

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Madison County Law Enforcement Repeater
Proposed Implementation Date:	Fall 2015
Proponent:	Madison County Sheriff's Office
Location:	SW1/4 Section 29 Township 3 South, Range 6 West
County:	Madison County

I. TYPE AND PURPOSE OF ACTION

Madison County Sheriff's Office has submitted an application for a Land Use License for a communication site on state land in Madison County west of Twin Bridges. Madison County proposes to construct a new radio repeater for the use of Madison County Law Enforcement, Fire Departments, and Emergency Medical Services. The repeater will be mostly buried underground with the antennae reaching 20-25 feet. Power lines to the repeater will be underground. The project will encumber approximately 0.5 acres of state trust land. The powerline will be below ground. The section is Western Eastern Grant.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: *Provide a brief chronology of the scoping and ongoing involvement for this project.*

Madison County Planner
Madison County Commissioners
Madison County Airport Board
Vanna Boccadori, Department of Fish, Wildlife, & Parks, Wildlife Biologist
Patrick Rennie, Department of Natural Resources and Conservation, Archaeologist
Martin Miller, Montana Natural Heritage Program
Steven L. Clark, Resident
Jamie Wood, SRI River Holdings LLC
David James, Near Channel Holdings LLC

We received comment from David James' lawyer Andy Suenram, SRI representative Jamie Wood, and Steven Clark. We met with both Steven Clark and Jamie Wood (who was also representing the interests of David James) along with Madison County representatives Lynda Holt and Sheriff Roger Thompson. Alternate repeater sites were discussed during these meetings, as well as the current proposal. The Communication site was described in detail of what it would look like and the reasons for choosing the proposed location.

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

No other governmental agencies with jurisdiction or additional permit requirements were identified during the scoping for this proposed project. The project as proposed would involve only Montana Trust Land allocated to the Western Eastern Grant.

3. ALTERNATIVES CONSIDERED:

Alternative A: No Action Alternative: Deny the proposed project to construct a new radio repeater for the Madison County Sheriff's Office.

Alternative B: Action Alternative: To allow construction of a new radio repeater for the Madison County Sheriff's Office.

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.

The NRCS soil survey for this area identifies soils that the powerline will travel through as 62- Kalsted sandy loam, 2 to 8 percent slopes. The parent material for this type of soil is coarse-loamy alluvium. The typical soil profile is 0-7" sandy loam, 7-30" sandy loam, and 30-60" stratified loamy sand to gravelly sandy loam. These soils are well drained and have a land capability classification of 4e.

Construction of a radio repeater includes digging a hole in which to set the housing unit, installing underground powerlines, and setting a single power pole. These actions should not cause significant damage to these soils. Compaction and rutting will not occur if the work is done during dry conditions.

No Action Alternative: No changes to the soil conditions will occur if this alternative is chosen.

Action Alternative: Some rutting and soil disturbance could occur if work is done during wet, saturated conditions. Mitigation measures should include limiting construction operations to dry or frozen ground conditions only. Top soil will be separated during the digging of well house and stored for distribution back onto the top of the well house. Any disturbed soils will be grass seeded with a native grass seed mixture of grasses.

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.

No surface water resources are located within the project area. This tract is part of a checkerboard ownership pattern of Trust Land with no naturally occurring surface water present. Neither of the two alternatives will effect or cause degradation of water quality or cause cumulative effects to water quality.

No Action Alternative: No changes to water quality would occur under this alternative.

Action Alternative: Under this alternative there will be some ground disturbance that occurs during the construction phase of the project. Because of the lack of surface water present on the tract, no long term cumulative effects to water quality would occur under this alternative.

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.

This proposed powerline easement is located in a sparsely populated area. The area currently meets EPA ambient air quality standards and is not located in a class I air shed. The granting of this easement would not cause any long term or cumulative impacts to air quality standards in the Twin Bridges area.

No Action Alternative: No changes to Air Quality standards would occur if this alternative is chosen.

Action Alternative: During the construction phase of the radio repeater and underground powerline, a small increase in dust particulates in the air will occur. This change in air quality standards would only be short term, and no long term or cumulative effects would be anticipated.

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.

A NRIS search of the area did not identify any rare plants or cover types in the area of the proposal or the surrounding area. The current vegetation cover type that was identified in the 2011 range evaluation is a mixture of the following grasses, and forbs: smooth Brome, Timothy, Kentucky Bluegrass, Wiregrass, Winterfat, Needle & Thread, Threadleaf sedge, Kentucky Blue grass, Prickly Pear, Fringed Sagewort, Green Rabbitbrush and Western Weatgrass.

No Action Alternative: No changes to the current vegetative cover type will occur under this alternative.

Action Alternative: This alternative will cause some disturbance to native vegetation during the construction phase of the project. Noxious weeds could be introduced to the area which could have long term effects to the surrounding environment with the action alternative.

Mitigation measures for the action alternative could include treating the area with herbicide prior to construction and then requiring 2 years of follow up herbicide treatment. In addition all disturbed areas should be broadcast seeded with native grass upon completion of the repeater installation.

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 area is used by both large and small mammals, and birds. Large game species include antelope, and deer. The habitat is a short native grass bench occasional sage brush forbs are present. The Big Hole River is within ¼ mile of section 29, T3S – R6W. The river has Artic Grayling in it; a known eagle's nest is present along the river corridor approximately 2 miles from the project location, and there are Great Blue Herron and Bobolink in the riparian zone.

No Action Alternative: No changes in the current habitat would occur if this alternative is chosen for this proposal.

Action Alternative: The repeater would cause some short term disturbance to the birds and mammals in the area of the proposal during installation, however long term or cumulative effects are not anticipated. The sensitive species are located in the riparian zone and the repeater would be in the dry grassland bench portion of the section.

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 Resource Information Service (NRIS) was queried for information regarding sensitive or endangered species located in the vicinity of the project area. The query results are listed below:

Great Blue Heron (*Ardea herodias*) – The Great Blue Heron is currently listed as a sensitive species by the State of Montana. According to the MNHP site, the blue heron primarily inhabits riparian areas and wetland habitats. This proposed project is located out of any riparian habitat. The site is dry rangeland and would not

impact blue heron habitat. The SE1/4 of the 160 acres that the state owns in section 29 does go down to an overflow channel on the Big Hole River that could provide habitat to Great Blue Herons.

Neither **No Action**, nor **Action Alternatives** would have any short term, long term or cumulative impacts on Great Blue Heron habitat.

Bald Eagle, *Haliaeetus leucocephalus* is listed as a threatened species by the US Forest Service, and the state of Montana lists it as an S4 species. An S4 species is one that is “uncommon but not rare, and usually widespread” A bald eagle nest has been identified along the Big Hole River within 2 miles of the proposed easement location. According to the NRIS map that was provided with their report, the proposed easement is not currently close enough to the buffer area around the nest to affect the eagle’s activity in this area. The map indicates that the most use is identified as being in the Big Hole River corridor. Bald eagles live along lakes and rivers where their main food source is fish, although they will also feed on carrion. The SE1/4 of the 160 acres that the state owns in section 29 does go down to an overflow channel on the Big Hole River that could provide habitat for Bald Eagles.

No Action Alternative: No changes to the natural environment would occur to bald eagles or their habitat if this alternative is chosen.

Action Alternative: The action alternative should not have any short term, long term, or cumulative effects on the Bald Eagle nest that is located on the Big Hole River (approximately 2 miles away). The repeater site is far enough away from the location of the nest that it should not affect Bald Eagle habitat or disturb the nesting site.

Bobolink, *Dolichonyx oryzivorus* is listed as a sensitive species by the BLM. The state of Montana considers the bird a S3B species meaning it is “potentially at risk because of limited and potentially declining numbers, extent, and/ or habitat, even though it may be abundant in some areas”. The Bobolink is a migratory song bird that inhabits open grasslands and fields, and nests on the ground. It’s a ground forager with insects and seeds being its main food source. An NRIS search reveals that the bird was observed using the area (within 0.5 miles of the easement) in August 1994 and no recent reports have been made. The bird has been identified as declining over much of its range. Much of that decline is attributed to early mowing of agricultural hay ground. There is no hay production near the section at this time. In addition, the species preferred habitat is moist grasslands. The area where the repeater will be located is a dry grassland bench.

More recently there have not been any sightings or recording of the bird species presence near the license location. Most of the grasslands in this area are moderately grazed and overall habitat may not be good enough to support the bird’s needs in this area.

No Action Alternative: No changes to Bobolink species or habitat would occur if this alternative is chosen.

Action Alternative: No short, long term or cumulative effects would be anticipated if the action alternative was chosen. The repeater would not be located in critical Bobolink habitat.

Arctic Grayling, (*Thymallus arcticus*), are listed as a sensitive species by the Forest Service and BLM and listed as a Critically Imperiled Species of Special Concern by the Fish & Wildlife Service. Grayling are currently living in the Big Hole River. The main concentration can be found in the upper Big Hole Valley, but an occasional fish is found all the way to the confluence of the Beaverhead River. The easement proposal is far enough away from the river and the population densities are low enough in this part of the Big Hole River that no long term or cumulative effects to the fish are anticipated from either of the two proposed alternatives.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

Patrick Rennie, DNRC Archaeologist, was consulted regarding possible cultural resources inside the proposed project area. No cultural resource concerns were found in a search of the database, and no evidence was found during a field inspection that was conducted on November 2, 2015.

Neither of the two proposed alternatives will impact any known historical or archeological sites at the location of the proposed repeater. If the action alternative is chosen the contractor will be instructed to suspend operations and contact the DNRC if cultural resources are uncovered during the construction of the repeater.

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.

This easement application is located in a rural area approximately three air miles from the town of Twin Bridges, Montana. The town has a population of approximately 450 people. The aesthetics in this area are good, with beautiful mountain views, blue ribbon trout streams, world class hunting and fishing, and plenty of clean water and air. Over the past twenty years rural housing development around the town has sprung up in all directions. There are still enough large ranches surrounding these pockets of development though, that it keeps the "open space" look in the Twin Bridges area intact.

This proposal will establish a repeater site near residences. Aesthetics was kept in mind for the design of the repeater and the majority of the facility will be buried in an underground well house-like structure. There will be a visible mound above the well house that will be 1-2 feet high. Above ground there will be a 20ft power pole with one Omni Directional Antenna and 2 Yagi antennas. There will also be 2 solar panels mounted on the power pole.

No Action Alternative: No changes to aesthetic values would occur if this alternative is chosen.

Action Alternative: Under this alternative there would be some minor aesthetics changes to the natural environment. There currently are powerlines running through the sections to other residences in the area so the aesthetic changes would be small to the overall landscape.

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.

No demands for additional environmental resources are required for this project. No cumulative effects to Environmental Resources should result from either of the proposed alternatives.

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 identified in this particular area during the scoping for this proposal.

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 are posed by either of the proposed alternatives.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

No Action Alternative: No changes to agricultural activities would occur if this alternative is chosen.

Action Alternative: Fencing off the repeater site may be a necessity and would close off an approximate 15x15 foot section. The installation of the repeater could have some short term effects on cattle grazing if it is installed while livestock are present on the lease, however no long term or cumulative effects are anticipated.

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.

Neither of the proposed alternatives will create nor eliminate permanent jobs in the area.

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.

Neither of the proposed alternatives will increase tax revenues nor result in an increase or decrease of the tax base.

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 increased demand for government services are expected as a result of either of the proposed alternatives.

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.

There currently aren't any locally adopted environmental plans and goals that DNRC is aware of in this area. The Madison County Commissioners and the County Planner were both contacted and there was only concern if the tower height was over 100 feet, and it will not be.

Neither of the proposed alternatives would cause any changes to environmental plans and goals for the area.

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.

Neither of the proposed alternatives will affect nor alter recreational activities in the area.

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.

Neither of the proposed alternatives will affect distribution of population or housing in the Twin Bridges or surrounding area.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

Neither of the proposed alternatives will affect social structures or mores of the surrounding area.

23. CULTURAL UNIQUENESS AND DIVERSITY:

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

Neither of the proposed alternatives will affect cultural uniqueness and diversity 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.

After several meetings between SRI representative Jamie Wood, Steven Clark, Madison County representatives Lynda Holt and Sheriff Roger Thompson, and North Western Energy, Madison County made the decision to move the location of the repeater to the NW1/4 Section 29 Township 3 South, Range 6 West.

No Action Alternative: No revenue for the trust would be generated from this alternative..

Action Alternative: If this alternative is chosen the Repeater would generate annual revenue of \$544.52 for the Western Eastern Trust.

EA Checklist Prepared By:	Name: Jessica Bryers-Holschbach	Date: December 6, 2015
	Title: Senior Engine Boss	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B: Action Alternative: To allow construction of a new radio repeater for the Madison County Sheriff’s Office.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

No significant impacts are anticipated under the action alternative. The footprint of the proposal is small and will not affect the overall aesthetics of the area. The majority of the facility will be underground with a 20 foot power pole with antennae’s and solar panel on it.

Disturbed ground will be seeded with native grass seed and the County will be responsible for controlling any noxious weeds that are introduced.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

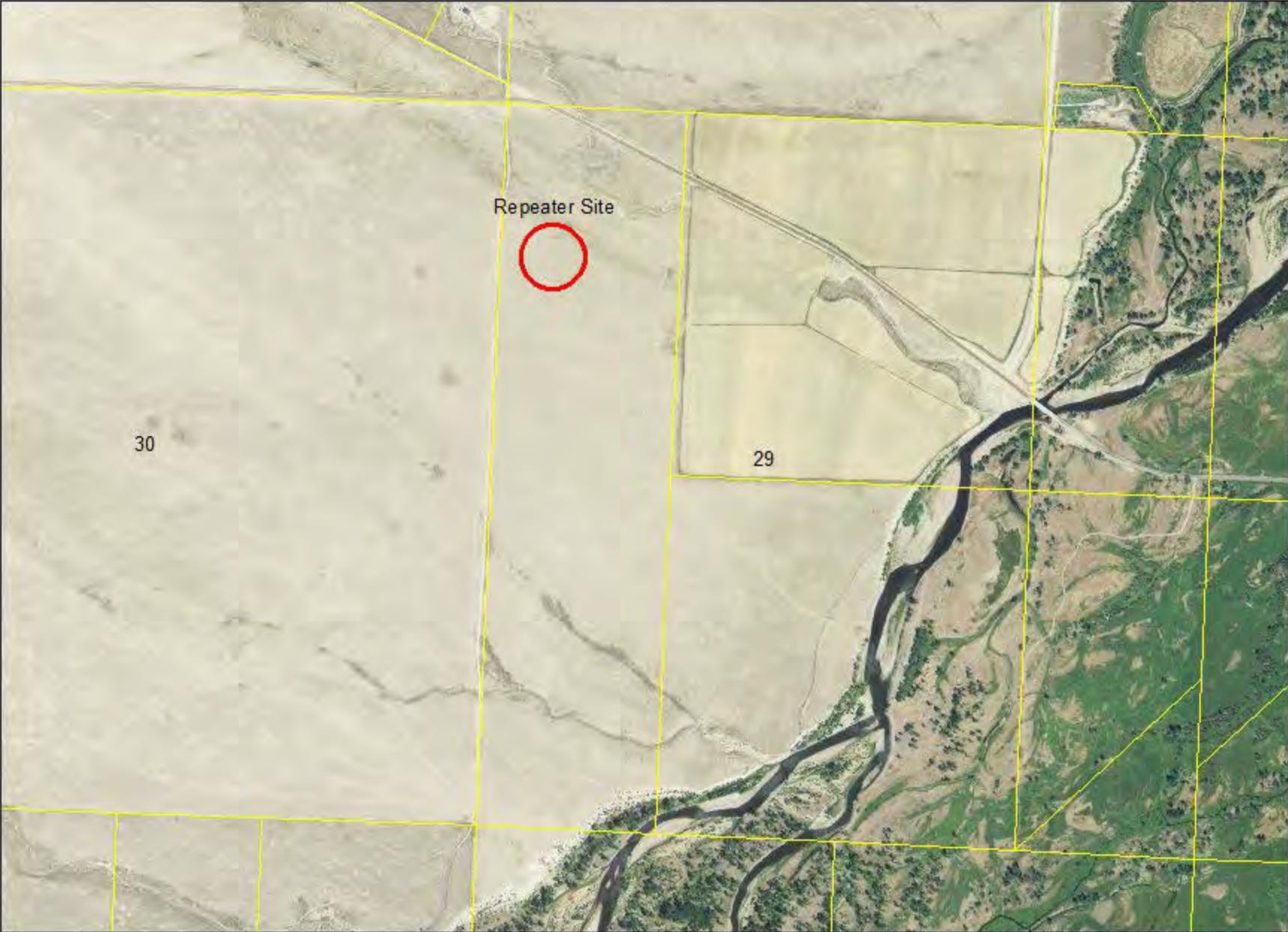
EIS

More Detailed EA

No Further Analysis

EA Checklist Approved By:	Name: Timothy Egan
	Title: Dillon Unit Manager
Signature: /S/ Timothy Egan	Date: 11/20/2015

Madison County Repeater LUL



1 inch = 1,056 feet

