

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	LF Ranch Pipeline & Fence
Proposed Implementation Date:	, Spring 2020
Proponent:	Lessee, LF Ranch
Location:	T19N R7W Sections 4, 5, 8 & 9
County:	Lewis & Clark

I. TYPE AND PURPOSE OF ACTION

The Lessee, LF Ranch, has submitted a proposal to place improvements on three sections Montana State Trust Land. DNRC grazing lease #7817 located Section 5, T19N R7W and DNRC grazing lease #8275 located in Sections 4 and 9, T19N R7W. The portion of the improvement located on State Trust Land would include burying a total of approximately 2.7 miles of 3-inch, HDPE pipeline from an existing well located on deeded land in Section 6. Approximately 1.8 miles of this pipeline would be on State Trust Land in Sections 4, 5 and 9. The pipeline would supply three proposed stock water tanks, two of which are on State Trust Land. One tank would be on the border between Sections 4 & 5 and the other tank would be in the northern central part of section 9. The pipeline would be installed by a D8 dozer with a 6-foot long ripper. A tracked tractor would help pull the dozer along the pipeline route. A backhoe would be used to install the stock water tanks. Ground disturbance would be minimal with this equipment. Disturbed areas would be reseeded with a DNRC approved seed mix. This project also involves multiple cross fences in all three of the state sections mentioned above. Fence would be constructed of three strands of high tensile smooth wire to be electrified when cattle are present. Iron braces at appropriate locations (corners, gates, etc.) with fiberglass posts every 40-50' and wire height spacing would be 20", 30", 40". The top and bottom wires would be electrified while cattle are present, the middle wire would be the ground wire. The proposed fences and stock water tanks will enable the ranch to manage the grazing and rangeland in a new and improved way while providing a dependable water source for cattle, keeping them out of undeveloped springs and wet areas. Please see attached map for locations of existing and proposed infrastructure on State Trust Lands.

II. PROJECT DEVELOPMENT

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

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

Brent Lonner, Department of Fish, Wildlife & Parks Biologist: comments are summarized in item #9 below.
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 cross fences on State Trust Lands.

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.

Web Soil Survey indicates soils on the State Lands sections 4, 5 & 9 include loams, complexes, gravelly loams and stony loams. Soils in sections 4 & 5 are mostly Beanlake-Winspect stony loams with a few smaller sites including Wayden-Cabba Rock outcrop complex, Fairfield-Beanlake-Winspect stony loams, and Fluvaquents and Fluvaquentic Haplustolls. Section 9 includes large portions of Shawmut gravelly loam, Vebar-Cuniff fine sandy loams, and Cuniff-Rock outcrop complex. The soils in these sections were examined in "Suitabilities and Limitations for Use" tab of Web Soil Survey. Most of these soils are suitable for fencing, have only a slight erosion hazard potential, and are moderately to well suited for reclamation. However, the ridgetop in Section 5 is rated poorly suited for fencing, high erosion hazard potential and poorly suited for reclamation.

The soils map provided here includes Sections 4, 5, 8 & 9. The entire 640 acres of Section 4 is state land, the other sections are only partially state owned. Please see the map at the end of the document which indicates State ownership in blue. The ridgetop mentioned in the previous paragraph is labeled 579E (Wayden-Cabba Rock outcrop complex), in the south west area of this map.



Construction of the proposed pipeline would entail burying the pipe 6 feet deep. Impacts to the soil would be minimized by use of a ripper to bury the pipe. This type of equipment causes minimal disturbance to the ground surface, typically less than 1 foot in width during construction and only a small ridge is left after the pipe is ripped into place. The disturbed soil would be reseeded to maintain stability and minimize erosion. Fence would be constructed of three strands of high tensile smooth wire to be electrified when cattle are present. Iron braces in appropriate locations (corners, gates, etc.) with fiberglass posts every 40-50', and wire height spacing would be 20", 30", 40". The top and bottom wires would be electrified while cattle are present, the middle wire would be the ground wire. Please see the map at the end of this document for location of existing and proposed infrastructure of this project on State Trust Lands.

A clean, reliable water source at stock water tanks could minimize cattle use of lower, wet areas and decrease erosion potential of those sites. Cross fences and more water sources would enable the ranch to improve the grazing management, which would improve the vegetation vigor and production while decreasing sheet 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.

Section 5 in this project area contains an unnamed tributary to Smith Creek. It is mostly fed by a spring located on deeded land in the NE1/4 of Section 5. Neither the proposed pipeline nor the cross fences would cross this tributary. Smith Lake is located in Section 8. No other bodies of water or tributaries were identified in Sections 4 and 9 via topographical maps and site visits in 2019 and 2020. The proposed fences and stock water tanks would help to improve livestock grazing distribution, protect the riparian area and banks of Smith Lake, and provide a clean, reliable water source for cattle and wildlife. This project would have a positive effect on the area keeping cattle out of the bottoms of drainages, dams and surrounding wet 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.

Vegetation in all three of the sections are mostly Mixed Grass Prairie with some areas of Great Plains Shrubland in the rolling hills. The dominant vegetation in these sections includes needle and thread grass, bluebunch wheatgrass, Idaho fescue, prairie junegrass and various native, perennial forbs. All three of these sections were evaluated by Land Use Specialists Heidi Crum and Dan Dobler in summer 2019 as part of the grazing lease renewal process.

Cover, quantity, and quality of vegetative communities would not be significantly, negatively affected by the construction and implementation of this project due to the low amount of disturbance and use of low impact equipment. Vegetative communities would have a positive impact in the long term after this project is in place. The pipeline would go through native rangeland and disturbed areas would be reseeded with a seed mix approved by DNRC. LF Ranch is required to manage noxious weeds as part of the grazing lease and would continue to do so on the pipeline route. This project would give the LF Ranch ability to manage the rangeland with the result of increased cover, quantity and quality of the vegetative community.

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. These sections are located between Smith Creek and Elk Creek.

Construction practices used in the placement of the pipeline, stock water tanks and cross fences would be a one-time, short duration occurrence to limit disturbance and will not lead to negative cumulative effects on wildlife.

Wildlife escape ramps 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 in the vicinity of the project area. No point observations of any species of concern are located in Sections 4, 5 and 9. However, these sections are within the polygons for Grizzly Bear and Golden Eagle. The Grizzly Bear polygons represent Recovery Zone Boundaries, monitoring areas, and known distribution. The Golden Eagle polygons represent a buffer of a minimum of 3,000 meters from breeding and nesting areas.

Construction practices used in the placement of the pipeline, stock water tanks and cross fences would be a one-time, short duration occurrence to limit disturbance and will not lead to negative cumulative effects on these species of concern.

FWP Biologist, Brent Lonner, commented that the fence specifications for this project would suffice for wildlife presence in the area. Lonner also commented that infrastructure may be damaged by bears in the area.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

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

A Class III cultural and paleontological resources inventory was conducted of the area of potential effect (APE) on state land. Despite a detailed examination, no cultural or fossil resources were identified in the APE. No additional archaeological or paleontological investigative work is recommended. The proposed project will have No Effect to Antiquities as defined under the Montana State Antiquities Act. A formal report of findings is forthcoming and will be made available through the DNRC and the Montana State Historic Preservation Officer.

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 Lewis & Clark County, approximately 6 miles southwest of Augusta, MT. The disturbed areas would be reseeded. Fences are typical use of infrastructure in rural Montana and this project would only slightly 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 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 would 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 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 availability in dry areas and improves grazing management opportunities. The increased water availability should improve both livestock distribution and wildlife use of the upland areas. Cross fences would improve rangeland sites and forage quality.

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 grazing lease for Sections 4 and 9 (which includes 1240 additional acres) provides approximately \$11,632 annually to the State Normal School trust (UM Western and MSU Eastern). The grazing lease for Section 5 (which includes 200 additional acres) provides approximately \$2,947 to the Montana Tech and Commons Schools trusts.

EA Checklist Prepared By:	Name: Heidi Crum	Date: 3/16/20
	Title: Land Use Specialist	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B: Action Alternative: Allow the proponent to install a buried pipeline and cross fences on State lands.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Installation of the cross fences and stock water pipeline to disperse livestock over the lease and help better utilize the available forage. No long term or cumulative negative impacts are anticipated from the implementation of this proposal.

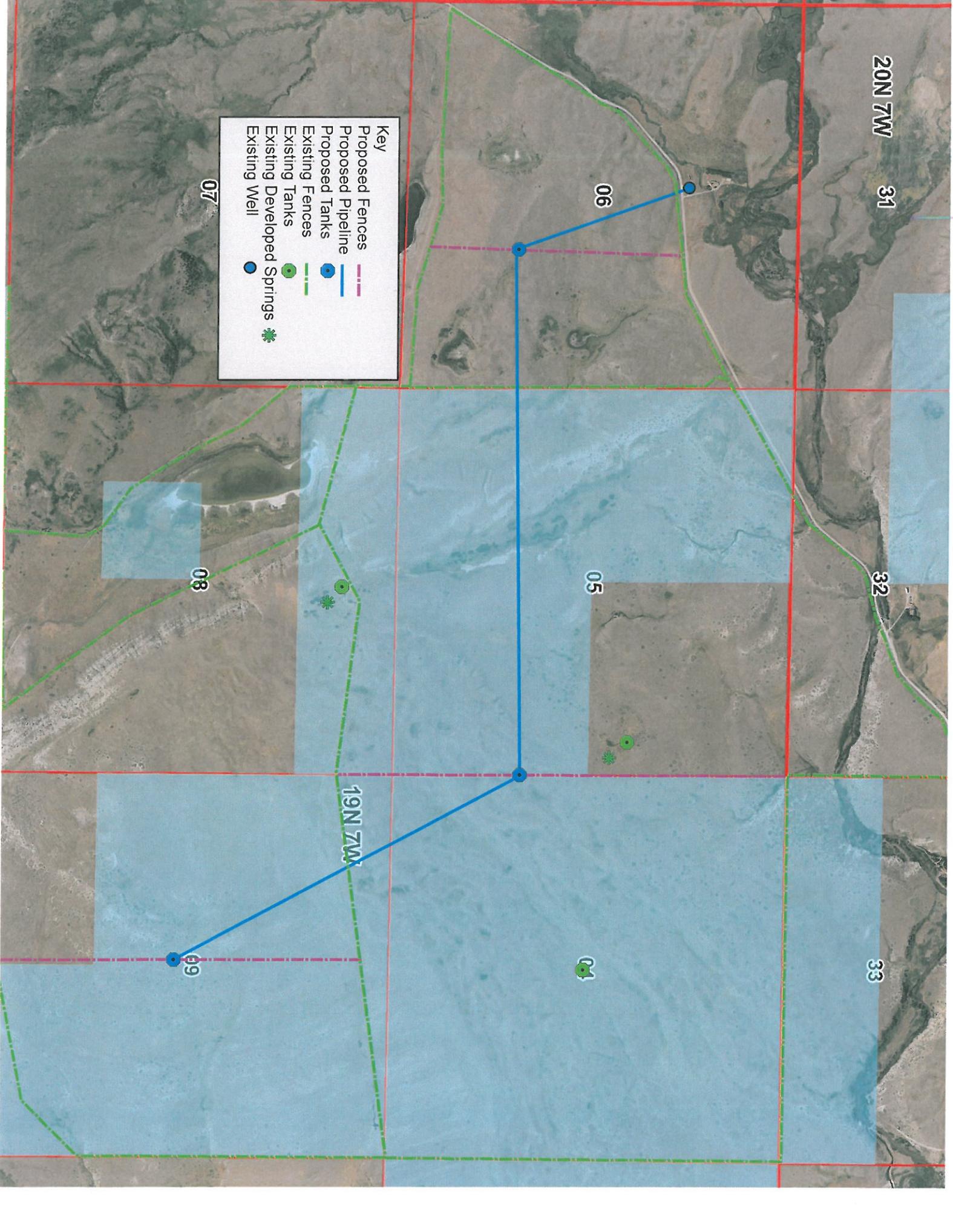
27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

EIS

More Detailed EA

No Further Analysis

EA Checklist Approved By:	Name: Andy Burgoyne	
	Title: Trust Land Manager - CLO	
Signature:		Date: 3/16/20



Key

- Proposed Fences
- Proposed Pipeline
- Proposed Tanks
- Existing Fences
- Existing Tanks
- Existing Developed Springs
- Existing Well

20N 7W

31

06

32

05

19N ZW

33

04

07

08

09