

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: **GEORGE E & VIRGINIA G DONNELLY
5585 FERRY DR
HELENA MT 59602 9545**
2. Type of action: **Application to Change a Water Right No. 30005092 411**
3. Water source name: **Groundwater Well**
4. Location affected by action: **Lot 2 Certificate Of Survey 374354
NWNWSW SEC 14 T11N R3W, Lewis & Clark County
Located at 5585 Ferry Dr., Helena MT**
5. Narrative summary of the proposed project, purpose, action to be taken, and objectives:
This is an application for a replacement well; the new well is in the same aquifer as the old well. The old well, 150 feet deep, was not supplying a sufficient amount of water for their uses and there was substantial amount of silt in the water. The new well is 280 feet deep and is approximately 120-150 feet northeast of the old well. The new well has a 2-HP submersible pump with new lines to the existing distribution system. The flow rate and volume of water used will be the same as it was in the past; therefore, there will be no increase in the burden on the aquifer from this well.

The DNRC shall issue an Application to Change if the applicant proves the criteria in 85-2-402, MCA are met.

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

None

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: **See groundwater section below.**

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: **See groundwater section below.**

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: **No impact. This project is replacing a well that was not producing a sufficient amount of clean water. The lines from the old well have been disconnected from the house. The water from the new well will be pumped at the same rate as the old well. This domestic, lawn and garden (includes shelterbelts; hereinafter considered part of lawn and garden use), and stock well have been in use since 1985. There was no check for a floodplain area.**

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: **This development will not impact any of the following: channel impacts, flow modifications, barriers, riparian areas or dams as it is utilizing groundwater. Though there may be surface sources and irrigation canals in the area, this groundwater well will have no impact on any surface source.**

A licensed well driller drilled the replacement well in accordance with the Montana Board of Water Well Contractors construction standards.

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: **No impact. The home, lawn and garden, and stock use were in existence since 1985. A search of threatened species was not conducted.**

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: **There are no wetlands in the area.**

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

Determination: **There are no ponds in the area.**

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: **This is a replacement well for domestic, lawn and garden, and stock use. The soil content and geology were not researched.**

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: **This well is approximately 120-150 feet from the old well; however, it is closer to the home than the old well. The installation of the new lines to the existing distribution lines caused minimal land disturbance. The vegetative cover has been replaced.**

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

Determination: **No impact.**

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

Determination: **No impact. This is replacing an existing well that has been in use since 1985; therefore, the site was not researched.**

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 impact.**

HUMAN ENVIRONMENT

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 **X**. 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: **No impact.**

Cumulative Impacts: **No impact.**

3. Describe any mitigation/stipulation measures:

The authorization will be issued subject to necessary conditions.

- **Upon notice from the department that a complaint has been received from an existing water right holder regarding adverse affect, the permittee shall modify**

their water use as instructed by the department until an investigation has been completed.

- Installation of water measuring device: in-line volume meter
- submittal of annual records for static level, water use and water sample
- annual coliform bacteria, chloride and nitrate testing
- access tube for static level measurements
- State and Lewis and Clark Water Quality Protection District (L&CWQD) access, with reasonable notice, for monitoring purposes, conducting tests, measurements or water sampling.

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: **This is a replacement well that is already in use. This is the only source for domestic, lawn and garden, and stock use available at this site. There are no reasonably available or prudent alternatives to consider.**

PART III. Conclusion

1. Preferred Alternative:
Not applicable.
2. Comments and Responses:
None.
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 action because no significant environmental impacts have been identified.**

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

Name: **Patti Miller**
Title: **Compliance Technician**
Date: **July 8, 2004**