

CHECKLIST ENVIRONMENTAL ASSESSMENT	
Project Name: Drill well and install associated solar pump and stock water tanks.	Proposed Implementation Date: October 2018
Proponent: Matt Miller, Rose Hill Cattle Co. Inc., 41 Spring Coulee Rd. , Glasgow, MT 59230	
Type and Purpose of Action: The applicant proposes to drill a water well and install a solar pump and two associated stock water tanks on School Trust land to provide a reliable source of water on the tract for livestock.	
Location: SE4NW4 Section 24, Township 31N, Range 39E	County: Valley

I. PROJECT DEVELOPMENT	
1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.	Mr. Miller submitted an Improvements Request Form and briefly discussed the project with Glasgow Unit staff.
2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	The Montana Department of Natural Resources and Conservation (DNRC) has sole jurisdiction over the land surface within the area of impact. The project will need to be approved by DNRC staff in the Glasgow Unit office.
3. ALTERNATIVES CONSIDERED:	Action Alternative: Grant permission to the proponent to install the well and tanks on School Trust land. No Action Alternative: Deny permission to the proponent to install the well and tanks on School Trust land.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS
4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are	The area of impact contains a Theony-Phillips complex of soils with 1-5%

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

fragile, compatible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?

slopes. This soil is not fragile or unstable. No unusual geographic features are present and no special reclamation considerations are necessary.

Action Alternative: There will be some soil compaction with heavy equipment operation during drilling of the well.

No Action Alternative: Under this alternative there will be no changes to soils on the School Trust land.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?

There are no important surface water resources present within the area of impact. The only water resource in the immediate area is the underground aquifer which would be accessed by the drilling of the well.

Action Alternative: The proposed project will increase water availability to livestock and wildlife in the area. The flow rate of the well would likely be too little to have a measurable impact on the water level of the underground aquifer.

No Action Alternative: Under this alternative, there will be no impacts to water quality, quantity and distribution.

6. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?

This project is not influenced by any air quality regulations or zones. No pollutants will be produced.

Action Alternative: This type of project on the School Trust land will have no impact on air quality.

No Action Alternative: Under this alternative there will be no impacts to air quality.

7. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered?

The current vegetative community consists primarily of native and non-native grasses and forbs. There are

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

<p>Are any rare plants or cover types present?</p>	<p>no rare plant species present.</p> <p>Action Alternative: In the immediate vicinity of the tank, some level of trampling of vegetation will occur. This is generally unavoidable around water sources but will benefit the plant community on the rest of the tract by allowing for better distribution of livestock and grazing management.</p> <p>No Action Alternative: Under this alternative there will be no impacts to the plant communities on the School Trust land.</p>
<p>8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>The School Trust land provides habitat mainly for antelope and deer, as well as upland and grassland birds.</p> <p>Action Alternative: The project will result in a more stable, consistent source of water for wildlife in the area.</p> <p>No Action Alternative: Under this alternative there will be no impacts to the possible use of the School Trust land as wildlife habitat.</p>
<p>9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern?</p>	<p>The area of impact does not contain fragile or critical habitat, or wetlands. The area is classified as Core Greater Sage-grouse habitat by Executive Order 10-2014, but the nearest known lek is approximately 3 miles away. The following are species of concern that may use the area seasonally: Little Brown Myotis, Swift Fox, Sprague's Pipit, Ferruginous Hawk, Chestnut-collared Longspur, Greater Sage-grouse, Baird's Sparrow, Long-billed Curlew, McCown's Longspur and Brewer's Sparrow.</p> <p>Action Alternative: Drilling of the well and installation of the tank will have no long-term impacts on sensitive species' potential use of the area. The proponent will be required to fit</p>

II. IMPACTS ON THE PHYSICAL ENVIRONMENT

the tanks with a "bird ramp" device to minimize potential conflicts with use of the tank by upland birds.

No Action Alternative: Under this alternative there will be no impacts to the environmental resources on this School Trust land.

10. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?

The area of impact contains no historical, archaeological or paleontological resources.

Action Alternative: The project will have no impact on historical, archaeological or paleontological resources.

No Action Alternative: There will be no impact to historical or archaeological sites under this alternative.

11. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?

The proposed work is to be done on School Trust land that is legally accessible by the public but is not easily visible from the nearest public road (Hwy. 24N).

Action Alternative: No major impact to the aesthetics of the School Trust land are expected. There would now be a water tank where there previously was none.

No Action Alternative: Under this alternative there will be no impacts to aesthetics associated with the School Trust land.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?

Environmental resources in the area are not specifically limited and are not affected by the proposed project. No nearby activities will affect the project.

Action Alternative: The proposed project will place no demands on any environmental resources in the area.

II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
	No Action Alternative: Under this alternative there will be no demands placed on environmental resources of land, water, air or energy.
13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract?	<p>There are currently no other studies, plans or projects on this tract of School Trust land.</p> <p>Action Alternative: This project will not impact any other plans or studies that DNRC has on this School Trust land.</p> <p>No Action Alternative: Under this alternative there will be no impacts to the plans or studies that DNRC has on this School Trust land.</p>

III. IMPACTS ON THE HUMAN POPULATION	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
14. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	<p>The operation and movement of heavy equipment and vehicles has inherent risks whether on School Trust land or not.</p> <p>Action Alternative: Drilling the well would require the use of heavy equipment.</p> <p>No Action Alternative: Under this alternative there will be no impacts to human health or safety.</p>
15. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	<p>The area of impact is classified as grazing acreage and is grazed seasonally by cattle.</p> <p>Action Alternative: The stock water improvement will increase the availability of water to livestock grazing on the School Trust land.</p> <p>No Action Alternative: Under this alternative there will be no impacts</p>

	to agricultural activities on the School Trust land.
16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	<p>Action Alternative: The project will not create nor impact any jobs in the area.</p> <p>No Action Alternative: There will be no impacts to quantity and distribution of employment under this alternative.</p>
17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	<p>Action Alternative: The project will have no impacts on the local and state tax base and tax revenues.</p> <p>No Action Alternative: There will be no impacts to the local and state tax base under this alternative.</p>
18. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?	<p>Action Alternative: There would be no additional demand for governmental services.</p> <p>No Action Alternative: Under this alternative there will be no additional demand for government services.</p>
19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	<p>There are no special management plans in effect on the School Trust land. It is managed for typical agricultural activities (livestock grazing).</p> <p>Action Alternative: The project has cleared DNRC management plans.</p> <p>No Action Alternative: Under this type of alternative there will be no impacts on locally adopted environmental plans and goals.</p>
20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	<p>This tract has good potential for recreation due to ease of access by the public. No wilderness areas or additional public lands are accessed through this tract (besides adjacent School Trust lands).</p> <p>Action Alternative: No changes to public land access or recreational potential would occur.</p>

	<p>No Action Alternative: There will be no impacts to the recreational values associated with the School Trust land under this alternative.</p>
<p>21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?</p>	<p>Action Alternative: The project will not impact the density and distribution of population and housing.</p> <p>No Action Alternative: There will be no impacts to the density and distribution of population and housing.</p>
<p>22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?</p>	<p>Action Alternative: The project will not disrupt the traditional lifestyles of the local community.</p> <p>No Action Alternative: There will be no impacts to the social structures under this alternative.</p>
<p>23. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?</p>	<p>Action Alternative: The project will not impact the cultural uniqueness and diversity of this rural area.</p> <p>No Action Alternative: There will be no impacts to the cultural uniqueness and diversity under this alternative.</p>
<p>24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:</p>	<p>Functioning stock water developments are necessary to get water to livestock and generally help with management of grazing distribution within pastures.</p> <p>Action Alternative: The improvement of the stock water resources on this tract will add value to the tract and allow for better management of the livestock grazing.</p> <p>No Action Alternative: There will be no impacts to the social and economic circumstances under this alternative.</p>

EA Checklist Prepared By: s/Jack Medicott Date: 9/25/18
Jack Medicott Land Use Specialist

IV. FINDING	
25. ALTERNATIVE SELECTED:	Action
26. SIGNIFICANCE OF POTENTIAL IMPACTS:	No significant impacts anticipated.
27. Need for Further Environmental Analysis: <input type="checkbox"/> EIS <input type="checkbox"/> More Detailed EA <input checked="" type="checkbox"/> No Further Analysis	

EA Checklist Approved By: Matthew Poole Glasgow Unit Manager
Name Title

s/Matthew Poole\s Date: September 25, 2018
Signature