

## CHECKLIST ENVIRONMENTAL ASSESSMENT

**Project Name:** Giem Stockwater Well Drilling Proposal  
**Proposed Implementation Date:** Winter, 2011 - 2012  
**Proponent:** Loren Giem, Lessee  
**Location:** NW ¼ Section 36, T4S R7W  
**County:** Madison

### I. TYPE AND PURPOSE OF ACTION

The lessee of the N ½ of Section 36, T4S R7W has submitted a request to drill a stock water well on the tract with a short pipeline to a single stock tank. A short segment of power line would also be required to service the well pump. The purpose of the well and stock tank is to provide a reliable year-round water source and to improve the quality of water available on the tract.

### II. PROJECT DEVELOPMENT

#### 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

*Provide a brief chronology of the scoping and ongoing involvement for this project.*

Bob Brannon, Wildlife Biologist for the Montana Department of Fish, Wildlife, & Parks – Sheridan,  
Patrick Rennie, Archaeologist for the Montana Department of Natural Resources and Conservation.  
Martin Miller, Montana Natural Heritage Program

#### 2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

#### 3. ALTERNATIVES CONSIDERED:

- 1) Allow the drilling of a stockwater well and placement of 1 stock tank
- 2) Do not allow the drilling of stockwater well and placement of stock tank

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

#### 4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

*Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.*

According to the NRCS Soil Survey of Madison County, Montana, soils on site are Neen Silty Clay Loam 0-2% slope. Primary use is for grazing. The proposed well project would not affect the soils of the site.

#### 5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

*Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.*

The Beaverhead River is located approximately 0.75 miles from the proposed project location. The river is not accessible to livestock from this tract and would not be affected by the proposed project. California Slough is located approximately 0.5 miles from the proposed project. The proposed project would have the benefit of moving livestock watering use to a dryland site outside of the slough area and would maintain or enhance the slough vegetation and banks.

**6. AIR QUALITY:**

*What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.*

The proposed project would not alter the air quality of the area.

**7. VEGETATION COVER, QUANTITY AND QUALITY:**

*What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.*

California Slough is located approximately 0.5 miles from the proposed project. The proposed project would have the benefit of moving livestock watering use to a dryland site outside of the slough area and would maintain or enhance the slough vegetation and banks.

**8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:**

*Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.*

The tract is located in the Beaverhead River Valley and in close proximity to California Slough. The Beaverhead River is not accessible to livestock from this tract. It is fenced along property boundaries with the river access on adjacent private landowners and lessee's. California Slough is listed in the Montana Natural Resource Information Service report as biologically significant due to the presence of three state-significant plant species, Mealy Primrose (*Primula incana*), Annual Indian paintbrush (*Castilleja exilis*), and Ute ladies tresses – (*Spiranthes diluvialis*). These species inhabit wetland and sub irrigated sites in the area. The project would provide an off-site water development which would decrease livestock use of the forbs preferred habitat. The 3 species are also listed in #9 below. The site is frequently used by whitetailed deer and waterfowl. The tract is used frequently by hunters in the Fall pursuing these species. The project would not alter use by deer and may increase use by waterfowl as cattle use of the slough site as a water source decreases.

**9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:**

*Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.*

The Montana Natural Heritage Program was contacted regarding species of concern within and around the project area. Four Species of concern were identified in the report and are listed below.

1) Grey wolf (*Canus lupus*) – In the on-going saga of “is it – or isn't it” in relation to the listing of the grey wolf as endangered, it currently isn't. All of Southwest Montana is listed as grey wolf habitat. The Southwest Montana wolf population has been deemed as an experimental population and has been delisted from the endangered species act. The project would not have cumulative effects on grey wolf habitat or distribution.

2) Mealy Primrose (*Primula incana*) – Mealy primrose is currently listed as sensitive by the U.S. Forest Service, BLM, and the State of Montana. According to the Montana Natural Resource Information Service, the plant is found growing in wetland sites which tend to be saturated and calcareous in nature. An occurrence has been documented on the affected tract approximately 0.5 miles from the project location in the California Slough area. The proposed project would create a water source for livestock outside of the slough areas where the plants preferred habitat is located. The resulting reduction of livestock use of the plants preferred habitat due to the off-source water development could provide a benefit to the plant during the growing season.

3) Bald Eagle (Haliaeetus leucocephalus) – Bald eagles are listed as Recovered, delisted, and being monitored by the US Fish and Wildlife Service. Montana State, the US Forest Service, and the US Dept. of the Interior Bureau of Land Management all list the bald eagle as sensitive. The proposed project would place a well and stock water tank near a high use state highway, Montana Highway 41. The project would not increase disturbance to bald eagle use of the area.

4) Arctic grayling (Thymallus arcticus) – Fluvial arctic grayling are currently listed by the US Fish & Wildlife Service as a candidate for listing under the Endangered Species Act. Grayling are listed as a high risk species by the State of Montana, and as a sensitive species by the U.S. Forest Service and the U.S.D.A. Bureau of Land Management. The proposed stock water tank and well places a stock watering site approximately 0.75 miles away from the Beaverhead River, the nearest naturally flowing water source. No impacts to arctic grayling would occur as a result of the proposed project.

5) Annual Indian paintbrush (Castilleja exilis) – Annual indian paintbrush is listed as sensitive by the State of Montana and the US Bureau of Land Management. An occurrence has been documented on the affected tract approximately 0.5 miles from the project location. According to the Montana Natural Resource Information Service, the plants habitat includes moist alkaline meadows in river and stream valleys. The proposed project would create a water source for livestock outside of the slough areas where the plants preferred habitat is located. The resulting reduction of livestock use of the plants preferred habitat due to the off-source water development could provide a benefit to the plant during the growing season.

6) Ute ladies tresses – (Spiranthes diluvialis) – Ute ladies tresses is listed as threatened by the US Fish and Wildlife Services. An occurrence has been documented on the affected tract approximately 0.5 miles from the project location. An excerpt from the Montana Natural Resource Information Service regarding habitat for the Ute ladies tresses states that the plant is found in “Alkaline wetlands, swales and old, meander channels often on the edge of the wetland or in areas that are dry by mid-summer. Habitat is limited to areas within major river drainages. In areas that are ungrazed, Spiranthes may occur among taller, relatively dense herbaceous vegetation making detection difficult.”

The proposed project would create a water source for livestock outside of the slough areas where the plants preferred habitat is located. The resulting reduction of livestock use of the plants preferred habitat due to the off-source water development could provide a benefit to the plant during the growing season.

#### **10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

*Identify and determine effects to historical, archaeological or paleontological resources.*

Patrick Rennie, DNRC Archaeologist, was contacted regarding cultural resource listings for the tract

#### **11. AESTHETICS:**

*Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.*

The project would not alter the aesthetics of the area.

#### **12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:**

*Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.*

The project would not negatively affect the areas environmental resources. The proposed project is located in close proximity to Montana Highway 41, a paved 2 lane highway with a high volume of traffic. The proposed project would not have significant impacts to the area.

**13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:**

*List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.*

No other studies, plans, or projects were reported to DNRC Dillon Unit during the scoping process.

**IV. IMPACTS ON THE HUMAN POPULATION**

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

**14. HUMAN HEALTH AND SAFETY:**

*Identify any health and safety risks posed by the project.*

No health or safety risks would result from this proposed project.

**15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:**

*Identify how the project would add to or alter these activities.*

The project would improve the quality of water available to livestock and give a year round water source for use of the tract in the fall or winter season.

**16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:**

*Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.*

The proposed project would not have cumulative effects on the employment market.

**17. LOCAL AND STATE TAX BASE AND TAX REVENUES:**

*Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.*

No tax revenue would be created or eliminated as a result of the approval of this project.

**18. DEMAND FOR GOVERNMENT SERVICES:**

*Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.*

No additional government services would be required as a result of this proposed project.

**19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:**

*List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

No other environmental plans or goals were reported during the scoping for this document.

**20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:**

*Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.*

The proposed project will not alter recreational activities on the tract.

**21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:**

*Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.*

The proposed project will not alter populations or housing.

**22. SOCIAL STRUCTURES AND MORES:**

*Identify potential disruption of native or traditional lifestyles or communities.*

The proposed project would not disrupt local communities.

**23. CULTURAL UNIQUENESS AND DIVERSITY:**

*How would the action affect any unique quality of the area?*

The proposed project would not affect the unique qualities of the area.

**24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:**

*Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.*

There would be no monetary increase to the trust as a result of this proposed project. Potential benefits of the project, if completed, would be an improvement in water quality to livestock as an alternative to the swamp water / stagnant water currently available on the tract, and an improvement of banks along the portions of California Slough located on the tract due to less cattle trampling in traveling to and from water sources.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Charles Maddox	<b>Date:</b> 12/2/2011
	<b>Title:</b> Land Use Specialist	

**V. FINDING**

**25. ALTERNATIVE SELECTED:**

- 1) Allow the drilling of a stockwater well and placement of 1 stock tank.

**26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

No significant or potential impacts have been identified through this EA process. The well and stock tank will allow cattle access to water out of the California slough and may reduce the amount of trampling of sensitive plant materials that are found in the slough.

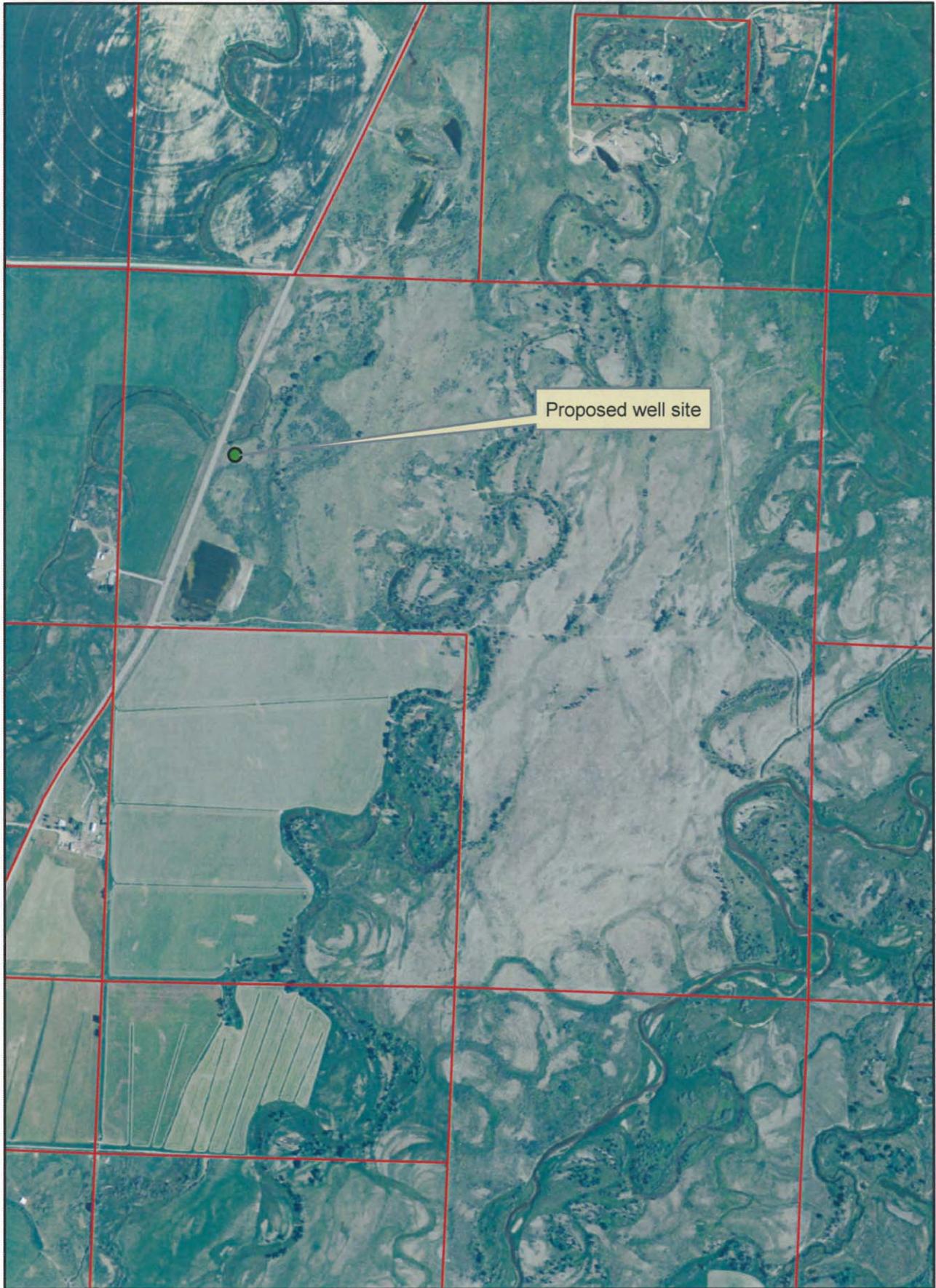
**27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:**

- EIS     
 More Detailed EA     
 No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Timothy Egan	
	<b>Title:</b> Dillon Unit Manager	
<b>Signature:</b> /S/ Timothy Egan	<b>Date:</b> 12/21/2011	



4S 7W Sec. 36 2009



1 inch = 1,056 feet

