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: Marks Ranch Enterprises Co.
Represented by: Rachel Kinkie
Bloomquist Law Firm P.C.
PO Box 799
Helena, MT 59624

2. Type of action: Application for Beneficial Water Use Permit 41I 30068548

3. Water source name: 2 Groundwater Wells

4. Location affected by project: The project proposes to appropriate groundwater from two wells located in the NENENW of Section 9, Township (T) 8 North (N), Range (R) 3 West (W), Jefferson County.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The project proposes to appropriate groundwater from two wells located in the NENENW of Section 9, T8N, R 3W, Jefferson County, in order to provide water for domestic and lawn and garden irrigation in the Red Cliff Estates Subdivision and adjacent proposed 10 unit development. The applicant requests 100 gallons per minute (GPM) up to 46.76 acre-feet (AF) to provide water to 35 households and 8.26 acres of lawn and garden irrigation. The water would be used year round for domestic purposes and used April 15 to October 15 for lawn and garden irrigation. The Red Cliff Estates and proposed 10 unit development are located in the SWSE of Section 4, N2NENW and N2NWNE of Section 9, T8N, R3W. Both wells have been drilled to the depth of 140 and 150 feet, respectively, by a licensed driller.

   The 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 Department of Natural Resources (DNRC), Water Management Bureau- Attila Folnagy and Russell Levens, Groundwater Hydrologists
   - Montana Natural Heritage Program (MTNHP)
   - Montana Department of Fish, Wildlife & Parks (DFWP)
   - USDA Web Soil Survey

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: No significant adverse impact. The proposed project will potentially affect Clancy Creek, but it is not identified by the Department of Fish, Wildlife and Parks (DFWP) as a chronically or periodically dewatered stream. The proposed appropriation is anticipated to affect Clancy Creek due to the hydraulic connection between the stream and the source aquifer. However, the proposed project includes a mitigation plan which will offset depletions to Clancy Creek during the irrigation season and satisfy legal demands. The water will be diverted from two groundwater wells, any potential surface water depletions will be mitigated by retiring 11 acres under proposed change 41I 30069327 and retiring 473 animal units (AU) under proposed change 41I 30070581.

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: No significant adverse impact. The proposed project would appropriate groundwater and, therefore, should not affect surface water quality.

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 significant adverse impact. Analysis of the aquifer characteristics shows the annual volumetric flux to be 2,177.3 AF/yr, while the existing legal demands are 1,374.9 AF/yr within the zone of influence. Given the quantity of water within the zone of influence, the quality of water will not be adversely affected.

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: No impact. Well 5 is equipped with a 7.5 horsepower Big-Flo 85 GPM Series MB pump and well 6 is equipped with a 5.0 horsepower Big-Flo 50 GPM Series FC pump, both are Red Jacket pumps. The proposed wells are capable of producing the requested 100 GPM flow rate.

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 adverse impact. The Montana National Heritage Program did not identify and animal species or plant species of concern in the propose project 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: The proposed project does not involve wetlands.

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

Determination: The proposed project does not involve 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.*

Determination: No significant adverse impact. According to the USDA Web Soil Survey, the type of soil for proposed place of use is primarily 1800D Breenton course sandy loam. However, since the proposed project is a subdivision, the construction of houses and establishing lawns and gardens should increase soil stability and have negligible effects to 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: No significant impact. The proposed project is a subdivision and individual homeowners will be responsible for maintaining a weed management plan for their property.

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

Determination: No significant impact. There may be a slight deterioration of air quality during the construction phase of the subdivision. However, the construction phase will be temporary and air quality should improve as houses are completed.

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, the project is not located on State or Federal Lands.

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 additional impacts on environmental resources of land, water and energy not already addressed were identified.

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 significant adverse impact. Jefferson County has approved the platting of the Red Cliff Estate Subdivision.

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 significant adverse impact. There are no wilderness areas immediately adjacent to the proposed project and therefore it will not impact access to or quality of recreational and wilderness areas.

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

Determination: No significant adverse impact. The project will not impact human health.

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: The project does not impact government regulations on private property.

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 impacts identified.

(b) *Local and state tax base and tax revenues?* No significant impacts identified. Potentially, the local and state tax base and revenue could increase in the area.

(c) *Existing land uses?* No impacts identified.

(*d*) *Quantity and distribution of employment?* No significant impacts identified. The project has the potential to increase the demand for services in the Town of Clancy and create employment.

(*e*) *Distribution and density of population and housing?* No significant impacts identified. The development of the subdivision would increase the population in the Town of Clancy.

(*f*) *Demands for government services?* No significant impacts identified. An increase in residence may increase the demands for governmental services.

(*g*) *Industrial and commercial activity?* No impacts identified. The development is strictly for domestic and lawn and garden irrigation.

(*h*) *Utilities?* No significant impacts identified. The 25 homes to be built in the subdivision and adjacent 10 unit development will need utilities; however, there shouldn't be a significant impact to utility services.

(*i*) *Transportation?* No significant impacts identified.

(*j*) *Safety?* No impacts identified.

(*k*) *Other appropriate social and economic circumstances?* No impacts identified.

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:*** The annual consumptive use was calculated to be 17.31 AF. Applications 41I 30069327 and 41I 30070581 have been submitted to the Department to change the historic consumptive use historically associated with the irrigation of 11 acres and 473 AU to instream mitigation water in order to offset annual surface water depletions associated with pumping the Red Cliff Estates public water supply wells. If the permit is granted, the applicant will be required to maintain and submit records to the Department of monthly the flow rate and volume appropriated.

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 reasonable alternative to the proposed action has been identified. The no action alternative would leave the subdivision without a beneficial water use permit and non-compliance with the Montana Water Use Act.

PART III. Conclusion

1. ***Preferred Alternative:*** As proposed. No significant impacts exist that would require an alternative action.

2 ***Comments and Responses:*** None 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: An EA is the appropriate level of analysis for this action. There are no significant impacts identified as defined in ARM 36.2.524, therefore an EIS is not required.

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

Name: Jennifer Daly
Title: Water Resource Specialist
Date: October 7, 2015