

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Bar Z Spring Developments, Buried Stock Water Pipelines and Stock Tanks Request 2020
Proposed Implementation Date:	Spring – Summer 2020
Proponent:	DNRC Grazing Lessee, John Hanson – Bar Z Ranch Inc.
Location:	T11N R6E Section 36
County:	Meagher

I. TYPE AND PURPOSE OF ACTION

The DNRC Grazing Lessee, John Hanson of the Bar Z Ranch Inc., has submitted a proposal to place an improvement on his Montana State Trust Land grazing lease number 7221 located in Section 36, T11N R6E. The portion of the improvement located on Trust Land would include developing two springs; each with a collection box, burying up to approximately 100 feet of plastic pipeline to proposed new tanks; all of which would be located on State Trust Land. One spring development would be in the northeast quarter of the section and the other would be in the southwest quarter of the section. The project would provide multiple dependable water sources to a dry area, would increase grazing distribution, improve rangeland management, and would keep cattle out of the flowing spring water, other undeveloped springs and wet areas in the section. Please see attached maps.

II. PROJECT DEVELOPMENT

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

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

Jay Kolbe, Department of Fish, Wildlife, & Parks Wildlife Biologist
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 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 Common Schools.

3. ALTERNATIVES CONSIDERED:

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

Alternative B: Action Alternative: Allow the proponent to develop 2 springs; each would include installing a spring collection box, buried pipeline, and a stock water 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.

No fragile, compactable, or unstable soils are present. Construction of the project would entail developing 2 existing springs. Construction on both sites would include installing a spring collection box, burying up to 100 feet of pipeline and installing a stock water tank. A backhoe would be used to place the collection box, pipe and tank. The pipeline installation would include disturbing up to 36" in width. Impacts to the soil would be minimal due to the short construction time frame and small scale of the project on the landscape. Disturbed areas would be less than an acre per spring development.

The following information was derived from Web Soil Survey for this section. The development in the northeast quarter would be on Bowery-Lolo complex type soils which are from alluvium parent material and consist of silt loam in the top 19 inches over graveley loams. The development in the southwest quarter would be on Bairsprin-Poin-Libeg complex type soils which consist of colluvium parent material and contain channery sandy loams over very channery loams. Both of these soils types have a slight erosion hazard, are well to moderately suited for mechanical site preparation, low to moderate resistance to soil compaction, and high restoration potential.

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 location of the proposed spring development in the northeast quarter of the section is near the head of an unnamed tributary to Newlan Creek which flows in a south-east direction. The spring in the southwest quarter of the section is near the head of an unnamed tributary which flows southwest into Spring Creek which flows into Buckingham Reservoir. This reservoir is in Section 3 T10N-R6E, southwest of the Montana State Trust Land Section 36. There is an existing developed spring and tank near the center of Section 36. This development is near the head of an unnamed tributary to Spring Creek, which flows north. According to topography maps, Spring Creek flows through the northwest quarter of the section near the northern boundary for approximately 1900 feet. DNRC Land Use Specialist Heidi Crum completed a site visit to this section on August 13, 2019 and there was no flow in Spring Creek at that time. The proposed spring developments would promote better grazing distribution of this section. The topography of the section is steep in the southern half with high elevation open meadows and parks in the southwest quarter. A spring development and tank would entice cattle to the area. The DNRC grazing lessee could get better utilization of the grass in this portion of the section, which has been not utilized by cattle much in the past. This project would have a positive effect on all the tributaries as the cattle would utilize the stock water tanks and stay out of the wetland and riparian areas.

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 amount of disturbance and short construction time frame. The proposed collection boxes and pipelines would be installed on approximately 100 feet of native rangeland and all disturbed areas would be reseeded with a seed mix approved by DNRC. According to Web Soil Survey, the development in the northeast quarter would take place on an overflow ecological site surrounded by upland alpine. This portion of the section is high elevation, approximately 5500 feet. Montana Natural Heritage Map view classifies this site as Big Sagebrush Steppe land cover. According to Web Soil Survey, the development in the southwest quarter would take place on a Shallow Cool Woodland ecological site. This development would be at approximately 5750 feet in elevation. Montana Natural Heritage Map view classifies this site as Rocky Mountain Montane Douglas-fir Forest and Woodland land cover. DNRC Land Use Specialist completed a site visit to this section on 9/12/19, looked at both proposed sites and found the following species at the spring development locations: Douglas fir, juniper, big sagebrush, woods rose, shrubby cinquefoil, western yarrow, western wheatgrass, green needlegrass, rough fescue, Idaho fescue, bluebunch wheatgrass and Kentucky bluegrass.

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 increase the availability of water for both livestock and wildlife. Construction practices used in the placement of the spring collection boxes, pipelines and stock tanks would be a one-time, short duration occurrence to limit disturbance and will not lead to negative cumulative effects on wildlife. A wildlife escape ramp would be placed in the tanks for birds and small mammals.

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 near the project area. The wolverine polygon for confirmed areas supported by observations of the species within 10 kilometers occurs in the N $\frac{1}{2}$ N $\frac{1}{2}$ of Section 36. This polygon does not occur at the locations for either of the spring developments. There are no documented point observations of any species of concern in Section 36.

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 results revealed that no cultural or paleontological resources have been identified in the APE, but it should be noted that Class III level inventory work has not been conducted there to date.

Because the topographic setting and geology suggest a low to moderate likelihood of the presence of cultural or paleontologic resources, the proposed action is expected to have No Effect to Antiquities. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are

identified during project related activities, all work will cease until a professional assessment of such resources can be made.

A field inspection by DNRC Land Use Specialist Heidi Crum was completed on August 12, 2019. No cultural resources were found near the proposed projects.

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 in a rural part of Meagher County, approximately 1.4 miles west of Highway 259. Mcguire Road runs through the northern portion of the section, this road is no longer maintained by the county and does not receive public traffic. Both spring developments are in forested areas, and are concealed by vegetation from the general view of the section. These projects would alter aesthetics of the area temporarily during construction and minimally when the project is complete.

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 access to water to aid in improving livestock distribution and forage utilization.

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. The improved access to upland water sources may increase use of the area by wildlife, enhancing recreational opportunities.

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 because of this project.

23. CULTURAL UNIQUENESS AND DIVERSITY:

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

The action affects water availability in the area. The increased water availability would improve both livestock distribution and wildlife use 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.

The return to the trust for Common Schools for this project cannot be measured in dollars received. No additional revenue is expected to result from construction of this project as the animal unit months (AUM's) are calculated on a forage production basis. The lessee is expected to harvest that forage and use the AUM's by fencing, placing improvements, and/or herding their livestock. The lessee's spring

development, stock water pipeline and tank projects would increase the overall value of the lease by creating a dependable water source on the affected section and adjacent Trust Lands.

EA Checklist Prepared By:	Name: Heidi Crum	Date: 1/8/2020
	Title: Land Use Specialist	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B: Action Alternative: Allow the proponent to develop 2 springs; each would include installing a spring collection box, buried pipeline, and a stock water tank.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Installation of the spring collection boxes, stock water pipelines and stock water tanks would help disperse livestock over the lease and help better utilize the available forage. No long term or cumulative impacts are anticipated from the implementation of this proposal.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EI More Detailed EA No Further Analysis

EA Checklist Approved By:	Name: John Huston
	Title: Helena Unit Manager
Signature: 	Date: 2/6/20

T11N-R6E Section 36: Aerial imagery and topographic maps of the section are below.

Existing spring development indicated by waterdrop in green box next to water tank icon near the center of the section.

Proposed spring developments in NE¼ and SW¼ indicated by waterdrop in yellow box icons.



