EXHIBIT E

RECLAMATION PLAN

MILTON RESERVOIR

FARMERS SAND RECLAMATION PLAN

Revised March 2025

PREPARED FOR:

Farmers Reservoir Irrigation and Company (FRICO)

PREPARED BY:

ECOLOGICAL RESOURCE CONSULTANTS, LLC
12345 W ALAMEDA PARKWAY
LAKEWOOD, COLORADO 80228

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Appendices

1.0 INTRODUCTION

Milton reservoir is a plains reservoir fed by surface water diversions from the South Platte River through the Platte Valley and Beebe canals. Milton Reservoir, which is an artificial man-made reservoir, was constructed to regulate and store water for irrigation. The reservoir is owned and operated by Farmer's Reservoir and Irrigation Company (FRICO). FRICO also owns the land surrounding the reservoir.

Since its original construction in the early 1900s, the reservoir has accumulated a significant amount of sediment conveyed with inflows that enter the reservoir. In 2019, a geotechnical investigation was completed in the reservoir for the purpose of estimating the thickness of the sediments and evaluating the properties of deposited sediments and the native materials beneath. Sediments, consisting of primarily silty to lean clayey sands were found in thicknesses ranging from 3 feet to 10 feet thick. It is estimated that the accumulated sediments have resulted in approximately 4,000 to 8,000 acre-feet of lost reservoir capacity. FRICO started removing these sediments in November 2021 and will continue the removal process for 20 years.

The sediment removal process consists of using a dredge equipped with a cutter head and suction. The solids are removed as a slurry (approximately 20% solids) from the lake bottom and pumped through a large diameter pipeline to either the settling ponds or the cyclone where the dredge materials are dewatered prior to placing them in stockpiles.

2.0 RECLAMATION PLAN

The disturbed areas that will require reclamation consist of stockpiles, settling ponds, sand plant, dredge operations staging area, and haul roads. Revegetation was selected as the type of reclamation for the stockpiles, settling basins, and sand plant, and dredge operations staging area since these areas consisted of native grasses prior to the mining operations. Permanent roads which have been used during mining operations are also used for daily use of larger vehicles/equipment to support dam maintenance and by oil/gas companies for access to infrastructure. These roads are routinely graded and graveled and will continue to be maintained as such through the mining operations and after mining is completed to support operations and maintenance at the reservoir. There are approximately 379 acres of revegetation and 8-acres of permanent roads. The locations of the settling ponds, stockpiles, sand plant, dredge operations staging area, and haul roads are presented on Exhibit F – Reclamation Plan Map, Sheets R-1 thru R3.

2.1. VEGETATION EARTHWORK PLAN

2.1.1. SETTLING PONDS

Scenario 1: Prior to the closure of mining operations, it is likely that the settling ponds will be backfilled with materials excavated from the reservoir basin. If this occurs, reclamation will involve grading the backfilled surfaces to restore the area's contours, ensuring they blend seamlessly with the natural topography. The inter-berms between the ponds will also be integrated into the overall landscape, and the entire area will be seeded and mulched to encourage regrowth of native vegetation.

Scenario 2: The pond will be drained, and the surrounding embankments will be cut down. The area will then be regraded to contours that blend with the surrounding landscape. Finally, it will be seeded and mulched to promote the regrowth of native vegetation.

2.1.2. STOCKPILES

The stockpile slopes will be developed with an overall angle of 3H:1V as the final configuration, resulting in a roughly graded outer surface. To facilitate reclamation, these slopes will need to be further graded to establish more uniform contours that align with the existing topography. Once the slopes have been roughly graded, they will be scarified in preparation for seeding and mulching.

2.1.3. SAND PLANT

The sand plant will be dismantled and removed from the site. In addition, the sand plant foundation/concrete base slab and surrounding gravel base will be removed and transported to a recycle facility. The ground surface will be graded to match the existing topography and scarified in preparation for seeding and mulching.

2.1.4. DREDGE OPERATIONS STAGING AREA

The construction trailer, Conex's, and fuel tanks will be removed from the site. In addition, the asphalt and 8,000-gallon concrete containment structure will be demolished and transported to a recycle facility. The ground surface will be graded to match the existing topography and scarified in preparation for seeding and mulching.

2.1.5. FINAL GRADING

Final grading of stockpile slopes will be 3H:1V. Settling basins, sand plant, and dredge operations staging area final grades will be restored to blend in with the existing/surrounding topography. Final grading will be accomplished using a dozer and/or grader, as applicable.

2.2. VEGETATION PLAN

The Site is situated within the Great Plains ecoregion at an approximate elevation of 4,800 feet above mean sea level (AMSL). The landscape within the Site surrounding the open water reservoir predominantly consists of Western Great Plains Sandhill Steppe (22%), Western Great Plains Shortgrass Prairie (10%), Cultivated Cropland (7%), and Pasture/Hay (7%). Smaller portions of upland habitat comprise less than 1% of the total area and include Inter-Mountain Basins Playa, Disturbed/Successional Shrub Regeneration, and Developed Open Space. Vegetated wetland habitat mapped within the site comprises less than 1% of the total land cover and includes a few small pockets of fringe habitat along the dam which are characterized by the Western Great Plains Floodplain, and Western Great Plains Riparian Woodland and Shrubland vegetation communities.

The vegetation plan was developed so a single seed mix can be used throughout to establish ground cover quickly, minimize weed infestation, and stabilize the soil to reduce wind and water erosion with minimal maintenance.

2.2.1. SOIL CHEMISTRY

Understanding soil chemistry for any seeding work is critical for establishment success. Seed will not germinate and develop if soil chemistry is not within acceptable ranges. A minimum of 3 composite grab samples of soil in areas to be revegetated will be collected for laboratory analysis. The samples will be sent to Weld Laboratories, Inc. (www.weldlabs.com) in Greeley, Colorado for a Complete Nutrient Test or equivalent. Most critical soil chemistry parameters are salts below 2 mmhos/cm and pH between 6.0 to 7.5.

2.2.2. SOIL AMENDMENTS

Once soil chemistry results are reviewed, soil amendments may need to be added or the seed mix modified. The addition of soil amendments (e.g., fertilizer + organic matter) should be considered to facilitate more rapid native grass establishment. Soil amendments will only be applied based on the nutrient testing so as not to promote excessive weed growth. Recommended (for initial planning purposes only) soil amendments include 1) Biosole Forte at a rate of 800 pounds per acre, 2) humates at a rate of 200 pounds per acre and mycorrhizae at a rate of 20 pounds per acre. Soil amendments will be applied hydraulically to the soil surface or incorporated into the soil surface through other broadcast methods.

2.2.3. SOIL PREPARATION

All areas to be seeded shall be ripped or tilled to a minimum depth of 3-inches. Soil decompaction will be completed with a tractor, ATV with disc/harrow, or with dozer rippers.

2.2.4. SEEDING

The seed mix presented in the following table is diverse and effective at wind and water erosion control, is fast growing and has a fibrous and/or rhizomatous root system which will provide adequate ground cover. Seeding will be completed using drill methods (drill seeding is preferred) or by broadcast seeding on slopes or narrow locations where equipment may have limited access.

Scientific Name	Common Name	% of Mix	LBS/PLS Required per Acre
Achnatherum hymenoides	Indian ricegrass	10	6
Andropogon gerardii	Big bluestem	10	7
Elymus lanceolatus	Streambank wheatgrass	20	11
Koeleria macrantha	Prairie Junegrass	20	0.1
Pascopyrum smithii	Western wheatgrass	15	12
Setaria italica	Foxtail millet	5	2
Sporobolus cryptandrus	Sand dropseed	20	0.1
Total:		**100**	**38.2**

Notes:
LBS/PLS = pounds pure live seed. Values in table are per acre
LBS/PLS values for Prairie Junegrass and Sand dropseed set to 0.1 due to high seeds/weight
Quantity assumes 200 seeds per square foot broadcasted.
Reduce 25% for drill seeding (150 seeds per square foot).
Total quantity assumes 1.0 acre of seeding. Adjust accordingly for required seeding area.
Species variety to be determined approved based on commercial availability.
Final species composition and rates subject to commercial availability.

- Seed will be purchased locally at Granite Seed (https://graniteseed.com) or Arkansas Valley Seed (https://avseeds.com) or equivalent.
- Dormant seeding is recommended generally between October through May when soil moisture is adequate. Summer seeding is not recommended.
- Seed bags will be thoroughly mixed prior to distributing for seeding.
- Drill Seeding is the most effective and preferred method. All seed is to be drilled one-quarter (1/4) inch to one-half (1/2) inch into the soil at the specified pure live seed (PLS) per acre rate with a mechanical grass drill with depth bands and an agitator in the seed box. Rows shall be spaced no more than seven (7) inches apart. One-half (1/2) of the required PLS per acre will be drilled in one compass direction, and then the remaining half of the required PLS per acre will be drilled in a direction ninety degrees (90°) to the first half. Drills will be calibrated to ensure the correct pounds per acre application rate.
- Broadcast Seeding will be used on the 3:1 slopes (e.g. stockpile slopes) that are not accessible to

drilling. Broadcast seeding shall be accomplished by hydro-seeding or using hand-operated "cyclone-type" seeders or rotary broadcast equipment attached to construction or revegetation machinery. All machinery will be equipped with metering devices.

2.2.5. MULCH, SOIL BINDER AND STABILIZATION

Mulching will follow seeding for immediate soil stabilization and to enhance seed germination. Mulching will be completed within twenty-four (24) hours after seeding. Soil binders will be utilized not only on stockpiles but also for protection and establishment in areas where there is a greater chance of erosion. The following describes the two proposed methods for mulching and stabilization.

- Hydraulic application of wood fiber (Profile High Performance Mulch-Wood) with organic tackifier (Rantec EM-Tack) at a rate of 2,000 pounds per acre. Hydraulic application will result in a consistent and complete uniform coverage done from multiple angles to prevent any shadow effect areas. Wood fiber mulch is the best type to minimize weeds.

- An environmentally friendly biodegradable soil binder (e.g. GRT Enviro Binder, Enviroseal LDC Liquid Dust Control) will primarily be utilized on the stockpile slopes and top areas where there is a greater chance of erosion from wind and water. The soil binder may also be used in areas where extreme wind and water may affect seed growth. In this case, the seed binder will be applied following seeding. Manufacturer recommendations will be followed for mixing the soil binder with water and application rates. The soil binder is not to be applied during storm events (e.g. rain, snow, wind) or on frozen soil/material.

The disturbed areas to be seeded using the seed mix and application rates above are as follows:

Stockpiles – 260 acres
Settling Ponds – 110 acres
Future Sand Plant – 6 acres (estimated)
Dredge Operations Staging Area – 3 acres
Total – 379 acres

2.2.6. TOPSOIL

If topsoil is encountered prior to construction of future settling ponds, the sand plant, and stockpiles the topsoil will be salvaged for use during revegetation of disturbed areas. The salvaged topsoil will be stockpiled northwest of the West Stockpile west of the north/south haul road (Exhibit F - Sheets R2A & R2B). Prior to seeding disturbed areas, salvaged topsoil will be placed at a minimum depth of 4 inches to 6 inches, as needed. If there is not enough topsoil for the disturbed areas, samples will be collected from the surface material and sent to a laboratory for a complete nutrient test (refer to Section 2.2.3 – Soil Chemistry). Dependent on the laboratory results, soil amendments may be added and/or the seed mix modified to enhance growth of vegetation. Refer to Section 2.2.4 – Soil Amendments.

To ensure the stockpile is not eroded when topsoil is not being placed or removed, an environmentally friendly biodegradable soil binder (e.g. GRT Enviro Binder, Enviroseal LDC Liquid Dust Control) will be

applied to the slopes and top areas.

3.0 POST-MINING LAND USE

Historically and currently, Milton Reservoir land is used for access for reservoir/dam maintenance and monitoring and oil/gas operations. Mining operations including stockpile and settling pond locations have been situated to continue accommodating these uses. Future (post-mining) land use will continue accommodating these uses.

4.0 RECLAMATION SCHEDULE

During mining operations, as settling ponds are constructed slopes will be seeded/mulched to provide a vegetative cover to reduce wind and water erosion. Stockpiles will be developed to form a stable configuration with side slopes no greater than 3H:1V. When necessary during interim conditions, an application of soil binder may be required to control wind erosion. As settling ponds and stockpiles are no longer being utilized and upon completion of mining operations, reclamation operations will begin. Earth work such as cut, fill, contouring, and grading will take place immediately with seeding taking place between October through May.

Water will be applied to seeded areas via a water truck. The anticipated seeding water schedule is weekly for the first four (4) months and then monthly for the next eight (8) months. This schedule may be adjusted according to weather conditions and vegetation establishment.

5.0 WEED MANAGEMENT

The primary goals of this Weed Management Plan are to prevent the establishment of any and all new noxious weed species in the affected/disturbed mining areas that will be re-vegetated during and upon completion of the mining operations in accordance with the Colorado Noxious Weed Act, Section 35-5.5-101, et seq., C.R.S. and Weld County Chapter 15 – Vegetation, Article I – Noxious Weed Management Enforcement Policy. The Weed Management Plan is provided in Appendix A.

APPENDIX A

WEED MANAGEMENT PLAN

MILTON RESERVOIR

FARMERS SAND
WEED MANAGEMENT PLAN

March 2025

PREPARED FOR:

Farmers Reservoir Irrigation and Company (FRICO)

PREPARED BY:

ECOLOGICAL RESOURCE CONSULTANTS, LLC

12345 W. ALAMEDA PARKWAY

LAKEWOOD, COLORADO 80228

Table of Contents

1.0 LOCATION

Owner: The Farmers Reservoir and Irrigation Company (FRICO)

Owner Address: 80 South 27th Avenue, Brighton, Colorado 80601

Contact: Scott Edgar **Title:** General Manager

Telephone Number: (303) 659-7373

Farmers Sand Mining Operations Legal Description:

Sections: 3, 4, 9, 10, 11, 14, 15, 22, and 23 Township: 3N Range: 65W
Mine Main Entrance: Latitude 40.218251 N Longitude -104.659137 W

2.0 DESCRIPTION OF LAND AND CURRENT USES

Milton reservoir is a plains reservoir fed by surface water diversions from the South Platte River through the Platte Valley and Beebe canals. Milton Reservoir, which is an artificial man-made reservoir, was constructed to regulate and store water for irrigation.

Since its original construction in the early 1900s, the reservoir has accumulated a significant amount of sediment conveyed with inflows that enter the reservoir. In 2019, a geotechnical investigation was completed in the reservoir for the purpose of estimating the thickness of the sediments and evaluating the properties of deposited sediments and the native materials beneath. Sediments, consisting of primarily silty to lean clayey sands were found in thicknesses ranging from 3 feet to 10 feet thick. It is estimated that the accumulated sediments have resulted in approximately 4,000 to 8,000 acre-feet of lost reservoir capacity. FRICO started removing these sediments in November 2021 and will continue the removal process for several more years (+10 years).

The sediment removal process consists of using a dredge equipped with a cutter head and suction. The solids are removed as a slurry (approximately 20% solids) from the lake bottom and pumped through a large diameter pipeline to either the settling ponds or the cyclone where the dredge materials are dewatered prior to placing them in stockpiles. The plan moving forward is to construct a sand plant that, once operational, will receive dredged materials directly. The plant will separate the sand particles to produce a sellable product while the undersized particles and water will be pumped as a slurry to a settling pond. Water will be returned to the reservoir by gravity through low-level drainage pipes.

The disturbed areas that will require reclamation consist of stockpiles, settling ponds, sand plant, dredge operations staging area, and haul roads. Revegetation was selected as the type of reclamation for the stockpiles, settling basins, sand plant, and dredge operations staging area since these areas consisted of native grasses prior to the mining operations. Permanent roads which have been used during mining operations are also used for daily use of larger vehicles/equipment to support dam maintenance, by oil/gas companies for access to infrastructure, and the Heritage hunting club. These roads are routinely graded and graveled

and will continue to be maintained as such through the mining operations and after mining is completed to support the aforementioned uses. There are approximately 379 acres of revegetation and 8-acres of permanent roads. The areas of disturbance (settling ponds, stockpiles, sand plant, and dredge operations staging area) that will potentially require noxious weed management prior to and during reclamation are presented in Exhibit F – Reclamation Plan Map, Sheets R1 thru R3.

3.0 FUTURE PLANS FOR THE LAND

Historically and currently, Milton Reservoir land and roads are used for access for reservoir/dam maintenance and monitoring, oil/gas operations, hunting and boating clubs. Mining operations including stockpile and settling pond locations have been situated to continue accommodating these uses going into the future (post-mining). Final grading of stockpile slopes will be 3H:1V and settling basins final grade will be restored to blend in with the surrounding topography.

4.0 DESCRIPTION OF WEED INFESTATION

The specific noxious weed species listed below have been identified by the Colorado Department of Agriculture and Weld County as invasive weed species that are non-native plants that are detrimental to the natural land and create problems in agricultural and the environment.

List A - Eradication Species

The species of noxious weeds that the Colorado Department of Agriculture has put on List A have the potential to be very invasive and are either not in Colorado yet or are present in very limited numbers and eradication of these species is still possible. Due to their competitive, aggressive nature they tend to out compete the native vegetation by forming mono-cultures. In addition, many of the species are toxic to livestock and wildlife, or limit grazing potential. The following are List A species found in Weld County and require eradication.

- Cypress Spurge
- Hairy Willow-Herb
- Japanese Knotweed
- Myrtle Spurge
- Purple Loosestrife
- Yellow Flag Iris

List B - Control Species

The plants on List B have the potential to be very invasive that quickly transform an area and typically already established in Colorado. However, they may be just moving into some local areas such as Weld County. Due to these plants not being native to North America they do not have the natural checks such as insects or diseases. Due to their competitive, aggressive nature they tend to out compete the native vegetation by forming mono-cultures. In addition, many of the species are toxic to livestock and wildlife, or limit grazing potential. The following presents which species in Weld County should be eradicated, suppressed, or both.

Eradication

- Absinth Wormwood
- Black Henbane
- Bull Thistle
- Chamomile species
- Chinese Clematis
- Houndstongue
- Moth Mullein
- Oxeye Daisy
- Plumeless Thistle
- Spotted Knapweed
- Sulfur Cinquefoil
- Tamarisk
- Wild Caraway
- Yellow Toadflax

Suppression

- Canada Thistle
- Common & Cutleaf Teasel
- Eurasian Watermilfoil
- Jointed Goatgrass
- Musk Thistle
- Russian Knapweed
- Scotch Thistle
- Yellow Nutsedge

Suppression & Eradication

- Bouncingbet
- Common Tansy
- Dalmatian Toadflax
- Dames Rocket
- Diffuse Knapweed
- Hoary Cress
- Leafy Spurge
- Perennial Pepperweed
- Russian Olive

List C - Suppression Species

In Weld County the focus is on the suppression of Field Bindweed. However, the Colorado Department of Agriculture has placed a number of noxious weed species on List C (see below). The plants on List C are very

invasive and quickly transform an area. The Department advises that these plants be eradicated not allowing them to become established.

- Bulbous bluegrass (Poa bulbosa)
- Cheatgrass aka Downy brome (Bromus tectorum)
- Chicory (Cichorium intybus)
- Common burdock (Arctium minus)
- Common mullein (Verbascum thapsus)
- Common St. Johnswort (Hypericum perforatum)
- Field bindweed (Convolvulus arvensis)
- Halogeton (Halogeton glomeratus)
- Johnsongrass (Sorghum halepense)
- Perennial sowthistle (Sonchus arvensis)
- Poison hemlock (Conium maculatum)
- Puncturevine (Tribulus terrestris)
- Quackgrass (Elymus repens)
- Redstem filaree (Erodium cicutarium)

5.0 MANAGEMENT PLAN

Earth-moving/disturbance activities are anticipated throughout the life of the project and include the construction of settling basins, stockpiles, stormwater drainage systems, reclamation of disturbed areas, and maintaining the haul roads (grading/gravel). These activities have the potential to spread weeds throughout the disturbed mining areas. Weeds can generally spread through the following four pathways.

1. **Soil disturbance** - when soil and existing vegetation is disturbed it creates an opportunity for weeds to move into an area left open or for seeds in the soil to be exposed and germinate.
2. **Contaminated materials** - Weeds often are introduced unintentionally as contaminants in seed, soil, hay, or revegetation materials. This includes weed seeds and plant fragments that can become lodged in or on vehicles and equipment. Seeds also move easily by becoming attached to clothing, shoes, and other personal gear.
3. **Animals** - Pets, domestic livestock and wildlife may spread weeds when seeds attach to their coats or through their droppings.
4. **Environmental** - Wind, water, and soil can move seeds and plant fragments.

The primary goals of this Weed Management Plan are to prevent the establishment of any and all new noxious weed species in the affected/disturbed mining areas that will be re-vegetated during and upon completion of the mining operations in accordance with the Colorado Noxious Weed Act, Section 35-5.5-101, et seq., C.R.S. and Weld County Chapter 15 – Vegetation, Article I – Noxious Weed Management Enforcement Policy.

Non-native species and noxious weeds (List A, B, and C) will be controlled at the mining disturbed areas during and after mining operations and continue throughout the reclamation period until re-vegetation is greater than 70 percent established. Mechanical pulling of List A, B, and C weed species will be conducted using hand tools on an as needed basis to control small populations of weed species. All noxious weeds that are manually collected will be immediately placed into trash bags that will be taken to a landfill. Herbicide treatment by a licensed applicator will be utilized for controlling larger populations of noxious weeds. Any spraying applications should prioritize minimizing drift on to native species. Eradication method is to be determined based on specific targeted species. Upon removal of non-native species and noxious weeds the areas will be re-seeded and mulched to encourage regrowth of native vegetation.

The vegetation plan was developed so a single seed mix can be used throughout to establish ground cover quickly, minimize weed infestation, and stabilize the soil to reduce wind and water erosion with minimal maintenance. The seed mix presented in the following table is diverse and effective at wind and water erosion control, is fast growing and has a fibrous and/or rhizomatous root system which will provide adequate ground cover quickly reducing the chances of invasion of non-native species and noxious weeds. Mulching will follow seeding for immediate soil stabilization and to enhance seed germination. Mulching will be completed within twenty-four (24) hours after seeding.

Scientific Name	Common Name	% of Mix	LBS/PLS Required per Acre
Achnatherum hymenoides	Indian ricegrass	10	6
Andropogon gerardii	Big bluestem	10	7
Elymus lanceolatus	Streambank wheatgrass	20	11
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Pascopyrum smithii	Western wheatgrass	15	12
Setaria italica	Foxtail millet	5	2
Sporobolus cryptandrus	Sand dropseed	20	0.1
	Total:	**100**	**38.2**

Notes:

LBS/PLS = pounds pure live seed. Values in table are per acre
LBS/PLS values for Prairie Junegrass and Sand dropseed set to 0.1 due to high seeds/weight
Quantity assumes 200 seeds per square foot broadcasted.
Reduce 25% for drill seeding (150 seeds per square foot).
Total quantity assumes 1.0 acre of seeding. Adjust accordingly for required seeding area.
Species variety to be determined approved based on commercial availability.
Final species composition and rates subject to commercial availability.

6.0 SCHEDULE

An evaluation of weeds within the mining area shall be completed two times per year once during the early growing season and again during the late growing season, generally being completed in late April/May and then August/September depending on factors such as daily average temperatures and precipitation during the project maintenance period.

7.0 REFERENCES

https://www.weld.gov/Government/Departments/Public-Works/Weed-Management/

Weld County Noxious Weed Management Enforcement Policy

EXHIBIT F

RECLAMATION PLAN MAP

NOTES:

1. THE STOCKPILE SLOPES WILL BE CREATED WITH AN OVERALL ANGLE OF 3H:1V AS THEY ARE LOADED, RESULTING IN A ROUGHLY GRADED OUTER SURFACE. TO FACILITATE RECLAMATION, THESE SLOPES WILL NEED TO BE FURTHER GRADED TO ESTABLISH MORE UNIFORM CONTOURS THAT ALIGN WITH THE EXISTING TOPOGRAPHY. ONCE THE SLOPES HAVE BEEN GRADED, THEY WILL BE SCARIFIED IN PREPARATION FOR SEEDING AND MULCHING.

2. THIS LAYOUT SHOWS THE MAXIMUM STOCKPILE CONFIGURATION ASSUMING NO DREDGED MATERIALS ARE HAULED OFF-SITE.

LEGEND:

- EXISTING GROUND CONTOURS AND ELEV (2' INTERVAL)
- PERMIT BOUNDARY
- REVEGETATED AREA
- HAUL ROAD

0 600 1200 Feet

N

N4 STOCKPILE

N3 STOCKPILE

N2 STOCKPILE

N1 STOCKPILE

3.0:1

PLATTE VALLEY CANAL

EVANS #2 DITCH

LAKE CHRISTINA

BEEBE DRAW FARMS PKWY

SETTLING POND 1 (RESTORED TO NATIVE TOPOGRAPHY)

EXISTING NORTH SETTLING PONDS (RESTORED TO PRE-MINING CONDITIONS)

DREDGE OPERATIONS STAGING AREA

EXISTING GROUND SURVEY COMPLETED BY AYERS IN 2004 BASED ON NAD83 COLORADO STATE PLANES, NORTH ZONE, US FOOT. VERTICAL DATUM BASED ON NGVD29.

COLORADO LICENSED
LISA JEAN SHEA
04/08/25
32604
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION
A	03/2025	ISSUED FOR PERMITTING

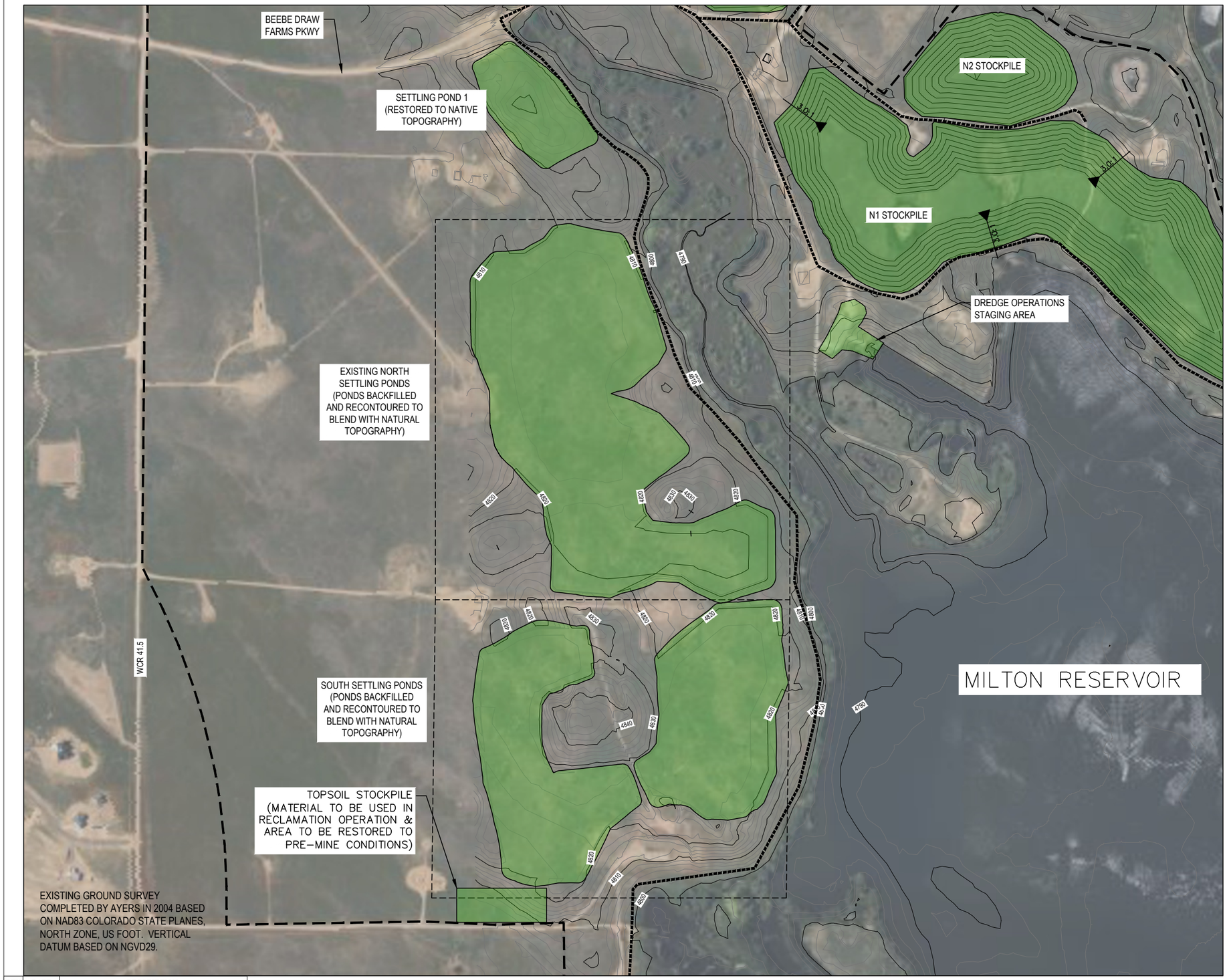
PREPARED BY
ECOLOGICAL RESOURCES CONSULTANTS, LLC
12345 W ALAMEDA PARKWAY SUITE 206
LAKEWOOD, CO 80228

CLIENT
FARMERS RESERVOIR AND IRRIGATION COMPANY (FRICO)

PROJECT
FARMERS SAND

TITLE
RECLAMATION PLAN NORTH STOCKPILES

DRAWING
R-1



NOTES:

1. THE SETTLING PONDS CONFIGURATION ASSUMES THE AREA WILL BE GRADED TO REPLICATE THE PRE-MINING TOPOGRAPHY.
2. THIS LAYOUT ASSUMES THAT POND 1 AND THE SOUTH POND COMPLEX WILL BE CONSTRUCTED, AND RECLAMATION OF THESE AREAS WILL BE REQUIRED. IF THEY ARE NOT NEEDED DURING THE MINING OPERATION AND ARE NOT CONSTRUCTED, THE AREA WILL NOT REQUIRE REVEGETATION.

LEGEND:

- EXISTING GROUND CONTOURS AND ELEV (2' INTERVAL)
- PERMIT BOUNDARY
- REVEGETATED AREA
- HAUL ROAD

N

0 600 1200 Feet

COLORADO LICENSED
LISA JEAN SHEA
04/08/25
32604
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION
A	03/2025	ISSUED FOR PERMITTING

PREPARED BY
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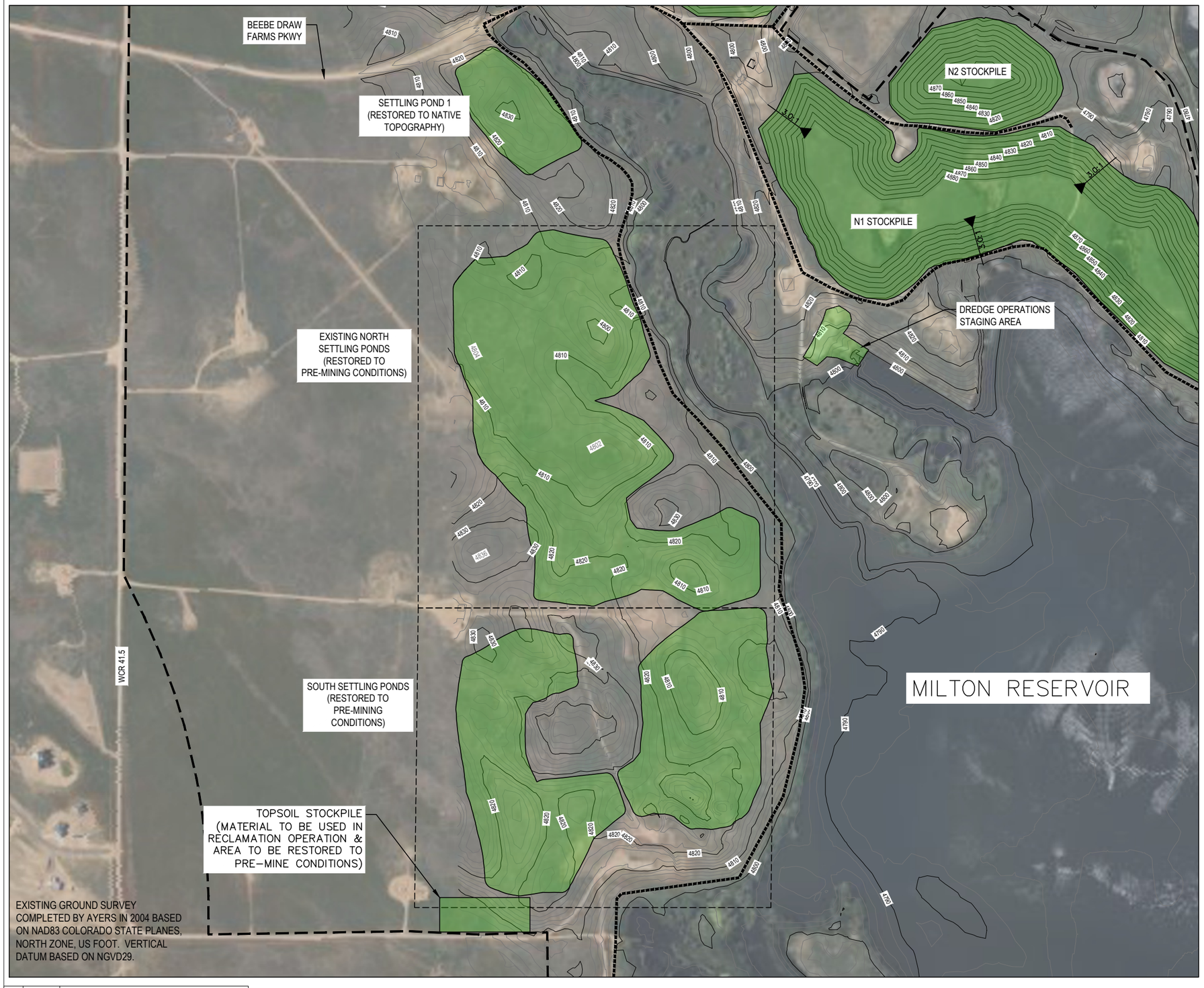
CLIENT
FARMERS RESERVOIR AND IRRIGATION COMPANY (FRICO)

PROJECT
FARMERS SAND

TITLE
RECLAMATION PLAN SETTLING PONDS SCENARIO 1

DRAWING
R-2A



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LEGEND:

- EXISTING GROUND CONTOURS AND ELEV (2' INTERVAL)
- PERMIT BOUNDARY
- REVEGETATED AREA
- HAUL ROAD

N

0 600 1200 Feet

COLORADO LICENSED
LISA JEAN SHEA
04/08/25
32604
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION
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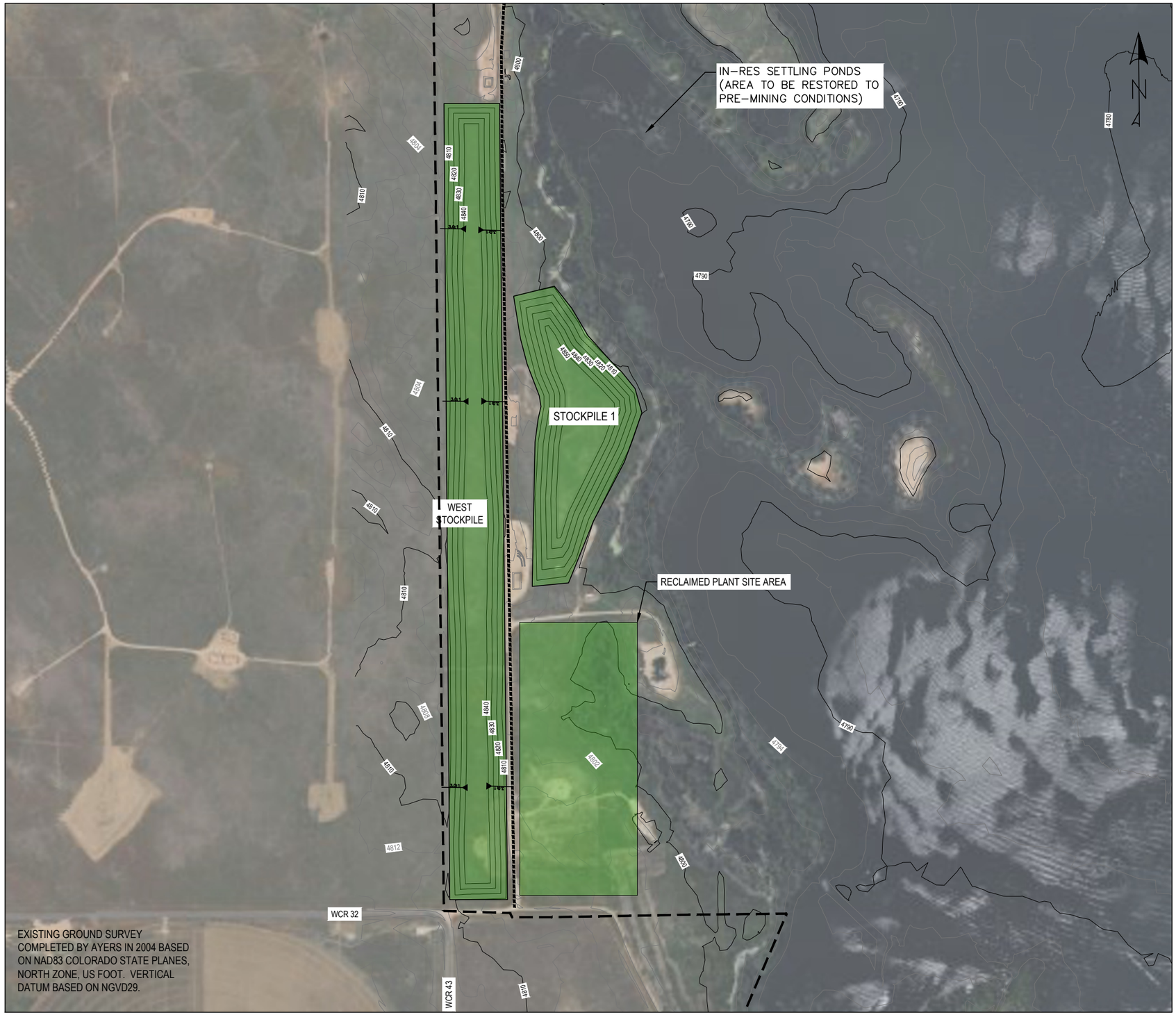
CLIENT
FARMERS RESERVOIR AND IRRIGATION COMPANY (FRICO)

PROJECT
FARMERS SAND

TITLE
RECLAMATION PLAN SETTLING PONDS SCENARIO 2

DRAWING
R-2B



NOTES:

1. THE STOCKPILE SLOPES WILL BE CREATED WITH AN OVERALL ANGLE OF 3H:1V AS THEY ARE LOADED, RESULTING IN A ROUGHLY GRADED OUTER SURFACE. TO FACILITATE RECLAMATION, THESE SLOPES WILL NEED TO BE FURTHER GRADED TO ESTABLISH MORE UNIFORM CONTOURS THAT ALIGN WITH THE EXISTING TOPOGRAPHY. ONCE THE SLOPES HAVE BEEN GRADED, THEY WILL BE SCARIFIED IN PREPARATION FOR SEEDING AND MULCHING.

2. THIS LAYOUT SHOWS THE MAXIMUM STOCKPILE CONFIGURATION ASSUMING NO DREDGED MATERIALS ARE HAULED OFF-SITE.

3. ALL PLANT SITE FACILITIES, EQUIPMENT, AND CONCRETE FOOTINGS/SLABS WILL BE REMOVED FROM SITE. ONCE ALL PLANT FACILITIES HAVE BEEN REMOVED, THE AREA WILL BE SCARIFIED PRIOR TO THE REVEGETATION OPERATION.

LEGEND:

- EXISTING GROUND CONTOURS AND ELEV (2' INTERVAL)
- PERMIT BOUNDARY
- REVEGETATED AREA
- HAUL ROAD

N

0 600 1200 Feet

COLORADO LICENSED
LISA JEAN SHEA
04/08/25
32604
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION
A	03/2025	ISSUED FOR PERMITTING

PREPARED BY
ECOLOGICAL RESOURCES CONSULTANTS, LLC
12345 W ALAMEDA PARKWAY SUITE 206
LAKEWOOD, CO 80228

CLIENT
FARMERS RESERVOIR AND IRRIGATION COMPANY (FRICO)

PROJECT
FARMERS SAND

TITLE
RECLAMATION PLAN SOUTH SIDE

DRAWING
R-3

EXHIBIT G

WATER INFORMATION

EXHIBIT G – WATER INFORMATION

SURFACE WATER RUNOFF

Milton Dam and Reservoir are located in southern Weld County approximately twelve miles north of Hudson, Colorado and thirteen miles south of Greeley, Colorado and is owned and operated by Farmers Reservoir and Irrigation Company (FRICO). The reservoir has an approximate storage capacity of 32,300 acre-feet at the spillway crest and 44,122 acre-feet at the dam crest. The Beebe Seep Canal feeds the reservoir from the south and the Platte Valley Canal from the northwest as shown in **Exhibit C(b).** In addition, precipitation falling directly on the reservoir and runoff from upstream watershed areas contribute to the reservoir. FRICO is in the process of applying for a Mining Permit through the Colorado Department of Reclamation, Mining and Safety (DRMS) to extract soil from the Milton reservoir basin, primarily targeting sand and selling the material for commercial use.

The mine area is situated along the perimeter of the Milton Reservoir, meaning that any runoff from the mine facilities will be contained and flow into the reservoir rather than onto neighboring properties. The watershed area that drains to the west side of the reservoir, where most of the mine facilities are located, extends northwestward and includes the nearby Pelican Lake Ranch neighborhood. While the mine development will not change the ultimate discharge point of the runoff, some rerouting may be necessary to manage runoff effectively. This will help prevent excessive ponding, erosion, and issues with driving on the site roads.

To model rainfall-runoff of the watershed, the hydrological modeling software HEC-HMS (version 4.10) developed by the U.S. Army Corps of Engineers was used. HEC-HMS models a watershed with hydrological elements such as sub-basins, reservoirs, diversions, and reaches. Parameters needed for the HEC-HMS model are as follows:

1. Watershed Sub-basin Areas and Characteristics
2. Basin Loss Method
3. Basin Transformation (Convert excess precipitation into runoff)
4. Meteorological Data (Precipitation depth and distribution)

BASIN CHARACTERISTICS

The tributary areas to the site extend about three miles to the northwest, encompassing approximately 4,635 acres as shown in **Figure 1**. Within this area, there are four primary drainages that converge at specific discharge points along the perimeter of the mine area. The upland sub-basins generally consist of prairie grassland, a residential area, and smaller portions of pasture/hay land. The basin areas, drainage lengths, elevations, and average slopes of the four basins are included in **Table 1**.

Figure 1: Watershed Map
(Yellow lines represent basin boundaries and cyan lines the longest flow paths)

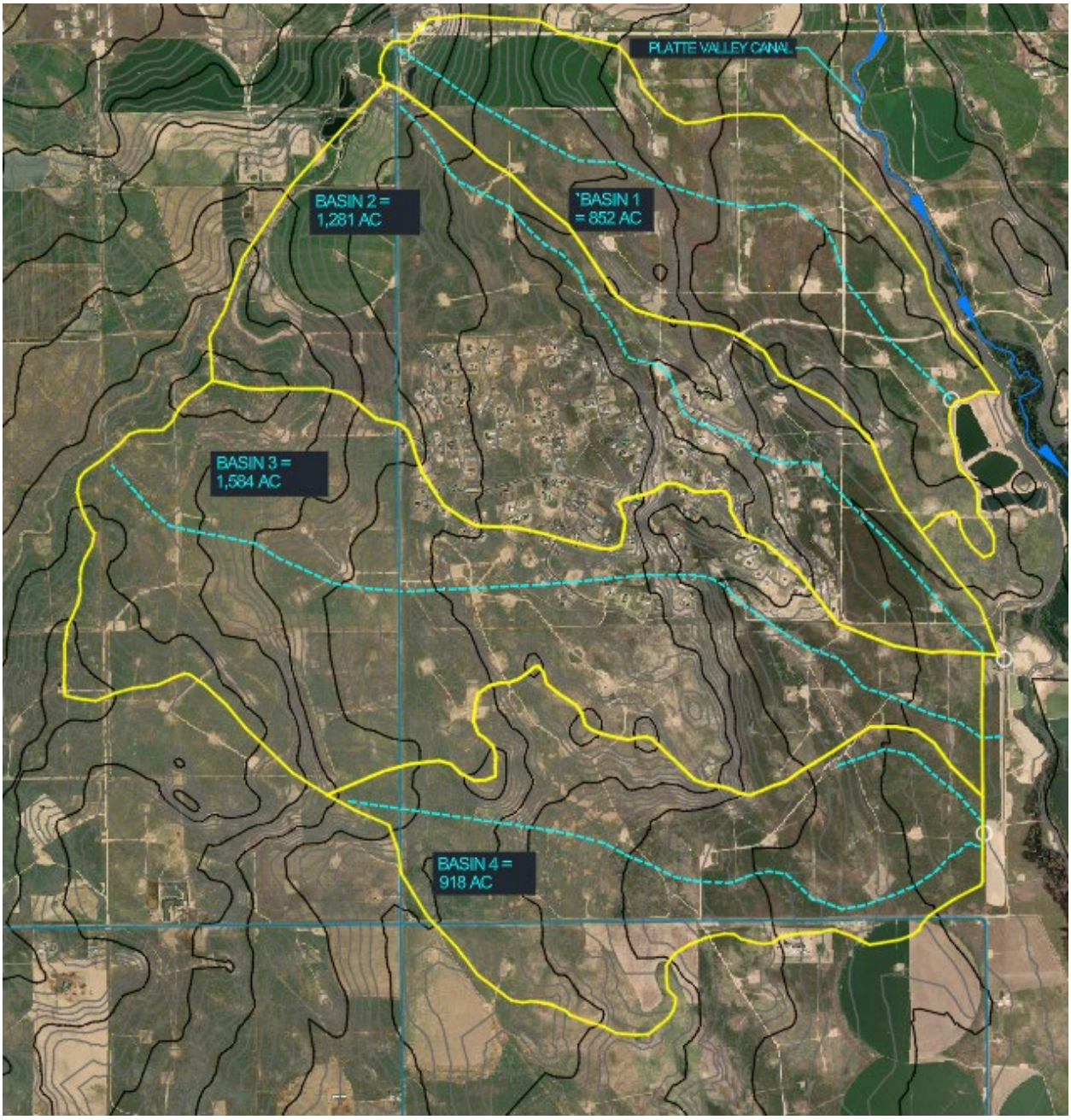


Table 1: Watershed Areas

Basin	Area (ft^2)	Area (ac)	Area (sqmi)	Longest Flowpath Length	Average Flowpath Length	Top Elev (ft)	Btm Elev (ft)	Elev Change (ft)	Longest Flowpath Slope	Basin slope
1	37,100,000	852	1.3308	13,600	8,100	4995	4810	185.0	1.36%	1.35%
2	55,800,000	1,281	2.0015	15,000	10,400	4990	4805	185.0	1.23%	1.35%
3	69,000,000	1,584	2.4750	17,800	9,800	5020	4805	215.0	1.21%	1.20%
4	40,000,000	918	1.4348	13,500	6,500	4980	4810	170.0	1.26%	1.14%

Basin Loss Method

The NRCS/SCS (Natural Resource Conservation Service formerly the Soil Conservation Service) Curve Number (CN) method was used in HEC-HMS to estimate the amount of runoff from a rainfall event in a watershed. This method involves assigning a CN value to each basin based on land use, soil conditions, and vegetation as these parameters reflect the ability of the land surface to absorb or prevent infiltration of rainfall. CNs values were established by the NRCS for different land uses and hydraulic conditions (TR-55). A higher CN values results in higher runoff and vice versa for lower CNs. A CN of 72 was assigned to reflect the surface conditions, which consist primarily of sandy soils and extensive areas of bunch-grass lands with few shrubs and little to no trees. This classification is characteristic of semi-arid climates, where land uses include agriculture, pasture, natural semi-arid open space, and large residential lots (such as those found at Pelican Lake Ranch). A 10% impervious surface factor was applied for conservative estimation.

Storm Event Precipitation and Distribution

The model was developed using three storm events to assess the range of flow rates and their magnitudes. Precipitation depths for the storm events were based on 24-hour durations, derived from POINT PRECIPITATION FREQUENCY (PF) ESTIMATES (NOAA Atlas 14). The three storm durations evaluated were the 5-, 10-, and 100-year, 24-hour storm event with a precipitation depth of 2.26, 2.71, and 4.65 inches (NOAA). The rainfall was distributed throughout the 24-hour timeframe using the hypothetical storm option developed by the NRCS. This method requires an input value for lag time for each basin. These values were estimated and are shown on **Table 2**. The rainfall was spread within the 24-hour period using the NRCS Type 2 distribution.

Rainfall to Runoff Correlation

The Unit Hydrograph Method was used to simulate the correlation of direct runoff to excess precipitation from the sub-basins. Unit hydrographs represent discharge over time produced from one inch of excess rainfall expressed as runoff versus time. The time component of the unit hydrograph is a function of the topography, shape, and infiltration characteristics of the watershed. The lag time (time from the rainfall midpoint), which can be calculated based on geometric and physiographic characteristics of the

watershed, is integral to developing the SCS unit hydrograph. The lag time has been estimated using the equation below (NRCS. The lag times calculated for the watershed basins are included in **Table 2**.

$L = \frac{\ell^{0.8}\,(S+1)^{0.7}}{1900\,Y^{0.5}}$ (NRCS, 1997)	L = Lag time in hours l = Hydraulic length of watershed in feet, S = (1000/CN') – 10, Y = Average watershed land slope.

A single unit duration of 5 minutes or less was used to develop unit hydrographs. Depression storage was neglected for the watershed areas.

Table 2: Lag Time Results

Basin	CN	S	L (hr)	L (min)	Tc
1	72	3.89	1.73	104	4.64
2	72	3.89	2.12	127	5.03
3	72	3.89	2.20	132	6.12
4	72	3.89	1.64	99	5.04

Results of the Hydrologic Model

Peak flows were estimated based on the input parameters and modeled results are included in **Table 3**.

Table 3: Results of Runoff Evaluation

Basin	Storm Event - Peak Flows (cfs)		
	5yr-24hr	10yr-24hr	100yr-24hr
1	100	151	437
2	132	198	567
3	158	237	680
4	113	170	491

Stormwater Runoff Control Measures

FRICO is currently working with the State Land Board - property owner of the area west of the west stockpile - to obtain an easement that would allow runoff to temporarily pond on their land. The existing soils in the area have a high sand content, indicating high infiltration rates, which would likely result in inundated areas draining quickly. However, since it is uncertain whether a flooding easement will be granted, a plan for diverting runoff from the upland areas has been incorporated into the design. This

design is detailed in the following sections. If a flooding easement is obtained, the drainage plan outlined herein will not be required.

Based on this evaluation, the following items will be implemented to control runoff:

1. Basin1: Runoff from Basin 1 flows to the low point downstream of Settling Pond 3A. The total estimated runoff volume generated by a 100-year, 24-hour storm event is approximately 169 acre-feet (7,362,000 cubic feet). The approximate inundation boundary is illustrated in **Figure 2**. The pond embankment is constructed with an internal zone of clayey material and has upstream and downstream side slopes of 3H:1V. The downstream slope has a well-established vegetative cover. The upstream slope is armored with riprap. As a result, ponding behind the embankment will not negatively affect its structural integrity. Additionally, FRICO will continue to address any issues related to pond stability. Given the sandy nature of the soils, ponded water is expected to infiltrate. If necessary, any nuisance water can be pumped by FRICO to allow it to enter the reservoir.

Figure 2: Runoff Inundation Area

2. Basin 2/3 Discharge Point: Runoff from Basin 3 reports the northwest side of the West Stockpile. A diversion channel will be constructed along the northwest perimeter of the West Stockpile to route runoff to the north then east across the site haul road. At the northwest end of the West Stockpile, runoff from Basin 2 merges with Basin 3. After the confluence, the channel will be enlarged to accommodate the increased flow. The channel was sized for the 5-year, 24-hour storm using the Manning's Equation (**Equation 1**) and assuming normal depth. The channel was sized for

the peak flow from Subbasin 3 (158 cfs) from Station 23+95 to Station 44+00. The peak flow in the channel for the section from Station 44+00 to 58+00 was derived by adding the flows from Subbasin 3 and Subbasin 2 with a delay to the Subbasin 3 equal to the travel time in the upstream section of the channel (**Equation 2**). The maximum permissible velocity was assumed to be 4 feet per second (fps), representing a channel with slope less than 5%, lined with a grass mixture and easily eroded soils (NRCS, 2007). The channel sizing parameters are shown in **Table 4**.

Equation 1	$Q = \frac{1.49}{n} A R_h^{2/3} S^{1/2}$
Equation 2	$T_t = \frac{L}{v}$

Where:

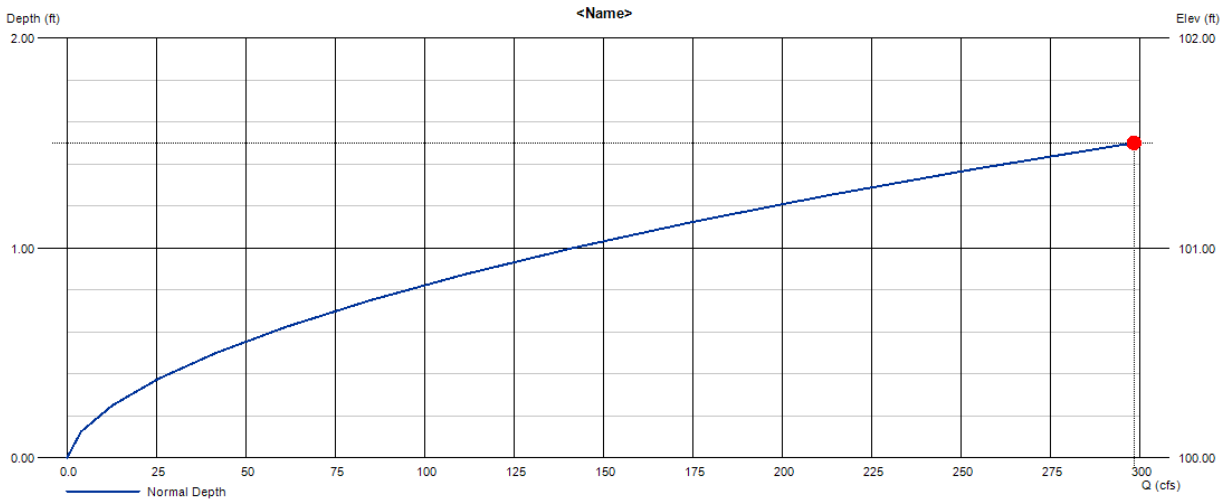
Q = Flow (cfs)
n = Manning's roughness coefficient
A = Cross-sectional area of flow (ft^2)
R_h = Hydraulic radius of flow (ft)
S = Channel slope (ft/ft)
T_t = Travel time (sec)
L = Length (ft)
v = Velocity (ft/s)

Table 4: Channel Sizing

Parameter	Value	
	STA 23+95 to 44+00	STA 44+00 to 58+00
Slope (ft/ft)	0.0016	0.0016
Bottom Width (ft)	22	30
Side Slope (xH:1V)	2	2
Depth (ft)	2.5	3.1
Velocity (ft/s)	2.4	3.0

Where the channel crosses the haul road, a drive-through swale will be graded and reinforced with riprap and gravel to prevent erosion of the sandy soils in the area. The swale sizing is determined based on runoff from the 5-year, 24-hour storm event, as this is considered relevant to the operational timeframe of approximately 20 years. The following channel analysis (Hydraflow Express Civil 3D) indicates that at a depth of 1.5 feet and side slopes of 20H:1V, the required bottom width is 65 feet. The resulting rating curve for the drive through swale is provided in **Figure 3**.

Figure 3: Drive-through Swale Rating Curve



3. Basin 4 Discharge Point: Runoff from Basin 4 reports to the southwest side of the West Stockpile. To manage this runoff, culverts will be installed under the West Stockpile to route water from the west side to the east side of the stockpile. Twenty-four-inch HDPE culverts were used in the analysis as this pipe is available on site and a larger culvert is not practical for this area. A reservoir element was incorporated into the HEC-RAS model upstream of the culvert to estimate the rise in headwater depth and its effect on the resulting inundation areas. This was done while varying the number of culverts to determine the condition that minimizes the number of culverts while maintaining an acceptable headwater depth.

   A storage-elevation curve was derived from the terrain and is shown in **Table 5**. The culvert barrels were assumed to have the properties shown in **Table 6,** which are representative of an HDPE pipe with an inlet protruding from fill. The pond was assumed to overtop at elevation 4809.7 and this overtopping flow was treated as a 30-ft wide broad-crested spillway with a weir coefficient of 2.6 within the model. The results of the 5-year, 24-hour storm for 1, 2, and 4 culvert barrels are shown in Figure 1.

Table 5: Pond Stage-Storage Curve

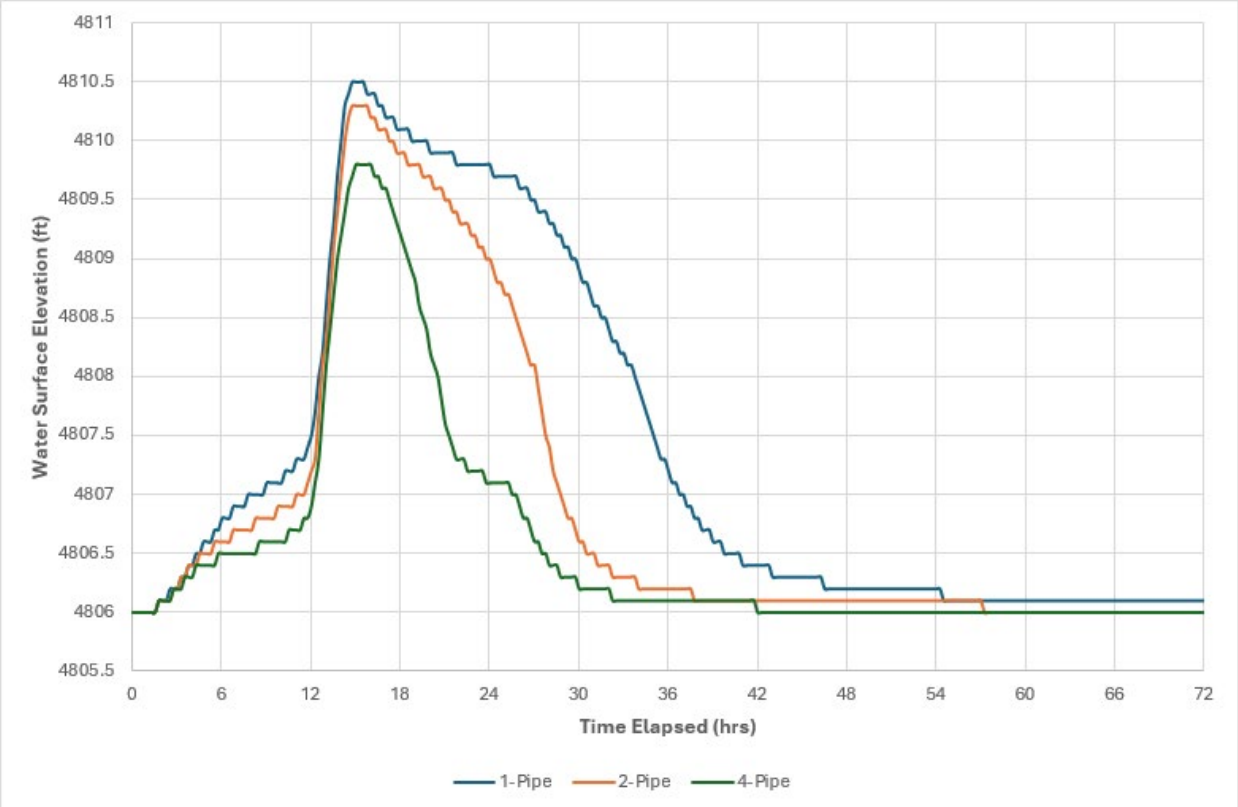
Elevation (ft)	Storage Capacity (acre-ft)	Notes
4806	0	Pipe Invert
4807	0.79	
4808	2.15	
4809	6.13	
4810	11.59	

Table 6: Culvert Properties

Parameter	Value
Length (ft)	438
Diameter (ft)	1.75
Inlet Elevation (ft)	4806
Entrance Coefficient	0.9
Outlet Elevation (ft)	4805
Exit Coefficient	1
Mannings n	0.01

Figure 4 illustrates the water level at the upstream side of the culverts over time for varying numbers of culverts. This helps estimate the time required to drain the area upstream of the culverts and determine the optimal number of culverts, especially when there's a minimal difference between the larger pipe sizes. This was done while varying the number of culverts to determine the condition that minimizes the number of culverts while maintaining an acceptable headwater depth. It was concluded that two 24-inch diameter pipes offer the most efficient solution.

Figure 4: Time to Drain Runoff Through Culverts



GROUNDWATER CONDITIONS

The likelihood that the dredging process will impact groundwater appears small due to the relatively thin depth of deposit that will be excavated with respect to the groundwater in the area. The average excavation depth within the reservoir is on the order of 12 to 13 feet with maximum excavations reaching 20 feet along the outer rim of the reservoir (shown on Drawing C-2 in Exhibit D).

The mine area sits over two known aquifers: the South Platte River Basin (SPRB) alluvium aquifer at the surface level and the Laramie Fox Hills (LFH) aquifer which is part of the Denver Basin Aquifer system. The top of the SPRB, found within the alluvium layer, is estimated to be at least 15 feet deep, if not deeper, outside the reservoir, where the reservoir level has minimal impact on groundwater. The top of the LFH is encountered at depths ranging from 60 to over 100 feet in the area around the lake (Hahn 2023).

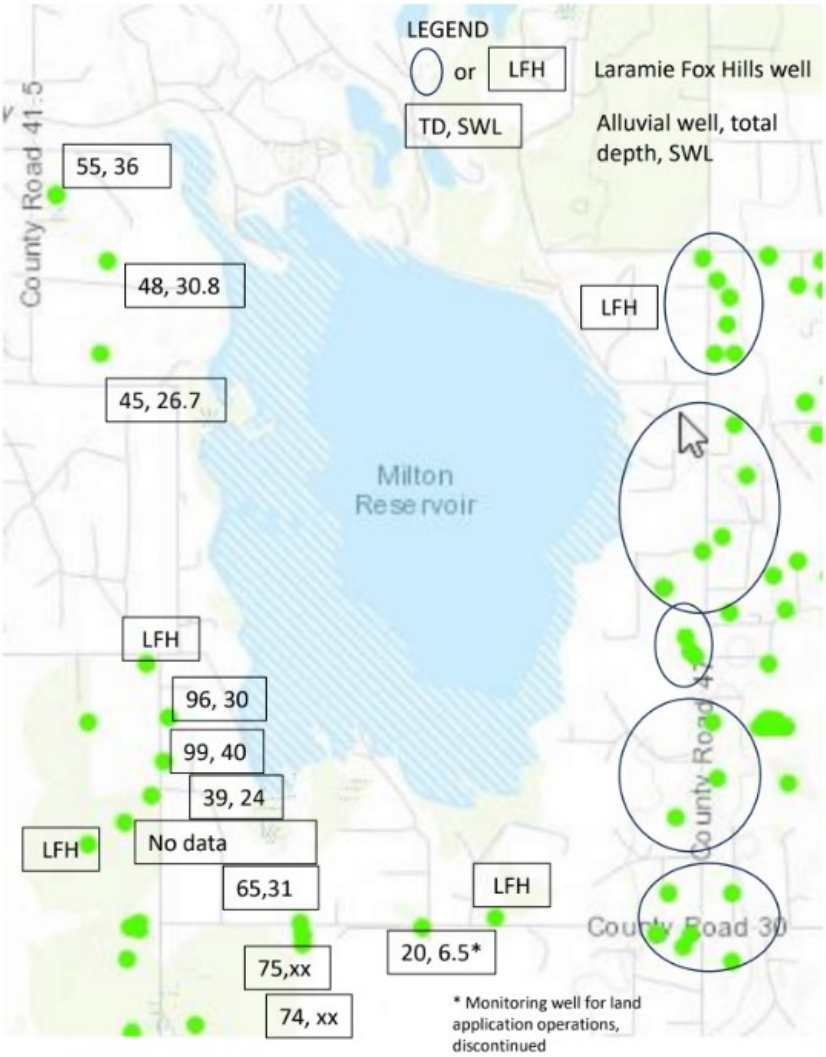
The estimated top of the SPRB alluvium aquifer is based on the following:

- In March 2022, three exploratory test pits were excavated, all located on the west side of the Milton Reservoir as shown on **Figure 5**. The test pits were excavated at locations slightly above high water level of the lake within 200 feet. The water level in the lake at the time of excavation was approximately 4,797.5. The test pits were all excavated to a depth of 10 feet. None encountered the natural groundwater table (Hahn 2023).
- In October 2022, a geotechnical investigation was completed to assess conditions for construction of a bridge near the inlet of the Platte Valley Canal to the Milton Reservoir along the Beebe Draw Farms Pkwy. Two boreholes were drilled, one on either side of the canal. Groundwater was encountered at 16 feet and 20 feet on the west and east sides of the canal, respectively. The natural groundwater in the area is likely lower than these values as these depths are likely influenced by the water level in the canal/reservoir suggesting that the groundwater table is greater than 20 feet below the surface.
- An inventory of wells surrounding Milton Lake was completed with 8 wells having been constructed in the alluvial sediments (Hahn 2023). Of these, one well was reported as a monitoring well installed at a site used for land application of wastewater. That site is no longer operational. Of the remaining 7 wells identified in the inventory, the wells were drilled to an average depth of 64 feet. The average depth to water in the wells was 31 feet, with a minimum depth to water of 27 feet, measured from ground surface. This information is summarized on **Table 7** and a map showing the inventoried wells is shown on **Figure 5**.

Table 7: Groundwater Depth

Well No.	SEO Permit No.	Total Depth (ft)	Depth to Water (ft)
1	47556-MH	55	36
2	47558-MH	48	31
3	47559-MH	45	27
4	236201-	96	30
5	157030-	99.00	40.00
6	176969-	39	24
7	68855-	65	31
8	319033-	20	7

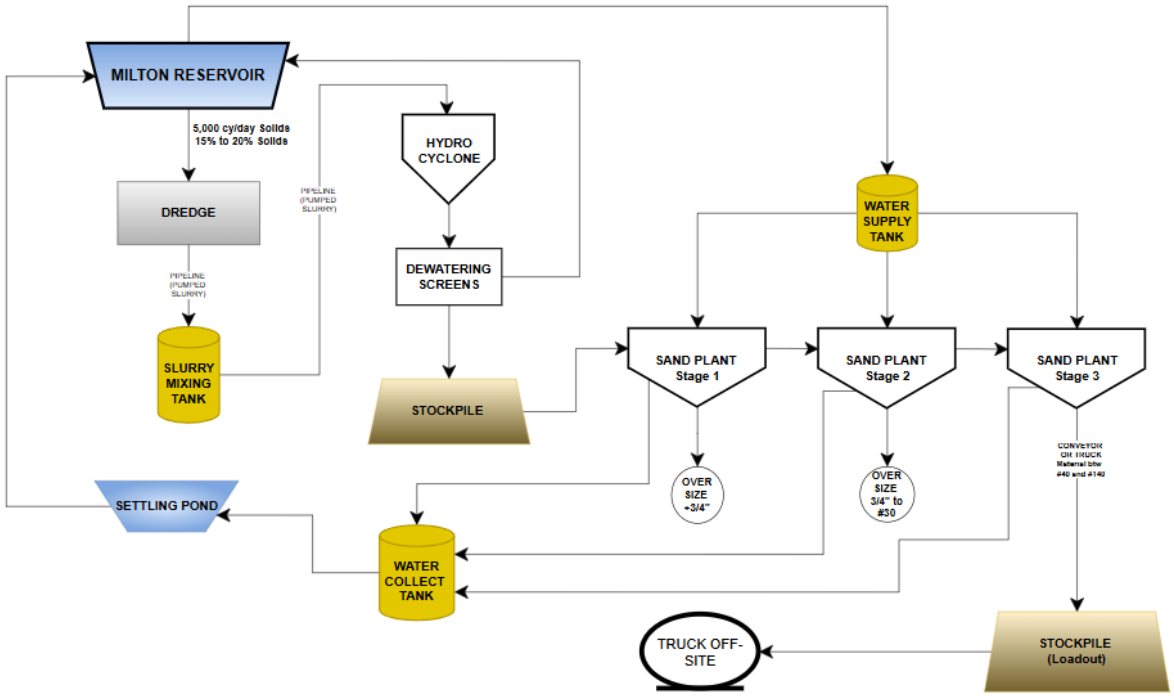
Figure 5: Well Inventory Location Map



Operational Water Requirements

Water used in the mining process will be supplied by FRICO's Milton Reservoir with excess recycled back to the reservoir. The dredging operation generates a slurry by excavating materials from the reservoir and mixing them with reservoir water, achieving a solids content of about 15% to 20%. At present, materials are dewatered using two methods: a cyclone and dewatering ponds. Dewatering screens will soon be incorporated into the system to more quickly reduce the moisture content of the sand, targeting an average between 15% to 20% (w/w), making it suitable for conveying and handling with a radial stacker. Any excess water from the system will be redirected back to the Milton Reservoir, ensuring no water is lost in the process. With the construction of the sand plant, an additional 3,500 to 4,500 gallons per minute (gpm) will be required to push materials through and clean the screens. Water from the sand plant will either be recycled directly to the reservoir if the fines content is low or routed to a settling pond for dewatering via the decant overflow system if needed. A general flow diagram is shown in **Figure 6**.

Figure 6: Flow Diagram for Sand Plant Operations



The only consumptive water use at the mine site consist of that needed for dust suppression. Approximately 10,000 to 15,000 gallons of water per day (~7-10 gpm) will be needed for dust control. The source of the water will be from the reservoir or settling ponds.

Reclamation Water Requirements

Reclamation will require approximately 650,000 gallons of water for the hydroseeding and 240,000 gallons during vegetation establishment (24 watering events at 10,000 gallons per event). Water from the reservoir will be used for reclamation.

Storm Water Control Permits

FRICO has acquired from the Colorado Department of Public Health and Environment *CERTIFICATION TO DISCHARGE UNDER CDPS GENERAL PERMIT COR400000 STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES, Certification Numbers: COR419504, COR414592, and COR418738*. Copies of the permits are attached.

Erosion and Sediment Control

Sediment and erosion control will be completed in phases with implementation of pre-construction BMPs and work continuing through final stabilization. The plans will be dynamic and reviewed/adjusted periodically as the project develops over time. The Pre-Construction and Site Access Phase has included the installation of vehicle tracking control, perimeter controls around stockpile locations, and stabilized staging areas. Perimeter control consists of installing sediment control logs or earthen berms as needed to intercept stormwater runoff from disturbed areas. If needed, stormwater runoff will be directed to sediment traps (ST) that will be constructed to capture runoff at low points around the facilities. The Construction Phase includes modifying the location of sediment control logs/berms as needed to accommodate stockpiles development, applying gravel and/or water to haul roads for dust control, surface roughening, seeding, and mulching, and developing stockpiles to form a stable configuration with side slopes no greater than 3H:1V. The Final Stabilization Phase will include temporary or permanent seeding, erosion control blankets, and removing all temporary BMPs when the site has reached final stabilization.

References

Natural Resources Conservation Service (NRCS). National Engineering Handbook Part 630 Hydrology, Chapter 15.

Hahn Water Resources, LLC, Memorandum of September 7, 2023 to Heather Thompson with Subject: Preliminary Assessment of Groundwater Conditions at Milton Reservoir.

EXHIBIT H

WILDLIFE INFORMATION -

RESPONSE TO CPW COMMENTS

Ecological Resource Consultants, LLC
2820 Wilderness Place, Suite A | Boulder, CO | 80301 | (303) 679-4820

Technical Memorandum

Date: **March 26, 2025**

To: **Farmers Reservoir and Irrigation Company (FRICO)**

From: **Diane Wright, Ecological Resource Consultants, LLC**

RE: **Response to CPW Comments on the Farmers Sand File No. M-2024-057**

Ecological Resource Consultants, LLC (ERC) provides the following response to the Colorado Parks and Wildlife (CPW) Comments on the Farmers Sand - Division of Reclamation, Mining and Safety Mine Permit (**File No. M-2024-057**). In a letter dated January 4, 2025, CPW provided recommendations for the proposed project which are addressed below.

MULE DEER SEVERE WINTER RANGE HIGH PRIORITY HABITAT

Mule Deer Severe Winter Ranges are defined as that part of the overall winter range where 90% of the individuals are located when the annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten.

CPW Recommendation: CPW recommends not constructing during the winter season (December 1 to April 30), if this is not feasible, CPW recommends that the applicant start construction outside of this window.

- Construction activities will be limited to the west side of the reservoir, including excavation of south settling ponds and sand plant construction. No construction activities are planned for the east side of the reservoir.
- Non-construction mining activities (e.g., hydraulic dredging, dewatering, cyclone separation, and material transport) will remain confined to designated areas.
- Dredging will occur from mid-February through mid-December, depending on weather conditions**.**
- Construction will take place outside of the winter season (December 1–April 30) to ensure favorable ground conditions. Some activities may extend into November/December and March/April during milder weather, but the proposed timeframe remains **consistent with CPW's recommendations**.
- Measures to minimize impacts to Mule Deer Severe Winter Range focus primarily on avoiding disturbance during the most critical winter period and ensuring proper restoration subsequently. These measures are intended to protect the mule deer population during the harshest winter conditions while allowing necessary project activities to occur during less sensitive periods.

- Any temporary disturbances are to be remedied through reclamation efforts, including revegetation, grading, seeding, mulching, and a coordinated weed management plan, which together help restore disturbed lands to their natural rangeland state.

BALD EAGLE ACTIVE NEST AND ROOST SITES

An active bald eagle nest site is a specific location in which a pair of bald eagles has at least attempted to nest within the last five years. Any nest location that can be directly tied to courtship, breeding, or brooding behavior is considered active.

CPW Recommendation: CPW has two recommendations to protect these sites: of a) No surface occupancy (NSO) within 0.25 miles of any active bald eagle nest site year-round, and b) no human encroachment or permitted/authorized human activities within 0.5 mile of any active bald eagle nest site from December 1 to July 31 of each year.

- The project operates under a valid Bald Eagle Short-Term Incidental Take Permit **(#MBPER3656925)** through May 31, 2029, **ensuring compliance with USFWS and CPW regulations.**
- Monthly monitoring will continue to assess nest activity, and dredging/haul road use will avoid active nests.

FENCING

CPW is concerned for the safety of Mule deer, White-tailed deer and Pronghorn Antelope. In the area for the proposed project.

CPW Recommendation: Use wildlife-friendly fencing (three- or four-strand smooth wire) with a minimum bottom height of 17 inches and top wire no higher than 42 inches, that would allow the free passage of wildlife. Avoid woven wire fencing.

- If fencing is installed, it will comply with CPW's "Fencing with Wildlife in Mind" guidelines to allow safe wildlife movement.

Noxious Weeds and Native Re-seeding

The revegetation of disturbed areas and control of invasive weed species are important components of the project and it is critically important that the site be restored back to the native plant community that currently exists on site. CPW prefers that native vegetation be retained on-site during the operational lifespan of the project, both as potential habitat for wildlife and to ensure successful reclamation of the project area, as noxious weeds could spread to adjacent habitats outside the project area.

CPW Recommendation: Development of a noxious weed management plan prior to initiating construction activities. Consult with the Weld County and Natural Resource Conservation Service (NRCS) for the best noxious weed management practices.

- A Reclamation Plan has been completed for the project which identifies the disturbed areas to be vegetated, soil amendment application, native seed mix type and long-term stabilization plans.

- A weed management plan has been developed (Refer to **Appendix A**) and the project will coordinate with Weld County and NRCS to ensure effective weed management and habitat restoration.

LIGHTING

Nighttime artificial lighting has been documented to affect wildlife species of all sizes, from small **macroinvertebrates to large mammals.**

CPW Recommendation: Use down-shielded lighting with warm-spectrum LEDs (2200K–2700K) and lower correlated color temperatures (CCT<3000 Kelvin degrees) to minimize wildlife disturbance.

- All outdoor lighting will be down-shielded, directed away from sensitive habitats, and comply with USFWS/American Bird Conservancy recommendations.

FUTURE PLANS FOR DEVELOPMENT

In the application for this project, it states, "Future plans are to install a sand plant." CPW has concern with this proposed sand plant because it is in close proximity to current and historic bald eagle nests, colonial waterbird nesting areas (including double-crested cormorant, great blue heron, black-crowned night heron, great egret, and snowy egret), and the American white pelican nesting colony site along the northwest and western shorelines of Milton Reservoir. CPW has been monitoring these nesting bird species along these areas of Milton Reservoir since 1978. Further development of a full-scale sand plant may be disruptive and possibly detrimental to the survival of the nests and roosting site located around Milton Reservoir.

CPW Recommendation: CPW requests from the Department of Reclamation Mining and Safety (DRMS) for CPW to continue to be involved with the planning process for this proposed project as it moves through the permitting and planning process.

- Review of CPW Species Activity Mapping (SAM) indicates the sand plant is located outside of the CPW-mapped buffer for bald eagle nest sites and American white pelican nesting areas. No mapping is available for other colonial waterbirds such as double-crested cormorant, black-crowned night heron, great egret and snowy egret.
- Prior to vegetation removal, a nest survey will be completed to ensure that active nests are not disturbed in the sand processing plant location. Generally, the active nesting season in this region of Colorado occurs between April 1 and August 31 for most non-raptor migratory birds and between February 1 and September 15 for non-eagle raptors.
- The proposed sand plant will be located approximately 400-1,000 feet from the edge of the reservoir. No nest sites located along the edge of the reservoir will be disturbed by the proposed sand plant.
- Despite ongoing project disturbances, migratory bird species appear somewhat adapted as nesting activity has been observed for a number of species.
- To ensure the protection of migratory birds and colonial waterbird nesting areas around Milton Reservoir, the project will coordinate with the CPW throughout the permitting process for the sand plant to assess and mitigate potential impacts to nesting and roosting sites.

APPENDIX A

MILTON RESERVOIR

FARMERS SAND
WEED MANAGEMENT PLAN

March 2025

PREPARED FOR:

Farmers Reservoir Irrigation and Company (FRICO)

PREPARED BY:

ECOLOGICAL RESOURCE CONSULTANTS, LLC

12345 W. ALAMEDA PARKWAY

LAKEWOOD, COLORADO 80228

Table of Contents

1.0 LOCATION

Owner: The Farmers Reservoir and Irrigation Company (FRICO)

Owner Address: 80 South 27th Avenue, Brighton, Colorado 80601

Contact: Scott Edgar **Title:** General Manager

Telephone Number: (303) 659-7373

Farmers Sand Mining Operations Legal Description:

Sections: 3, 4, 9, 10, 11, 14, 15, 22, and 23 Township: 3N Range: 65W
Mine Main Entrance: Latitude 40.218251 N Longitude -104.659137 W

2.0 DESCRIPTION OF LAND AND CURRENT USES

Milton reservoir is a plains reservoir fed by surface water diversions from the South Platte River through the Platte Valley and Beebe canals. Milton Reservoir, which is an artificial man-made reservoir, was constructed to regulate and store water for irrigation.

Since its original construction in the early 1900s, the reservoir has accumulated a significant amount of sediment conveyed with inflows that enter the reservoir. In 2019, a geotechnical investigation was completed in the reservoir for the purpose of estimating the thickness of the sediments and evaluating the properties of deposited sediments and the native materials beneath. Sediments, consisting of primarily silty to lean clayey sands were found in thicknesses ranging from 3 feet to 10 feet thick. It is estimated that the accumulated sediments have resulted in approximately 4,000 to 8,000 acre-feet of lost reservoir capacity. FRICO started removing these sediments in November 2021 and will continue the removal process for 20 years.

The sediment removal process consists of using a dredge equipped with a cutter head and suction. The solids are removed as a slurry (approximately 20% solids) from the lake bottom and pumped through a large diameter pipeline to either the settling ponds or the cyclone where the dredge materials are dewatered prior to placing them in stockpiles. The plan moving forward is to construct a sand plant that, once operational, will receive dredged materials directly. The plant will separate the sand particles to produce a sellable product while the undersized particles and water will be pumped as a slurry to a settling pond. Water will be returned to the reservoir by gravity through low-level drainage pipes.

The disturbed areas that will require reclamation consist of stockpiles, settling ponds, sand plant, dredge operations staging area, and haul roads. Revegetation was selected as the type of reclamation for the stockpiles, settling basins, sand plant, and dredge operations staging area since these areas consisted of native grasses prior to the mining operations. Permanent roads which have been used during mining operations are also used for daily use of larger vehicles/equipment to support dam maintenance, by oil/gas companies for access to infrastructure, and the Heritage hunting club. These roads are routinely graded and graveled

and will continue to be maintained as such through the mining operations and after mining is completed to support the aforementioned uses. There are approximately 379 acres of revegetation and 8-acres of permanent roads. The areas of disturbance (settling ponds, stockpiles, sand plant, and dredge operations staging area) that will potentially require noxious weed management prior to and during reclamation are presented in Exhibit F – Reclamation Plan Map, Sheets R1 thru R3.

3.0 FUTURE PLANS FOR THE LAND

Historically and currently, Milton Reservoir land and roads are used for access for reservoir/dam maintenance and monitoring, oil/gas operations, hunting and boating clubs. Mining operations including stockpile and settling pond locations have been situated to continue accommodating these uses going into the future (post-mining). Final grading of stockpile slopes will be 3H:1V and settling basins final grade will be restored to blend in with the surrounding topography.

4.0 DESCRIPTION OF WEED INFESTATION

The specific noxious weed species listed below have been identified by the Colorado Department of Agriculture and Weld County as invasive weed species that are non-native plants that are detrimental to the natural land and create problems in agricultural and the environment.

List A - Eradication Species

The species of noxious weeds that the Colorado Department of Agriculture has put on List A have the potential to be very invasive and are either not in Colorado yet or are present in very limited numbers and eradication of these species is still possible. Due to their competitive, aggressive nature they tend to out compete the native vegetation by forming mono-cultures. In addition, many of the species are toxic to livestock and wildlife, or limit grazing potential. The following are List A species found in Weld County and require eradication.

- Cypress Spurge
- Hairy Willow-Herb
- Japanese Knotweed
- Myrtle Spurge
- Purple Loosestrife
- Yellow Flag Iris

List B - Control Species

The plants on List B have the potential to be very invasive that quickly transform an area and typically already established in Colorado. However, they may be just moving into some local areas such as Weld County. Due to these plants not being native to North America they do not have the natural checks such as insects or diseases. Due to their competitive, aggressive nature they tend to out compete the native vegetation by forming mono-cultures. In addition, many of the species are toxic to livestock and wildlife, or limit grazing potential. The following presents which species in Weld County should be eradicated, suppressed, or both.

Eradication

- Absinth Wormwood
- Black Henbane
- Bull Thistle
- Chamomile species
- Chinese Clematis
- Houndstongue
- Moth Mullein
- Oxeye Daisy
- Plumeless Thistle
- Spotted Knapweed
- Sulfur Cinquefoil
- Tamarisk
- Wild Caraway
- Yellow Toadflax

Suppression

- Canada Thistle
- Common & Cutleaf Teasel
- Eurasian Watermilfoil
- Jointed Goatgrass
- Musk Thistle
- Russian Knapweed
- Scotch Thistle
- Yellow Nutsedge

Suppression & Eradication

- Bouncingbet
- Common Tansy
- Dalmatian Toadflax
- Dames Rocket
- Diffuse Knapweed
- Hoary Cress
- Leafy Spurge
- Perennial Pepperweed
- Russian Olive

List C - Suppression Species

In Weld County the focus is on the suppression of Field Bindweed. However, the Colorado Department of Agriculture has placed a number of noxious weed species on List C (see below). The plants on List C are very

invasive and quickly transform an area. The Department advises that these plants be eradicated not allowing them to become established.

- Bulbous bluegrass (Poa bulbosa)
- Cheatgrass aka Downy brome (Bromus tectorum)
- Chicory (Cichorium intybus)
- Common burdock (Arctium minus)
- Common mullein (Verbascum thapsus)
- Common St. Johnswort (Hypericum perforatum)
- Field bindweed (Convolvulus arvensis)
- Halogeton (Halogeton glomeratus)
- Johnsongrass (Sorghum halepense)
- Perennial sowthistle (Sonchus arvensis)
- Poison hemlock (Conium maculatum)
- Puncturevine (Tribulus terrestris)
- Quackgrass (Elymus repens)
- Redstem filaree (Erodium cicutarium)

5.0 MANAGEMENT PLAN

Earth-moving/disturbance activities are anticipated throughout the life of the project and include the construction of settling basins, stockpiles, stormwater drainage systems, reclamation of disturbed areas, and maintaining the haul roads (grading/gravel). These activities have the potential to spread weeds throughout the disturbed mining areas. Weeds can generally spread through the following four pathways.

1. **Soil disturbance** - when soil and existing vegetation is disturbed it creates an opportunity for weeds to move into an area left open or for seeds in the soil to be exposed and germinate.
2. **Contaminated materials** - Weeds often are introduced unintentionally as contaminants in seed, soil, hay, or revegetation materials. This includes weed seeds and plant fragments that can become lodged in or on vehicles and equipment. Seeds also move easily by becoming attached to clothing, shoes, and other personal gear.
3. **Animals** - Pets, domestic livestock and wildlife may spread weeds when seeds attach to their coats or through their droppings.
4. **Environmental** - Wind, water, and soil can move seeds and plant fragments.

The primary goals of this Weed Management Plan are to prevent the establishment of any and all new noxious weed species in the affected/disturbed mining areas that will be re-vegetated during and upon completion of the mining operations in accordance with the Colorado Noxious Weed Act, Section 35-5.5-101, et seq., C.R.S. and Weld County Chapter 15 – Vegetation, Article I – Noxious Weed Management Enforcement Policy.

Non-native species and noxious weeds (List A, B, and C) will be controlled at the mining disturbed areas during and after mining operations and continue throughout the reclamation period until re-vegetation is greater than 70 percent established. Mechanical pulling of List A, B, and C weed species will be conducted using hand tools on an as needed basis to control small populations of weed species. All noxious weeds that are manually collected will be immediately placed into trash bags that will be taken to a landfill. Herbicide treatment by a licensed applicator will be utilized for controlling larger populations of noxious weeds. Any spraying applications should prioritize minimizing drift on to native species. Eradication method is to be determined based on specific targeted species. Upon removal of non-native species and noxious weeds the areas will be re-seeded and mulched to encourage regrowth of native vegetation.

The vegetation plan was developed so a single seed mix can be used throughout to establish ground cover quickly, minimize weed infestation, and stabilize the soil to reduce wind and water erosion with minimal maintenance. The seed mix presented in the following table is diverse and effective at wind and water erosion control, is fast growing and has a fibrous and/or rhizomatous root system which will provide adequate ground cover quickly reducing the chances of invasion of non-native species and noxious weeds. Mulching will follow seeding for immediate soil stabilization and to enhance seed germination. Mulching will be completed within twenty-four (24) hours after seeding.

Scientific Name	Common Name	% of Mix	LBS/PLS Required per Acre
Achnatherum hymenoides	Indian ricegrass	10	6
Andropogon gerardii	Big bluestem	10	7
Elymus lanceolatus	Streambank wheatgrass	20	11
Koeleria macrantha	Prairie Junegrass	20	0.1
Pascopyrum smithii	Western wheatgrass	15	12
Setaria italica	Foxtail millet	5	2
Sporobolus cryptandrus	Sand dropseed	20	0.1
	Total:	**100**	**38.2**

Notes:

LBS/PLS = pounds pure live seed. Values in table are per acre
LBS/PLS values for Prairie Junegrass and Sand dropseed set to 0.1 due to high seeds/weight
Quantity assumes 200 seeds per square foot broadcasted.
Reduce 25% for drill seeding (150 seeds per square foot).
Total quantity assumes 1.0 acre of seeding. Adjust accordingly for required seeding area.
Species variety to be determined approved based on commercial availability.
Final species composition and rates subject to commercial availability.

6.0 SCHEDULE

An evaluation of weeds within the mining area shall be completed two times per year once during the early growing season and again during the late growing season, generally being completed in late April/May and then August/September depending on factors such as daily average temperatures and precipitation during the project maintenance period.

7.0 REFERENCES

https://www.weld.gov/Government/Departments/Public-Works/Weed-Management/

Weld County Noxious Weed Management Enforcement Policy

EXHIBIT H

WILDLIFE INFORMATION -

WILDLIFE REPORT

Ecological Resource Consultants, LLC
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WILDLIFE REPORT
MILTON RESERVOIR- FARMERS SAND PROJECT

March 2025

Weld County, Colorado

Prepared for:

The Farmers Reservoir and Irrigation Company (FRICO)
80 South 27th Avenue
Brighton, CO 80601
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ERC Project #: 342-2203

Wildlife Report
Milton Reservoir - Farmers Sand Project

Weld County, Colorado
March 2025

CONTENTS

APPENDICES

1.0 INTRODUCTION

Ecological Resource Consultants, LLC (ERC) provides the following Wildlife Report for the proposed Milton Reservoir - Farmers Sand Project located in Weld County, Colorado. This report includes site-specific evaluation of wildlife habitat and use within the affected land (site) based on existing vegetation communities, species activity mapping (SAM) from the Colorado Parks and Wildlife (CPW), potential migratory birds and potential federal and state listed threatened or endangered species and/or habitat that could exist on or immediately surrounding the affected land. This report evaluates the potential impacts of the proposed project on wildlife and vegetation communities within the site. This report was prepared to support the 2024 Mine Plan permit application (Revised March 2025) (specifically, Construction Materials Rule 6, Exhibit H – Wildlife Information) for The Farmers Reservoir Irrigation and Company (FRICO).

The Colorado Parks and Wildlife (CPW) had an opportunity to review the project (Farmers Sand - Division of Reclamation, Mining and Safety Mine Permit (**File No. M-2024-057**) and subsequently provided comments in a letter dated January 4, 2025 (herein "2025 CPW Letter."). This revised Wildlife Report incorporates wildlife protective measures and recommendations outlined in the 2025 CPW letter.

2.0 GENERAL SITE DESCRIPTION

The 2,489-acre permit area is located in southern Weld County, approximately 12.5 miles southeast of Greeley, Colorado. The site is located in Sections 3, 4, 9, 10, 11, 13, 14, 15, 16, 22 and 23, Township 3 North, Range 65 West (Latitude 40°13'47.613" North, Longitude 104°38'24.236" West). A Location and US Geological Survey (USGS) Topographic Map are provided in **Figure 1.** The site can be accessed by taking Interstate 76 (I-76) East toward Fort Morgan. From the interstate, take exit 34 toward Kersey Road, turn left at Weld County Road (WCR) 49, turn left at WCR 30, turn right onto Cavanaugh Road (WCR 43), and turn right at the intersection of Cavanaugh Road (WCR 43) and WCR 32 onto a gated dirt access road. The site (affected land), subject of this evaluation is situated on the northwest side of the permit area and comprised of 1,080 acres.

3.0 METHODOLOGY

ERC evaluated the existing conditions, vegetation communities and general wildlife habitat within the site. The evaluation comprised a Geographic Information Systems (GIS) desktop review utilizing existing available mapping including:

- Satellite Imagery Dated June 2024 (Apollo 2024)
- GAP/LANDFIRE National Terrestrial Ecosystems data (GAP Analysis) for Colorado (USGS 2011)
- CPW SAM Data (CPW 2023)
- CPW High Priority Habitat (HPH) Mapping (CPW 2024)

Site-specific field evaluation was conducted numerous times from 2021 to the present to evaluate existing conditions within the site. ERC conducted a literature review for potential resources as part of initial data collection for the preparation of this report. Among others, ERC reviewed the available literature sources including the US Fish and Wildlife Service (USFWS) Federal Register. This review specifically addresses

Compliance with the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 730-712), Bald and Golden Eagle Protection Act (BGPA), USFWS Endangered Species Act (ESA) of 1973, and CPW Colorado Statute Title 33.

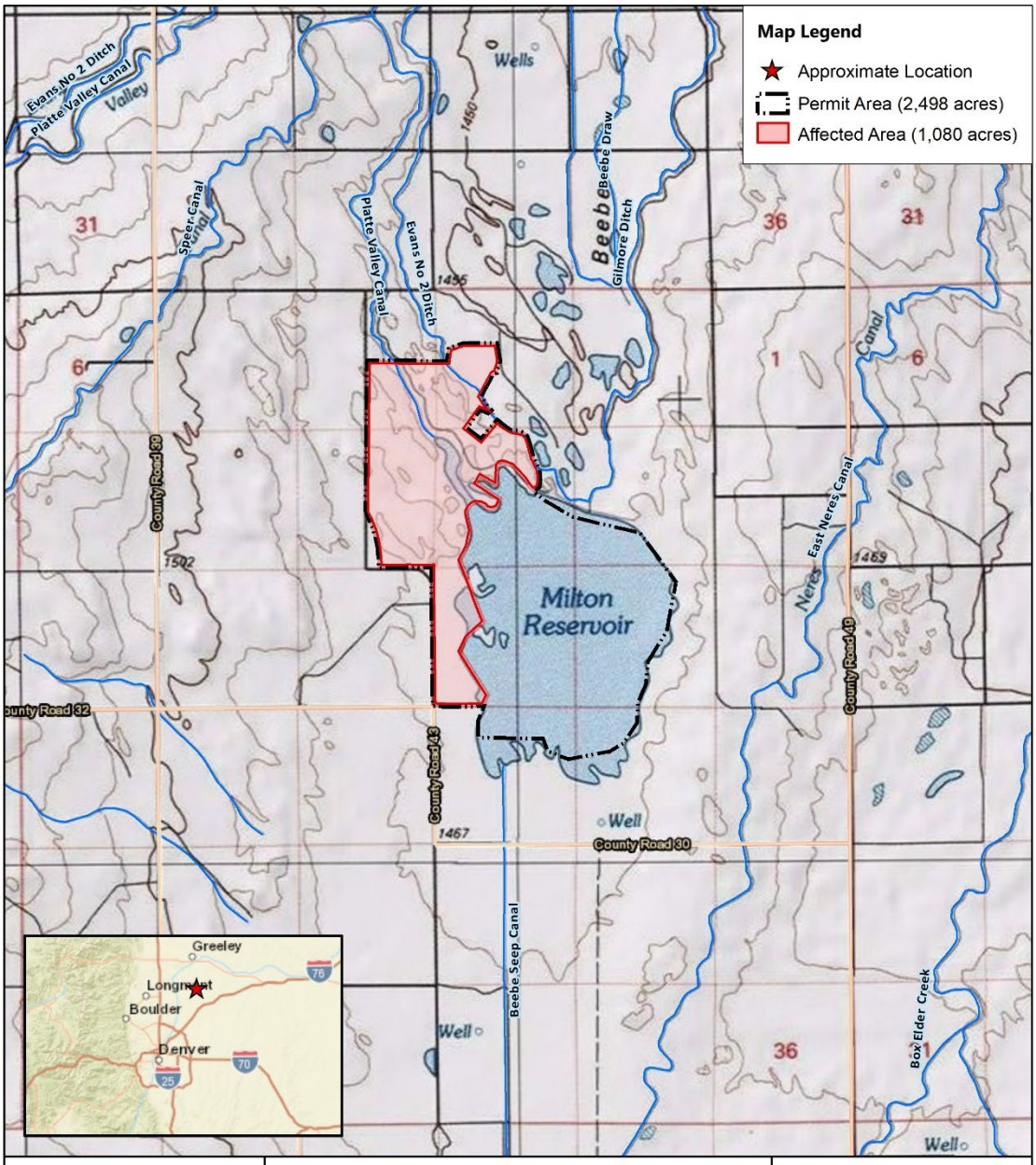

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FIGURE 1
USGS TOPOGRAPHIC & LOCATION MAP

FARMERS SAND
WELD COUNTY, COLORADO

4.0 EXISTING CONDITIONS

The project is situated within the Great Plains ecoregion at an approximate elevation of 4,800 feet above mean sea level (AMSL). Milton Reservoir, Beebe Seep Canal, Platte Valley Canal, and the Gilmore Ditch are depicted on the USGS Topographic Map within the site (**Figure 1**). Beebe Seep Canal occurs in the southern portion of the site and conveys water north into Milton Reservoir. Platte Valley Canal occurs in the northwest portion of the site and flows southeast into Milton Reservoir. Gilmore Ditch occurs in the northern portion of the site and conveys flows north out of Milton Reservoir. The northwestern shore peninsula has an access road on an upland berm that connects the uplands west of the reservoir to below the OHWM without crossing any wetland vegetation. Two boat ramps are located in the northern portion of the site with one present in the northeast corner and one in the northwest corner of the reservoir. The site is bound by agricultural land on all sides. Two exiting haul roads are located along the western portion of the reservoir. Approximately 32 active or idle but unclosed oil and gas facilities and associated infrastructure are located throughout the site (ECMC 2024).

4.1 ONGOING MINING ACTIVITIES

Existing and ongoing mining activities on the site include dredging Milton Reservoir using a hydraulic dredge boat. The dredge operates on the water surface of Milton Reservoir from approximately mid-February through mid-December, weather dependent. The slurry is pumped from the dredge either to a hydraulic cyclone or into several settling ponds adjacent to Milton Reservoir. Once the settling ponds fill up with sediment removed from Milton Reservoir, earth moving equipment is used to remove the material from the settling ponds and it is hauled to an onsite location for staging. Ongoing dredge activities have occurred within Milton Reservoir from November 2021 to the present. The dredging operation at Milton Reservoir is anticipated to continue for 20 years. Additional proposed land disturbance associated with the Mine Permit includes the construction of additional settling ponds, sediment stockpile areas, a sand plant and associated infrastructure.

5.0 VEGETATION COMMUNITIES

Vegetation communities within the site were evaluated by ERC using the USGS GAP/LANDFIRE National Terrestrial Ecosystems data (GAP Analysis) for Colorado (USGS 2011). The GAP Analysis provides GIS spatial data and classification of land cover and vegetation community type classification.

In total, eight vegetation communities and land cover types are mapped within the affected land (Refer to **Appendix B**). In the upland areas, the site predominantly consists of Western Great Plains Sandhill Steppe (50%), Western Great Plains Shortgrass Prairie (18%), Cultivated Cropland (13%), and Pasture/Hay (5%). Developed Open Space land cover type comprises less than 1% of upland habitat. Wetland habitat mapped within the affected land is primarily comprised of Open Water (12%) with a few small pockets (less than 1%) of fringe habitat characterized by the Western Great Plains Floodplain, and Western Great Plains Riparian Woodland and Shrubland vegetation communities. Refer to **Table 1** for a detailed description of the vegetation communities and land cover types within the site.

Table 1. USGS GAP Analysis Vegetation Communities and Land Cover Types Mapped Within the Site

GAP Analysis Community Type	Acres (Approximate)	Total % Cover	Vegetation Cover Height Estimate	Description
329 - Western Great Plains Sandhill Steppe	543	53%	1-4 feet	This system is found on somewhat excessively to excessively well-drained, deep sandy soils that are often associated with dune systems and ancient floodplains. Typically, this system is characterized by a sparse to moderately dense woody layer dominated by sand sagebrush. Associated species can vary with geography, amount and season of precipitation, disturbance, and soil texture.
331 - Western Great Plains Shortgrass Prairie	197	13%	<1 foot	This system occurs primarily on flat to rolling uplands with loamy soils and is characterized by blue grama. The short grasses that dominate this system are extremely drought- and grazing-tolerant.
556 - Cultivated Cropland	136	13%	0-6 feet	Areas used for the production of annual crops, such as corn, soybeans, vegetables, tobacco, and cotton, and also perennial woody crops such as orchards and vineyards. Crop vegetation accounts for greater than 20 percent of total vegetation. This class also includes all land being actively tilled.
579 - Open Water (Fresh)	130	12%	<0.5 feet	All areas of open water, generally less than 25% cover of vegetation or soil. Specifically, inland waters of streams, rivers, ponds and lakes.
557 - Pasture/Hay	59	5%	0-4 feet	Areas of grasses, legumes, or grass-legume mixtures planted for livestock grazing or the production of seed or hay crops, typically on a perennial cycle. Pasture/hay vegetation accounts for greater than 20 percent of total vegetation.
192 - Western Great Plains Floodplain	5	<1%	0.5-60 feet	These are the perennial big rivers of the region with hydrologic dynamics largely driven by snowmelt in the mountains. Grass cover underneath the trees is an important part of this system. Tamarix and less desirable grasses and forbs can invade degraded areas within the floodplains. These areas are often subjected to heavy grazing and/or agriculture and can be heavily degraded.
194 - Western Great Plains Riparian Woodland and Shrubland	5	<1%	0.5-60 feet	These are the stream and creek-side woodlands and shrublands found in the western Great Plains. When heavily use, such as too frequent livestock grazing, or heavy agricultural runoff, increasing stream salinity, non-native trees such as tamarisk and Russian olive can replace the native species.
581 - Developed, Open Space	9	0%	<0.5 feet	Includes areas with a mixture of some constructed materials, but mostly vegetation in the form of lawn grasses. Impervious surfaces account for less than 20 percent of total cover. These areas most commonly include large-lot single-family housing units, parks, golf courses, and vegetation planted in developed settings for recreation, erosion control, or aesthetic purposes.
Grand Total	**1,080**	100%		

6.0 GENERAL WILDLIFE USE

Wildlife can utilize the landscape in a multitude of ways. Wildlife can use specific habitats as areas of permanent or seasonal residence, breeding, migration, foraging, temporary shelter or as open space. The majority of potential wildlife habitat within the site is represented by the Western Great Plains Sandhill Steppe, Western Great Plains Shortgrass Prairie communities and a mix of native and nonnative grasses dominating the Cultivated Cropland, Pasture/Hay vegetation communities.

Several disturbances currently affect the site's upland habitats, with active mining operations and adjacent oil and gas operations by others being the most significant. Stockpiles associated with mining activities on the north and west sides of the reservoir, ranging from 40 to 150 feet in height, have limited vegetation, significantly altering the natural landscape. Settling ponds along the reservoir's western edge are sparsely vegetated basins, spanning hundreds of feet in width. Two existing haul roads are present along the west and north sides of the reservoir. The stockpiles, settling basins, and haul roads along the western and northern boundaries collectively fragment the vegetation communities, reducing habitat connectivity and limiting the site's ability to support wildlife in these upland areas. The persistent noise from heavy machinery and haul trucks compounds the disruption, further limiting wildlife use within the uplands of the mining site. Beyond the immediate mining zone, disturbances become more dispersed, including vegetation impacts from agricultural land use, habitat fragmentation caused by existing fencing, and further disturbances from oil and gas facilities.

The open water of Milton Reservoir and its surrounding fringe wetlands support a diverse ecosystem, providing habitat for aquatic species, birds, amphibians, and mammals. These habitats function as key areas for foraging, breeding, migration stopovers, shelter, and movement corridors. However, recreational activities at the reservoir such as boating, fishing, and camping can disrupt wildlife behavior and reduce the availability of suitable habitat. Seasonal fluctuations in water levels, driven by agricultural and municipal water storage needs, can further disrupt wildlife activity and potential habitat.

Despite these disturbances, migratory bird species utilizing Milton Reservoir appear somewhat adapted as nesting activity has been observed for a number of species (**Section 8.0 Migratory Birds**). The CPW has identified potential wildlife use areas for game and non-game species within the site which are summarized as follows in **Section 7.0**.

7.0 CPW SAM DATA

The CPW SAM data identifies buffer zones and other distribution data for general wildlife species which is available in GIS format (CPW 2023a). This mapping provides information on wildlife distributions to public and private agencies and individuals, for environmental assessment, land management resource planning, and general scientific research. Some wildlife use areas that are part of the SAM program fall within the site. The specific CPW-mapped wildlife use areas or ranges for these species within the site are summarized as follows in **Table 2**.

Table 2. CPW SAM Wildlife Use Areas within the Site

CPW SAM Layer	Wildlife Use Area within the Site
NON-GAME	
[1]Bald Eagle	
	Bald Eagle Nest Sites
	Bald Eagle Roost Sites
	Bald Eagle Communal Roosts
	Bald Eagle Winter Concentration
	Bald Eagle Winter Forage
	Bald Eagle Winter Range
Bats	
	Big Brown Bat Overall Range
	Hoary Bat Overall Range
	Little Brown Myotis Overall Range
	Red Bat Overall Range
	Silver-haired Bat Overall Range
	Tri-colored Bat Overall Range
Birds	
	American Bittern Breeding Range
	Bobolink Breeding Range
	Brewer Sparrow Breeding Range
	[2]Burrowing Owl Breeding Range
	Cassin Sparrow Breeding Range
	Ferruginous Hawk Breeding Range
	Golden Eagle Breeding Range
	Grasshopper Sparrow Breeding Range
	Lark Bunting Breeding Range
	Long-billed Curlew Breeding Range
	Mountain Plover Breeding Range
	Northern Harrier Breeding Range
	Prairie Falcon Breeding Range
	Rufous Hummingbird Migration Range
	Swainson Hawk Breeding Range
	Upland Sandpiper Breeding Range
Black-tailed Prairie Dog	
	Black-tailed Prairie Dog Colony Potential Occurrence
	Black-tailed Prairie Dog Overall Range
Geese	
	Canada Geese Foraging Area
	Canada Geese Production Area
	Canada Geese Winter Concentration Area

CPW SAM Layer	Wildlife Use Area within the Site
	Canada Geese Winter Range
[1]Great Blue Heron	
	Great Blue Heron Nesting Area
	Great Blue Heron Foraging Area
	Great Blue Heron Historic Nesting Area
Greater Prairie Chicken	
	Greater Prairie Chicken Historic Range
Olive-backed Pocket Mouse	
	Olive-backed Pocket Mouse Overall Range
[3]Preble's Meadow Jumping Mouse	
	Preble's Meadow Jumping Mouse Overall Range
Reptiles	
	Bullsnake Overall Range
	Common Gartersnake Overall Range
	Common Lesser Earless Lizard Overall Range
	Hernandez's Short-horned Lizard Overall Range
	Milksnake Overall Range
	North American Racer Overall Range
	Ornate Box Turtle Overall Range
	Painted Turtle Overall Range
	Plains Black-headed Snake Overall Range
	Plains Gartersnake Overall Range
	Plains Hog-nosed Snake Overall Range
	Prairie Lizard And Plateau Fence Lizard Overall Range
	Prairie Rattlesnake And Western Rattlesnake Overall Range
	Six-lined Racerunner Overall Range
	Snapping Turtle Overall Range
	Spiny Softshell Overall Range
	Terrestrial Gartersnake Overall Range
	Variable Skink and Many-lined Skink Overall Range
Ring-necked Pheasant	
	Ring-necked Pheasant Overall Range
Sandhill Crane	
	Greater Sandhilll Crane Overall Range
[1]White Pelican	
	White Pelican Nesting Area
	White Pelican Foraging Area
	White Pelican Overall Range
White-tailed Jackrabbit	
	White-tailed Jackrabbit Overall Range

CPW SAM Layer	Wildlife Use Area within the Site
GAME SPECIES	
[4]Mule Deer	
	Mule Deer Concentration Area
	Mule Deer Resident Population Area
	Mule Deer Severe Winter Range
	Mule Deer Winter Range
	Mule Deer Overall Range
White-tailed Deer	
	White-tailed Deer Overall Range

Several species warranted additional consideration and are addressed subsequently in this report:

[1] Further addressed in Section 8.0 Migratory Birds
[2] Further addressed in Section 12.0 State Threatened and Endangered Species
[3] Further addressed in Section 11.0 Species Protected under the ESA
[4] Further addressed in Section 10.0 High Priority Habitat

- Based on a review of the CWP SAM data, the site occurs within numerous mapped species' overall ranges. The site represents only a minor portion of these regional ranges; therefore, the proposed expansion to the existing mining operation is not expected to negatively impact the overall range for these species.
- The protection of migratory birds is further addressed in **Section 8.0 Migratory Birds**.
- The CPW SAM data identified the following wildlife use areas and nest sites for bald eagles, great blue heron and American white pelican, which are further addressed in **Section 8.0 Migratory Birds**:
    - Bald Eagle Roost Sites
    - Bald Eagle Communal Roosts
    - Bald Eagle Winter Concentration
    - Bald Eagle Winter Forage
    - Bald Eagle Winter Range
    - Great Blue Heron Nesting Area
    - Great Blue Heron Foraging Area
    - White Pelican Nesting Area
    - White Pelican Foraging Area
    - White Pelican Overall Range
- A bald eagle Incidental Take Permit was obtained for the project on April 26, 2023, Eagle Take Form 3-200-71 (Eagle Take – Associated with but not the Purpose of an Activity (Incidental Take Permit) (**Appendix A**). The Incidental Take Permit is summarized in **Section 9.0**.
- Burrowing owl breeding habitat is further addressed in **Section 12.0 State Threatened and Endangered Species**.
- Preble's meadow jumping mouse is further addressed in **Section 11.0 Species Protected under the ESA**.
- Mule deer are further addressed in **Section 10.0 High Priority Habitat**.

8.0 MIGRATORY BIRDS

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 730-712). The MBTA makes it illegal for anyone to take, possess, import, export, transport, sell, purchase barter, or offer for sale, purchase, or barter any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations. In Colorado, all birds except for the European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*) and rock pigeon (*Columba livia*) are protected under the MBTA. A total of 523 migratory bird species are known to occur in the Mountain-Prairie Region (USFWS Region 6, Montana, Wyoming, Utah, North Dakota, South Dakota, Nebraska, Kansas and Colorado); 320 of the 523 migratory bird species are known to breed in USFWS Region 6.

MBTA Nests and Raptor Species (Non-Eagle)

- The CPW SAM data (**Section 7.0**) indicates that the site falls within the overall range of several migratory bird and non-eagle raptor species. Numerous field assessments by ERC from 2021 to the present identified numerous MBTA nests and non-eagle raptor nests. These birds, their eggs, and active nests are protected under the MBTA, and taking or possessing these resources is prohibited. Active nests must become inactive before the destruction of the nest without a USFWS permit.
- The USFWS regulates active raptor nest sites under the MBTA with local review from the CPW. CPW has established recommended protective buffer zones and seasonal activity restrictions for a variety of Colorado raptors (CPW 2020). No non-eagle raptor nest protection buffers are identified on the CPW SAM data within the site (CPW 2023a). Nest protection buffers are mapped on the site for the great blue heron and white pelican, which are discussed subsequently.
- Disturbances associated with the proposed project will include the removal of vegetation to construct additional settling ponds and stockpile areas, construction of a sand plant and the utilization of haul roads to transport sediment for processing and storage. Additionally, continued dredging of the reservoir will occur from approximately mid-February through mid-December.
- Prior to vegetation removal, a nest survey will be completed to ensure that active nests are not disturbed. Generally, the active nesting season in this region of Colorado occurs between April 1 and August 31 for most non-raptor migratory birds and between February 1 and September 15 for non-eagle raptors. Haul road usage and dredging activities will avoid trees or locations with active MBTA and raptor nests. Dredging activities will be limited during the active migratory bird and raptor breeding season per CPW buffer zone protocol (CPW 2020).
- As recommended in the 2025 CPW Letter, the project will coordinate with the CPW throughout the permitting process for the sand plant to assess and mitigate potential impacts to MBTA nests and non-eagle raptor nests.

Great Blue Heron and White Pelican Nesting Areas

- A vast abundance (>200) of active great blue heron (*Ardea herodias*) nests were observed within the site during a 2021 field inspection. The 2024 field evaluation occurred outside of the active nesting season, however, the presence of blue herons within the western side of the site was confirmed. Blue herons return to the same nest site for consecutive breeding seasons. CPW recommends a 500-meter buffer for active great blue heron nests and a seasonal restriction on human encroachment from March 1 to July 1 (CPW 2023b). Impacts related to human activity and development can disrupt heron

nesting and cause nest abandonment and mortality. CPW mapped buffer zones for the great blue heron within the site (CPW 2023a) are shown in **Figure 2**.

- Mine activities that will occur within the great blue heron nest buffer include ongoing dredging of the reservoir from mid-February through mid-December, sediment removal from the In-Reservoir (In-Res) Settling Ponds and transportation of the material using the existing haul roads to Stockpile 1 or the West Stockpile area and vegetation removal for construction of the South Settling Ponds. Construction of the sand plant will be located outside of the great blue heron nest buffer. The proposed mine activities within the great blue heron buffer are shown in **Figure 2**.
- The CPW SAM data identified an American white pelican (*Pelecanus erythrorhynchos*) nesting area on the western side of the site. The CPW recommends a seasonal restriction to human disturbance on those islands and/or beach areas where any pelican nests are found from April 15 to August 15 (CPW 2023b). The CPW mapped buffer zone for the white pelican nesting area within the site (CPW 2023a) is shown in **Figure 3**.
- Mine activities that will occur within the white pelican nesting buffer include ongoing dredging of the reservoir from mid-February through mid-December, sediment removal from the In-Res Settling Ponds and transportation of the material using the existing haul roads to Stockpile 1 or the West Stockpile area. Construction of the sand plant will be located outside of the great blue heron nest buffer. The proposed mine activities within the white pelican nesting area buffer are shown in **Figure 3**.
- Nesting sites for the white pelican and the great blue heron rookery will be avoided during the recommended buffer seasons for each species (CPW 2023b). To comply with CPW buffer zone protocols, dredging activities will be strategically sequenced during the nesting season. Dredging operations within the reservoir, ongoing since 2021, are conducted using a floating dredge equipped with an on-board pump. This method limits disturbances to the immediate vicinity of the dredging vessel, with only minimal noise generated. Disturbances within the In-Res Settling Ponds have also been ongoing since 2021. These reservoirs are now filled with sediment and future activities will include removing and transporting the sediment to the nearby stockpile locations, which have also been utilized since 2021. Observations from 2021 until the present confirm that the great blue heron rookery and white pelican nesting area have remained intact since the initiation of mining activities in 2021, suggesting that these species may demonstrate a degree of tolerance to the operational presence and noise produced by the mine. New disturbances within the great blue heron rookery will include the construction of the South Settling Ponds. These areas are located on the west side of the existing haul road and are separated from the rookery by a large berm. Construction of the South Settling Ponds will occur outside of the great blue heron nesting season from March 1 to July 1 (CPW 2023b). Construction of the sand plant will be located outside the nesting sites for the white pelican and the great blue heron.
- As recommended in the 2025 CPW Letter, the project will coordinate with the CPW throughout the permitting process for the sand plant to assess and mitigate potential impacts to white pelican and great blue heron nest sites.

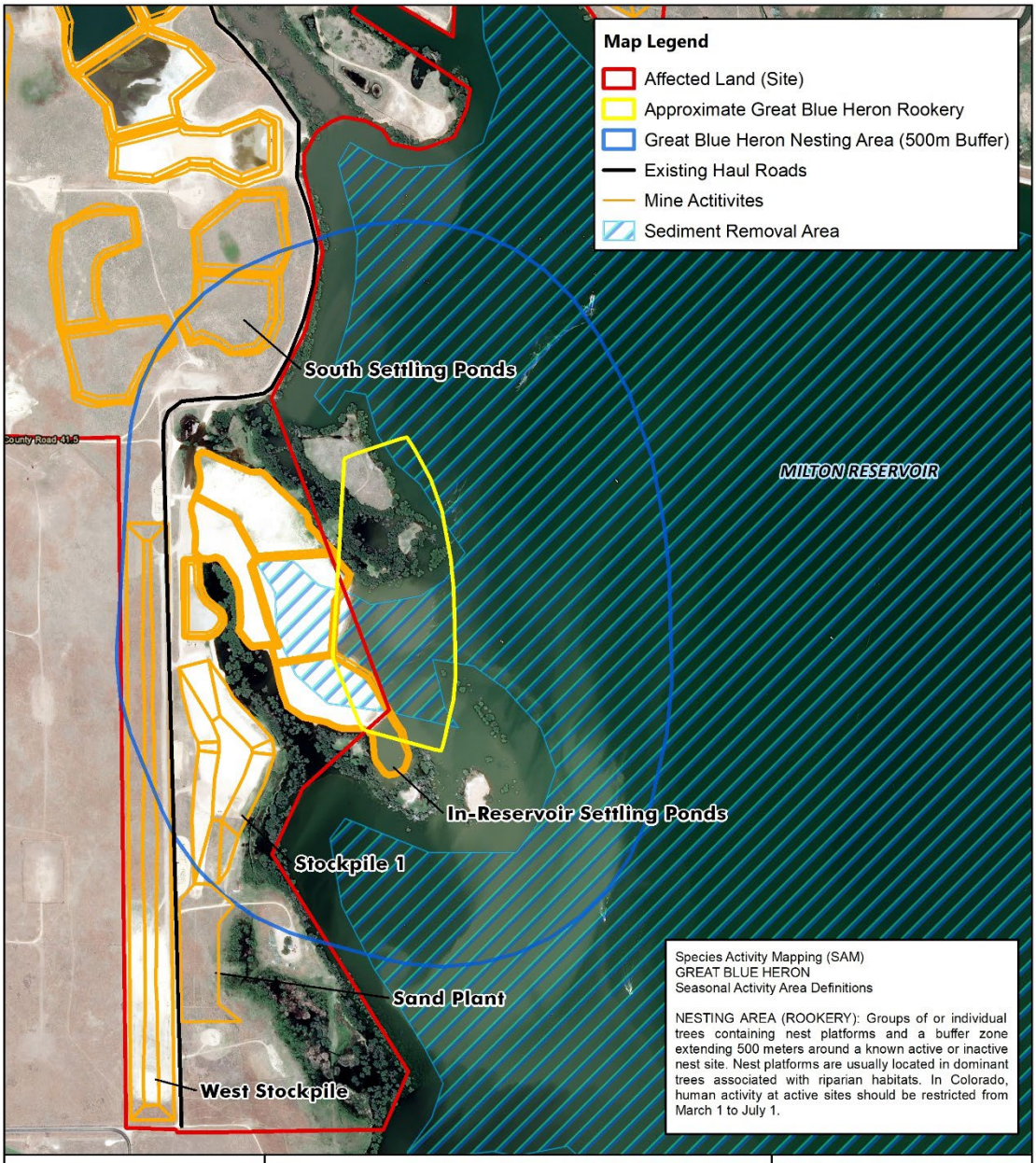

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FIGURE 2 - CPW SAM GREAT BLUE HERON

FARMERS SAND
WELD COUNTY, COLORADO

N

0 500 1,000
Feet

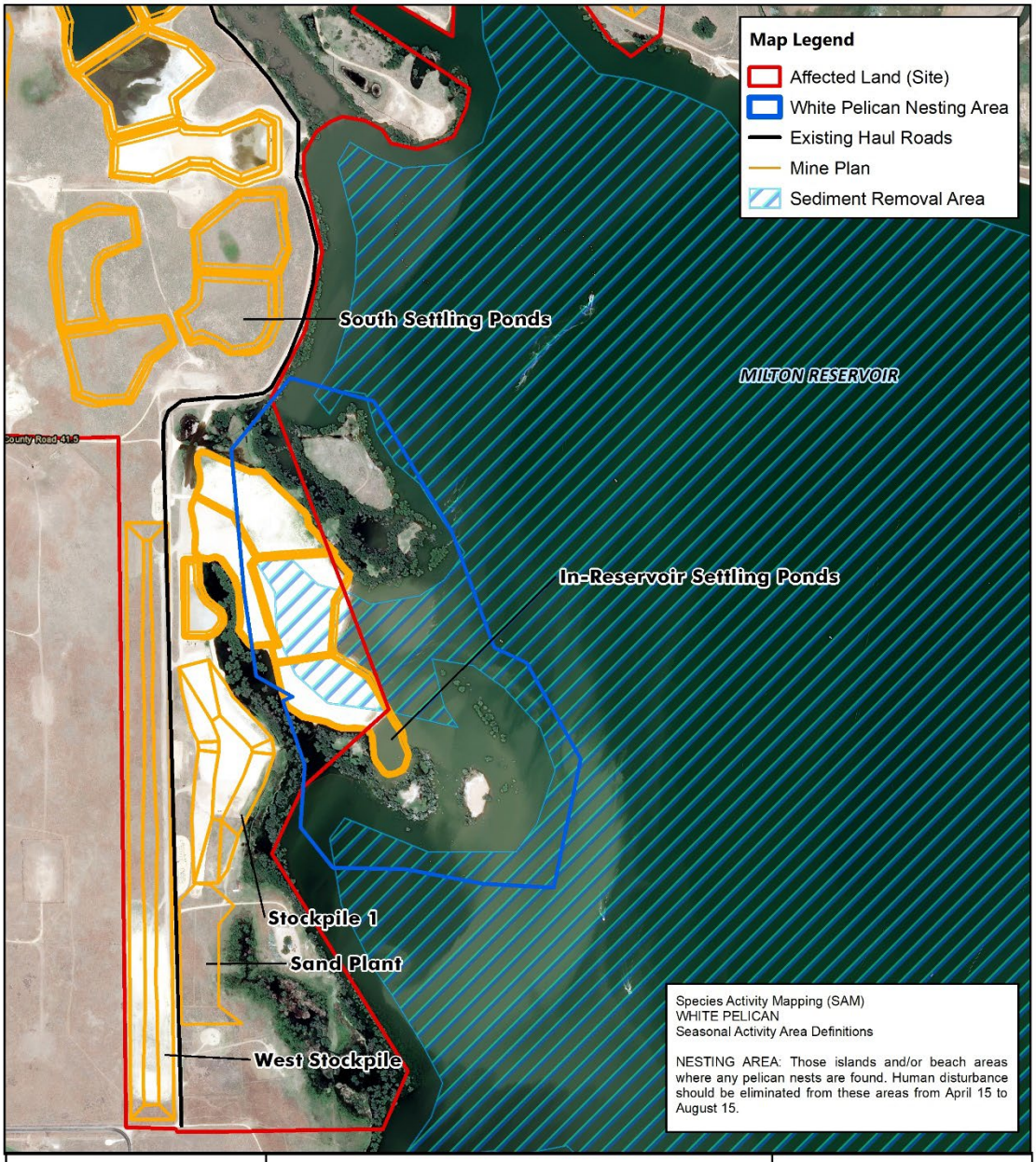

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FIGURE 3 - CPW SAM
AMERICAN WHITE PELICAN

FARMERS SAND
WELD COUNTY, COLORADO

N

0 500 1,000
Feet

Bald Eagle Nest Sites

- ERC confirmed four active eagle nests (Nests A, B, C, and D) on March 31, 2023; June 28, 2024; July 26, 2024; and August 9, 2024. A fifth potential alternate nest was also identified during the 2024 season. The status of all five nests will be reassessed after December 1, 2024, when the bald eagle nesting season begins. The location of the eagle nests is shown in **Figure 4**.
- Eagle species are regulated by the USFWS under the MBTA and Bald and Golden Eagle Act with local review from the CPW. CPW has established specific recommended protective buffer zones and seasonal activity restrictions for bald and golden eagles.
- A bald eagle Short Term Incidental Take Permit was obtained for the project effective June 11, 2024 (**#MBPER3656925**) and expires May 31, 2029 (**Appendix A**). The Incidental Take Permit is summarized in **Section 9.0**.

9.0 USFWS INCIDENTAL TAKE PERMIT

The project received a Short-Term Incidental Take Permit **(#MBPER3656925)** from the USFWS for four bald eagle nest sites on the western side of Milton Reservoir (**expires May 31, 2029**) (enclosed as **Appendix A**). Refer to **Figure 4** for the location of the nest sites and the regulated 660-foot disturbance buffer. The CPW data identifies the nests as:

01149A (Destroyed, no longer present)

01149B (Nest is Intact, occupation undetermined)

01149C (Nest is Intact, occupied)

01149D (Nest is Intact, occupied)

The following conditions are required by the permit:

1. Annual Report to MBTA Permit office
    a. Complete form (**Form 3-202-15**) for each nest and each monthly monitoring event.
    b. Monitoring required from 2024-2031 during the nesting season. For USFWS Mtn Prairie Region, per CPW agreement, nesting season is considered Dec 1 through July 31 (CO only).
    c. No monitoring is required if activities are outside of the Jan 1 – Aug 31 timeframe.
    d. Avoid moving dredge boat and pontoon boat through the Nest D buffer before dawn or dusk. Disruptive construction (dredging, heavy equipment work, other loud activities) within the 660-foot buffer must occur outside the Jan 1-Aug 31 timeframe when eagles are most sensitive unless there is a biological monitor on site.
    e. Monitoring to occur early morning, before sunrise or late afternoon just prior to sunset (5am-8am; 3pm-5pm)
    f. Monitoring to be completed at least once per month for a minimum of 1 hour.

g. If monitoring determines the nest is inactive or failed as of June 1, then monitoring can be discontinued for the remainder of the nesting season.

h. If young are present, and documented as having fledged by June or July, then no additional visits during the nesting season is necessary.

i. If no eagle activity is observed, a report is still required. The report must indicate "No activity observed".

ERC observed a new alternate bald eagle nest along the western side of the reservoir (Latitude 40.224947° N, Longitude -104.649520°W) (refer to **Figure 4**). This nest was not included in the USFWS Take Permit therefore the applicant is in consultation with CPW, and the permit will be amended as necessary to remain in compliance through the expiration date of **May 31, 2029**.

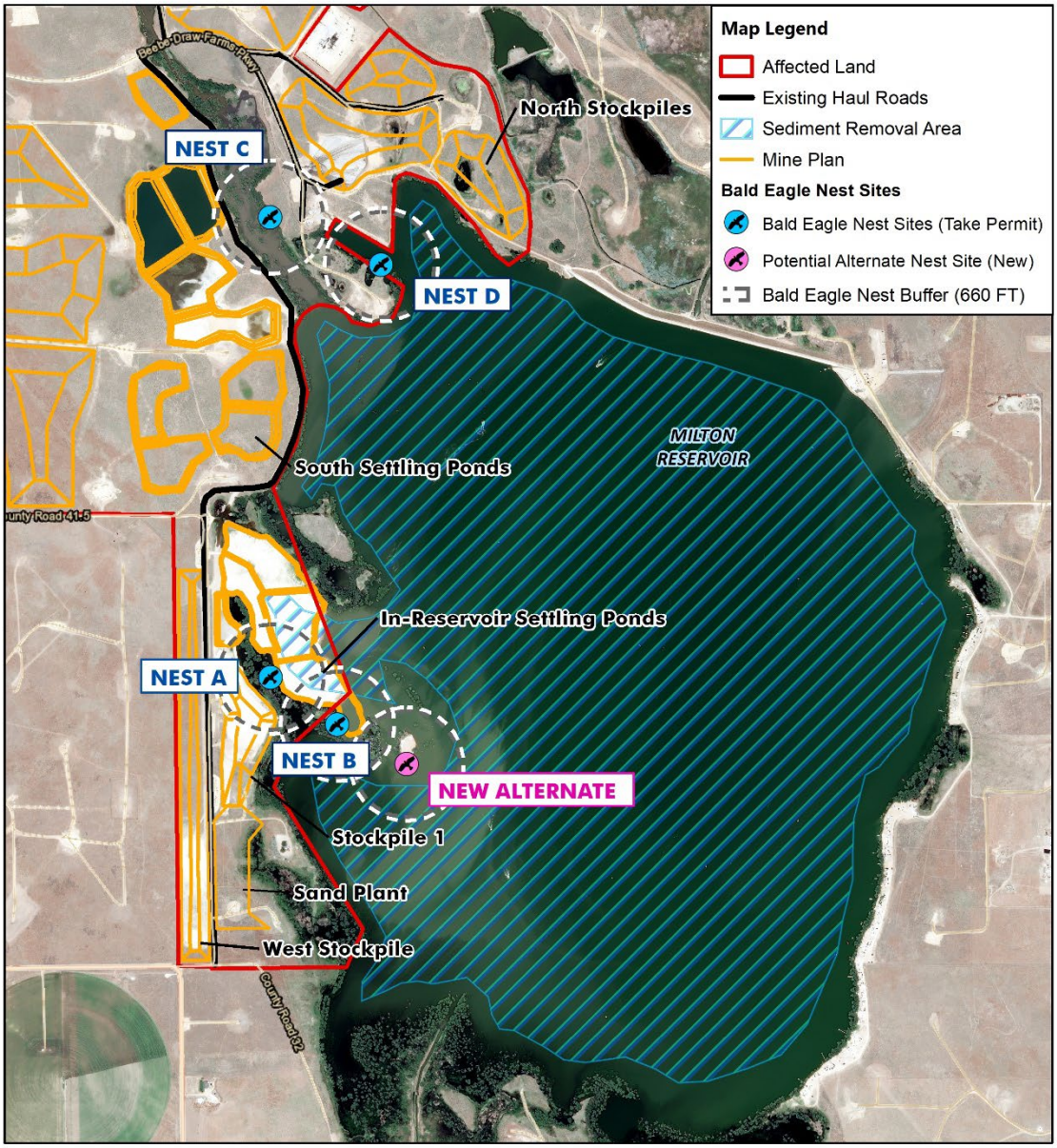

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FIGURE 4 - BALD EAGLE NEST SITES

FARMERS SAND
WELD COUNTY, COLORADO

N

0 750 1,500
Feet

10.0 CPW HIGH PRIORITY HABITAT

The CPW developed High Priority Habitat (HPH) areas to ensure land use development recommendations are consistent statewide (CPW 2023c). This data was compiled for the Colorado Energy & Carbon Management Commission in response to SB181. CPW HPH data was reviewed, and four areas are mapped within the site: Bald Eagle Active Nest Site (0.5 mile buffer), Bald Eagle Active Nest Site (0.25 mile buffer), Bald Eagle Roost Site and Mule Deer Severe Winter Range.

Bald Eagle HPH

- The monthly monitoring requirements and mitigation measures for the project comply with the terms of the USFWS 2024 Take Permit. Disturbances to this HPH have been minimized to the extent practicable. Monthly monitoring and consultation with CPW will continue for the duration of the permit (expires June 15, 2029).

Mule Deer Severe Winter Range Habitat

The CPW has identified Mule Deer Severe Winter Range Habitat within the permit area (CPW 2023c), as shown in **Figure 5**. CPW defines Mule Deer Severe Winter Range Habitat as:

> *That part of the overall range where 90% of the individuals are located when the annual snow pack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten. No permitted or authorized human activities from December 1 to April 30.*

Since 2021, FRICO has conducted dredging operations within the permit area at Milton Reservoir from approximately mid-February through mid-December, depending on the weather conditions. Dredging is performed with a cutter-head dredge boat that operates continuously, 24/7, to remove bottom sediments. This material is pumped as a slurry to a discharge basin near the shore. Other ongoing mining activities that occur within the affected land include sediment removal from the In-Res settling ponds and transportation of the material using the existing haul roads to the stockpile areas and vegetation removal for construction of the proposed South Settling Ponds and construction of the sand plant.

Potential Impact on Mule Deer Severe Winter Range Habitat

- A portion of the site lies within CPW mapped Mule Deer Severe Winter Range Habitat, which presents the potential for temporary habitat disturbances from mining activities. Disturbances such as excavation and vegetation removal may reduce available cover and forage, while heavy equipment can compact soil and increase erosion potential. Stockpiled materials might temporarily disrupt natural topography, potentially fragmenting habitat areas and reducing overall habitat quality. The construction of haul roads and increased human activity can result in higher noise levels, traffic, and dust, potentially causing mule deer to avoid these areas, further fragmenting upland habitat. No disturbances are proposed within the eastern portion of the permit area.
- Potential project disturbances are considered temporary. According to the site's reclamation plan, future restoration efforts will reestablish native rangeland, reconnect movement corridors, and improve overall Mule Deer Severe Winter Range Habitat.

Mitigation Measures to Minimize Impacts to Mule Deer Severe Winter Range Habitat

- Measures to minimize impacts to Mule Deer Severe Winter Range focus primarily on avoiding disturbance during the most critical winter period and ensuring proper restoration subsequently. Specifically, mitigation measures proposed for the project include:

Seasonal Restrictions and Timing of Operations:

- Most dredging operations occur during the warmer months when mule deer are less reliant on Severe Winter Range. Mule deer do not directly utilize the reservoir itself, making it unlikely that dredging operations will directly impact Severe Winter Range Habitat. Additionally, no dredging operations are planned during peak winter conditions when snowpack and low temperatures are at their most extreme. Dredging will occur from mid-February through mid-December, weather dependent.
- The 2025 CPW Letter recommends not constructing during the winter season (December 1 to April 30), if this is not feasible, CPW recommends that the applicant start construction outside of this window.
- Construction will take place outside of the winter season (December 1 – April 30). Some mining activities may overlap with milder winter conditions in November/December and March/April, though these periods typically pose fewer risks to mule deer populations. These measures are intended to protect the mule deer population during the harshest winter conditions while allowing necessary project activities to occur during less sensitive periods. This proposed timeframe remains consistent with CPW's recommendations.
- If fencing is installed, it will comply with CPW's "Fencing with Wildlife in Mind" guidelines to allow safe wildlife movement.
- All outdoor lighting will be down-shielded, directed away from sensitive habitats, and comply with USFWS/American Bird Conservancy recommendations.

Reclamation and Restoration:

- Any temporary disturbances are to be remedied through reclamation efforts, including revegetation, grading, seeding, mulching, and a coordinated weed management plan, which together help restore disturbed lands to their natural rangeland state.

Reclamation and Post-Mining Land Use

- Reclamation efforts will target disturbed areas, including stockpile areas, settling ponds, and the sand plant with the lands being returned to rangeland. Approximately 379 acres will be revegetated, with 8 acres designated as permanent roads. Grading, seeding, and mulching will establish ground cover to minimize weed growth and stabilize the soil, reducing erosion with minimal maintenance requirements. The future, post-mining landscape will continue to support reservoir use, dam maintenance, and oil and gas operations.
- Per recommendations provided in the 2025 CPW Letter, a weed management plan has been developed (Refer to **Appendix C**) and the project will coordinate with Weld County and NRCS to ensure effective weed management and habitat restoration.

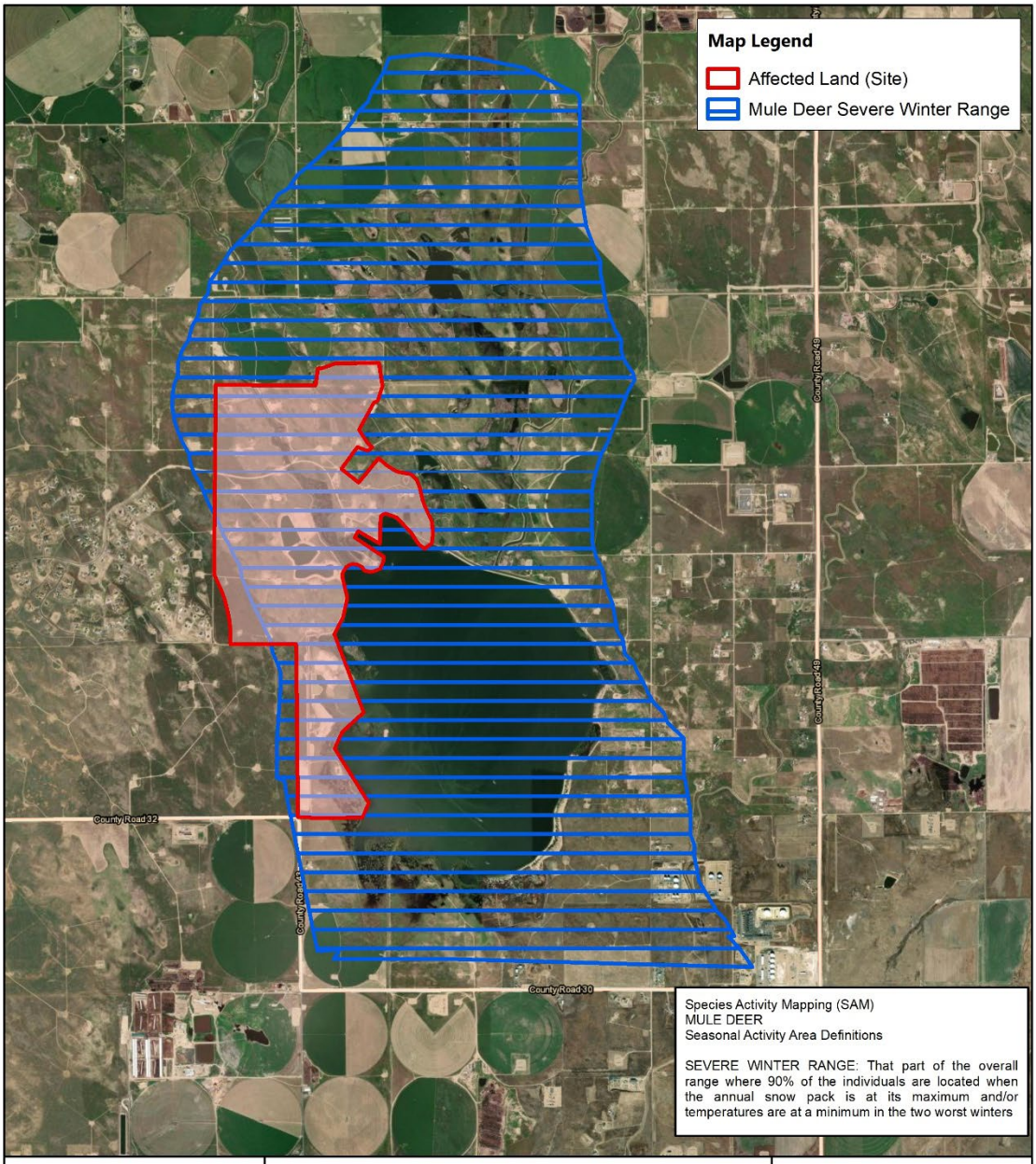

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FIGURE 5 - CPW SAM
MULE DEER

FARMERS SAND
WELD COUNTY, COLORADO

N

0 2,000 4,000
Feet

11.0 SPECIES PROTECTED UNDER THE ENDANGERED SPECIES ACT OF 1973

The ESA of 1973 was enacted by the United States to conserve endangered and threatened species and the ecosystems that they depend on. Under the ESA, species may be listed as either "endangered" or "threatened"; both designations are protected by law. The ESA is administered by the USFWS. The USFWS has developed project-specific species lists, available online by request, identifying threatened, endangered, and proposed species, designated critical habitat, and candidate species protected under the ESA that may occur within the boundary of the proposed project and/or may be affected by the proposed project (USFWS 2024) (Project Code: 2024-0145993). The species list for the site has identified a total of seven threatened or endangered species within the site.

11.1 SPECIES NOT WITHIN RANGE OF THE SITE

The following federally listed threatened and endangered species are identified to occur within Weld County. However, these species are not known to exist within the specific vicinity of the site and/or have specific habitat requirements (i.e., elevation range) that are not common in the vicinity of the site.

Common Name	Scientific Name	Status*	Determination
Whooping crane	*Grus Americana*	FT	NO EFFECT; HABITAT LACKING

*Status key:

FT – Federally Threatened, FE – Federally Endangered

- The site does not contain the specific habitat characteristics necessary to support the species listed above. This species is not likely to occur within the site, therefore any future land use changes would not likely adversely affect the continued existence or available habitat of the species.

11.2 WATER DEPLETION SPECIES

The USFWS under the ESA has determined that water depletions in the South Platte River Basin could be considered an adverse effect to the species identified below. The site is considered to be located within the South Platte River Basin.

Common Name	Scientific Name	Status*	Determination
Pallid sturgeon	*Scaphirhycchus albus*	FE	NOT LIKELY TO ADVERSELY AFFECT
Piping plover	*Charadrius melodus*	FT	NOT LIKELY TO ADVERSELY AFFECT

*Status key:

FT – Federally Threatened, FE – Federally Endangered

Any water-related project conducted in the Platte River Basin that has a federal nexus; such as federal funding or a federal permit (i.e., Section 404 Clean Water Act (CWA) Permit), is subject to ESA Section 7 Consultation with the USFWS. The consultation is a mandate for water depletion projects that may adversely affect threatened and endangered species that rely on the South Platte River.

- Currently, the proposed project does not involve a federal nexus that would trigger ESA Section 7 Consultation with the USFWS. As a result, the project is not expected to adversely affect water-depletion species, their habitats, or any proposed or designated critical habitats.

11.3 SPECIES POTENTIALLY WITHIN RANGE OF THE SITE

The following federally listed threatened and endangered species are identified to occur or historically occur within Weld County (USFWS 2024). The site is located within the potential known range for these species to occur. Further analysis was conducted to determine if the species or habitat has the potential to exist on the site considering site-specific conditions and characteristics. A brief explanation is provided as to the species life cycle, habitat requirements and potential occurrence on the site. The site is not within designated critical habitat for the species listed below.

Common Name	Scientific Name	Status*	Habitat	Project Rational	Determination
Eastern Black Rail	*Laterallus jamaicensis*	FT	Dense and complex vegetative cover within salt and freshwater marshes. Interspersed with, or adjacent to, very shallow water of 1 to 6 centimeters.	The site lacks a shrub canopy and the seasonal drawdown of the reservoir further limits the suitability of potential habitat.	NOT LIKELY TO ADVERSELY AFFECT; HABITAT NOT PRESENT
Preble's Meadow Jumping Mouse	*Zapus hudsonius preblei*	FT	Undisturbed riparian habitat with dense herbaceous vegetation, below 7,600' and within 300' of vegetated canals, ditches, and wetlands.	The dense fringe cattail vegetation around the reservoir does not contain suitable habitat. The adjoining uplands are highly disturbed by mining activities further limiting potentially suitable habitat.	NOT LIKELY TO ADVERSELY AFFECT; HABITAT NOT PRESENT
Ute Ladies'-tresses orchid	*Spiranthes diluvialis*	FT	Typical habitat is open and sparsely vegetated riparian habitats. They do not compete well with aggressive species such as reed canary grass or monocultures of cattails.	The fringe wetlands dominated by cattails and open water of the reservoir do not contain suitable habitat for this species.	NOT LIKELY TO ADVERSELY AFFECT; HABITAT NOT PRESENT
Western Prairie Fringed Orchid	*Platanthera praeclara*	FT	Found in native wet prairies and sedge meadows.	The fringe wetlands dominated by cattails and the seasonally fluctuating conditions of the reservoir do not contain suitable habitat for this species.	NOT LIKELY TO ADVERSELY AFFECT; HABITAT NOT PRESENT

12.0 STATE THREATENED AND ENDANGERED SPECIES

Species identified as state threatened or endangered are protected by the CPW under Colorado Statute Title 33. State regulations prohibit "*any person to take, possess, transport, export, process, sell or offer for sale, or ship and for any common or contract carrier to knowingly transport or receive for shipment*" any species or subspecies listed as state endangered or threatened. The CPW also has identified State Species of Special Concern, which are species or subspecies of native wildlife that are currently vulnerable in their Colorado range and have the potential to become threatened or endangered. Species of Special Concern are not protected under State regulations but the 'take' of individuals and disturbance of their habitat is strongly discouraged.

All state listed species were screened as potential inhabitants of the survey area based on general habitat requirements and CPW Species Profiles (CPW 2024). ERC evaluated the species listed by CPW as threatened or endangered that could potentially exist within the survey area. All animal species listed above as threatened or endangered by the USFWS are also listed by the CPW as threatened or endangered, respectively, therefore were not duplicated below.

12.1 SPECIES NOT WITHIN RANGE OF THE SITE

The following listed threatened and endangered species are identified to occur within the state (CPW 2024). However, these species are not known to exist within the specific vicinity of the survey area and/or have specific habitat requirements (i.e., elevation range) that are not common in the vicinity of the survey area (CPW 2024 and USFWS 2024).

Common Name	Scientific Name	Status*	Determination
Boreal toad	*Bufo boreas boreas*	SE	NO EFFECT; HABITAT NOT PRESENT
Arkansas darter	*Etheostoma cragini*	ST	NO EFFECT; HABITAT NOT PRESENT
Bonytail	*Gila elegans*	SE	NO EFFECT; HABITAT NOT PRESENT
Brassy minnow	*Hybognathus hankinsoni*	ST	NO EFFECT; HABITAT NOT PRESENT
Colorado pikeminnow	*Ptychocheilus lucius*	ST	NO EFFECT; HABITAT NOT PRESENT
Common shiner	*Luxilus cornutus*	ST	NO EFFECT; HABITAT NOT PRESENT
Greenback cutthroat trout	*Oncorhynchus clarki stomias*	ST	NO EFFECT; HABITAT NOT PRESENT
Grizzly bear	*Ursus arctos*	SE	NO EFFECT; HABITAT NOT PRESENT
Humpback chub	*Gila cypha*	ST	NO EFFECT; HABITAT NOT PRESENT
Kit fox	*Vulpes macrotis*	SE	NO EFFECT; HABITAT NOT PRESENT
Lake chub	*Couesius plumbeus*	SE	NO EFFECT; HABITAT NOT PRESENT
Lesser prairie-chicken	*Tympanuchus pallidicinctus*	ST	NO EFFECT; HABITAT NOT PRESENT
Lynx	*Lynx canadensis*	SE	NO EFFECT; HABITAT NOT PRESENT
Northern redbelly dace	*Phoxinus eos*	SE	NO EFFECT; HABITAT NOT PRESENT
Plains minnow	*Hybognathus placitus*	SE	NO EFFECT; HABITAT NOT PRESENT
Plains sharp-tailed grouse	*Tympanuchus phasianellus jamesii*	SE	NO EFFECT; HABITAT NOT PRESENT
Razorback sucker	*Xyrauchen texanus*	SE	NO EFFECT; HABITAT NOT PRESENT
Rio grande sucker	*Catostomus plebeius*	SE	NO EFFECT; HABITAT NOT PRESENT
River otter	*Lontra canadensis*	ST	NO EFFECT; HABITAT NOT PRESENT
Southern redbelly dace	*Phoxinus erythrogaster*	SE	NO EFFECT; HABITAT NOT PRESENT

Common Name	Scientific Name	Status*	Determination
Southwestern willow flycatcher	*Empidonax traillii extimus*	SE	NO EFFECT; HABITAT NOT PRESENT
Suckermouth minnow	*Phenacobius mirabilis*	SE	NO EFFECT; HABITAT NOT PRESENT
Wolverine	*Gulo gulo*	SE	NO EFFECT; HABITAT NOT PRESENT

*Status key:

ST – State listed as threatened, SE – State listed as endangered

- The site does not contain the specific habitat characteristics necessary to support the species listed above. These species and/or critical habitat are not present within the site. Therefore, any future land use changes will have no effect on the species, their habitats, or proposed or designated critical habitat.

12.2 SPECIES POTENTIALLY WITHIN RANGE

The following state listed threatened and endangered species are identified to occur or historically occur within Weld County. The site is located within the potential known range for these species. Further analysis was conducted to determine if the species or habitat has the potential to exist on the site considering site-specific conditions and characteristics. A brief explanation is provided as to the species life cycle, habitat requirements and potential occurrence within the site.

Common Name	Scientific Name	Status*	Habitat	Determination
Burrowing owl	*Athene cunicularia*	ST	Nesting habitat occurs in burrows, especially in both active and inactive prairie dog colonies.	POTENTIALLY WITHIN RANGE

*Status key:

ST – State Threatened, SE – State Endangered

BURROWING OWL (*ATHENE CUNICULARIA*)

The burrowing owl (Owl) is listed as a state threatened species in Colorado. The Owl is small (length of 24 centimeters), long-legged, boldly spotted, and barred with brown and white. The Owl is a breeding species across the plains of eastern Colorado however, it rarely winters in the state. Nesting habitat is in burrows, especially in both active and inactive prairie dog colonies, located in grasslands, mountain parks, well-drained steppes, deserts, prairies, and agricultural lands from late March through October. The Owl can usually be observed on low perches such as fence posts, dirt mounds or the ground. Clutch size of this Owl averages six to seven and incubation lasts up to 30 days. The owlets usually run and forage at 4 weeks and fly at 6 weeks. Primary threats to the existence of this species are habitat loss due to intensive agriculture, habitat degradation and fragmentation due to control of burrowing mammals and predation by cats and dogs.

- The CPW Sam Data identifies the entire site as Burrowing Owl Breeding Range (**Section 7.0 CPW SAM Data**). No Owl individuals were observed in or surrounding the site. However, areas that contain prairie dog burrows are visible on the aerial imagery, which is considered potential Owl habitat.

- Owl habitat is considered likely to occur within the site. Prior to any future land use changes, a burrowing owl survey is recommended in accordance with CPW Burrowing Owl Survey Protocol (CPW 2021).
- Any new disturbances, including vegetation removal, should not occur during Owl breeding season in Colorado (generally between March 15 and August 31), without an Owl survey. According to CPW guidelines, disturbance is prohibited within ⅛ mile (660 feet) of a Burrowing Owl nesting site during nesting season, March 15 through August 31 (CPW 2020).
- If any new land disturbance (such as vegetation removal) is planned during the Owl breeding season, an Owl survey must be submitted to the CPW to ensure compliance.

13.0 REFERENCES

Apollo. Apollo Mapping, LLC. 2024. Satellite Imagery Acquired from AIRBUS DS GEO dated June 2024.

Armstrong, D.M., et al. Edited by M.E. Bakeman. May 1997. *Report on Habitat Findings of the Preble's Meadow Jumping Mouse*. Presented to the US Fish and Wildlife Service and the Colorado Division of Wildlife.

CPW. Colorado Parks and Wildlife. 2020. Recommended Buffer Zones and Seasonal Restrictions for Raptors. Available online at: https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/Raptor-Buffer-Guidelines.pdf

CPW. Colorado Parks and Wildlife. 2021. Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls. Available online at: https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/Recommended-Survey-Protocol-Burrowing-Owls.pdf

CPW. Colorado Parks and Wildlife. 2023a. Species Activity Mapping (SAM), Geographic Information Systems (GIS) Data. Updated December. Available online at: http://www.arcgis.com/home/item.html?id=190573c5aba643a0bc058e6f7f0510b7

CPW. Colorado Parks and Wildlife. 2023b. CPW Recommendations to Avoid and Minimize Impacts to Wildlife from Land Use Development in Colorado. July 19. Available online at: https://cpw.state.co.us/Documents/Conservation-Resources/Energy-Mining/CPW_HPH-Map-Layers.pdf

CPW. Colorado Parks and Wildlife. 2023c. High Priority Habitat (HPH), Geographic Information Systems (GIS) Data. Updated December 22. Available online at: https://www.arcgis.com/home/item.html?id=104877140e534e52840a2bc380390495

CPW. Colorado Parks and Wildlife. 2024. Threatened and Endangered List. Available online at http://cpw.state.co.us/learn/Pages/SOC-ThreatenedEndangeredList.aspx

ECMC. Energy & Carbon Management Commission. 2024. Data Downloads. Available online at: https://ecmc.state.co.us/data2.html#/downloads

CPW. Colorado Parks and Wildlife. 2025. Letter RE: CPW's Comments on the Farmers Sand File No. M-2024-057. January 4.

Hanophy, W. 2009. Fencing with Wildlife in Mind. Colorado Parks and Wildlife, Denver, CO. 36 pp. Available online at: https://cpw.widencollective.com/assets/share/asset/vlrphdeji6

Robert A. Schorr, Brian S. Mihlbachler. 2018. Understanding Habitat Quality for Preble's Meadow Jumping Mouse: How Survival Responds to Vegetation Structure and Composition. Journal of Fish and Wildlife Management 1 December 2018; 9 (2): 545–553. Doi: https://doi.org/10.3996/052018-JFWM-040

Sheppard, PHD, Christine. *Misguiding Light: The Role Artificial Light Plays in Bird Mortality from Collisions with Glass*. American Bird Conservancy, 11 May 2022. Available online at: chrome-

extension://efaidnbmnnnibpcajpcglclefindmkaj/abcbirds.org/wp-content/uploads/2022/05/ABC-lighting-collisions-position-statement-2022.pdf

USFWS. US Fish and Wildlife Service. 2018. Preble's meadow jumping mouse (*Zapus hudsonius preblei*) trapping database for scientific collection activities conducted under section 10 of the Endangered Species Act. Colorado Ecological Services Field Office. Denver.

USFWS. United States Fish and Wildlife Service. 2024. Official Species List. List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project. Project Code: 2024-0145993.

USGS. US Geological Survey. 2011. GAP/LANDFIRE National Terrestrial Ecosystems GIS Data for Arizona. Available online at: https://www.usgs.gov/programs/gap-analysis-project/science/land-cover-data-download

DWR. Division of Water Resources. 2024. Colorado's Decision Support Systems GIS Data Download. Available online at: https://cdss.colorado.gov/gis-data

APPENDIX A

SHORT-TERM EAGLE INCIDENTAL TAKE

Permit Number: MBPER3656925

Version Number: 0

Effective: 2024-06-11 **Expires:** 2029-05-31

Issuing Office:

Department of the Interior

U.S. FISH AND WILDLIFE SERVICE

MB Lakewood Permit Office
P.O. Box 25486 DFC (60154)
Lakewood, Colorado 80225-0486
permitsR6MB@fws.gov
Tel: 303-236-8171

ANNA MUNOZ
DEPUTY REGIONAL DIRECTOR
Digitally signed by ANNA MUNOZ
Date: 2024.06.12 11:34:48 -06'00'

Permittee:

FARMERS RESERVOIR AND IRRIGATION COMPANY
dba MILTON RESERVOIR OWNER
80 SOUTH 27TH AVENUE
BRIGHTON, CO 80601
U.S.A.

Name and Title of Principal Officer:

SCOTT EDGAR GENERAL MANAGER

Authority: Statutes and Regulations: 16 U.S.C. 668-668(d), 16 U.S.C 703-712 50 CFR Part 13, 50 CFR 22.80

Location where authorized activity may be conducted:

Weld County, Colorado

Reporting requirements:

You must submit an annual report to your Regional Migratory Bird Permit Office each year, even if you had no activity.

To retain the authorizations granted under this permit, you must comply with its reporting requirements. **See Condition H and I for more information.**

You must submit an annual report to your Regional Migratory Bird Permit Office each year, even if you had no activity. Form can be found at: https://fwsepermits.servicenowservices.com/fws Under "Explore Permits" select your permit type. Annual Report Form is under Permit Details.

SHORT-TERM EAGLE INCIDENTAL TAKE
Permit Number: MBPER3656925
Version Number: 0
Effective: 2024-06-11 **Expires:** 2029-05-31

Link to federal permit regulations:
https://www.fws.gov/program/migratory-bird-permit/permit-types-and-forms
Reporting Form: Form 3-202-15 (Eagle Incidental Take Report): http://www.fws.gov/forms/3-202-15.pdf.

Authorizations and Conditions:

Eagle Biologist and Contact Number: Anna Joy Lehmicke at: 720-948-4966
General Permit Office Number: 303-236-8171

A. General conditions set out in Subpart B of 50 CFR 13, and specific conditions contained in federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accordance with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. You are responsible for ensuring that the permitted activity is in compliance with all federal, tribal, state, and local laws and regulations applicable to eagles.

C. Valid for use by permittee named above and any subpermittees (see Condition G.).

D. You are authorized to disturb **four (4) bald eagle (*Haliaeetus leuocephalus*) nests** incidental to your ongoing dredging of the Milton Reservoir Project. The building of settling ponds, pipeline routes, haul roads and the dredge boat parking location at the following locations:
Nest 01149A - Latitude 40.22758TN, Longitude -104.65525°W; **Nest 01149B**- Latitude 40.224810°N, Longitude -104.651969°W; **Nest 01149C** - Latitude 40.241085°N, Longitude-104.654913°W; **Nest 01149D** - Latitude 40.240224°N. Longitude -104.650158°W

The authorizations granted by this permit apply only to take that results from activities conducted in accordance with the description contained in the permit application and the terms of the permit. If the permitted activity changes, you must immediately contact PermitsR6MB@fws.gov to determine whether a permit amendment is required in order to retain take authorization.

To disturb/disturbance means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

E. This permit does not authorize intentional take of eagles or eagle nests.

F. You must comply with the following avoidance and minimization measures:

1. To the extent practicable, avoid moving the work boat and pontoon boat through the Nest D buffer before dawn or after dusk.

2. If any new activity (i.e., anything other than boat movement or regular vehicular traffic) is started within the 660-ft buffer of any nest when that nest is active, a qualified biological monitor must be on-site and will have stop work authority if eagles exhibit adverse reactions to the new disturbance.

3. As previously agreed, all dredging activity within nest buffers should occur outside the nesting season. If a nest is not occupied by April 1, it can be assumed that it will not be used that year and these restrictions will no longer apply.

G. Subpermittees.

Any person who is

- employed by or under contract to you for the activities specified in this permit, or
- otherwise designated a subpermittee by you in writing, may exercise the authority of this permit.

1. A subpermittee is an individual to whom you have provided written authorization to conduct some or all of the permitted activities in your absence. Subpermittees must be at least 18 years of age.

2. Any subpermittee who has been delegated this authority may not re-delegate to another individual/business.

3. You are responsible for ensuring that your subpermittees are qualified to perform the work and adhere to the terms of your permit. You are also responsible for maintaining current records of designated subpermittees. As the permittee, you are ultimately legally responsible for compliance with the terms and conditions of this permit and that responsibility may not be delegated.

4. You and any subpermittees must carry a legible copy of this permit and display it upon request whenever exercising its authority.

H. Monitoring Requirements.

You are required to monitor eagle use of important eagle-use areas where eagles are likely to be affected by your activities. You are required to monitor until **2031**, during the season(s) when eagles would normally be present, in the area where the take is likely to occur, and noting whether eagles continue to nest, roost, or forage there.

a. If FRICO completes its activities outside of the January 1 – August 31 nesting season, no monitoring is required.

b. If FRICO activities occur during any portion of the nesting season, a qualified biologist must monitor the nest for activity using standard permit conditions for monitoring.

c. Disruptive construction activities (dredging work, heavy equipment work, other loud activities) within the 660-foot nest buffer area must occur outside the eagle sensitive time (January 1 through August 31) or while a biological monitor is on-site. The biological monitor will have stop work authority when eagles exhibit adverse reactions to disturbance.

Monitoring should occur at a time of day when eagles are most likely to be in the area, e.g., early morning, before sunrise or late afternoon, just prior to sunset, e.g. 7am- 10am; 5pm-7pm EST. Monitoring must be able to provide data on the following: Monitoring should be conducted by qualified biologists and consist of the following:

1. Monitoring should be conducted throughout the entire bald or golden eagle nesting season. For the USFWS, Mountain Prairie Region the bald eagle nesting season is generally considered to be January 1st through August 31st of each year. An exception to this is for the state of Colorado where per agreement with the Colorado Division of Parks and Wildlife the bald eagle nesting season for Colorado is considered to be 1 December through 31 July, each year. For golden eagles the USFWS, Mountain Prairie Region, Migratory Management Office generally considers the nesting season to be January 1st through August 31st of each year. This applies to all 8 states in the USFWS, Mountain Prairie Region.

2. Monitoring should be conducted by qualified biologists in a manner such that the nest monitoring itself does not result in disturbance to nesting bald or golden eagles, if any are present.

3. Monitoring should be done at least one time per month throughout the bald or golden eagle nesting season for a minimum of 1 hour of observation time per month.

4. If monitoring determines the nest is inactive or that it has failed, as of June 1st, then monitoring can be discontinued for the remainder of that nesting season.

5. If the bald or golden eagle pair produces young eagles, and these young eagles are documented as having fledged from the nest by June or July (per these monitoring recommendations), then no additional visits to the nest are necessary, during the current nesting season, to determine status after fledging of the young occurs.

6. If regular once a month monitoring visits are not sufficient to determine occupancy, productivity, and nest success additional monitoring visits should then be added in order to make these determinations.

7. Monitoring should occur at a time of day when bald or golden eagles are most likely to be in the nest area, (e.g., early morning, before sunrise or late afternoon, just prior to sunset).

8. Nest monitoring should provide data on nesting bald or golden eagles regarding the following:
   a) Date and length of time eagles were observed
   b) Time of day
   c) Number and age of eagles observed (i.e. juvenile, immature, subadult, adult)
   d) Observed behavior (e.g. perching, feeding, sitting on or attending nest, in flight)

e) Nest activity status (active, inactive)
f) Nesting status (incubating eggs, eaglets present)
g) Nest productivity (number of young produced/observed etc.)
h) Nest success (number of eaglets fledged, or note if nest failed)

You remain responsible for all outstanding monitoring requirements required under the terms of the permit for take that occurs prior to cancellation, expiration, suspension, or revocation of the permit.

I. Reporting Requirements.

1. You must submit an annual report summarizing the information you obtained through monitoring to the Service for **seven years (2024-2031)** to the issuing permit office at PermitsR6MB@fws.gov .

You may use Form 3-202-15 (Eagle Take Report) found online at http://www.fws.gov/forms/3-202-15.pdf to report eagle monitoring activities.

Monitoring reports must be submitted by November 30 of each calendar year a report is required to the issuing migratory bird permit office at U.S. Fish and Wildlife Service, Migratory Bird Permit Office, P. O. Box 25486, DFC (60154), Denver, CO 80225 and/or PermitsR6MB@fws.gov, and should include the following information:

a. Date and length of time eagles were observed;
b. Time of day;
c. Number and age of eagles observed (i.e. juvenile, immature, subadult, adult); if age is not known, provide description;
d. Observed behavior (e.g. perching, feeding, sitting on or attending nest, in flight);
e. In the event a new eagle's nest is built on/adjacent to your property, you must also report the new location and whether the eagles produced young at that site;
f. If any eagle nesting attempt was successful, failed or the eagles abandoned the area; and
g. A description of any human activity at the time eagles are observed during each month of the monitoring period, (e.g. construction, road building, use of machinery, etc.).

If no eagle activity is observed, a report indicating "no activity observed" is still required.
If project activities were delayed or not conducted, an Annual Report indicating that “no activities occurred” is required.

2. You must immediately notify the migratory bird permit issuing office at PermitsR6MB@fws.gov upon discovery of any unanticipated take or regarding any apparent injury or death occurring to any eagle, including viable eggs or young, related or unrelated to the project activities. You must immediately contact the nearest available permitted migratory bird rehabilitator (see https://www.fws.gov/story/find-migratory-bird-rehabilitation-facility) to find a permitted rehabilitator near you) to coordinate transportation of any injured eagle.

SHORT-TERM EAGLE INCIDENTAL TAKE
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Effective: 2024-06-11 **Expires:** 2029-05-31

All of the provisions and conditions of the governing regulations at 50 CFR part 13 and 50 CFR part 22.80 are conditions of your permit. Failure to comply with the conditions of your permit could be cause for suspension of the permit and/or citation.

J. The standard conditions below are a continuation of your permit conditions. If you have any questions regarding these conditions, refer to the regulations and forms, or to obtain contact information for your issuing office, visit: https://www.fws.gov/program/migratory-bird-permit/permit-types-and-forms

1. This permit does not authorize you to conduct activities on federal, state, tribal, or other public or private property without additional prior written permits or permission from the agency/landowner.

2. You remain responsible for all outstanding monitoring requirements and mitigation measures required under the terms of the permit for take that occurs prior to cancellation, expiration, suspension, or revocation of the permit. Provisions for discontinuance of permit activity are outlined in 50 CFR 13.26.

3. You must maintain records as required in 50 CFR 13.46. Your records must also include the data gathered for monitoring and reporting purposes. All records relating to the permitted activities must be kept at the location indicated in writing by you to the migratory bird permit issuing office.

4. Acceptance of this permit authorizes the U.S. Fish and Wildlife Service to inspect and audit or copy any permits, books or records required to be kept by the permit and governing regulations (50 CFR 13.47).

5. You must allow Service personnel, or other qualified persons designated by the Service, access to the areas where eagles are likely to be affected by your project activities, at any reasonable hour, and with reasonable notice from the Service, for purposes of monitoring eagles at the site(s) while the permit is valid and for up to 3 years after it expires

6. The Service may amend, suspend, or revoke a permit issued under this section if new information indicates that revised permit conditions are necessary, or that suspension or revocation is necessary, to safeguard local or regional eagle populations. This provision is in addition to the general criteria for amendment, suspension, and revocation of Federal permits set forth in 13.23, 13.27, and 13.28 of this chapter.

7. To renew this permit if the activities described in Condition D have not been completed by the expiration date of this permit, permittee must meet issuance criteria at the time of renewal and must also have been in compliance with permit conditions, including all monitoring and reporting requirements of the original permit.

8. You may request amendment to your permit. The Service will charge a fee for substantive amendments made to permits within the time period that the permit is still valid. The fee is $500 for commercial permittees and $150 for non-commercial permittees (50 CFR 13.11(d)(4)). Substantive amendments are those that pertain to the purpose and conditions of the permit and are not purely administrative. Administrative changes, such as updating name and address information, are required under 13.23(c), and the Service will not charge a fee for such amendments. Requests for substantive amendment must be submitted via Form 3-200-71.

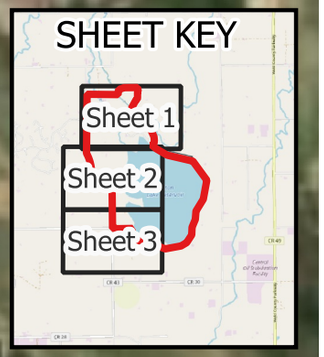
APPENDIX B

Map Legend

- Affected Land (1080 ac)
- Permit Boundary (2497 ac)

- 192 - Western Great Plains Floodplain
- 194 - Western Great Plains Riparian Woodland and Shrubland
- 329 - Western Great Plains Sandhill Steppe
- 331 - Western Great Plains Shortgrass Prairie
- 458 - Inter-Mountain Basins Playa
- 556 - Cultivated Cropland
- 557 - Pasture/Hay
- 575 - Disturbed/Successional - Shrub Regeneration
- 579 - Open Water (Fresh)
- 581 - Developed, Open Space

SHEET KEY



COLORADO LICENSED
LISA JEAN SHEA
04/08/25
32604
PROFESSIONAL ENGINEER

Prepared By:
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Lakewood, CO 80228
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ERC# 342-2203

0 600 1,200 Ft

Projection:
NAD 1983 StatePlane Colorado North FIPS 0501 Feet

EXHIBIT C (e) - AFFECTED LAND VEGETATION COMMNITIES MAP

SHEET 1

FARMERS SAND
WELD COUNTY, COLORADO

Applicant: FRICO

Prepared By: ERC

REV	Date:	DESCRIPTION
B	03/2025	RE-ISSUED FOR PERMITTING
A	12/2024	ISSUED FOR MINE PERMIT

Map Legend

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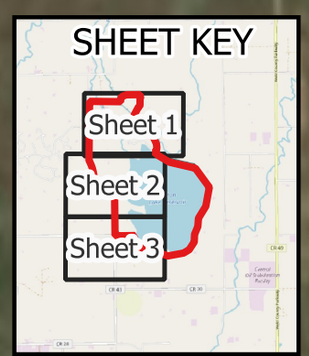

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ERC# 342-2203

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Projection:
NAD 1983 StatePlane Colorado North FIPS 0501 Feet

EXHIBIT C (e) - AFFECTED LAND VEGETATION COMMNITIES MAP

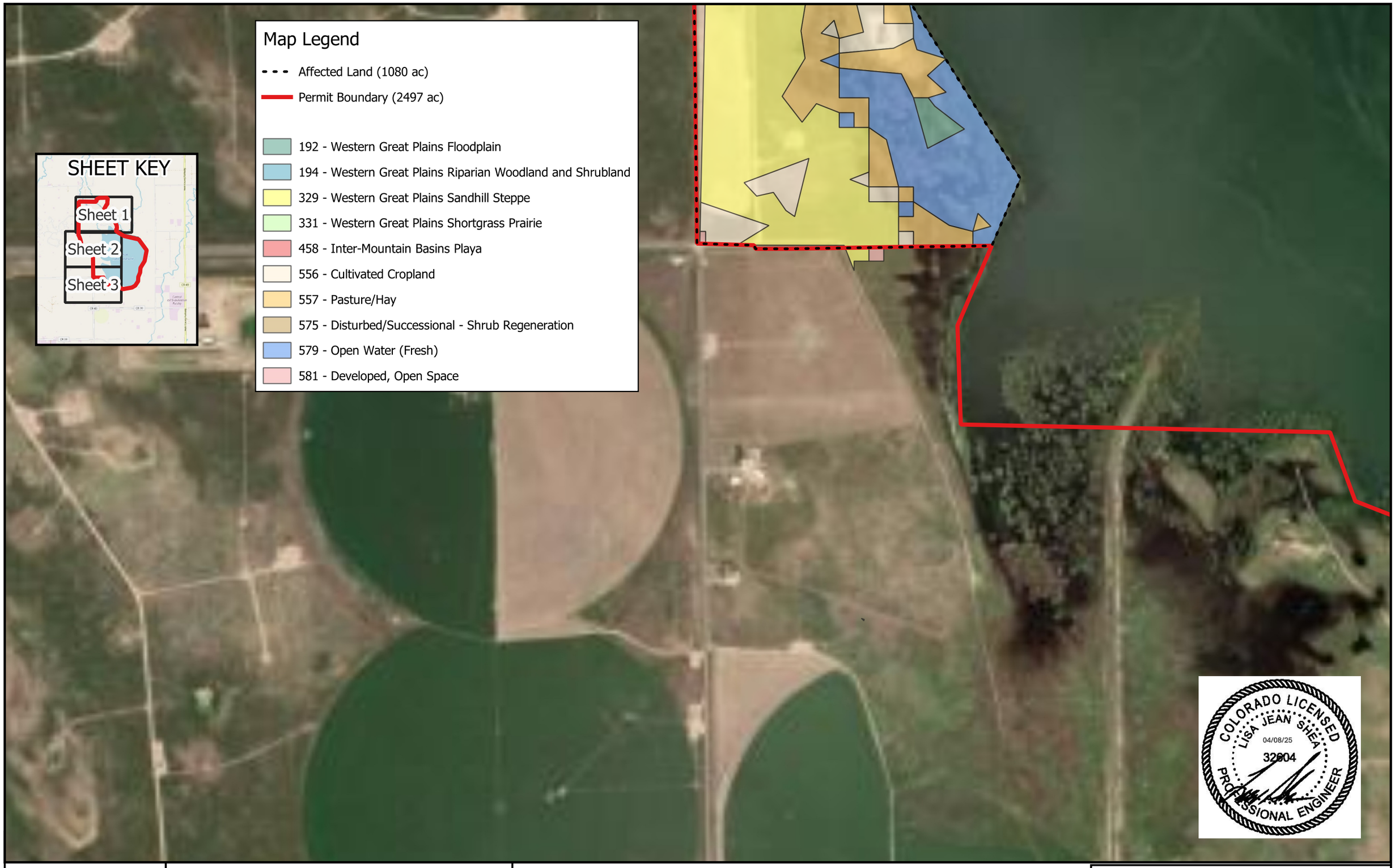
SHEET 2

FARMERS SAND
WELD COUNTY, COLORADO

Applicant: FRICO

Prepared By: ERC

REV	Date:	DESCRIPTION
B	03/2025	RE-ISSUED FOR PERMITTING
A	12/2024	ISSUED FOR MINE PERMIT



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ERC# 342-2203

0 600 1,200 Ft

Projection:
NAD 1983 StatePlane Colorado North FIPS 0501 Feet

EXHIBIT C (e) - AFFECTED LAND VEGETATION COMMNITIES MAP

SHEET 3

FARMERS SAND
WELD COUNTY, COLORADO

Applicant: FRICO

Prepared By: ERC

REV	Date:	DESCRIPTION
B	03/2025	RE-ISSUED FOR PERMITTING
A	12/2024	ISSUED FOR MINE PERMIT

APPENDIX C

MILTON RESERVOIR

FARMERS SAND
WEED MANAGEMENT PLAN

March 2025

PREPARED FOR:

Farmers Reservoir Irrigation and Company (FRICO)

PREPARED BY:

ECOLOGICAL RESOURCE CONSULTANTS, LLC

12345 W. ALAMEDA PARKWAY

LAKEWOOD, COLORADO 80228

Table of Contents

1.0 LOCATION

Owner: The Farmers Reservoir and Irrigation Company (FRICO)

Owner Address: 80 South 27th Avenue, Brighton, Colorado 80601

Contact: Scott Edgar **Title:** General Manager

Telephone Number: (303) 659-7373

Farmers Sand Mining Operations Legal Description:

Sections: 3, 4, 9, 10, 11, 14, 15, 22, and 23 Township: 3N Range: 65W
Mine Main Entrance: Latitude 40.218251 N Longitude -104.659137 W

2.0 DESCRIPTION OF LAND AND CURRENT USES

Milton reservoir is a plains reservoir fed by surface water diversions from the South Platte River through the Platte Valley and Beebe canals. Milton Reservoir, which is an artificial man-made reservoir, was constructed to regulate and store water for irrigation.

Since its original construction in the early 1900s, the reservoir has accumulated a significant amount of sediment conveyed with inflows that enter the reservoir. In 2019, a geotechnical investigation was completed in the reservoir for the purpose of estimating the thickness of the sediments and evaluating the properties of deposited sediments and the native materials beneath. Sediments, consisting of primarily silty to lean clayey sands were found in thicknesses ranging from 3 feet to 10 feet thick. It is estimated that the accumulated sediments have resulted in approximately 4,000 to 8,000 acre-feet of lost reservoir capacity. FRICO started removing these sediments in November 2021 and will continue the removal process for several more years (+10 years).

The sediment removal process consists of using a dredge equipped with a cutter head and suction. The solids are removed as a slurry (approximately 20% solids) from the lake bottom and pumped through a large diameter pipeline to either the settling ponds or the cyclone where the dredge materials are dewatered prior to placing them in stockpiles. The plan moving forward is to construct a sand plant that, once operational, will receive dredged materials directly. The plant will separate the sand particles to produce a sellable product while the undersized particles and water will be pumped as a slurry to a settling pond. Water will be returned to the reservoir by gravity through low-level drainage pipes.

The disturbed areas that will require reclamation consist of stockpiles, settling ponds, sand plant, dredge operations staging area, and haul roads. Revegetation was selected as the type of reclamation for the stockpiles, settling basins, sand plant, and dredge operations staging area since these areas consisted of native grasses prior to the mining operations. Permanent roads which have been used during mining operations are also used for daily use of larger vehicles/equipment to support dam maintenance, by oil/gas companies for access to infrastructure, and the Heritage hunting club. These roads are routinely graded and graveled

and will continue to be maintained as such through the mining operations and after mining is completed to support the aforementioned uses. There are approximately 379 acres of revegetation and 8-acres of permanent roads. The areas of disturbance (settling ponds, stockpiles, sand plant, and dredge operations staging area) that will potentially require noxious weed management prior to and during reclamation are presented in Exhibit F – Reclamation Plan Map, Sheets R1 thru R3.

3.0 FUTURE PLANS FOR THE LAND

Historically and currently, Milton Reservoir land and roads are used for access for reservoir/dam maintenance and monitoring, oil/gas operations, hunting and boating clubs. Mining operations including stockpile and settling pond locations have been situated to continue accommodating these uses going into the future (post-mining). Final grading of stockpile slopes will be 3H:1V and settling basins final grade will be restored to blend in with the surrounding topography.

4.0 DESCRIPTION OF WEED INFESTATION

The specific noxious weed species listed below have been identified by the Colorado Department of Agriculture and Weld County as invasive weed species that are non-native plants that are detrimental to the natural land and create problems in agricultural and the environment.

List A - Eradication Species

The species of noxious weeds that the Colorado Department of Agriculture has put on List A have the potential to be very invasive and are either not in Colorado yet or are present in very limited numbers and eradication of these species is still possible. Due to their competitive, aggressive nature they tend to out compete the native vegetation by forming mono-cultures. In addition, many of the species are toxic to livestock and wildlife, or limit grazing potential. The following are List A species found in Weld County and require eradication.

- Cypress Spurge
- Hairy Willow-Herb
- Japanese Knotweed
- Myrtle Spurge
- Purple Loosestrife
- Yellow Flag Iris

List B - Control Species

The plants on List B have the potential to be very invasive that quickly transform an area and typically already established in Colorado. However, they may be just moving into some local areas such as Weld County. Due to these plants not being native to North America they do not have the natural checks such as insects or diseases. Due to their competitive, aggressive nature they tend to out compete the native vegetation by forming mono-cultures. In addition, many of the species are toxic to livestock and wildlife, or limit grazing potential. The following presents which species in Weld County should be eradicated, suppressed, or both.

Eradication

- Absinth Wormwood
- Black Henbane
- Bull Thistle
- Chamomile species
- Chinese Clematis
- Houndstongue
- Moth Mullein
- Oxeye Daisy
- Plumeless Thistle
- Spotted Knapweed
- Sulfur Cinquefoil
- Tamarisk
- Wild Caraway
- Yellow Toadflax

Suppression

- Canada Thistle
- Common & Cutleaf Teasel
- Eurasian Watermilfoil
- Jointed Goatgrass
- Musk Thistle
- Russian Knapweed
- Scotch Thistle
- Yellow Nutsedge

Suppression & Eradication

- Bouncingbet
- Common Tansy
- Dalmatian Toadflax
- Dames Rocket
- Diffuse Knapweed
- Hoary Cress
- Leafy Spurge
- Perennial Pepperweed
- Russian Olive

List C - Suppression Species

In Weld County the focus is on the suppression of Field Bindweed. However, the Colorado Department of Agriculture has placed a number of noxious weed species on List C (see below). The plants on List C are very

invasive and quickly transform an area. The Department advises that these plants be eradicated not allowing them to become established.

- Bulbous bluegrass (Poa bulbosa)
- Cheatgrass aka Downy brome (Bromus tectorum)
- Chicory (Cichorium intybus)
- Common burdock (Arctium minus)
- Common mullein (Verbascum thapsus)
- Common St. Johnswort (Hypericum perforatum)
- Field bindweed (Convolvulus arvensis)
- Halogeton (Halogeton glomeratus)
- Johnsongrass (Sorghum halepense)
- Perennial sowthistle (Sonchus arvensis)
- Poison hemlock (Conium maculatum)
- Puncturevine (Tribulus terrestris)
- Quackgrass (Elymus repens)
- Redstem filaree (Erodium cicutarium)

5.0 MANAGEMENT PLAN

Earth-moving/disturbance activities are anticipated throughout the life of the project and include the construction of settling basins, stockpiles, stormwater drainage systems, reclamation of disturbed areas, and maintaining the haul roads (grading/gravel). These activities have the potential to spread weeds throughout the disturbed mining areas. Weeds can generally spread through the following four pathways.

1. **Soil disturbance** - when soil and existing vegetation is disturbed it creates an opportunity for weeds to move into an area left open or for seeds in the soil to be exposed and germinate.
2. **Contaminated materials** - Weeds often are introduced unintentionally as contaminants in seed, soil, hay, or revegetation materials. This includes weed seeds and plant fragments that can become lodged in or on vehicles and equipment. Seeds also move easily by becoming attached to clothing, shoes, and other personal gear.
3. **Animals** - Pets, domestic livestock and wildlife may spread weeds when seeds attach to their coats or through their droppings.
4. **Environmental** - Wind, water, and soil can move seeds and plant fragments.

The primary goals of this Weed Management Plan are to prevent the establishment of any and all new noxious weed species in the affected/disturbed mining areas that will be re-vegetated during and upon completion of the mining operations in accordance with the Colorado Noxious Weed Act, Section 35-5.5-101, et seq., C.R.S. and Weld County Chapter 15 – Vegetation, Article I – Noxious Weed Management Enforcement Policy.

Non-native species and noxious weeds (List A, B, and C) will be controlled at the mining disturbed areas during and after mining operations and continue throughout the reclamation period until re-vegetation is greater than 70 percent established. Mechanical pulling of List A, B, and C weed species will be conducted using hand tools on an as needed basis to control small populations of weed species. All noxious weeds that are manually collected will be immediately placed into trash bags that will be taken to a landfill. Herbicide treatment by a licensed applicator will be utilized for controlling larger populations of noxious weeds. Any spraying applications should prioritize minimizing drift on to native species. Eradication method is to be determined based on specific targeted species. Upon removal of non-native species and noxious weeds the areas will be re-seeded and mulched to encourage regrowth of native vegetation.

The vegetation plan was developed so a single seed mix can be used throughout to establish ground cover quickly, minimize weed infestation, and stabilize the soil to reduce wind and water erosion with minimal maintenance. The seed mix presented in the following table is diverse and effective at wind and water erosion control, is fast growing and has a fibrous and/or rhizomatous root system which will provide adequate ground cover quickly reducing the chances of invasion of non-native species and noxious weeds. Mulching will follow seeding for immediate soil stabilization and to enhance seed germination. Mulching will be completed within twenty-four (24) hours after seeding.

Scientific Name	Common Name	% of Mix	LBS/PLS Required per Acre
Achnatherum hymenoides	Indian ricegrass	10	6
Andropogon gerardii	Big bluestem	10	7
Elymus lanceolatus	Streambank wheatgrass	20	11
Koeleria macrantha	Prairie Junegrass	20	0.1
Pascopyrum smithii	Western wheatgrass	15	12
Setaria italica	Foxtail millet	5	2
Sporobolus cryptandrus	Sand dropseed	20	0.1
	Total:	**100**	**38.2**

Notes:

LBS/PLS = pounds pure live seed. Values in table are per acre
LBS/PLS values for Prairie Junegrass and Sand dropseed set to 0.1 due to high seeds/weight
Quantity assumes 200 seeds per square foot broadcasted.
Reduce 25% for drill seeding (150 seeds per square foot).
Total quantity assumes 1.0 acre of seeding. Adjust accordingly for required seeding area.
Species variety to be determined approved based on commercial availability.
Final species composition and rates subject to commercial availability.

6.0 SCHEDULE

An evaluation of weeds within the mining area shall be completed two times per year once during the early growing season and again during the late growing season, generally being completed in late April/May and then August/September depending on factors such as daily average temperatures and precipitation during the project maintenance period.

7.0 REFERENCES

https://www.weld.gov/Government/Departments/Public-Works/Weed-Management/

Weld County Noxious Weed Management Enforcement Policy

EXHIBIT I

SOILS INFORMATION

Exhibit I – Soils Information

6.4.9 EXHIBIT I - Soils Information

(1) In consultation with the Natural Resources Conservation Service (NRCS) or other qualified person, the Operator/Applicant shall indicate on a map (in Exhibit C) or by a statement, the general type, thickness and distribution of soil over the affected land. Such description will address suitability of topsoil (or other material) for establishment and maintenance of plant growth. If necessary, at its discretion, the Board may require additional information on soils or other growth media to be stockpiled and used in revegetation.

1. NRCS Soils

The NRCS soil map (NRCS 2024) presented in **Exhibit C** identifies six soil types that cover approximately 1,049 acres, or 97% of the total affected land area. The remaining 3%, approximately 31 acres, consists of open water and is therefore not classified as a soil type. A table summarizing the distribution of these soil types across the affected land is provided below.

Exhibit I - NRCS Soils within the Affected Land

NRCS Soil Type		Depth (inches)	Total Acres	% Cover Affected Land
70	Valent sand, 3 to 9 percent slopes	0-80	647	60%
72	Vona loamy sand, 0 to 3 percent slopes	0-60	300	28%
69	Valent sand, 0 to 3 percent slopes	0-80	47	4%
10	Ellicott-Ellicott sandy-skeletal complex, 0 to 3 percent slopes, rarely flooded	0-80	41	4%
85	Water	-	31	3%
35	Loup-Boel loamy sands, 0 to 3 percent slopes	0-60	13	1%
Grand Total			**1,080**	

According to the NRCS, several key soil characteristics are essential for supporting plant growth and for stabilizing a site, including, soil texture, structure, organic matter content, pH, nutrient availability, water holding capacity and erosion potential (NRCS 2024). The NRCS Web Soil Survey supplies detailed information on soil chemistry, health (i.e., organic content), and suitability for vegetative productivity, which has been evaluated for the affected land and is included as an attachment to this exhibit.

Site-specific soil characteristics can determine the need for soil amendments, inform plant species selection, and guide reclamation strategies to promote long-term vegetation success and site stability. The complete Reclamation Plan is provided as **Exhibit E**, with additional information on soil chemistry and recommended amendments included from the plan, as follows.

2. Soil Chemistry

Understanding soil chemistry for any seeding work is critical for establishment success. Seed will not germinate and develop if soil chemistry is not within acceptable ranges. ERC recommends a minimum of 3 composite grab samples of soil in areas to be revegetated be collected and sent to a lab for analysis prior to revegetation. Weld Laboratories, Inc. (www.weldlabs.com) in Greeley, Colorado can be used for a Complete Nutrient Test. Most critical soil chemistry parameters are salts below 2 mmhos/cm and pH between 6.0-7.5.

The topsoil in the area is thin at an average depth of approximately 6 inches. Overall, the topsoil exhibits a distinct darker color, which indicates the presence of organic material from decomposed plant and root matter. This suggests that the material is suitable for use as a borrow source for growth media, as it effectively supports the existing vegetation in the area. Soils beneath the topsoil consist primarily of sand with clay and silt as defined by the laboratory testing that was completed on samples from test pits excavated along the northwest side of the reservoir. Since these types of materials have a fine texture and there are no indications of low pH such as discoloration, these materials will likely be satisfactory to use as growth medium, but soil amendments will likely be required. Grain size analysis and Atterberg Limits from soils sampled in test pits are provided below.

Test Pit	Depth (ft)	Atterberg Limits			Grain Size Analysis - Percent Passing						Soil Classification
		LL	PL	PI	#4	#10	#30 (0.6mm)	#40	#140 (0.1mm)	#200	
22-1	5	NP	NP	NP		100	88	79	18	12	Sand
22-1	8	21	17	4		100	98	96	52	44	Silty/Clayey Sand
22-2	4	21	18	3		100	96	93	53	45	Silty Sand
22-2	4	21	16	5		100	96	92	48	39	Silty Sand
22-2	7	27	17	10	100	98	92	88	59	55	Clayey Sand
22-3	2-3	NP	NP	NP		100	90	83	28	18	Silty Sand

3. Soil Amendments

Once soil chemistry results are reviewed, any required soil amendments may be recommended, or the seed mix modified. The addition of soil amendments (e.g., fertilizer + organic matter) should be considered to facilitate more rapid and prolific native grass establishment. Soil amendments should only be applied based on the nutrient testing so as not to promote excessive weed growth. Recommended (for initial planning purposes only) soil amendments include 1) Biosole Forte at a rate of 800 pounds per acre, 2) humates at a rate of 200 pounds per acre and mycorrhizae at a rate of 20 pounds per acre. Soil amendments can be applied hydraulically to the soil surface or incorporated into the soil surface through other broadcast methods.

ENCLOSED NRCS SOIL REPORTS

- Chemical Soil Properties
- Organic Matter Depletion, Salt Concentration, Aerobic Soil Organisms, Organic Soil Subsidence
- Range Production (Normal Year)

REFERENCES

NRCS. Natural Resources Conservation Service. 2024. Soil Survey Area: Weld County, Colorado, Southern Part Survey Area Data: Version 23, Aug 29, 2024. Available online at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

EXHIBIT J

VEGETATION INFORMATION

EXHIBIT J – VEGETATION INFORMATION

The Site is situated within the Great Plains ecoregion at an approximate elevation of 4,800 feet above mean sea level (AMSL). Vegetation communities within the site were evaluated by ERC using the USGS GAP/LANDFIRE National Terrestrial Ecosystems data (GAP Analysis) for Colorado (USGS 2011). The GAP Analysis provides geographic information systems (GIS) spatial data and classification of land cover and vegetation community types.

In total, 8 vegetation communities and land cover types are mapped within the Affected Area (Refer to **Exhibit C (e)**). In the upland areas, the site predominantly consists of Western Great Plains Sandhill Steppe (50%), Western Great Plains Shortgrass Prairie (18%), Cultivated Cropland (13%), and Pasture/Hay (5%). Developed Open Space land cover type comprises less than 1% of upland habitat. Wetland habitat mapped within the Affected Area is primarily comprised of Open Water (12%) with a few small pockets (less than 1%) of fringe habitat characterized by the Western Great Plains Floodplain, and Western Great Plains Riparian Woodland and Shrubland vegetation communities. Refer to the enclosed Wildlife Report Milton Reservoir - Farmers Sand Project (ERC, March 2025) for a detailed description of the vegetation communities and land cover types within the site.

The relationship between vegetation and soil types is presented in the following table.

Exhibit J - Affected Area - Vegetation Community Type & NRCS Soils				
USGS GAP Analysis Vegetation Community and Land Cover Type	**NRCS Soil Type**	**Acres**	**% Cover Affected Area**	**Vegetation Cover Height Estimate**
329 - Western Great Plains Sandhill Steppe	Valent sand, 3 to 9 percent slopes	407		1-4 feet
	Vona loamy sand, 0 to 3 percent slopes	114		
	Valent sand, 0 to 3 percent slopes	12		
	Ellicott-Ellicott sandy-skeletal complex, 0 to 3 percent slopes, rarely flooded	11		
	Water	0		
329 - Western Great Plains Sandhill Steppe Total		**543**	**50%**	

Exhibit J - Affected Area - Vegetation Community Type & NRCS Soils				
USGS GAP Analysis Vegetation Community and Land Cover Type	**NRCS Soil Type**	**Acres**	**% Cover Affected Area**	**Vegetation Cover Height Estimate**
331 - Western Great Plains Shortgrass Prairie	Valent sand, 3 to 9 percent slopes	108		<1 foot
	Vona loamy sand, 0 to 3 percent slopes	84		
	Valent sand, 0 to 3 percent slopes	5		
	Ellicott-Ellicott sandy-skeletal complex, 0 to 3 percent slopes, rarely flooded	0		
331 - Western Great Plains Shortgrass Prairie Total		**197**	**18%**	
556 - Cultivated Cropland	Valent sand, 3 to 9 percent slopes	74		0-6 feet
	Vona loamy sand, 0 to 3 percent slopes	55		
	Ellicott-Ellicott sandy-skeletal complex, 0 to 3 percent slopes, rarely flooded	5		
	Water	2		
	Valent sand, 0 to 3 percent slopes	1		
556 - Cultivated Cropland Total		**136**	**13%**	
579 - Open Water (Fresh)	Water	29		<0.5 feet
	Valent sand, 3 to 9 percent slopes	25		
	Valent sand, 0 to 3 percent slopes	25		
	Ellicott-Ellicott sandy-skeletal complex, 0 to 3 percent slopes, rarely flooded	23		
	Vona loamy sand, 0 to 3 percent slopes	17		
	Loup-Boel loamy sands, 0 to 3 percent slopes	11		
579 - Open Water (Fresh) Total		**130**	**12%**	

Exhibit J - Affected Area - Vegetation Community Type & NRCS Soils				
USGS GAP Analysis Vegetation Community and Land Cover Type	**NRCS Soil Type**	**Acres**	**% Cover Affected Area**	**Vegetation Cover Height Estimate**
557 - Pasture/Hay	Vona loamy sand, 0 to 3 percent slopes	29		0-4 feet
	Valent sand, 3 to 9 percent slopes	27		
	Valent sand, 0 to 3 percent slopes	3		
	Loup-Boel loamy sands, 0 to 3 percent slopes	0		
	Water	0		
557 - Pasture/Hay Total		**59**	**5%**	
192 - Western Great Plains Floodplain	Valent sand, 3 to 9 percent slopes	3		0.5-60 feet
	Loup-Boel loamy sands, 0 to 3 percent slopes	1		
	Valent sand, 0 to 3 percent slopes	1		
	Ellicott-Ellicott sandy-skeletal complex, 0 to 3 percent slopes, rarely flooded	0		
192 - Western Great Plains Floodplain Total		**5**	**<1%**	
194 - Western Great Plains Riparian Woodland and Shrubland	Valent sand, 3 to 9 percent slopes	3		0.5-60 feet
	Ellicott-Ellicott sandy-skeletal complex, 0 to 3 percent slopes, rarely flooded	2		
194 - Western Great Plains Riparian Woodland and Shrubland Total		**5**	**<1%**	
581 - Developed, Open Space	Vona loamy sand, 0 to 3 percent slopes	2		<0.5 feet
	Valent sand, 3 to 9 percent slopes	2		
	Valent sand, 0 to 3 percent slopes	1		
581 - Developed, Open Space Total		**5**	**<1%**	
Grand Total		**1,080**	**100%**	

EXHIBIT L

RECLAMATION COSTS

The costs for grading of the stockpiles and settling ponds were included in the Reclamation Costs See Item 11 Grade Stockpiles and Slopes, and Item 12 Grade Settling Pond (highlighted on the attached). Reclamation Costs will be revised and submitted under separate cover when the Sand Plant design is complete.

WESTERN STATES RECLAMATION

3756 Imperial Street • Frederick, CO 80516
(303) 833-1986 • (303) 833-4447 - Fax

To:	ERC	**Contact:**	
Address:	Lakewood Office 12345 W Alameda Pwky #206. Lakewood ... Lakewood, CO 80228	**Phone:**	
		Fax:	
Project Name:	Milton Reservoir ERC	**Bid Number:**	
Project Location:		**Bid Date:**	

Item #	Item Description	Estimated Quantity	Unit	Unit Price	Total Price
1	Mob	1.00	LS	$2,199,100.00	$2,199,100.00
2	Project Management	400.00	HR	$247.00	$98,800.00
3	Reclamation Oversight	8.00	WK	$3,960.00	$31,680.00
4	Weekly Meetings	8.00	WK	$3,960.00	$31,680.00
5	Remove Dredge & Cyclone Discharge Pipe	18,600.00	LF	$7.70	$143,220.00
6	Remove Dredge Equipment	1.00	EACH	$31,350.00	$31,350.00
7	Remove Cyclone Infastructure	9,000.00	SF	$9.50	$85,500.00
8	Remove Conveyors	1,500.00	LF	$27.00	$40,500.00
9	Remove Sand Plant Infrastructure	342,000.00	SF	$0.30	$102,600.00
10	Fill Settling Pond	355,000.00	CY	$3.50	$1,242,500.00
11	Grade Stockpiles And Slopes	250.00	ACRE	$190.00	$47,500.00
12	Grade Settling Pond	74,770.00	CY	$4.20	$314,034.00
13	Grade Permanent Roads	6.00	ACRE	$5,065.00	$30,390.00
14	Grade Temp Roads	4.00	ACRE	$7,595.00	$30,380.00
15	Placement Of Topsoil? On Stockpiles	169,150.00	CY	$3.50	$592,025.00
16	Placement Of Topsoil? Settling Ponds	74,770.00	CY	$3.50	$261,695.00
17	Placement Of Class 6? On Temporary Roads	3,000.00	CY	$50.00	$150,000.00
18	Placement Of Class 6 On Permanent Roads	4,100.00	CY	$50.00	$205,000.00
19	Ripping Of Stckpiles	250.00	ACRE	$125.00	$31,250.00
20	Ripping Of Settling Ponds	110.00	ACRE	$125.00	$13,750.00
21	Ripping Of Temp Roads	4.00	ACRE	$2,185.00	$8,740.00
22	Hydroseed Stockpiles	250.00	ACRE	$4,950.00	$1,237,500.00
23	Hydroseed Settling Ponds	110.00	ACRE	$4,950.00	$544,500.00
24	Hydroseed Temp Roads	4.00	ACRE	$4,950.00	$19,800.00
25	Monitor And Maintenance	122.00	HR	$440.00	$53,680.00
26	Vegetation Water Truck	24.00	DY	$1,025.00	$24,600.00
27	Vegetation Water	240,000.00	GAL	$0.95	$228,000.00
28	Erosion Controls/maint	1.00	LS	$46,950.00	$46,950.00
29	Waddles	18,700.00	LF	$6.60	$123,420.00
30	Silt Fence	40,000.00	LF	$1.95	$78,000.00
31	SWMP Management & Inspections	1.00	LS	$142,950.00	$142,950.00
32	Debris Removal	1.00	LS	$49,500.00	$49,500.00
33	BMP Removal	58,700.00	LF	$2.45	$143,815.00

Total Bid Price: $8,384,409.00

Notes:

- Addendums acknowledged: None
- This bid is good for thirty (30) days from the bid date set forth above.
- This bid does not include Davis Bacon wages or certified payroll requirements.
- This bid does not include a performance or payment bond. Add 1.5% for bond. Minimum of $250.00 charge.

EXHIBIT N

SOURCES OF LEGAL RIGHT-TO-ENTER

121304000032

121304000045

121304000038

121304000022

121303001003

121304000037

121309000017

121303301004

121309000027

121310000019

121310001002

121310000021

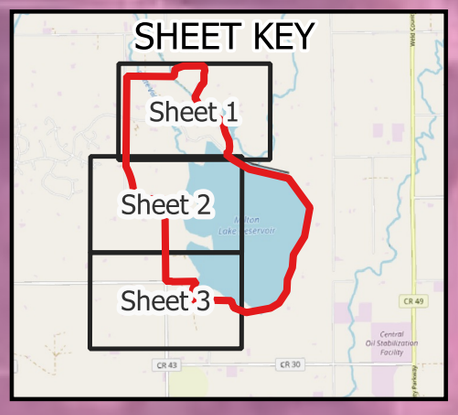
121310000029

121310000008

Map Legend

- Affected Land (1080 ac)
- Farmers Reservoir and Irrigation Company Property
- REI LTD Liability Company Property

SHEET KEY



COLORADO LICENSED
LISA JEAN SHEA
04/08/25
32604
PROFESSIONAL ENGINEER

Prepared By:

ERC

12345 W. Alameda Pkwy
Suite 206
Lakewood, CO 80228
(303) 679-4820

ERC# 342-2203

N

0 700 1,400 Ft

EXHIBIT N

SHEET 1

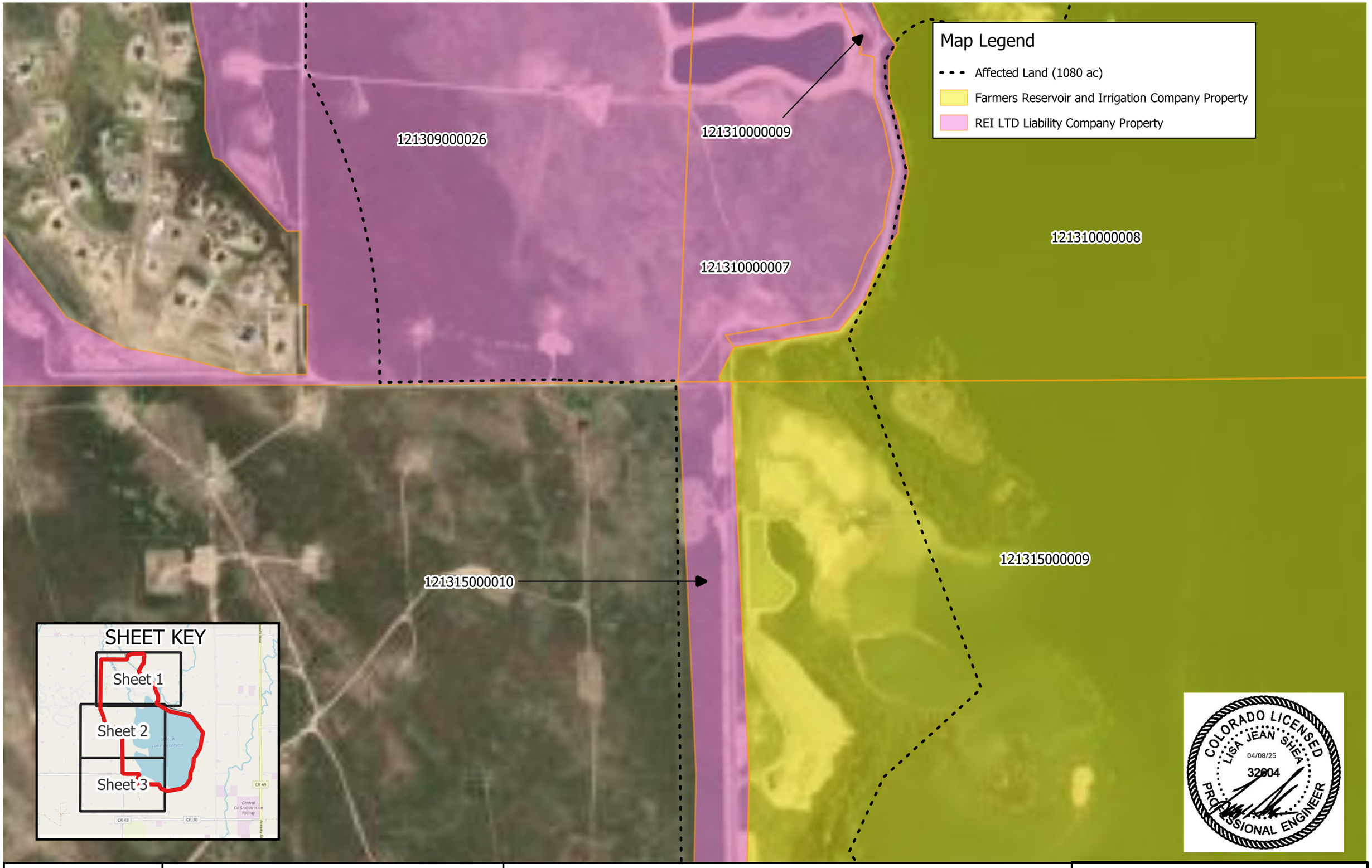
FARMERS SAND
WELD COUNTY, COLORADO

Applicant: FRICO

Prepared By: ERC

Date:

A	12/2024	ISSUED FOR MINE PERMIT
B	03/2025	REISSUED FOR PERMITTING



Prepared By:

ERC

12345 W. Alameda Pkwy
Suite 206
Lakewood, CO 80228
(303) 679-4820

ERC# 342-2203

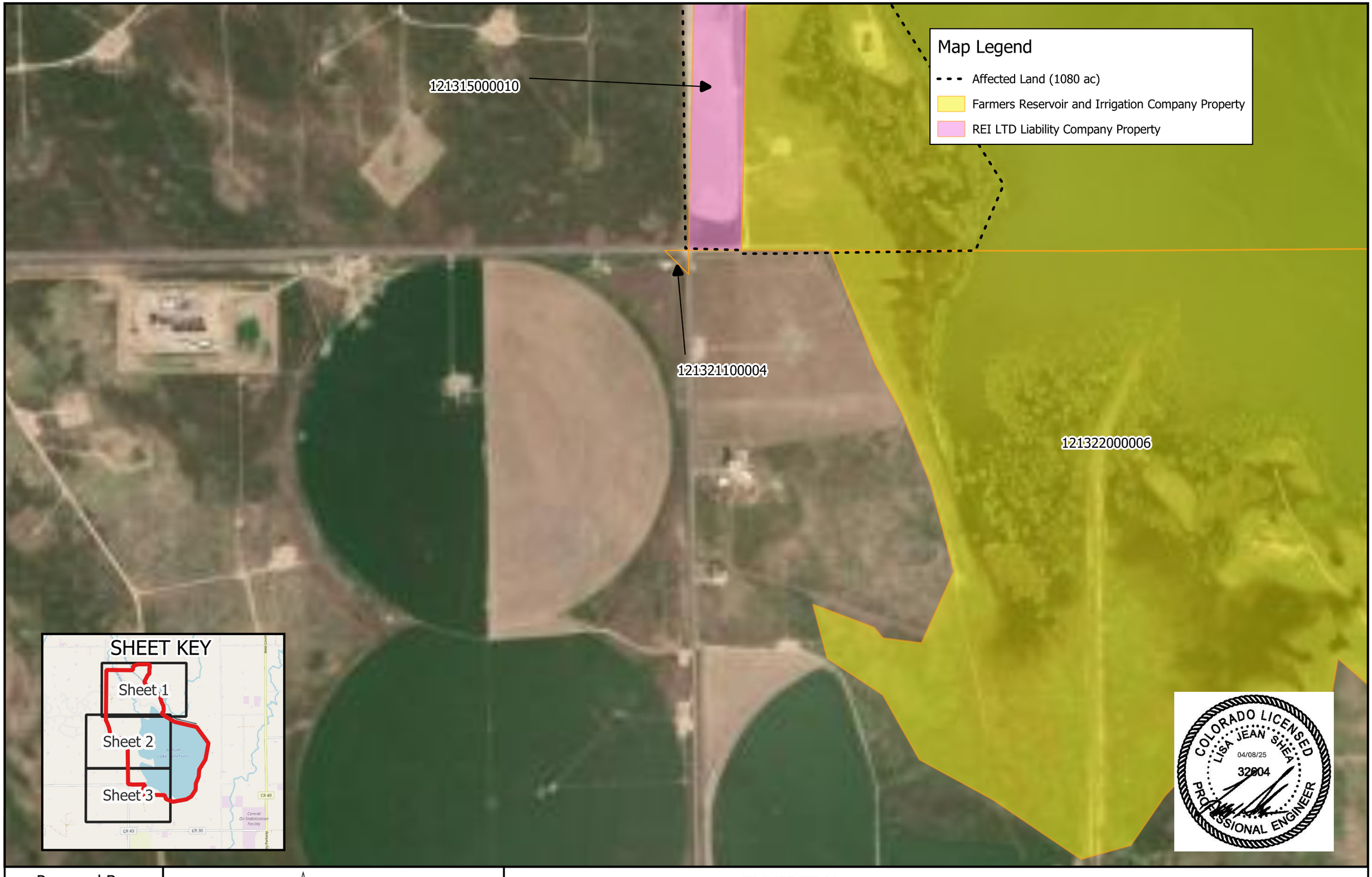
0 600 1,200 Ft

EXHIBIT N

SHEET 2

FARMERS SAND
WELD COUNTY, COLORADO

Applicant: FRICO		
Prepared By: ERC		
Date:		
A	12/2024	ISSUED FOR MINE PERMIT
B	03/2025	REISSUED FOR PERMITTING



Prepared By:

ERC

12345 W. Alameda Pkwy
Suite 206
Lakewood, CO 80228
(303) 679-4820

ERC# 342-2203

0 700 1,400 Ft

EXHIBIT N

SHEET 3

FARMERS SAND
WELD COUNTY, COLORADO

Applicant: FRICO		
Prepared By: ERC		
A	12/2024	ISSUED FOR MINE PERMIT
B	03/2025	REISSUED FOR PERMITTING

EXHIBIT P

MUNICIPALITIES WITHIN TWO MILES

Fairfield & Woods P.C.

Katie A. Moisan
Direct: (303) 894-4442
email: kmoisan@fwlaw.com

March 21, 2025

Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

RE: Preliminary Adequacy Review Response, The Farmers Reservoir and Irrigation Company ("FRICO") Application for a Regular (112) Construction Materials Operation Reclamation Permit, File No. M-2024-057

To Whom It May Concern:

The Division of Reclamation, Mining and Safety requested that FRICO answer the following: **Please clarify why Beebe Draw Farms Authority and/or Pelican Lakes Ranch is not constituted as a municipality.** Our response is below.

Pelican Lake Ranch is a residential subdivision. It is not constituted as a unit of government of any sort. The Beebe Draw Farms Authority was formed by agreement between two metropolitan districts that were formed pursuant to Title 32, C.R.S. Such agreements are authorized by C.R.S. § 29-1-203. The Beebe Draw Farms Authority is not constituted as a "municipality" because municipalities are created pursuant to specific procedures and requirements set out in Title 31, Article 2, C.R.S. Those procedures and requirements do not include agreements authorized by C.R.S. § 29-1-203.

If you have any questions, please reach out to me.

Sincerely,

Katie A. Moisan

Katie A. Moisan, Esq.