CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	**Peter Stockwater**
Proposed Implementation Date:	July 15th, 2016
Proponent:	Peter Moe
Location:	18N 15E Sections 36
County:	Fergus
Trust:	Common Schools

I. TYPE AND PURPOSE OF ACTION

Peter Moe has requested to run a spur line and tank onto his state lease number 8292. The pipeline will be approximately .4 miles in length. Purpose of this project is to develop dependable water so to implement a consistent grazing rotation.

II. PROJECT DEVELOPMENT

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

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

Department of Natural Resources and Conservation (DNRC)
Northeastern Land Office (NELO)
Peter Moe

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

The DNRC, and NELO have jurisdiction over this proposed project.

DNRC is not aware of any other agencies with jurisdiction or other permits needed to complete this project

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action) – Under this alternative, the Department does not grant permission to install the stockwater pipelines and tanks.

Alternative B (the Proposed Action) – Under this alternative, the Department does grant permission to install the stockwater pipelines and 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.

Map unit: 56 - Danvers clay loam, 2 to 8 percent slopes

Component: Danvers (90%)

The Danvers component makes up 90 percent of the map unit. Slopes are 2 to 8 percent. This component is on terraces. The parent material consists of clayey alluvium derived from limestone. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. This component is in the R046XC503MT Clayey (cy) Rru 46-c 10-14" P.z. ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 25 percent.

Map unit: 176 - Neldore-Rock outcrop complex, 15 to 60 percent slopes

Component: Neldore (45%)

The Neldore component makes up 45 percent of the map unit. Slopes are 15 to 60 percent. This component is on plains, hills. The parent material consists of clayey residuum over consolidated shale. Depth to a root restrictive layer, bedrock, paralithic, is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is very low. Shrink-swell potential is high. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R058AC059MT Shallow Clay (swc) Rru 58a-c 11-14" P.z. ecological site. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Rock outcrop (35%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop is a miscellaneous area.

Erosion Hazard (Off-Road, Off-Trail)

Aggregation Method: Dominant Condition
Tie-break Rule: Higher

Fergus County, Montana
Survey Area Version and Date: 15 - 09/11/2014

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
56	Danvers clay loam, 2 to 8 percent slopes	Slight	Danvers 90% Fairfield 4% Tamaneen 3% Judeli 3%
176	Neldore-Rock outcrop complex, 15 to 60 percent slopes	Severe	Neldore 45% Slope/erodibility

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- The will be some ground disturbance and bare ground created associated with the stockwater installation. The effect will be minimal and the bare ground should revegetate naturally within a few growing seasons. Areas extreme slopes should be avoided. If this is not possible then straw waddles or other water slowing features should be installed to mitigate the erosion 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.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

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.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect 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.

Current plant community is native short grass/shrubs associated with clayey shallow clay Eco sites.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- The will be some ground disturbance and bare ground created associated with the stockwater installation. These areas will be prone to noxious weed infestations. Frequent scouting should occur until revegetation has occurred to suppress noxious weed establishment. The pipeline scar will remain visible for many year, due to the disturbance.

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.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

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.

A search of the Montana Natural Heritage Program for Species of Concern with a state rank of 2 or higher was conducted in the township that includes the area of potential effect. (State rank of 3 means Potentially at risk because of **limited** and/or **declining** numbers, range and/or habitat, even though it may be abundant in some areas.)

The Western Milksnake and Dwarf Shrew are two species that could potential be in the area.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- Temporary displacement or incidental take may occur during construction of the Stockwater pipeline and tank. No population effect is anticipated.

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 *Antiquities* have not been identified in the APE. 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.

Alternative A (No Action) - No effect anticipated.

Alternative B (the Proposed Action) - No effect anticipated.

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.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

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.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

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.

Alternative A (No Action)-No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

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.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect 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.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

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.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

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

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

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.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

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.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

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

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

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.

Alternative A (No Action)- No effect anticipated.

Alternative B (the Proposed Action)- No effect anticipated.

EA Checklist Prepared By:	**Name:**	Brandon Sandau
	Title:	Land Use Specialist
Signature:		**Date**: May 6, 2016

V. FINDING

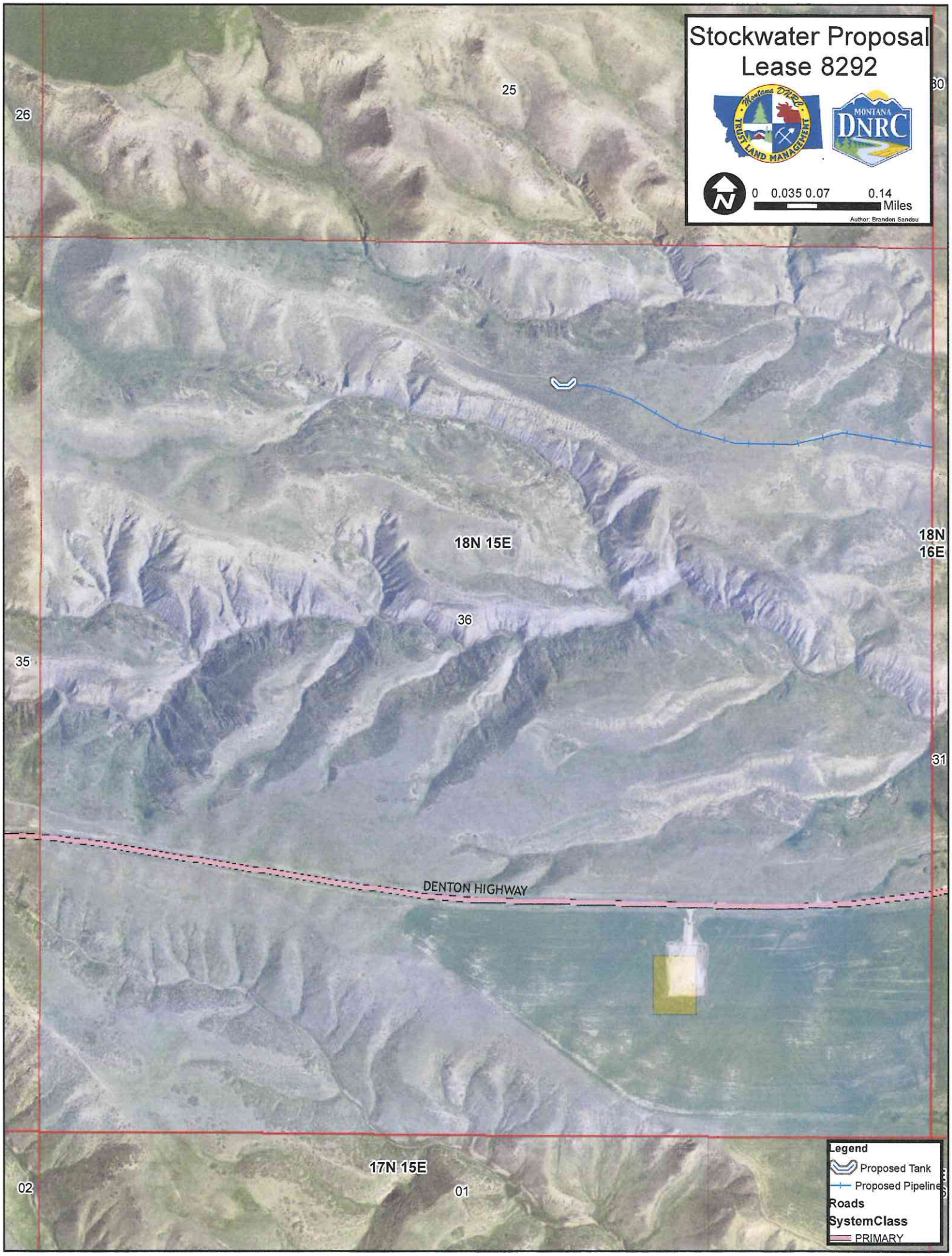
25. ALTERNATIVE SELECTED:

Alternative B (the Proposed Action) – Under this alternative, the Department does grant permission to install the stockwater pipeline and tank.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:					
	EIS		More Detailed EA	XXX	No Further Analysis

EA Checklist Approved By:	Name:	Barny D. Smith
	Title:	Unit Manager, Northeastern Land Office
Signature:		Date: May 6, 2016


Stockwater Proposal
Lease 8292
0 0.035 0.07 0.14
Miles
Author: Brandon Sandau
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16E
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35
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DENTON HIGHWAY
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02
01
Legend
Proposed Tank
Proposed Pipeline
Roads
SystemClass
PRIMARY