

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Tim Wilson Irrigation Improvements
Proposed Implementation Date:	Summer, 2019
Proponent:	Lessee, Tim Wilson
Location:	T1N R5W Section 26
Trust:	Montana State University
County:	Jefferson County

I. TYPE AND PURPOSE OF ACTION

The DNRC Lessee, Tim Wilson, has submitted a proposal to place irrigation improvements on his Montana State Trust Land grazing lease #9005 located in Section 26, T1N R5W. The portion of the improvements located on Trust Land would include burying a pipeline through 500' of Section 26 in the south east corner and making some improvements to the dam located in the SE1/4 of Section 26. The pipeline would source water from a dam structure which is fed from a turn out on the irrigation ditch in Section 35. The pipeline would be buried in the same location as the existing ditch system from the dam structure, through Sections 35, 26 and 25 to deliver water to Mr. Wilson's deeded, irrigated hay land in Section 25. The dam in Section 35 has an overflow drainage of approximately 2200' feet to the dam on State Land in Section 26. In the rare event of system failure, the dam on State Land would need some repairs to maintain structural integrity. The overflow from this dam is directed north to a natural drainage which then flows east. This dam is approximately 1.5 miles upstream from the nearest home site in NW1/4NE1/4 of Section 25. This pipeline would replace the ditch system of water conveyance to improve water efficiency. Mr. Wilson has indicated that the soils are very sandy in this area and he loses excessive amounts of water to seepage in the ditches. Please see attached map.

II. PROJECT DEVELOPMENT

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

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

Patrick Rennie, Department of Natural Resources and Conservation Archaeologist
Montana Natural Heritage Program

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

No other agencies are known to have jurisdiction and permits on this section.

3. ALTERNATIVES CONSIDERED:

Alternative A: No action alternative. The proposed project would not be approved.

Alternative B: Action Alternative: Allow the proponent to install a buried pipeline and make improvements to the dam on 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.

No fragile, compactable, or unstable soils are present. Construction of the project would entail burying approximately 500 feet of 12-inch diameter pipe buried at 48 inches deep. Impacts to the soil would be minimized by use of a

backhoe to place the pipe, disturbing what is an existing ditch system. Improvements to the existing dam in the SE1/4 of Section 26 would be made to hold water in the event of structure failure of the system in Section 35. The disturbed soil would be reseeded to maintain stability and minimize erosion.

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.

This State Land has a drainage which flows west to east in the N1/2N1/2 of the section. An existing historic ditch runs through very small portions of the section: approximately 560 feet in SE1/4SW1/4 and 500 feet in SE1/4SE1/4. The 560 feet in SE1/4SW1/4 would be abandoned and no longer used after this project is installed. A pipeline would be buried in the same location as the 500 feet of ditch in SE1/4SE1/4. The overflow from a dam located to the south in Section 35 flows to the dam in SE1/4SE1/4 of Section 26 of State Land. The overflow from the dam on State Land flows north to the drainage in N1/2N1/2. The improvements made to the dam on state Land would improve safety to the deeded land and homesites downstream in Section 25. This dam has not stored enough water for livestock use in the recent years. Cattle currently water off the state land and this will not change.

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.

Air Quality would not be affected by this project.

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.

Cover, quantity, and quality of vegetative communities would not be significantly affected by this project due to the low area of disturbance. The pipeline would be buried in an existing ditch, and improvements to the dam would include lowering the upstream dam face and building up the crest to allow the dam to have the ability to capture more water before flowing into the spillway. All disturbed areas would be reseeded with a seed mix approved by DNRC.

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 project would have minimal impacts to terrestrial, avian and aquatic wildlife species and their habitats. Construction practices used in the placement of the pipeline and improvements to the dam would be a one-time short duration occurrence to limit disturbance and will not lead to negative cumulative effects on wildlife.

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. There is a point observation of Long-billed Curlew in the NW1/4NW1/4 of Section 26. This species has a confirmed breeding area based on the presence of a nest, chicks, or territorial adults during the breeding season. The Great Blue Heron has a confirmed nesting area buffered by 6,500 meters to encompass areas commonly used for foraging near the breeding colony. Section 26 is within the buffer area for this species. This project should have minimal impacts to both of these species due to the small number of acres and short construction time frame.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that the Beal Ditch has been formally recorded and assigned Smithsonian Trinomial 24JF2083, the ditch is privately owned and the DNRC has no administrative jurisdiction under the Montana State Antiquities Act. Installation a pipeline into the ditch to bolster flow rate will have No Effect to state owned Heritage Properties.

A field inspection by Heidi Crum was completed on June 24, 2019. No cultural resources were found in the vicinity of the proposed project.

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 is located in a rural part of Jefferson County, approximately 5 miles south of Whitehall, MT. This section of State Land is located ½ mile west of Highway 55 and is not visible from the road due to the topography of the area. All disturbed sites at the dam and pipeline route would be reseeded and will not alter 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.

No demands for additional environmental resources are required for this project. No cumulative effects to environmental resources should result from this project.

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 during the scoping for this project.

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 the project.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

If approved, this project is designed to improve water efficiency for irrigation and improve downstream safety.

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 will not create or 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.

No significant increase in tax revenues are expected as a result 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 increased demand for government services are expected as a result of this 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 locally adopted environmental plans will be affected by this project.

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 project will not negatively alter recreational activities in the area, this section is not legally accessible to the public.

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.

No change in population will result from this project.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No change in social structures and mores are expected as a result of this project.

23. CULTURAL UNIQUENESS AND DIVERSITY:

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

The action affects water efficiency for irrigation.

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.

This grazing lease provides approximately \$1457 annually to the Montana State University trust. This project would include a Land Use License with an annual fee of \$200 for the pipeline to cross State Lands.

EA Checklist Prepared By:	Name: Heidi Crum	Date: 7/8/19
	Title: Land Use Specialist	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B: Action Alternative: Allow the proponent to install a buried pipeline and make improvements to the dam on State Land.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Installation of the pipeline would improve irrigation water efficiency and improvements to the dam increase overflow water safety to homesites and deeded land downstream.

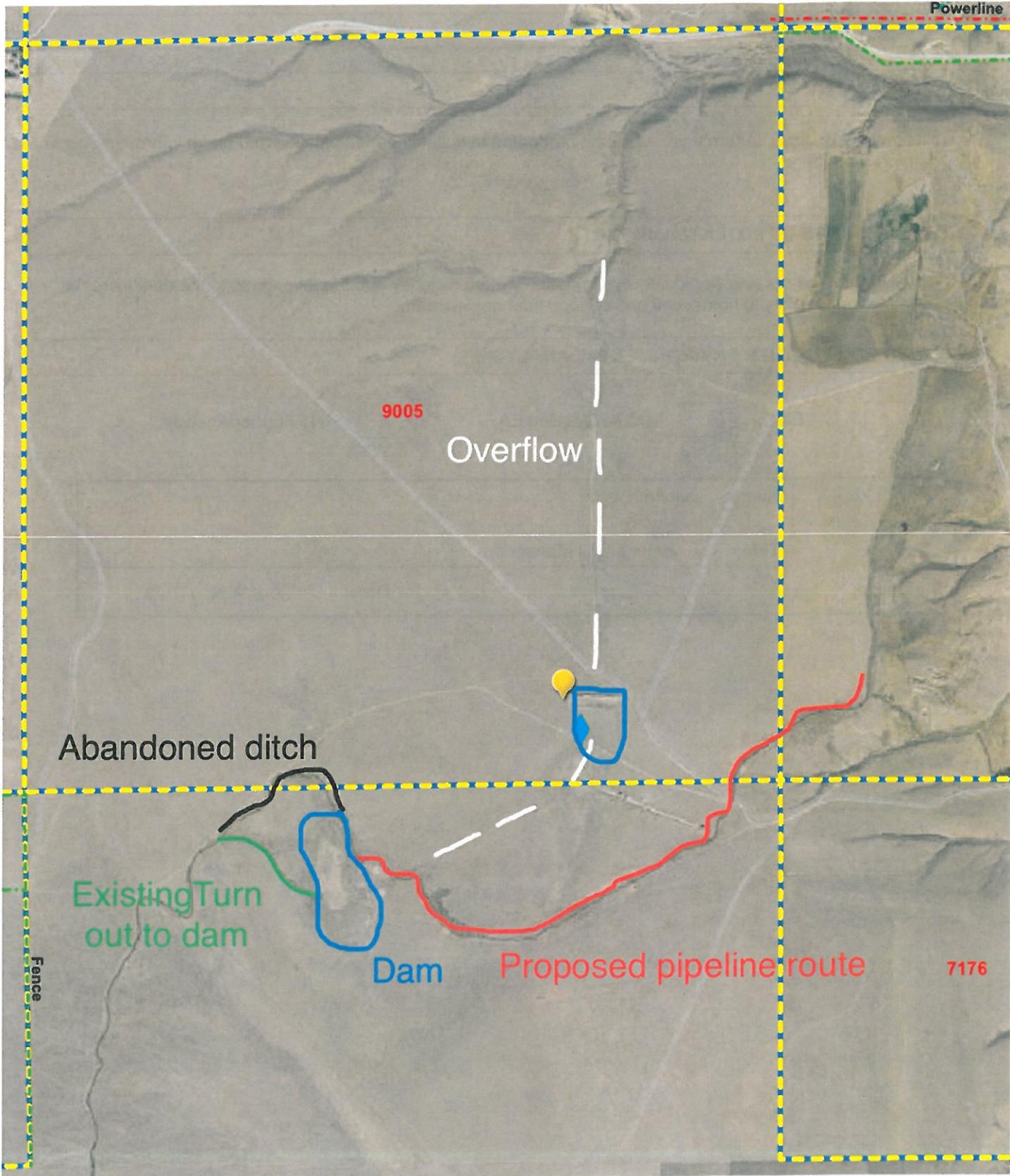
27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

No Further Analysis

EA Checklist Approved By:	Name: John Huston
	Title: Helena Unit Manager
Signature: 	Date: 7/23/19



Powerline

9005

Overflow

Abandoned ditch

Existing Turn
out to dam

Dam

Proposed pipeline route

7176

Fence