

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

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

Determination: Private property rights are not impacted by this proposed action.

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

Impacts on:

(a) Cultural uniqueness and diversity? No significant impact

(b) Local and state tax base and tax revenues? No significant impact

(c) Existing land uses? No significant impact

(d) Quantity and distribution of employment? No significant impact

(e) Distribution and density of population and housing? No significant impact

(f) Demands for government services? No significant impact

(g) Industrial and commercial activity? No significant impact

(h) Utilities? No significant impact

(i) Transportation? No significant impact

(j) Safety? No significant impact

(k) Other appropriate social and economic circumstances? No significant impact

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

Secondary Impacts No secondary impacts have been identified.

Cumulative Impacts No cumulative impacts have been identified.

3. **Describe any mitigation/stipulation measures:** Mitigation or stipulations are not planned at this time.
4. **Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:** If this ground is to be subdivided, lots could be sold without water where it would be the lot owners responsibility to drill their own wells. The density of lots may need to be changed if this option were to occur. These individual wells may be shallower and cause more problems in the Churchill area. The no action alternative would be to not subdivide this ground, and continue to irrigate it.

PART III. Conclusion

1. **Preferred Alternative** If this ground is to be subdivided, a deeper community well appears to be the preferred alternative.
2. **Comments and Responses** No comments or responses received at this time.
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: Significant impacts have not been identified. An EIS is not required for this action.

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

Name: Jan R Mack

Title: Water Resources Specialist

Date: February 26,2004