

## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	Cascade Colony Irrigation Pipeline
<b>Proposed Implementation Date:</b>	April 2016
<b>Proponent:</b>	Cascade Colony (surface lessee)
<b>Location:</b>	Section 36, T20N, R2W
<b>County:</b>	Cascade
<b>Trust:</b>	Common School

### I. TYPE AND PURPOSE OF ACTION

The Cascade Colony has applied for a Land Use License (3073319) to bury approximately 900 feet of 24" plastic pipeline across state land in order to improve the irrigation water delivery system on state and private lands. The water has been delivered by an irrigation ditch in the past. The affected area would be approximately 1 acre of grazing land.

### II. PROJECT DEVELOPMENT

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

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

Agencies, Groups or Individuals Scoped:	Response:
DNRC, Landowner	Neutral
Cascade Colony Inc., surface lessee	Proponent is in favor of the project
NRCS	In favor of this project

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

The NRCS is helping fund this irrigation improvement project.

#### 3. ALTERNATIVES CONSIDERED:

**Proposed Alternative:** To grant Cascade Colony permission to install the irrigation pipeline across state land.

**No Action Alternative:** To deny Cascade Colony permission to install the irrigation pipeline across state land.

### 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 soils are silty and there are no fragile, compactable, or unstable soils.

**Proposed Alternative:** Impacts to the soils would be temporary and soils are anticipated to return to normal. No impacts to fragile, compactable, or unstable soils or any unusual geologic features are anticipated.

**No Action Alternative:** No impacts to the geology or soil characteristics would occur.

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## 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 project area does not contain any significant surface water resources, besides the irrigation water being placed into a pipeline instead of the existing irrigation ditch.

Proposed Alternative: Improvements to the irrigation system are expected, by having less water loss.

No Action Alternative: No impacts to the water quality, quantity, and/or distribution will occur.

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## 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.*

In general, this area is considered to be of high quality air standards with good ventilation and would not be affected by the proposal.

Proposed Alternative: No direct or cumulative effects are expected to occur to air quality as a result of the proposed action.

No Action Alternative: No impacts to air quality will occur.

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## 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.*

There are no known rare plants or cover types present. The Montana Natural Heritage Program lists Northern Wildrye as a species of concern. However, this species is not found within the proposed area.

Proposed Alternative: Temporary disturbances to plant communities located within the proposed project area would occur. Vegetative communities would not be permanently altered. No impacts to rare plants or cover types are anticipated.

No Action Alternative: No impacts to the vegetation cover, quantity, and/or quality will occur.

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## 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 Montana Natural Heritage Program lists the black-tailed prairie dog, golden eagle, and the greater short-horned lizard as species of concern. This tract is used by a variety of wildlife, including large ungulates (mule deer, whitetail deer, and pronghorn), small to large sized predators (weasels, skunks, red fox, and coyotes), numerous species of small mammals (mice, voles, ground squirrels, rabbits, etc.), various raptors (red-tailed hawks, golden eagles, American kestrels, prairie falcons, etc.) upland game birds (Hungarian partridge, sharptail grouse, pheasants), and numerous non-game bird species (a wide variety of migrant and resident bird species associated with available habitats). The proposed project would temporarily displace these wildlife species.

Proposed Alternative: Habitats would be temporarily disturbed during the installation of the pipeline. No lasting impacts to terrestrial, avian, and/or aquatic life and/or habitats are anticipated.

No Action Alternative: No impacts to terrestrial, avian, and/or aquatic life and habitats will occur.

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## 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.*

At this time, no known unique, endangered, fragile or limited environmental resources have been identified within the proposed project area. None of the area's wildlife would be affected beyond temporary displacement during installation and maintenance of the lines.

Proposed Alternative: No impacts to unique, endangered, fragile, or limited environmental resources are anticipated.

No Action Alternative: No impacts to unique, endangered, fragile, or limited environmental resources will occur.

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**10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

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

No historical and archaeological sites were observed in the project areas. The DNRC Archaeologist was contacted by phone on 1/25/16, and he did not have any concerns regarding this proposal.

Proposed Alternative: No impacts to areas historical, archeological, and/or paleontological resources are anticipated.

No Action Alternative: No impacts to historical, archeological, and/or paleontological resources will occur.

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**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 landscape consists of rolling hills primarily used for ranching operations. The pipeline would be buried so it would not interfere with the areas aesthetics. Noise increases would occur during construction; these impacts would cease as soon as the project is completed.

Proposed Alternative: No impacts to the aesthetics are anticipated.

No Action Alternative: No impacts to the aesthetics will occur.

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**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 area does not contain limited resources. Nearby activities consist mostly of ranching operations.

Proposed Alternative: No impacts to the demands of environmental resources such as land, water, air, and/or energy resources are anticipated.

No Action Alternative: No impacts to the demands of environmental resources such as land, water, air, and/or energy resources will occur.

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**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.*

DNRC is not aware of other environmental studies, plans, or projects on this tract.

Proposed Alternative: No impacts to studies, plans, and/or projects pertinent to this area are anticipated to occur.

No Action Alternative: No impacts to studies, plans, and/or projects will occur.

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<b>IV. IMPACTS ON THE HUMAN POPULATION</b>
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| <ul style="list-style-type: none"><li>• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i></li><li>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i></li><li>• <i>Enter "NONE" if no impacts are identified or the resource is not present.</i></li></ul> |
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**14. HUMAN HEALTH AND SAFETY:**

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

The proposed project would create human health and/or safety risks associated with the installation and maintenance of the pipeline.

Proposed Alternative: The Cascade Colony bears the risks associated with the installation of the pipeline. The risks would be present during installation and maintenance of the proposed pipeline.

No Action Alternative: No impacts to human health and/or safety risks will occur.

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

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

The project would improve the production and management of the irrigation system.

Proposed Alternative: The proposed project would improve the irrigation efficiency.

No Action Alternative: No changes with the irrigation system would occur.

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**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 project would be completed in a relatively short time frame and it would not create permanent jobs; however, it is likely temporary jobs would be available during the installation of the line.

Proposed Alternative: No lasting impacts to quantity and distribution of employment are anticipated.

No Action Alternative: No impacts to quantity and distribution of employment will occur.

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**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.*

Proposed Alternative: The project would not have any measurable effects to local or state tax revenues.

No Action Alternative: No impacts to the state tax base and/or tax revenues will occur.

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**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*

Proposed Alternative: The proposal would not have any impacts on traffic or government services.

No Action Alternative: No impacts to traffic, road uses, or government services will occur.

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**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.*

DNRC is not aware of any environmental plans or goals.

Proposed Alternative: No impacts to local environmental plans and goals are anticipated occur as the construction is in remote areas.

No Action Alternative: No impacts to local environmental plans and goals will occur.

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**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.*

This state land is rural, legally accessible, and has fair recreational value. The proposal would not affect recreational activities.

Proposed Alternative: The proposed action is not expected to impact general recreational and wilderness activities on this state land.

No Action Alternative: No impacts to the quality of recreational and wilderness activities will occur.

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**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.*

Proposed Alternative: The proposal does not include any changes to housing or developments. No direct or cumulative effects to population or housing are anticipated.

No Action Alternative: No impacts to the density and/or distribution of population and housing will occur.

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**22. SOCIAL STRUCTURES AND MORES:**

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

Proposed Alternative: No impacts to the areas social structures, native/traditional lifestyles, or communities are anticipated to occur.

No Action Alternative: No impacts social structures, native/traditional lifestyles, or communities will occur.

**23. CULTURAL UNIQUENESS AND DIVERSITY:**

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

Proposed Alternative: No impacts to the areas cultural uniqueness and/or diversity are anticipated to occur.

No Action Alternative: No impacts to the areas cultural uniqueness and/or diversity will occur.

**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.*

Proposed Alternative: The proposed project would improve the irrigation delivery system for the lessee's pivot. The trust would receive \$250 for this Land Use License. This amount reflects that of similar licenses for similar purposes

No Action Alternative: No impacts to the social and economic circumstances will occur.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Casey Kellogg	<b>Date:</b> January 25, 2016
	<b>Title:</b> Land Use Specialist	

**V. FINDING**

**25. ALTERNATIVE SELECTED:**

**Proposed Action Alternative-Approve the project as proposed to install 900 feet of 24 inch plastic pipe to replace the existing irrigation ditch and to improve the irrigation water delivery system on state and private lands.**

**26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

This project, as proposed, should have no significant, detrimental impacts or cumulative effects regarding the project area. The project should reduce ditch loss, which will improve water quantity and the efficiency of its benefits to the irrigation system which in turn improves the state land. Minimal ground disturbance will be addressed through pertinent and valid license stipulations by requiring appropriate mitigation measures to include: washing equipment and vehicles before they enter the project area, weed management, and reseeding disturbed areas as necessary with a seed mix approved by DNRC staff.

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

EIS       More Detailed EA       No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Andy Burgoyne
	<b>Title:</b> Helena Unit Manager, Central Land Office
<b>Signature:</b>	<b>Date:</b> 1/26/16