

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Right-of-Way for Sewer Lagoon Expansion at Missile Alert Facility L-01
Proposed Implementation Date:	July 2026
Proponent:	United States Air Force (USAF)
Location:	S½ SE¼, Sec. 20, T11N, R16E
County:	Fergus
Trust:	Common Schools

I. TYPE AND PURPOSE OF ACTION

This action would authorize a right-of-way for the expansion of the sewer lagoon at the Missile Alert Facility L-01 ("LIMA") on State Trust Lands. The project would include construction, maintenance, and continued use of the lagoon. Expansion is necessary because the existing lagoon has reached capacity, reducing treatment effectiveness. During winter months, the current lagoon size also makes draining and maintenance costly and operationally difficult. As part of the project, the existing helipad would be slightly modified to accommodate the new configuration.

II. PROJECT DEVELOPMENT

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

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

The Department of Natural Resources and Conservation (DNRC)
Northeastern Land Office (NELO) & Lewistown Unit Office
Proponent: United States Air Force
Surface Lessees: E.L. Peterson Ranch INC.
Other:

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

The DNRC, and Northeastern Land Office-Lewistown Unit have jurisdiction over this proposed project.

The proponent is responsible for acquiring all necessary permits for the proposed project and settling all surface damages with the surface lessees.

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action) – Under this alternative, the Department would not grant permission for the expansion of the existing sewer lagoon. Construction, maintenance, and use of an expanded lagoon system would not occur, and the associated helipad modification would also not take place. The existing lagoon would continue to operate at its current capacity, and current limitations in effectiveness and winter maintenance challenges would persist.

Alternative B (the Proposed Action) – Under this alternative, the Department would authorize a right-of-way for the expansion of the existing sewer lagoon at Missile Alert Facility L-01 "LIMA" on State Trust Lands. This action would allow for the construction, maintenance, and use of the expanded lagoon system, which is intended to increase capacity, improve operational effectiveness, and reduce winter maintenance challenges. As part of this project, the existing helipad would be slightly modified to accommodate the new lagoon footprint and associated infrastructure.

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.

Soils in the proposed lagoon expansion area are generally rated as "somewhat limited" for shallow excavations and pose a severe hazard for rutting (see Appendix A). These soils are suitable for lagoon construction when proper design, grading, and compaction practices are applied. Key considerations include slope, depth to bedrock, soil permeability (Ksat), depth to the water table, and organic matter content. While soils that are overly porous or shallow can increase the risk of seepage or construction challenges, these limitations can be effectively managed using standard engineering methods. With these measures in place, no significant direct, indirect, or cumulative impacts to soil quality, stability, or moisture are anticipated.

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 proposed lagoon expansion is not expected to significantly impact local or regional water resources. Short-term construction effects such as sediment-laden runoff or minor fuel leaks will be controlled with standard best management practices and prompt reclamation. Long-term risks of groundwater seepage or overflow are minimized through proper lagoon design, liner integrity, embankment stability, and freeboard maintenance. No new water withdrawals or diversions are proposed. With these measures, no significant direct, indirect, or cumulative impacts to water quality, quantity, or distribution are 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.

Short-term impacts to air quality would include minor dust and exhaust emissions from construction equipment. Long-term impacts would primarily consist of localized odors associated with lagoon operation. No significant cumulative impacts to air quality are 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.

Vegetation disturbance will be limited to approximately 2.85 acres. Disturbed areas will be reseeded using the seed mix in Appendix B to promote native plant recovery and minimize erosion. No rare plant species or unique cover types are present. Spotted knapweed is present and will be managed by the right-of-way holder. With these mitigation measures, no significant direct, indirect, or cumulative impacts to vegetation are anticipated.

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 area consists of grazed rangeland supporting common grassland and shrubland species. Construction may temporarily displace wildlife and remove ~2.85 acres of cover; these effects are localized and

reversible following reclamation and reseeding. No perennial waters are within the disturbance footprint, so direct effects to fish or aquatic habitat are not anticipated. To minimize impacts to nesting birds protected under the Migratory Bird Treaty Act, work will occur outside the primary nesting season where practicable or avoidance buffers will be established. With these measures, no significant direct, indirect, or cumulative impacts to terrestrial, avian, or aquatic habitats are 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.

Eastern Red Bat, Little Brown Myotis, and Northern Hoary Bat are species of concern in the analysis area. These species are unlikely to be affected due to the lack of suitable roosting or hibernation habitat, such as mature trees or caves, within the project footprint. Some temporary displacement of individual wildlife may occur during construction, but no lasting effects are anticipated. A full list of species of concern is provided in Appendix C. No significant direct, indirect, or cumulative impacts to terrestrial, avian, or aquatic life and habitats are expected.

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, and each locality was inventoried to Class III standards in 2019.

Proposed sewage lagoon construction activities are 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.

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 an agricultural lease area and is not visible from scenic or populated areas. Temporary visual changes will occur during construction, and disturbed areas will be reseeded post-construction. Noise and light impacts will be minimal and limited to daytime work hours. No significant direct, indirect, or cumulative impacts to aesthetics are 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.

The project will require approximately 2.85 acres of land, minimal water for construction and dust control, and fuel for equipment. No permanent energy infrastructure is required. No other nearby activities will be affected, and no cumulative impacts to land, water, air, or energy resources are 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.

Previous studies and DNRC land management records, NELO site files, and prior environmental reviews for the existing lagoon are relevant to this tract. No current or proposed federal, state, or private actions in the vicinity are expected to result in cumulative impacts beyond those described. No significant direct, indirect, or cumulative impacts to environmental resources are 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.

Construction risks include slips, trips, falls, and equipment-related injuries; adherence to OSHA standards, PPE, and safety protocols will minimize these risks. The operational lagoon will be maintained to prevent overflow or unauthorized access. Signage and restricted access will protect workers and the public. No significant direct, indirect, or cumulative impacts to human health or safety are anticipated.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

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

The project will not add to or deter from existing industrial, commercial, or agricultural activities in the area. No significant direct, indirect, or cumulative effects are 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.

The project will not create, relocate, or eliminate any jobs. No significant effects to the local or regional employment market are 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.

No changes to tax revenue are anticipated. No significant direct, indirect, or cumulative impacts are expected.

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

The project will not increase traffic, school attendance, or need for additional fire or police services. No significant cumulative impacts are 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.

No applicable zoning or management plans affect this project. No significant impacts are 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.

No recreational or wilderness areas will be affected. No significant impacts are 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

The project does not involve housing or population changes. No significant impacts are anticipated.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No native, unique, or traditional communities are present; no significant impacts are anticipated.

23. CULTURAL UNIQUENESS AND DIVERSITY:

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

No unique cultural, historical, or aesthetic qualities will be affected. No significant impacts are 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.

The project will result in a one-time \$7125.00 fee to the Common School Trust. No significant cumulative economic or social impacts are anticipated.

V. FINDING

25. ALTERNATIVE SELECTED:

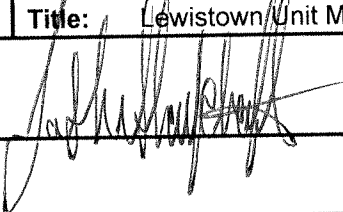
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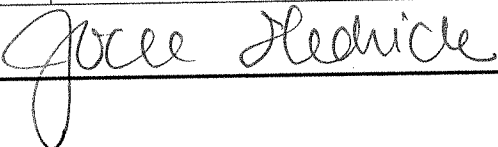
26. SIGNIFICANCE OF POTENTIAL IMPACTS:

After evaluating the potential environmental effects of the proposed lagoon expansion, it has been determined that no significant direct, indirect, or cumulative impacts to environmental resources or the human population are expected. Standard construction practices, reclamation procedures, and mitigation measures (e.g., reseeding, erosion control, wildlife avoidance) will minimize temporary disturbances. The project is consistent with existing land management objectives and will not adversely affect soils, water, air, vegetation, wildlife, cultural resources, aesthetics, or social and economic conditions.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

☐ EIS ☐ More Detailed EA ☒ No Further Analysis

EA Checklist Prepared By:	Name: Josh Stoychoff Title: Lewistown Unit Manager
Signature: 	Date: 8/20/25

EA Checklist Approved By:	Name: Jocee Hedrick Title: Area Manager, Northeastern Land Office
Signature: 	Date: 8/20/25

Appendix A: Soil Ratings

Table -- Sewage Lagoons -- Summary by Rating Value			
Summary by Rating Value			
	Rating	Acres in AOI	Percent of AOI
Very limited		3.0	90.4%
Null or Not Rated		0.3	9.6%
Totals for Area of Interest		3.3	100.0%
Description -- Sewage Lagoons			
ENG - Engineering			
<p>Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, saturated hydraulic conductivity (Ksat), depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.</p> <p>Ksat is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a Ksat rate of more than 14 micrometers per second are too porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.</p> <p>A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.</p> <p>The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.</p> <p>Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).</p> <p>The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.</p> <p>Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.</p>			
Rating Options -- Sewage Lagoons			
Aggregation Method: Dominant Condition			
Component Percent Cutoff: None Specified			
Tie-break Rule: Higher			
Table -- Shallow Excavations -- Summary by Rating Value			
Summary by Rating Value			
	Rating	Acres in AOI	Percent of AOI
Very limited		27.0	52.7%
Somewhat limited		24.3	47.3%
Totals for Area of Interest		51.3	100.0%

Appendix B: Reclamation Seed Mix

Species	% of Seed mix	Pounds PLS/ac
Western Wheatgrass	35	2.8
Slender wheatgrass	35	2.8
Bluebunch Wheatgrass	15	1.2
Green Needlegrass	10	0.8
Lewis flax or purple prairie clover	5	0.4

Appendix C: Species of Concern

Sort Order	Field Guide	ELCODE	Species Group	Common Name	Scientific Name
1	Field Guide	AMACC05010	Mammals	Eastern Red Bat	<i>Lasiurus borealis</i>
1	Field Guide	AMACC01010	Mammals	Little Brown Myotis	<i>Myotis lucifugus</i>
1	Field Guide	AMACC05032	Mammals	Northern Hoary Bat	<i>Lasiurus cinereus</i>
2	Field Guide	ABNKC12061	Birds	American Goshawk	<i>Accipiter atricapillus</i>
2	Field Guide	ABPBXA0010	Birds	Baird's Sparrow	<i>Centronyx bairdii</i>
2	Field Guide	ABPBX94040	Birds	Brewer's Sparrow	<i>Spizella breweri</i>
2	Field Guide	ABNSB10010	Birds	Burrowing Owl	<i>Athene cunicularia</i>
2	Field Guide	ABPBXA6040	Birds	Chestnut-collared Longspur	<i>Calcarius ornatus</i>
2	Field Guide	ABNKC19120	Birds	Ferruginous Hawk	<i>Buteo regalis</i>
2	Field Guide	ABNKC22010	Birds	Golden Eagle	<i>Aquila chrysaetos</i>
2	Field Guide	ABPBR01030	Birds	Loggerhead Shrike	<i>Lanius ludovicianus</i>
2	Field Guide	ABNNF07070	Birds	Long-billed Curlew	<i>Numenius americanus</i>
2	Field Guide	ABNNB03100	Birds	Mountain Plover	<i>Anarhynchus montanus</i>
2	Field Guide	ABPBK04010	Birds	Sage Thrasher	<i>Oreoscoptes montanus</i>
2	Field Guide	ABPBM02060	Birds	Sprague's Pipit	<i>Anthus spragueii</i>
2	Field Guide	ABPBXA6010	Birds	Thick-billed Longspur	<i>Rhynchophanes mccownii</i>
5	Field Guide	AFCJB31020	Fish	Northern Redbelly Dace	<i>Chrosomus eos</i>
6	Field Guide	IMGASB5328	Invertebrates	Berry's Mountainsnail	<i>Oreohelix strigosa berryi</i>
7	Field Guide	PDAST2E1P0	Vascular Plants	Long-styled Thistle	<i>Cirsium longistylum</i>
7	Field Guide	PDAST8H1S8	Vascular Plants	Scribner's Ragwort	<i>Senecio integerrimus</i> var. <i>scribneri</i>

