EXECUTIVE SUMMARY

M L Wetlands, Inc. proposes to establish the Maria Lake Mitigation Bank (Bank) in Huerfano County, Colorado with the intent of providing compensatory mitigation for permitted impacts to Waters of the United States. This will be accomplished through establishment, re-establishment, rehabilitation, enhancement, and preservation of wetlands and riparian habitats on the Bank Property. The mitigation Credits generated by the Bank will be used by permittees within the Arkansas River watershed. Currently, there are no other mitigation banks in the region and transportation projects and future regional growth create a need for additional compensatory mitigation options.

The Bank Property is a 47.7-acre drainage basin on an approximately 2179-acre ranch northeast of the city of Walsenburg. The location of the Bank is within the Southwestern Tablelands ecoregion that lies between the Great Plains and Southern Rocky Mountains. This ecoregion is characterized by its alkaline/salt flat wetlands that support migratory waterfowl, such as cinnamon teals (*Anas cyanoptera*) and American avocets (*Recurvirostra americana*), and a unique host of specialized plant species, including alkali muhly (*Muhlenbergia asperifolia*), alkali sacaton (*Sporobolus airoides)*, inland saltgrass (*Distichlis spicata*), and greasewood (*Sarcobatus vermiculatus)*. The Bank Property supports a variety of alkaline wetland types including alkaline marshes, pursh seepweed (*Sueada calceoliformis*) flats, and alkali wet meadows.

A Development Plan will dictate the restoration and preservation of the Bank Property, and the success of the restored/preserved biological resources will be ensured through financial securities and established performance standards. The Bank Property will be protected in perpetuity through the recordation of a conservation easement. It will also be managed in perpetuity for its conservation values through the implementation of the Interim and Long-term Management Plans and the funding of a non-wasting Endowment Fund.

Construction Phase 1 of the Bank will involve the preservation of existing high functioning wetlands through the construction of cattle exclusion fencing and the recordation of a conservation easement. Construction Phase 2 implements vegetation management and planting/seeding of native wetland vegetation to enhance and rehabilitate existing moderate to low-functioning wetlands. Construction Phase III will establish and re-establish wetlands in the surrounding uplands through minor earthwork that concentrates and re-distributes the natural hydrology of the Bank Property. Should regional mitigation demand prove sufficient, additional areas may be added to the Bank from the surrounding ranch property as Subsequent Phases. These Subsequent Phases will incorporate land from the larger Property into the Bank to provide additional compensatory mitigation.

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Appendix A – Figures

MARIA LAKE MITIGATION BANK PROSPECTUS

1.0 DEFINITIONS

"Bank Establishment Date" is the date when the Bank is considered established and the Transfer of Credits may begin.

"Bank Property" is the portion of the Maria Lake Ranch Property which is currently proposed as a mitigation bank and over which a conservation easement will be recorded.

"Construction Phase" means a phase of the Bank in which all components are fully developed, beyond concept, and included within the exhibits of the MBI, but is implemented in stages over time. Implementation of a Construction Phase does not require an amendment of the MBI.

"Credits" are units of measure representing the accrual, attainment, or protections of aquatic functions on the Bank Property. One Credit is equivalent to one acre, unless otherwise defined.

"Development Plan" means the document that is the overall plan governing construction and habitat establishment, restoration, and enhancement activities required to be conducted on the Bank Property to establish Credits.

"Endowment Agreement" means the document which establishes the terms and conditions pursuant to which the endowment holder will accept custody of and manage the Endowment Fund.

"Endowment Fund" is a sum of money in a long-term stewardship account, held in trust in a fund designated in the Endowment Agreement. The Endowment Fund is to be maintained and managed in perpetuity

"Interagency Review Team (IRT)" means interagency group of federal, tribal, state, and/or local regulatory and resource agency representatives that reviews documentation for, and advises the district engineer on, the establishment and management of a mitigation bank or an in-lieu fee program.

"Long-term Management Plan" means the document that provides measure intended to ensure the Bank Property is managed, monitored, and maintained in perpetuity to conserve and protect its Waters of the U.S.

"Mitigation Banking Instrument (MBI)" is the legally binding document detailing the establishment and management of the Bank Property as well as the responsibilities of all involved parties.

"Property" is the real property that comprises the entire 2,179.2 acres of the Maria Lake Ranch and contains the Bank Property.

"Subsequent Phase" means a phase of a bank that is either planned conceptually or added after the Bank Establishment Date and for which complete components are not included in the exhibits and approved as part of the MBI. Subsequent Phases are added through an amendment of the MBI or developed as a new bank, as determined by the IRT.

2.0 BANK NAME, CONTACTS, AND LOCATION

This Prospectus is for the proposed Maria Lake Wetland Mitigation Bank, a 47.7-acre portion ("Bank Property") of a larger 2179.2-acre ranch property ("Property") located in Huerfano County, Colorado, 6 miles northeast of the City of Walsenburg (Figure 1-3). The southern boundary of the Property is Highway 10 that connects the City of Walsenburg to the City of La Junta. The Property Owner is Maria Lake Grazing Association, LLC and the Bank Sponsor is M L Wetlands, Inc.

Bank Sponsor
M L Wetlands, Inc.
7343 S Alton Way
Suite 100
Centennial, Colorado 80112
Contact: Donald E. Siecke

Property Owner
Maria Lake Grazing Association, LLC
686 County Road 120
Walsenburg, CO 81089
Contact: Donald E. Siecke

Consultants
WRA, Inc.
621 17th St.
Denver, CO 80250
Contact: Ben Guillon

3.0 BANK OBJECTIVES

The proposed Bank seeks to:

1. Establish, re-establish, rehabilitate, enhance, and preserve aquatic resources, including wetlands and riparian habitat, to provide compensatory mitigation for unavoidable impacts to Water of the United States.

2. Provide an advanced compensatory mitigation alternative to permittee-responsible mitigation in a region with no operating mitigation banks or in-lieu fee programs.

4.0 OVERVIEW OF MITIGATION BANKING

Mitigation banking is a third-party approach for fulfilling compensatory mitigation for unavoidable impacts to Waters of the United States. Mitigation banks preserve, restore and create aquatic resources at a particular site, which provides functional uplift to these aquatic resources and the surrounding watershed. This functional uplift generates Credits that are released to the bank over time as the habitats meet specific performance criteria. Released credits may then be sold to one or more permittees requiring compensatory mitigation for impacts to similar resources within the Bank's service area.

In 2008, the U.S. Army Corps of Engineers (Corps), issued a Final Rule establishing a hierarchy for mitigation approaches that supported mitigation banking as the most preferred approach. The reasons for this preference are numerous. Mitigation banks are considered advanced mitigation in that the preservation, restoration, or creation of aquatic resources occurs before the permitted impacts. This eliminates any temporal loss of these resources. In addition, banks are typically established on large tract of lands that contain, or have the potential to contain, high value biological resources and increase connectivity to nearby conserved lands. The restored or created aquatic resources at a mitigation bank are also required to achieve established performance standards for several years after the establishment of the bank and provide financial securities to guarantee that performance standards and any other requirement of the bank are met. Credits are released according to an established schedule as restored habitats meet their performance standards. Bank sponsors are also required to provide for the long-term management of the Bank Property though the funding of a non-wasting Endowment Fund. These conditions of mitigation banking make it the lowest risk and most ecologically valuable form of mitigation available.

5.0 NEED FOR MITIGATION BANK

5.1 Ecological Value of Bank Property

The Bank Property is located within the Southwestern Tablelands ecoregion (Level III)[1], which is dominated by semi-arid rangeland and situated between the Great Plains and the Southern Rocky Mountains. The ecological characteristics of this region have given rise to a unique array of wildlife and aquatic resources, including alkaline/salt flat wetlands.

At the Bank Property, several types of alkaline/salt flat wetlands are present including alkaline emergent marshes, alkaline wet meadows, and mesic grasslands. As their name implies, alkaline/salt flat wetlands typically occur on flat stretches within the tablelands and evaporation from their seasonally high water tables causes salts to accumulate. The increased salinity and alkalinity of these soils limits vegetation to salt-tolerant species such as alkali sacaton (*Sporobolus airoides*), greasewood (*Sarcobatus vermiculatus*), alkali grasses (*Puccinella* spp.), red glasswort (*Salicornia rubra*), sea milkwort (*Glaux maritima*), and western wheatgrass (*Pascopyrum smithii*) (Chapman et al., 2006) (Culver and Lemly, 2013).

[1] USEPA Classification. See Omernik, 1995, for further information on classification system.

In addition to the specialized vegetation the wetlands support, the wetlands also are vital for a host of shorebird and waterfowl species including American avocet (*Recurviostra americana*), sanderling (*Calidris alba*), cinnamon teal (*Anas cyanoptera*), and Wilson's phalarope (*Phalaropus tricolor*) (Culver and Lemly, 2013). These birds depend on these wetlands for breeding, foraging and migratory rest stops. The semi-arid climate and intermittent hydrology of the region makes them even more precious oases. The uplands also support native perennial grasslands that have been disappearing across the United States.

In the 2011 *The State of Colorado's Biodiversity Report* produced by the Colorado Natural Heritage Program, greasewood and shortgrass prairie ecological systems were all categorized as "under conserved", which is the least protected category in their ranking system and most at risk. These are two of the dominant ecological systems at the Bank Property, making it a valuable conservation site.

5.2 Regional Mitigation Supply and Demand

The entire state of Colorado only has a handful of approved mitigation banks, with none servicing the southeastern portion of the state. Based on the 2008 Final Rule issued by the Corps, mitigation banks are the most preferred compensatory mitigation option (over in-lieu fee programs and permittee-responsible mitigation). Maria Lake Mitigation Bank would thus provide a superior mitigation option for permittees in the southeastern Colorado region. Additionally, the Bank is protecting and restoring a unique wetlands type (alkali/salt flat wetlands) not present at many of the existing mitigation banks.

In 2014, Colorado was the fourth fastest growing state by population, but the growth was primarily concentrated around Denver and other cities located along the Rocky Mountains. (University of Colorado-Boulder Leeds School, 2014) Southeastern Colorado counties have experienced very little if any significant growth or development in recent years. Huerfano County, the county in which the Bank Property is located, has only 6,711 residents (2015), and future growth is projected to be limited. It is thus important for the Bank Service area to encompass neighboring regions with higher projected growth and development rates, such as Colorado Springs and Pueblo.

While population growth in southeastern Colorado is predicted to be low, poor grazing management continues to threaten the ecological integrity and sustainability of biological resources, including wetlands, in the region. This creates a need to protect these valuable and unique alkaline wetlands.

6.0 SITE DESCRIPTION

6.1 Current Conditions and Uses

Approximately 1500 acres of the total 2179.2 acres of the Property are currently being used for cattle ranching and recreation with 160 acres of the rangeland composed of irrigated pasture. Another 518 acres in the southeastern corner of the Property consist of a residential subdivision, comprised of 36 individual lots and Maria Lake. The entire subdivision is owned by the Property Owner and only six residences have been constructed to-date. Given the multiple current uses of the Property, not all of the land is included in the proposed Bank.

Development on the property consists of a clubhouse, a residence for the property manager and five owner residences with garages and associated infrastructure. In addition, there are six RV pads and an orchard on the Property. There is also a gravel pit on the property currently used for the Property maintenance needs and it is depicted on the topographic map (Figure 2).

None of the aforementioned infrastructure, however, exists within the Bank Property borders. The Bank Property is located along the northern border of the Property, in a topographic basin that separates it from the rest of the Property. The Bank Property is located over 1.4 miles north of the nearest building. There is not currently a general plan for Huerfano County; however, the Property is zoned for agriculture.

6.2 Physical Characteristics

The Bank Property encompasses a small drainage basin just south of Sandy Arroyo, a tributary of the Arkansas River. This drainage basin is within the Sandy Arroyo watershed and the larger Arkansas River basin. The Arkansas River is a major tributary of the Mississippi River and an important perennial source of water for Colorado, Kansas and several other states. The river originates in the Southern Rocky mountains and then flows South-Southeast until emptying into the Mississippi River. Through the majority of the river's reach, the waterway is wide with shallow banks and prone to seasonal flooding.

Although the Bank Property abuts Sandy Arroyo, the Alkali/salt flat wetlands on the Bank Property are filled primarily by seasonally high water tables and are not dependent on the Sandy Arroyo for water. While not dependent on Sandy Arroyo for water, the wetlands do receive input from occasional flooding of the creek. The seasonality of the water table height means these wetlands are dry for much of the year.

The regional climate for Southeastern Colorado is cold and semi-arid, and it typically receives 10-16 inches of rain per year. Due to the limited precipitation, most of the plant species are relatively drought-tolerant. In winter, temperatures routinely drop below freezing and light snowfall is not uncommon. Given the aridity of the region, however, large snow events are rare. Summer temperatures are frequently 90°F or higher and rain events are scarce. The aridity and high summer temperatures characteristic of this region, contribute to high evaporation rates within the wetlands leading to an accumulation of salts in the soil.

The eastern half of the Bank Property is primarily composed of the Apishapa silty clay soils (Figure 4). These soils are poorly drained and have between 48-50% clay content from the surface down to 152 cm, making them highly suitable to wetland establishment and/or restoration (NRCS Soil Web Survey, 2015). This soil type is associated with alkali flats and playas of southeastern Colorado that support vegetation such as inland saltgrass (*Distichlis spicata*), alkali sacaton (*Sporobolus airoides*), and greasewood.

The remaining majority of soils on the Bank Property are silty clay loam and clay loam soil series with moderate drainage and clay contents ranging from 20-40% (NRCS Soil Web Survey, 2015). These soils exhibit some potential for wetland establishment. These soils historically supported native prairies, but have since been converted to rangeland and irrigated cropland.

The Bank Property's elevation ranges from approximately 5,820 - 6,030 feet above sea level. The Property is also relatively flat, as reflected by the modest elevational changes (Figure 5).

6.3 Biological Resources

6.3.1 Ecological Communities

Three dominant ecological communities are present at the Bank Property and are described below. Each of the communities supports several vegetation alliances and associations.

Inter-Mountain Basins Greasewood Flat (CNHP, 2005)

These shrublands are common throughout much of the Western U.S., including Eastern Colorado. They are often found near drainages, alluvial fans, streams, or playas, and are characterized by their saline soils and groundwater-dependent hydrology. As its name implies, greasewood is the iconic species in these flats, but most contain a mosaic of halophytic and drought-tolerant species including *Sporobolus airoides*, *Bouteloua gracilis*, *Eleocharis palustris*, *Atriplex canescens*, and *Chrysothamnus nauseosus*. The flats experience seasonal inundation from high water tables and intermittent flooding, which support the unique vegetation. Evaporation from the high water tables is what creates the accumulation of salts in the soils. Greasewood can be found in both wetland and upland sites depending on the soils and hydrology.

Western Great Plains Shortgrass Prairie (CNHP, 2005)

These grasslands occur in the western half of the Western Great Plains and are dominated by graminoid species such as blue grama (*Bouteloua gracilis*). Soils vary for these grasslands, but they are usually present on flat to rolling upland areas. Tallgrass and mixed grass species may occur, particularly in mesic soils, but do not dominate. The dominate grasses are typically extremely drought and grazing-tolerant making them desirable rangelands. These prairies support a large variety of bird and mammal systems and are one of the fastest disappearing ecological systems in the Western U.S.

North American Arid West Emergent Marsh (CNHP, 2005)

These marshes occur regularly in the arid and semi-arid regions of the Western U.S. They can be found bordering lakes and streams, around seeps and springs, or in natural depressions, and are frequently or permanently inundated. Common vegetation includes *Schoenoplectus spp*., *Typha spp., Juncus spp.*, and *Sueada calceoliformis*. These herbaceous species are well adapted to saturated soil conditions, but can be impacted by prolonged droughts. Their perennial or frequent water support a variety of amphibians, birds, and other wildlife in the arid landscapes where they occur.

6.3.2 Vegetation Associations

6.3.2.1 Wetland Vegetation Associations

Within the wetland areas of the Bank Property six predominant vegetation alliances were observed. These alliances are listed in Table 1 below.

Table 1. Wetland Vegetation Alliances and Associations Observed at the Bank Property (NatureServe, 2015)

Vegetation Alliance	Vegetation Association	Acreage
Western Great Plains alkaline marsh	Western Great Plains alkaline marsh	1.36
Saltgrass alkaline wet meadow	Saltgrass meadow	6.40
	Pursh seepweed flat	1.39
Alkali muhly - alkali cordgrass - alkali sacaton - alkaline grassland	Alkali muhly wet meadow	5.33
	Alkali sacaton mesic grassland	0.58
Intermountain greasewood scrub	Greasewood mesic shrubland	0.16

Western Great Plains Alkaline Marsh (*Schoenoplectus pungens - Suaeda calceoliformis* Alkaline Herbaceous Vegetation) (NatureServe, 2015)

These emergent marshes occur across the Central and Western Great Plains in natural depressions, along streams, and alkali lakes. The soils are typically deep, poorly drained silt-loams with a silt-clay subsoil. Precipitation and surface runoff fill these marshes, which remain wet for the majority of the year. Bulrush species including *Schoenoplectus pungens*, *Suaeda calceoliformis, and Typha spp.* dominate these marshes. Within the Bank Property there are several patches of alkaline marshes primarily in the central flat regions with hydric soils (Figure 6).

Saltgrass Meadow (*Distichlis spicata* Herbaceous Vegetation) (NatureServe, 2015)

These prairies are found in playas, swales, and terraces along seasonally flooded washes. Inundation often is caused by seasonal, localized, thunderstorms. Soil textures range in the prairies, but the soils are typically saline as their name suggests. Additionally, the soils usually contain an impermeable layer that slows drainage. These prairies occur throughout the arid and semi-arid regions of the North America, often exhibiting pure stands of inland saltgrass with occasionally other halophytic graminoids. Saltgrass prairies are found on low terraces adjacent to Western Great Plains Alkaline Marsh primarily in the southern reaches of the Bank Property (Figure 6).

Pursh Seepweed Flat (*Suaeda calceoliformis* Herbaceous Vegetation)

This association occurs in Colorado in salt flats that are intermittently or seasonally flooded. During the dry season these flats dry out completely and leave bare, cracked soils. Pursh seepweed is the dominant vegetation, but most of ground in these flats is bare. Some flats may contain modest shrub cover from greasewood or saltgrass. Soils range from poorly drained silty- clays to well-drained silty-loams. At the bank property, three seepweed flats exist on the margins of the central alkaline marsh (Figure 6).

Alkali Muhly Wet Meadow (*Muhlenbergia asperifolia* Herbaceous Vegetation)

These meadows occur in poorly drained lowlands with alkaline soils across the Intermountain West. On the Bank Property, alkali muhly dominates the majority of large, flat areas in the central portion of the Bank Property (Figure 6). Flooding typically occurs after summer thunderstorms and the grasslands are slow to drain because of an impermeable layer. Forbs and shrubs are rare and these grasslands are often monotypic.

Alkali Sacaton Mesic Grassland (*Sporobolus airoides* Southern Plains Herbaceous Vegetation) (NatureServe, 2015)

These mesic grasslands can be found across the Southwestern United States near flat bottomlands and terraces. Soils are often shallow, poorly drained, and saline, and hydrology is frequently dependent on water from washes and sheetflow runoff. These grasslands are typically dominated by alkali sacaton, but can contain other grass species as well. Shrubs and forbs are minor in cover. At the Bank Property alkali sacaton grasslands are found in the north central wetland transitional area sometimes intermixed with greasewood (Figure 6).

Greasewood Mesic Shrubland (*Sarcobatus vermiculatus/Sporobolus airoides* Shrubland) (NatureServe, 2015)

This association occurs along streams, intermittent washes, and alluvial fans where there are high water tables. Flooding is often intermittent and the soils are almost always alkaline, saline, and fine-textured. The greasewood canopy is relatively open and the understory is dominated by alkali sacaton. These shrublands can be found throughout the Colorado Plateau, Columbia and Wyoming basins, and the western Great Plains. On the Bank Property there are 0.16 acres of greasewood/alkali sacaton shrubland delineated as wetlands (Figure 6). Greasewood can be found in both upland and wetland areas. The majority of greasewood shrublands at the Bank Property occur in the uplands and do not exhibit hydric soils, but a small proportion qualifies as functioning wetlands.

6.3.2.2 Native Upland Vegetation Associations

Surrounding the wetland complex at the Bank Property are four native upland vegetation alliances as shown in Table 2 below. Two of the alliances are non-native species communities that have not been formally categorized into an alliance.

Table 2. Upland Vegetation Alliances and Associations Observed at Bank Property (NatureServe, 2015)

Vegetation Alliance	Vegetation Association	Acreage
Intermountain greasewood scrub	Greasewood mesic shrubland	4.09
James' galleta grassland	Blue grama shortgrass prairie	2.29
Fourwing saltbush shrubland	Fourwing saltbush/blue grama shrubland	4.74

Greasewood Mesic Shrubland (*Sarcobatus vermiculatus/Sporobolus airoides* Shrubland) (NatureServe, 2015)

This association occurs along streams, intermittent washes, and alluvial fans where there are high water tables. Flooding is often intermittent and the soils are almost always alkaline, saline, and fine-textured. The greasewood canopy is relatively open and the understory is dominated by alkali sacaton. These shrublands can be found throughout the Colorado Plateau, Columbia and Wyoming basins, and the western Great Plains. On the Bank Property there are 4.09 acres of greasewood/alkali sacaton shrubland delineated as uplands located in three patches within the center of the Bank Property (Figure 6)., Greasewood can be found in both upland and wetland areas, however, the majority of greasewood shrublands at the Bank Property occur in the uplands and do not exhibit hydric soils.

Blue Grama Shortgrass Prairie (*Bouteloua gracilis* Herbaceous Vegetation) (NatureServe, 2015)

These prairies are found in Arizona, Colorado, New Mexico, Utah, and Wyoming in flat or gently sloping plains, plateaus, and meadows. Soils vary but vegetation is typically dominated by the perennial grass, blue grama, but may contain other grass species. Forb and shrub cover is typically low. Blue grama is very tolerant of both drought and grazing making it well suited for the semi-arid rangelands of Southeastern Colorado. At the Bank Property, blue grama prairies exist along the eastern Bank Property border (Figure 6).

Fourwing Saltbush/Blue Grama Shrubland (*Atriplex canescens*/*Bouteloua gracilis* Shrubland)

These shrublands are found across the Southern Great Plains of the U.S. on valley floors and alluvial flats in the Colorado Plateau and barren flats and slopes throughout the rest of the Great Plains. Soils are typically shallow, rocky, and alkaline, excepting the Colorado Plateau. Fourwing saltbush usually dominates the shrub layer and blue grama dominates the herbaceous understory. These shrublands occur on the western and eastern borders of the Bank Property surrounding the more central wetlands complex (Figure 6).

6.3.2.3 Non-native Upland Vegetation Communities

The Bank Property suffers from the invasion of two non-native weedy plant species, kochia (*Bassia scoparia*) and tamarisk (*Tamarix ramosissima).* The proliferation of these two species has created four unique vegetation communities shown in Table 3 below.

Table 3. Non-native Upland Vegetation Communities Observed at the Bank Property (NatureServe, 2015)

Vegetation Alliance	Vegetation Association	Acreage
Intermountain greasewood scrub	Greasewood/kochia disturbed shrubland	14.43
Kochia grasslands[1]	Kochia stand[1]	0.56
	Kochia/perennial grasslands[1]	5.78
Western Great Plains alkaline marsh	Western Great Plains alkaline marsh (with tamarisk)	1.36

[1] Not formally classified to Alliance or Association level

Greasewood/Kochia Disturbed Shrubland (*Sarcobatus vermiculatus* Disturbed Shrubland) (NatureServe, 2015)

Greasewood dominated shrublands can be found on terraces, swales, playas, alluvial fans and flats, valley floors, toeslopes and ridges in the Colorado Plateau and Great Basin. Soils are typically saline, but can range in texture from sandy loam to silty clay. Greasewood can be found in both upland and wetland areas. Unlike undisturbed greasewood shrublands, the herbaceous understory layer is largely devoid of native grasses such as *Sporobolus airoides*, and replaced by exotic, weedy species. At the Bank Property, kochia (*Bassia scoparia*), a non-native, annual forb, dominates the understory layer. 14.43 acres of these shrublands exist across the northern portions of the Bank Property (Figure 6).

Kochia Stand (Casey, 2009)

Kochia or Mexican fireweed (*Bassia scoparia*) is a non-native annual forb in Colorado. While kochia can exist in a wide range of environments it particularly well suited to arid and semi-arid regions due to its drought tolerance and early germination. It is also a tolerant of alkaline and saline soils allowing it to infiltrate environments other weedy species cannot. Kochia individuals become tumbleweeds at maturity giving them excellent dispersal ability. Kochia can be grazed by cattle and other livestock as it is highly palatable, but high concentrations can prove toxic. At the Bank Property, kochia exists in pure or almost pure stands in two small patches, one at the north-central part of the Bank Property and the other at the south-central part of the Bank Property.

Kochia/Perennial Grasslands (Casey, 2009)

Kochia is tolerant of a wide range of environmental conditions, allowing it to persist in many landscapes. While it can exist in monotypic stands it is often present in mixed species community such as the perennial grasslands present in the upland areas of the Bank Property (Figure 6). Blue grama is one of the more dominant perennial grass species present and a native to Colorado. Kochia is considered a non-native, invasive weed in Colorado and can displace desirable native vegetation.

Riparian Wetland with Tamarisk (*Tamarix ramosissima*)

A portion of Sandy Arroyo flows through the northwestern corner of the Bank Property (Figure 6) and is bordered with riparian wetland vegetation. Tamarisk, an invasive deciduous shrub, is established in this area. It is tolerant of saline and alkaline soils, and left unchecked, can significantly reduce groundwater flows. This area was not formally delineated during the December 3-4, 2015 wetland delineation and vegetation mapping, but its vegetation was determined via aerial photography and information gathered during other site visits.

6.3.3 Wetlands and Waters

Based on the wetland delineation conducted at the Bank Property, there are 12.21 acres of jurisdictional wetlands and 0.02 acres of jurisdictional waters (Figure 7). The wetlands are hydrologically connected to Sandy Arroyo, and as such, are not isolated wetlands. The observed aquatic features at the Bank Property are summarized below, but for more detailed information about the delineated wetlands and waters see Appendix B.

Emergent Alkaline Wetlands (PEM)

Emergent alkaline wetlands occupy 12.05 acres at the Bank Property. These wetlands occur in low-lying flat stretches of land and are primarily fed by precipitation and seasonally high water tables. Vegetation alliances in these wetlands include Western Great Plains alkaline marsh, saltgrass meadow, pursh seepweed flat, alkali muhly wet meadow, and alkali sacaton mesic grassland. Western Great Plains alkaline marsh is the wettest association observed at the Bank Property and retains surface water throughout the majority of the wet season. The other associations are less frequently inundated and for typically shorter durations.

Scrub-Shrub Alkaline Wetlands (PSS)

Scrub-shrub alkaline wetlands occupy 0.16 acres at the Bank Property. These wetlands are present in the northern portions of the Bank Property in areas exhibiting small depressions and hummocks. The hydrology of these wetlands is primarily driven by seasonally high water tables. Evaporation from these wetlands concentrates salts in the soils. The dominant vegetation association in these wetlands at the Bank Property is greasewood mesic shrubland. Greasewood can persist in both uplands and wetlands and only the wettest locations of this alliance at the Bank Property qualify as wetlands. When dry, a salt crust is often present on the surface of these wetlands.

Ephemeral Stream (R4)

In the northeast border of the property is a 0.02-acre ephemeral stream. This stream was only observed holding water after a rain event on May 18, 2015. The OHWM ranges from 2-4 feet and channel depth ranges from 1-2 feet. The stream flows northward from the kochia stand in Sandy Arroyo. The most northern stretch of the stream is vegetated and identified as alkali muhly wet meadow.

6.4 Site History

The Bank Property and surrounding lands have been used primarily for cattle grazing and recreational hunting and fishing. Other historic uses have been documented in the vicinity, but not within the boundaries of the Bank Property.

The first developed use of the Property was determined to be in 1866 as a stagecoach station with a Post Office. In 1872 Cuchara City was established by the Denver & Rio Grand (D&RG) railroad just west of County Road 120. A reservoir, called Stevens Lake, was formed in 1872 east of the road. Cucharas and Cuchara City thrived as a postal stop and a railroad, cattle, and passenger depot with a small town built to the west of the road including a hotel. However, later in the 1800s rail traffic began to slow as Walsenburg, located 6 miles to the west, emerged with rail service in a more strategic location and by the late 1930s the Cuchara City depot was closed, disassembled and removed as were all of the city's buildings. By 1940, Cuchara City was gone, leaving only the footprints of the railroad tracks and a few building foundations.

The reservoir was composed of two separate lakes called Stevens and Maria Lakes and in the 1950s and 1960s they were used by Kings Soopers and Safeway stores as a hatchery for trout. In 1968, the two lakes were combined into one called Maria Lake.

A Phase 1 Environmental Assessment (ESA) was conducted in 2013. This assessment has revealed no evidence of recognized environmental conditions. In addition, the Bank Property has never been used for mitigation or been designated for passive park/open space use. The Bank Property is currently zoned for agricultural and has no other preexisting designations. It is also entirely privately owned and has not received public funding for the proposed restoration of the Bank Property.

6.5 Surrounding Land Uses

The Bank Property is directly surrounded by ranchland and farmland on three sides. The western boundary of the Bank Property is County Road 120. The Bank Property and all adjoining lands are zoned for agriculture. The Bank Property is located to the south of Sandy Arroyo in a self-contained basin that protects the watershed from any off-site stressors and is located more than 1.4 miles from the nearest developed land use. As such, off-site land uses are not anticipated to result in any detrimental impacts to the Bank’s habitats..

We do not anticipate that the development of a mitigation bank on the Property will have an adverse impact on adjacent land. As Figure 8 depicts, the Bank Property is just south of several federal land holdings, and only a few miles west of large areas categorized as regions of high and very high biodiversity significance by the Colorado Natural Heritage Program (CNHP). These regions of biodiversity significance were determined by comparing land areas for their relative capacity to support unique ecological communities, a particular species, or suite of species. To the northwest are also large federal land holdings. Based on its location, the Bank Property will help increase connectivity between valuable conservation areas, federal lands, and properties with existing conservation easements.

7.0 FEASIBILITY AND LOGISTICS OF PROPOSED MITIGATION BANK

7.1 Property Rights

The Bank Property is owned in fee simple by the Maria Lake Grazing Association, LLC (Appendix D). It has never been used as mitigation previously, and there are no current easements or encumbrances on the Bank Property. A few easements exist on the larger 2179.2-acre ranch Property, but do not intersect with the Bank Property or inhibit the creation of the mitigation bank at the Bank Property.

M L Wetlands, LLC (Bank Sponsor) currently holds one hundred percent of the mineral rights at the Bank Property. Although the northern border of the Bank Property runs parallel to Sandy Arroyo, all aquatic features within the Bank Property are filled predominantly from shallow groundwater and/or precipitation, thus no dedicated water rights are required to support the wetlands within the Bank Property. All property rights documents are included in Appendix D.

7.2 Site Access

The Bank Property may be accessed by vehicle from Highway 10 and County Road 120.

8.0 ESTABLISHMENT AND OPERATION

8.1 Proposed Ownership and Long-term Management Arrangements

Maria Lake Grazing Association, LLC will continue to own the Bank Property, but M L Wetlands, Inc. will be the Bank Sponsor. M L Wetlands, Inc. owns the mineral rights and holds the right to place easements on the Bank Property. Long-term monitoring, maintenance, and management will be the responsibility of M L Wetlands, Inc.

Upon establishment of the Mitigation Bank, a conservation easement will be recorded over all 47.7 acres of the Bank Property by M L Wetlands,Inc. . The easement will be held and managed by a non-profit or government entity approved to hold conservation easements in Colorado. Should subsequent phases be established, conservation easements will be recorded over each additional phase before the phase is included as part of the Bank.

The Bank Sponsor will prepare a Long-term Management Plan (LTMP) that describes the long-term management, monitoring, and maintenance obligations of the Bank Property owner. The LTMP will also include a grazing management plan and a weed abatement management plan. The Bank Sponsor will also establish and fund a non-wasting Endowment Fund to support the execution of the LTMP required actions. The Endowment Fund will only be used to pay for actions specified in the LTMP and actions determined necessary under the terms of the conservation easement.

8.2 Bank Development and Crediting Plan

8.2.1 Bank Phases

8.2.1.1 Construction Phases

The Bank Sponsor intends to develop the Bank in Construction Phases. Each Construction Phase will be presented in full in the Mitigation Banking Instrument (MBI) and associated Exhibits. Each Construction Phase will be independent and can be constructed alone or in conjunction with other phases and can be constructed in any sequence.

Phase 1

Phase 1 of construction will include the preservation of existing, high functioning wetlands. This will be done by constructing a fence around the wetlands plus a 50-foot setback to protect them from cattle grazing, trespass, etc. In addition, the recordation of a conservation easement over the entire Bank Property and funding of the Endowment Fund will ensure these wetlands are preserved in perpetuity.

Phase 2

The second phase of construction will involve vegetation management, seeding/planting of native wetland vegetation, and cattle exclusion. These activities will occur in areas identified as wetland enhancement/rehabilitation in Figure 9.

Phase 3

Phase three of construction will involve minor earthwork to concentrate and redistribute the natural hydrology of the Bank Property over a wider area. This Phase would also include vegetation management, the seeding and planting of native wetland vegetation, and cattle exclusion. This phase would occur in areas labeled as establishment or re-establishment in Figure 9. The exact acreages of wetlands generated will be based on detailed restoration plans that will be submitted to the IRT when this construction phase is to be implemented.

8.2.1.2 Subsequent Phases

Subsequent Phases to add additional acreage or restoration areas to the Bank may be considered if market demand supports adequate credit sales. Any Subsequent Phases proposed by the Bank Sponsor will be submitted to the IRT for approval and comply with any requirements in place at the date of submission. Additionally, any Subsequent Phase will be considered an amendment of the MBI.

Subsequent Phase II is expected to cover the land within the current Bank Property boundaries that is not included in the initial phase of bank development (Figure 9). Before this Phase is incorporated into the Bank a wetlands delineation will be conducted and a Development Plan drafted. Other Subsequent Phases may be developed on the larger 2179.2-acre Property in the future as market demand allows.

8.2.2 Corps (Section 404) Credits

Wetland Credits will be generated through the re-establishment, enhancement, and preservation of wetlands on the Bank Property (Figure 9). To determine the exact amount of Credits generated at the Bank, a quantitative functional assessment will be performed. This assessment will determine the functional uplift generated by the preservation and restoration of aquatic resources at the Bank, which will then dictate the amount of Credits issued. Based on the Mitigation Ratio-Setting Checklist guidelines issued by the South Pacific Division (SPD) of the Corps, there are several ecological functions important to consider in the functional assessment. These functions include: short- and/or long-term surface water storage, subsurface water storage, moderation of groundwater flow or discharge, dissipation of energy, cycling of nutrients, removal of elements and compounds, retention of particulates, export of organic carbon, and maintenance of plant and animal communities.

Each credit type will generate varying degrees of functional uplift for wetlands at the Bank. Established and re-established wetlands will experience significant functional uplift to all of the aforementioned ecological functions. This transformation will also result in a net gain in wetland acreage. Enhancement/rehabilitation activities, including weeding, native vegetation seeding/planting, and cattle exclusion, will improve an individual or smaller suite of functions including plant and animal communities, nutrient cycling, and retention of particulates. These activities, however, will not increase the net acreage of wetlands at the Bank. Preservation will not result in any functional uplift given that preservation denotes maintenance of existing function.

The following table describes the predicted acres of each type of credit expected to be generated in Phase I of the Bank.

Table 4. Phase I Proposed Acreages of Wetland and Credit Types[1]

Wetland Type (Cowardin)	Credit Type	Construction Phase	Acres
Emergent Alkaline Wetlands	Establishment/Re-establishment	3	0
	Enhancement/Rehabilitation	2	4.61
	Preservation	1	7.44
Scrub-Shrub Alkaline Wetlands	Establishment/Re-establishment	3	8.15
	Enhancement/Rehabilitation	2	0.16
	Preservation	1	0
Waters	Enhancement/Rehabilitation	2	0.02

[1] Subsequent Phases acreages of wetlands and credit types will be determined after those areas have had wetland delineations conducted and preliminary development plans drafted

8.2.2.1 Wetland Establishment/Re-establishment Credits

According to the Corps 2008 Final Mitigation Rule, establishment is defined as "the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource *that did not previously exist* at an upland site". Re-establishment is defined as "the manipulation of the physical, chemical, or biological characteristics of a site with the goal of *returning natural/historic functions* to a former aquatic resource." Both establishment and re-establishment result in a gain in aquatic resource area and functions. At the Bank Property, 8.15 acres of predominantly disturbed greasewood shrublands will be converted to scrub-shrub alkaline wetlands. The exact number of Credits generated will be determined by the finalized Development Plan, achieved functional uplift, and the IRT approved crediting methodology.

Greasewood can be found in both wetlands and uplands, the majority of greasewood shrublands at the Bank Property do not exhibit hydric soils or other wetland indicators. Furthermore, the majority of these flats have been invaded by kochia, which reduces native vegetation cover due to its alleopathic properties. In the established/re-established wetlands, kochia will be removed and native wetland plants will be seeded and/or planted which will improve native vegetation cover, reduce invasive species cover, improve habitat for waterfowl and other wildlife, and increase organic carbon storage of these ecological systems. Minor earthwork will also be implemented to collect and re-distribute the natural hydrology of these sites increasing the surface and subsurface water storage, moderating groundwater flow, and improving particulate retention. No irrigation would be required to maintain these wetlands. Cattle will also be excluded from these wetlands further improving their ecological function.

8.2.2.2 Wetland Rehabilitation/Enhancement Credits

The Corps 2008 Final Mitigation Rule defines rehabilitation as "the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area." Enhancement is described as "the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area." Functional assessments will be performed to determine whether the proposed restoration qualifies as enhancement or rehabilitation of the wetlands and how functional uplift is generated.

Several locations around the Bank Property contain existing wetlands that are not providing maximum ecological function totaling 4.79 acres. These degraded wetlands include saltgrass meadows, pursh seepweed flats, alkali muhly wet meadows, and greasewood mesic shrublands. Their loss of function is primarily due to weedy species (kochia and tamarisk) and suboptimal cattle grazing regimes that reduce the proliferation of native species and overall function of the wetland.

Vegetation management will be implemented to remove kochia (*Bassia scoparia*) and tamarisk (*Tamarix ramosissima*) and seed and/or plant native wetland vegetation. This will improve native plant cover, reduce invasive species cover, and improve habitat for waterfowl and other wildlife. Tamarisk is primarily found in the northwestern corner the Bank Property along Sandy Arroyo, but kochia is widely dispersed across the enhancement/rehabilitation areas.

Kochia can be controlled through a variety of means including a structured cattle grazing regime as it is high in protein and very palatable to cattle. It is important, however, to graze the plants before they seed or grow beyond 18 inches in height (Casey, 2009). Past these points, livestock can suffer from toxicity issues and the seeds can begin to disperse (Casey, 2009). Even with appropriately timed grazing, kochia should never make up more than 50% of a cow's diet (Casey, 2009). Grazing is not proposed within the Bank Property but may be considered as an adaptive management tool in areas of the Bank Property that will not experience degradation due to the presence of cattle, and stocking levels will be adjust to minimize grazing impacts.

Tamarisk is less palatable to cattle and will likely require mechanical removal or the targeted application of an approved herbicide.

8.2.2.3 Wetland Preservation Credits

The Corps 2008 Final Mitigation Rule defines preservation as "the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions". The Final Rule also lists the following five criteria that must be met in order to use preserved aquatic resources as compensatory mitigation for permitted impacts:

> *(1) The preserved resources must provide valuable physical, chemical, and/or biological functions to the watershed.*
> *(2) The preserved resources must contribute significantly to the ecological sustainability of the watershed. This determination must be made using an approved quantitative assessment tool.*
> *(3) Preservation of the aquatic resources is deemed appropriate and practicable by the district engineer.*
> *(4) The aquatic resources must be under threat of destruction or adverse modification.*
> *(5) The preserved site must be permanently protected through a real estate or other legal agreement, such as a conservation easement.*

The wetlands to be preserved at the Bank Property meet the aforementioned criteria as follows:

1. As mentioned earlier, alkaline flats, meadows, and marshes support a unique suite of halophytic vegetation including alkali muhly, alkali sacaton, and pursh seepweed.
2. Additionally, these seasonally inundated wetlands provide crucial habitat for migratory waterfowl, including American avocets, sanderlings, and cinnamon teals. Alkaline marshes also capture and store surface runoff and precipitation, which recharges aquifers and mitigates flooding (Culver and Lemly, 2013).

3. As shown in the 2011 *The State of Colorado's Biodiversity Report* produced by the Colorado Natural Heritage Program, many of the wetland types at the Bank are categorized as "under conserved" – the lowest ranking of protection in the report. This suggests preserving these types of wetlands would be ecological valuable and appropriate. In addition, the aridity of Southeastern Colorado limits the areas in which wetlands can be established or re-established further supporting preservation activities.
4. Predicted development immediately surrounding the Bank in the near future is low, however, development in the Colorado Springs area, which is covered by the Bank's service area, is growing quickly. In addition, ranching practices, water management programs, energy development and farming in the region as well as the spread of invasive species threaten the long-term ecological sustainability of alkaline wetlands, creating a need for their protection.
5. A conservation easement will be recorded over the entire Bank Property ensuring their perpetual preservation.

7.44 acres of alkaline marsh, alkaline wet meadow, and alkaline flat will be preserved at the Bank Property (Figure 9). As described in Construction Phase 1, this will be achieved through the construction of fencing, recordation of a conservation easement, and funding of the Endowment Fund. The fencing will be set back at least 50 feet from all wetlands to accommodate a buffer protecting the ecological integrity of the existing wetlands. Since preservation denotes maintaining the current function of a biological resource, no functional uplift will be generated as a result of preservation. Likewise, preservation will not result in a net gain of wetland resources.

8.2.3 Performance Monitoring

In addition to the functional assessment, performance monitoring will be conducted for all restored wetlands at the Bank. In the Development Plan, specific performance criteria for each type of wetland will be established based on the Uniform Performance Standards developed by the Corps SPD. The Uniform Performance Standards provide measurable targets for ecological functions including hydrology, native vegetation cover, invasive vegetation cover, water quality, and species richness. Associated with each target is also an allowable timeframe to achieve the stated target. If a performance standard is not met by the established deadline, adaptive management actions will be undertaken, and Credit releases may be delayed.

In addition to the performance monitoring required under the Development Plan, any additional monitoring, maintenance and management activities will be specified in the Interim and Long-term Management Plans. This will further ensure the success of the aquatic resources at the Bank.

8.3 Service Area

The proposed service area would cover the Arkansas River basin from Canon City in the North to the Kansas border in the East. The Southern limit of the service area would be the New Mexico border, while the Western border ends roughly at the Southern Rockies. (Figure 10). The justification for this service area is provided below.

The USACE South Pacific Division's (SPD) Mitigation and Monitoring Guidelines issued January 12, 2015, states that Bank's service area includes, at minimum, the HUC-10 watershed containing the Bank Property. Additional watersheds requiring minimal justification include: 1) HUC-10 watersheds within the HUC-8 sub-basin containing the Bank Property, 2) watersheds abutting the HUC-10 watershed containing the Bank Property, and 3) areas within the same ecoregion as the Bank Property. All other areas included in a proposed service area will require substantial justification for their inclusion.

Watershed (HUC-10) Containing Bank Property

The Bank Property is located within the Sandy Arroyo watershed, which is part of the Huerfano sub-basin (11020006) (Table 1). This watershed is also within the Southwestern Tablelands ecoregion (Chapman et al., 2006). This ecoregion is primarily semi-arid rangeland dominated by buffalograss, blue grama, western wheatgrass, galleta, alkali sacaton, sand dropseed, greasewood, and yucca. Alkali/salt flats and playas are characteristic aquatic features of the region. This region is less arable than the adjacent Great Plains, although irrigated cropland can be found near streams and rivers. The EPA's ecoregion level III classification was used in the ecoregion assessment.

Based on the SPD guidance aforementioned, this watershed is automatically included in the service area and requires no further justification.

Table 5. Watershed Containing the Bank Property

Watershed Name	HUC-10
Sandy Arroyo	1102000606

Watersheds within Same Sub-basin (HUC-8) as Bank Property

These watersheds abut the Sandy Arroyo watershed that contains the Bank Property (Table 2). In addition, they are within the same sub-basin (HUC-8) as the Bank Property and the same ecoregion. Given their ecological and hydrological similarities to the watersheds containing the Bank Property and the SPD guidance, these watersheds are included in the service area for the Bank without further justification.

Table 6. Watersheds within the Same Sub-basin (HUC-8) as Bank Property

Watershed Name	HUC-10
Lower Cucharas River	1102000607
Lower Huerfano River	1102000609
Middle Huerfano River	1102000608
Dog Springs Arroyo-Huerfano River	1102000603
Upper Cucharas River	1102000604
Middle Cucharas River	1102000605
Upper Huerfano River	1102000602
Headwaters Huerfano River	1102000601

Watersheds within the Same Basin (HUC-6) and Ecoregion as the Bank Property

These watersheds extend primarily east and north of the Bank Property (Table 3) and are justified for inclusion in the Bank's service area due to the similarity of aquatic resource types that exist throughout the ecoregion encompassing these watersheds. While some of these watersheds are as far as 100 miles away from the Bank Property, they are more similar than regions closer to the west. All of these watersheds are within the same hydrologic basin (HUC-6) that drains into the Arkansas River, as well as the Southwestern Tablelands ecoregion. West of the Bank lies the Southern Rocky Mountains which exhibit vastly different hydrologic, climactic, and biological conditions than the nearby tablelands. The alkali/salt flats and playas found on and around the Bank Property can also be found in these watersheds extending north and east, allowing for in-kind compensatory mitigation.

In addition to the ecological similarity and hydrologic connectivity, these watersheds are critical to economic viability of the Bank. The largest city near the Bank Property is Walsenburg, CO, which only has a population of about 3,000 individuals. The surrounding lands are primarily cattle rangeland with very limited annual impacts. The greater Colorado Springs area; however, has experienced significant growth in the last 30 years. It is has a strong commercial economy, particularly in the technology sector, and is the location of several large military installations including the U.S. Air Force Academy and U.S. Air Force Space Command. Additionally, it is an increasingly popular destination for outdoor recreationalists. It is thus important for the watersheds in the greater Colorado Springs area to be included in the Bank's service area.

Table 7. Watersheds within the Same Basin (HUC-6) and Ecoregion as Bank Property

Watershed Name	HUC-10
Chacuaco Creek	1102001015
Trementina Creek	1102001009
Trinchera Creek	1102001008
San Isidro Creek	1102001007
Frijole Creek-Purgatorie River	1102001006
Chicosa Arroyo	1102001005
Luning Arroyo-Purgatorie River	1102001011
Van Bremer Arroyo	1102001010
Taylor Arroyo	1102001012
Perlie Canyon-Purgatorie River	1102001013
Plum Creek	1102001014
Smith Canyon	1102001017
Jack Canyon-Purgatorie River	1102001018
Outlet Purgatorie River	1102001019
Headwaters Apishapa River	1102000701
Upper Apishapa River	1102000702
Middle Apishapa River	1102000703
Lower Apishapa River	1102000704
Timpas Creek	1102000506
Crooked Arroyo	1102000508
Anderson Arroyo-Arkansas River	1102000509
Dry Creek	1102000505
Dry-Reservoir-Arkansas River	1102000507
Lake Meridith	1102000504

Chicosa Creek-Arkansas River	1102000503
Kramer Creek	1102000502
Haynes Creek	1102000501
Saint Charles River-Arkansas River	1102000212
Dry Creek-Arkansas River	1102000209
Pueblo Reservoir-Arkansas River	1102000208
Greenhorn Creek	1102000210
Headwaters Saint Charles River	1102000211
Hardscrabble Creek	1102000203
Red Creek-Arkansas River	1102000206
Eightmile Creek-Arkansas River	1102000204
Outlet Four Mile Creek	1102000202
Beaver Creek	1102000205
Turkey Creek	1102000207
Lower Fountain Creek	1102000304
Middle Fountain Creek	1102000303
Upper Fountain Creek	1102000302
Monument Creek	1102000301
Chico Creek	1102000403
Black Squirrel Creek	1102000402
Brackett Creek-Black Squirrel Creek	1102000401
Upper Horse Creek	1102000802
Steels Fork	1102000801
Breckenridge Creek	1102000803
Middle Horse Creek	1102000804
Lower Horse Creek	1102000805
South Rush Creek	1102001202
North Rush Creek-Rusk Creek	1102001203
Long Branch	1102001201
Middle Rush Creek	1102001205
Lower Rush Creek	1102001206
Headwaters Big Sandy Creek	1102001101
Lake Creek-Big Sandy Creek	1102001102
Barron Creek-Big Sandy Creek	1102001103
Outlet Big Sandy Creek	1102001109
Granada Creek-Arkansas River	1102000917
Cheyenne Creek-Arkansas River	1102000919
Wolf Creek	1102000916
Buffalo Creek-Arkansas River	1102000915
Clay Creek	1102000913
Neenoshe Reservoir-Arkansas River	1102000914
Dry Creek-Arkansas River	1102000910
Mud Creek	1102000909
Caddoa Creek	1102000908
Headwaters Rule Creek	1102000905
Muddy Creek	1102000904
Outlet Rule Creek	1102000906
John Martin Reservoir	1102000907
Outlet Adobe Creek	1102000903

Mustang Creek	1102000901
Headwaters Adobe Creek	1102000902
N/A	1102000911
Kiowa Creek	1102000912
Upper Two Butte Creek	1102001301
Middle Two Butte Creek	1102001302
Lower Two Butte Creek	1102001304
Plum Creek	1102001303

Watersheds within the Same Basin (HUC-6) as Bank Property

These watersheds are within the same basin as the Bank Property, but not within the same ecoregion (Table 4). While these watersheds may support similar aquatic resources as those found on the Bank Property, the habitats are generally expected to be less similar. However, these watersheds are needed for inclusion in the Bank's service area to be financially sustainable. The two adjacent ecoregions that these watersheds are contained within are the Southern Rockies ecoregion and the Great Plains ecoregions. While these watersheds are within different ecoregions that the Bank Property, they border the Southwestern tablelands ecoregion. Biological communities do not typically make abrupt changes geographically, and thus these watersheds likely represent a transitional, intermediary community. Consequently, many of the aquatic resources found at and around the Bank Property could be found in these watersheds, but probably with less frequency.

The majority of these watersheds are in rural locations with very limited growth. Because of this, it is unlikely that a mitigation bank will ever be developed in these areas. Since the 2008 Corps Final Mitigation Rule established a hierarchy expressing the Corps' preference for mitigation banks over other types of compensatory mitigation, including these watersheds in the Bank's service area is providing a preferred mitigation alternative in these regions.

Table 8. Watersheds within the Same Basin (HUC-6) as the Bank Property

Watershed Name	HUC-10
Headwaters Four Mile Creek	1102000201
Ratan Creek	1102001004
Trinidad Lake-Purgatorie River	1102001003
Lorencito Canyon-Purgatorie River	1102001002
Headwaters Purgatorie River	1102001001
N/A	1102001108
Big Spring Creek-Big Sandy Creek	1102001107
Wild Horse Creek	1102001105
Aroya Gulch-Big Sandy Creek	1102001106
Sevenmile Creek-Big Sandy Creek	1102001104

8.4 Permitting Requirements

Due to the proposed restoration activities in Construction Phase 3 at the Bank Property, jurisdictional wetlands and waters may be temporarily impacted. Construction Phase 3 may require a Section 404 Nationwide Permit issued through the Army Corps of Engineers. Other state or local permits may be required for grading activity during Construction Phase 3 and will be obtained as necessary.

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Appendix A: Figures

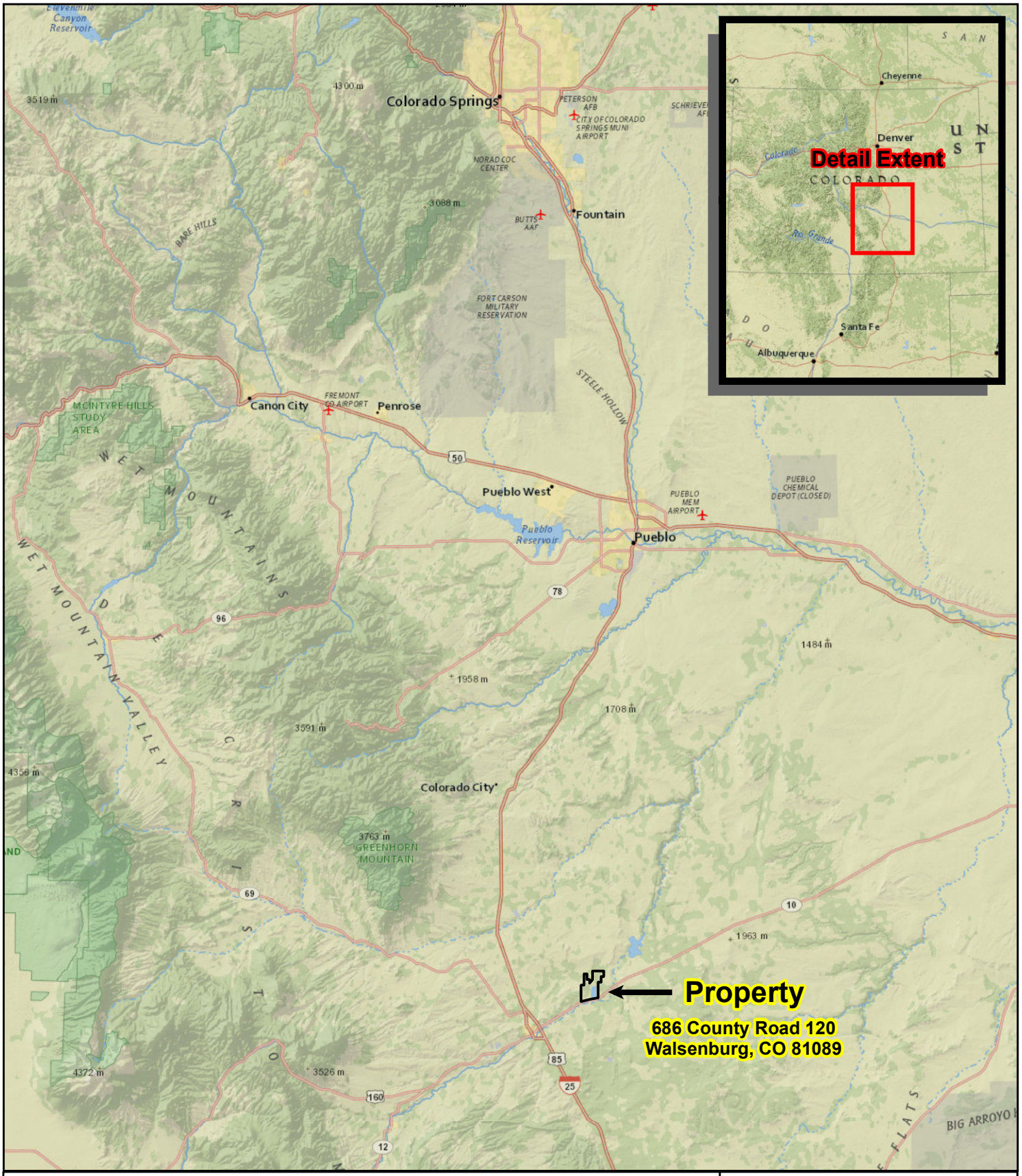

Figure 1. Bank Location Map

Maria Lake Mitigation Bank
Huerfano County, Colorado

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Map Prepared Date: 12/24/2015
Map Prepared By: czumwalt
Base Source: National Geographic
Data Source(s): WRA

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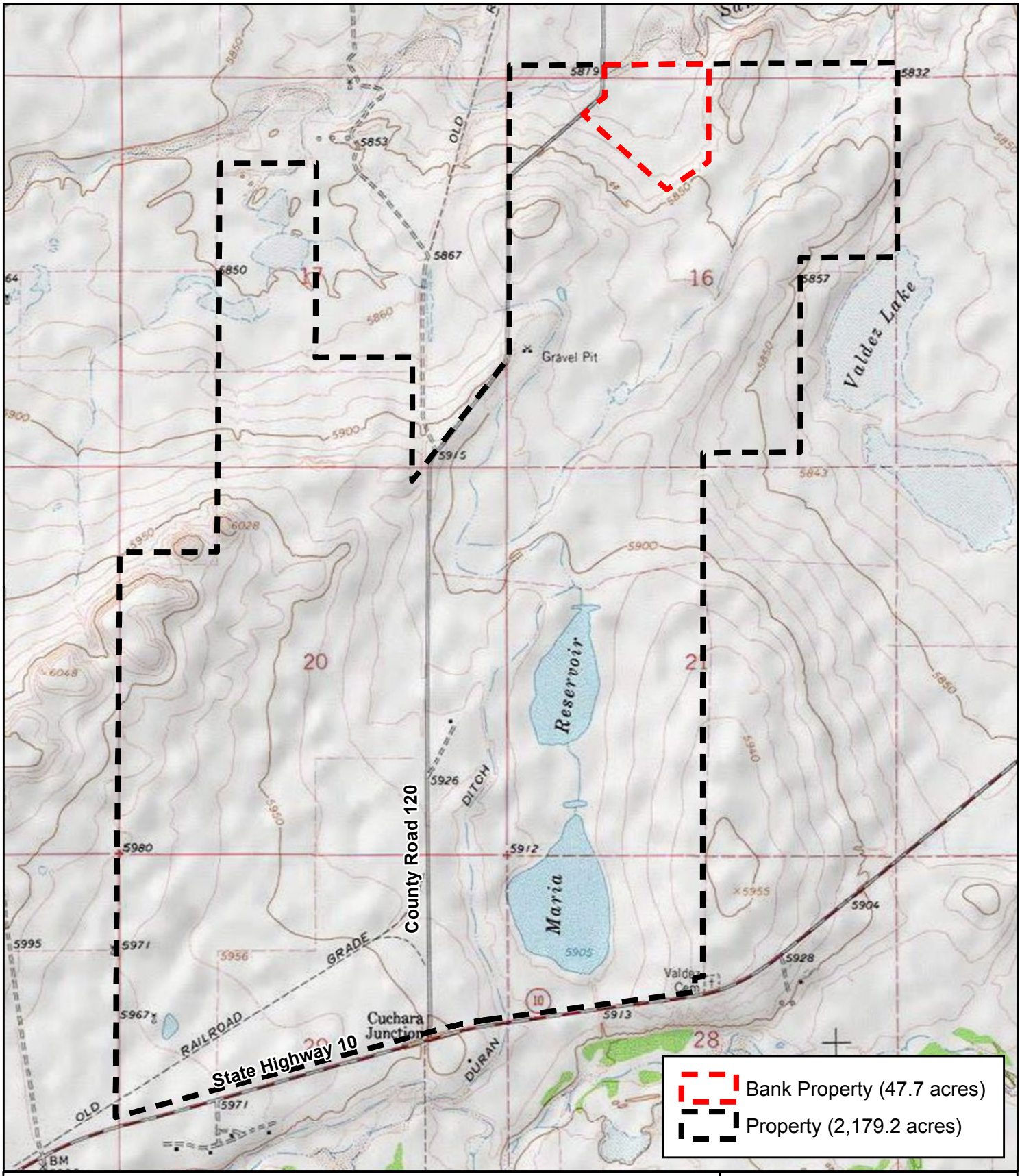

Figure 2. USGS Maria Reservoir Quad

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Maria Lake Mitigation Bank
Huerfano County, Colorado

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Map Prepared Date: 1/5/2016
Map Prepared By: czumwalt
Base Source: USGS Topo Quad
Data Source(s): WRA

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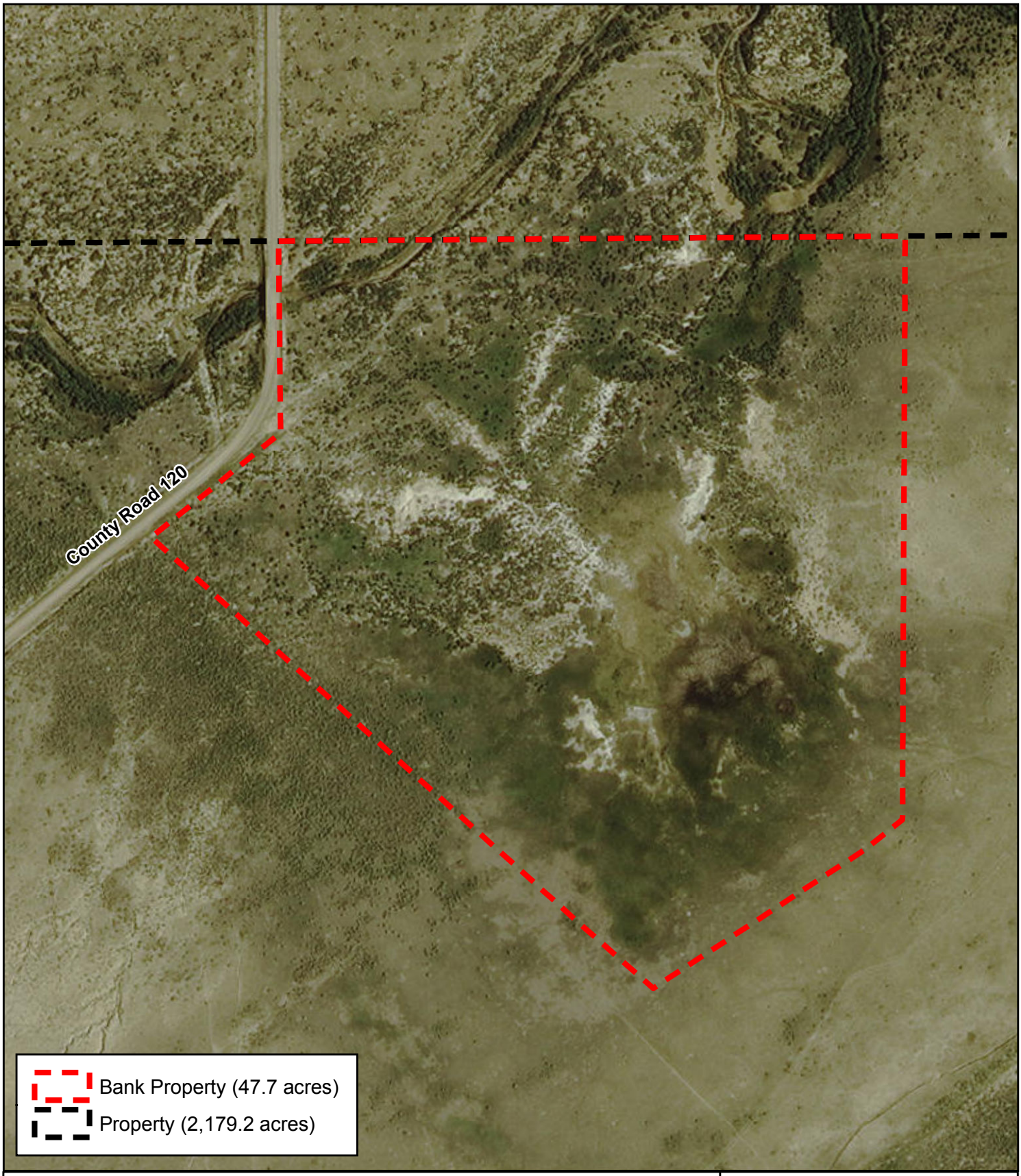

Figure 3. Aerial of Bank Property

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Maria Lake Mitigation Bank
Huerfano County, Colorado

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Map Prepared Date: 1/5/2016
Map Prepared By: czumwalt
Base Source: USDA NAIP 2013
Data Source(s): WRA

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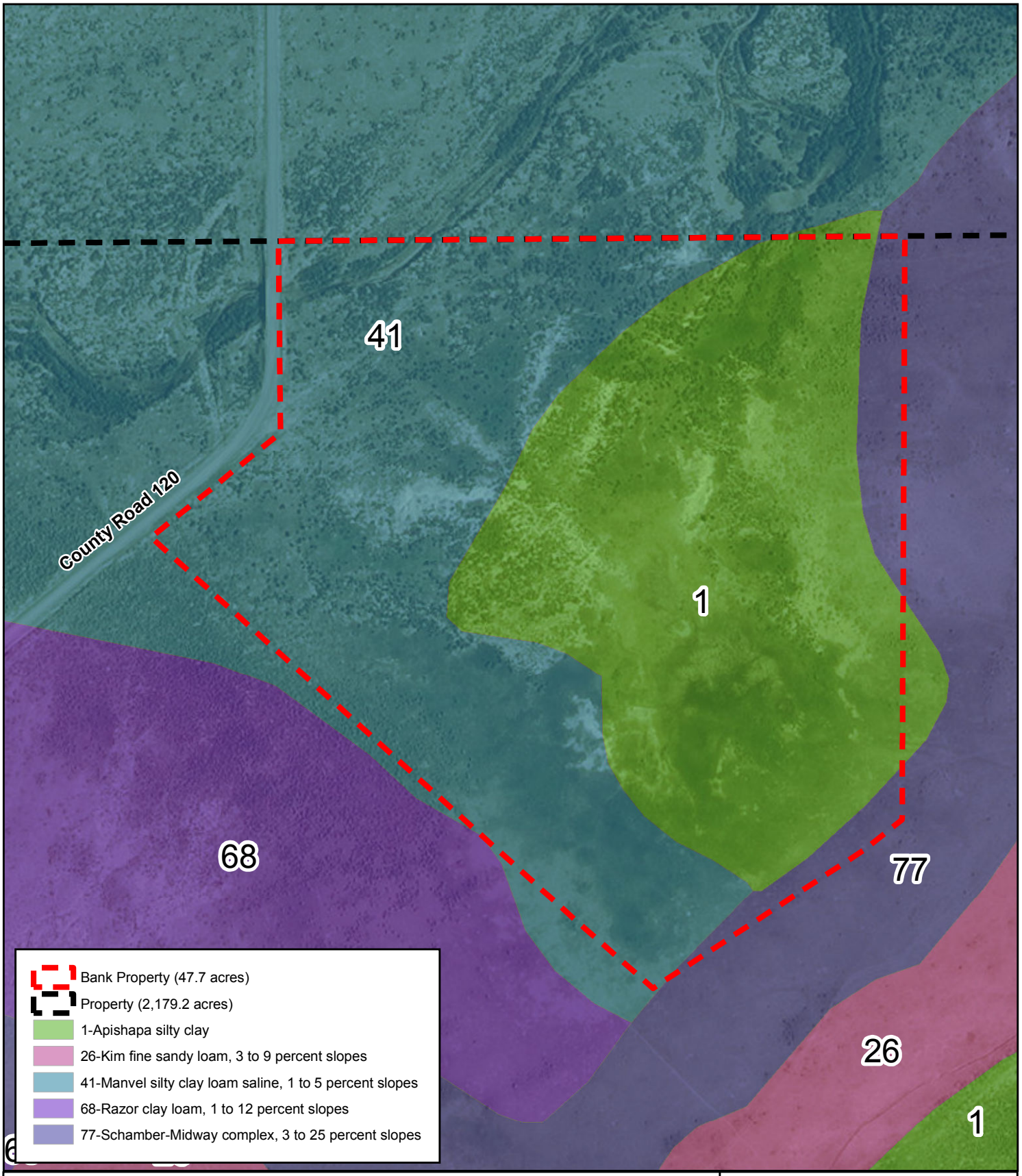

Figure 4. Soils Map of Bank Property

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Huerfano County, Colorado

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Map Prepared Date: 1/5/2016
Map Prepared By: czumwalt
Base Source: USDA NAIP 2013
Data Source(s): WRA

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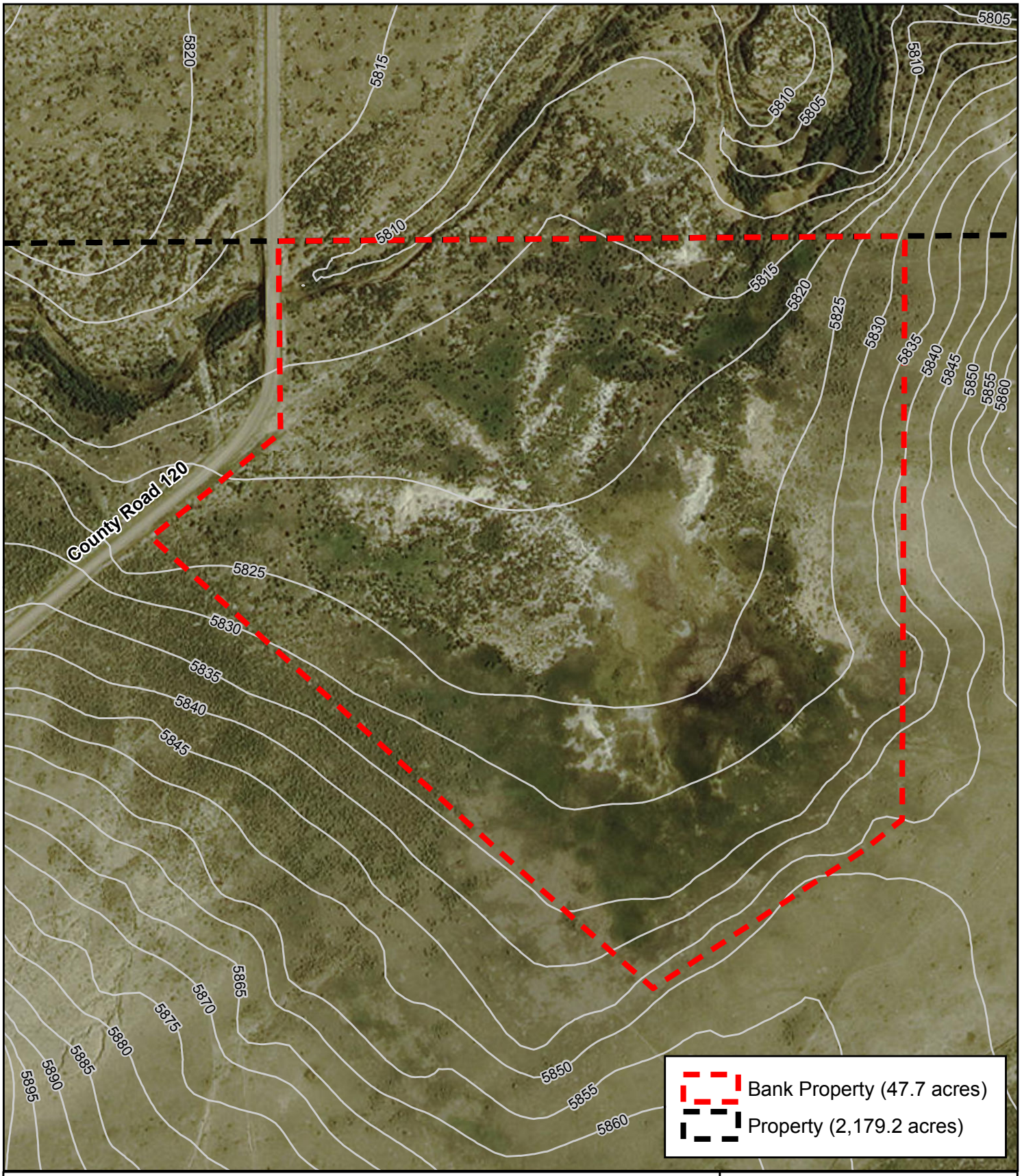

Figure 5. Topography of Bank Property

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Maria Lake Mitigation Bank
Huerfano County, Colorado

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Map Prepared Date: 1/5/2016
Map Prepared By: czumwalt
Base Source: USDA NAIP 2013
Data Source(s): WRA

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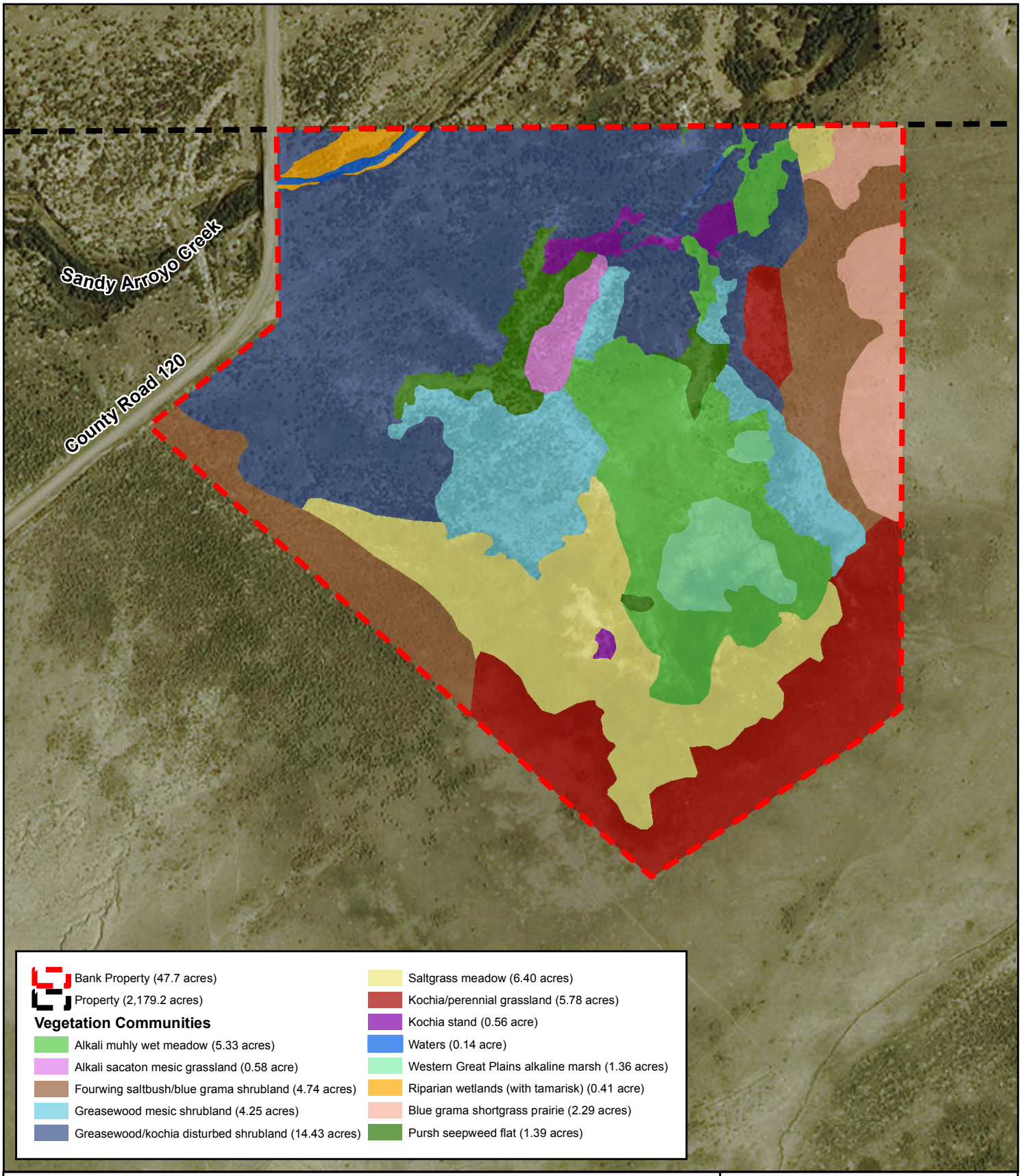

Figure 6. Vegetation Communities

Mapping done by Auckland Environmental Consulting

Maria Lake Mitigation Bank
Huerfano County, Colorado

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ENVIRONMENTAL CONSULTANTS

Map Prepared Date: 1/7/2016
Map Prepared By: czumwalt
Base Source: USDA NAIP 2013
Data Source(s): Auckland Environmental Consulting

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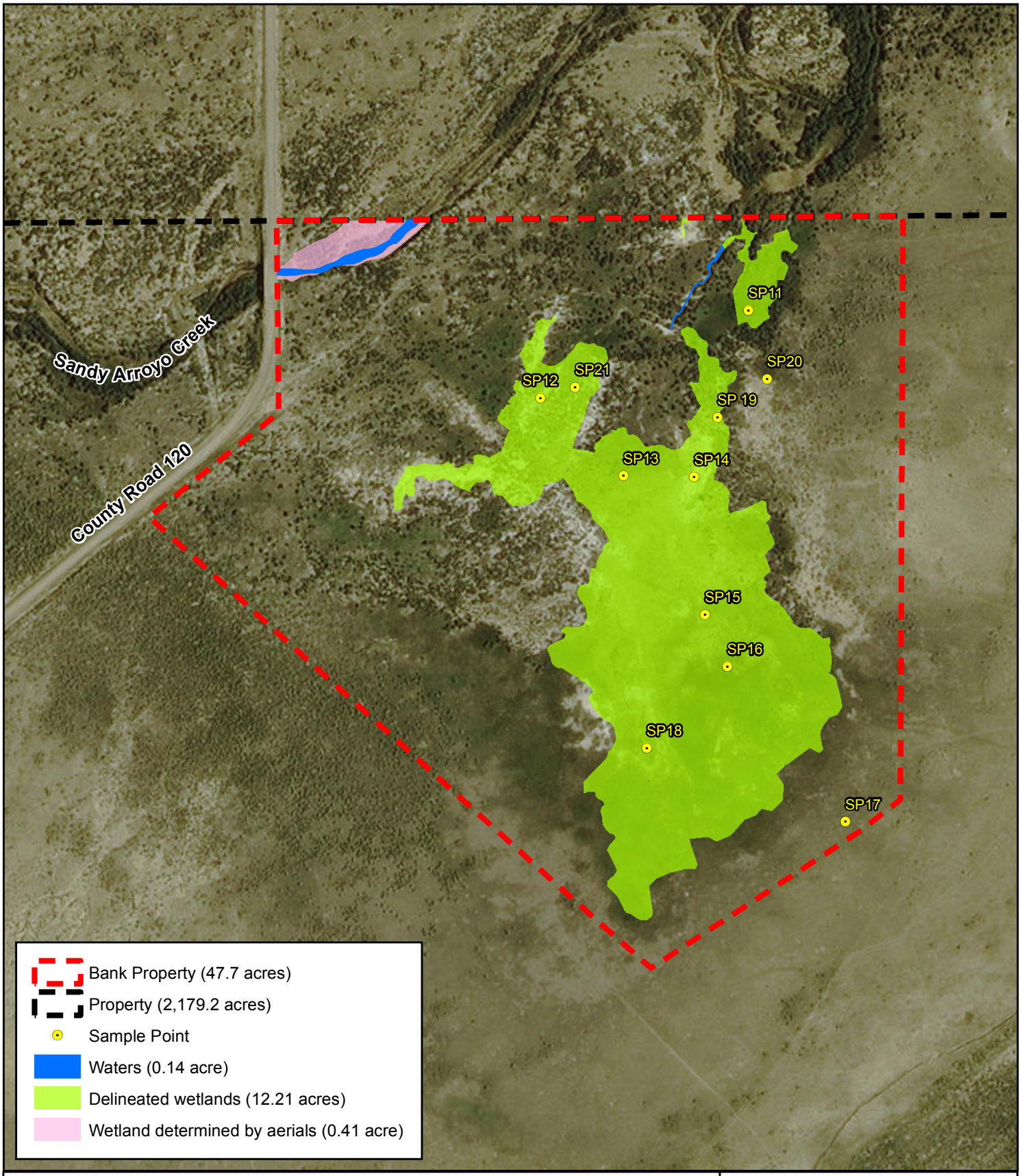

Figure 7. Wetlands and Waters

Mapping done by Auckland Environmental Consulting

Maria Lake Mitigation Bank
Huerfano County, Colorado

N
W E
S

0 150 300 600
Feet

wra
ENVIRONMENTAL CONSULTANTS

Map Prepared Date: 1/7/2016
Map Prepared By: czumwalt
Base Source: USDA NAIP 2013
Data Source(s): Auckland Environmental Consulting

Path: L:\Acad 2000 Files\24000\24316\GIS\ArcMap\Prospectus\Fig 7 Delineation.mxd

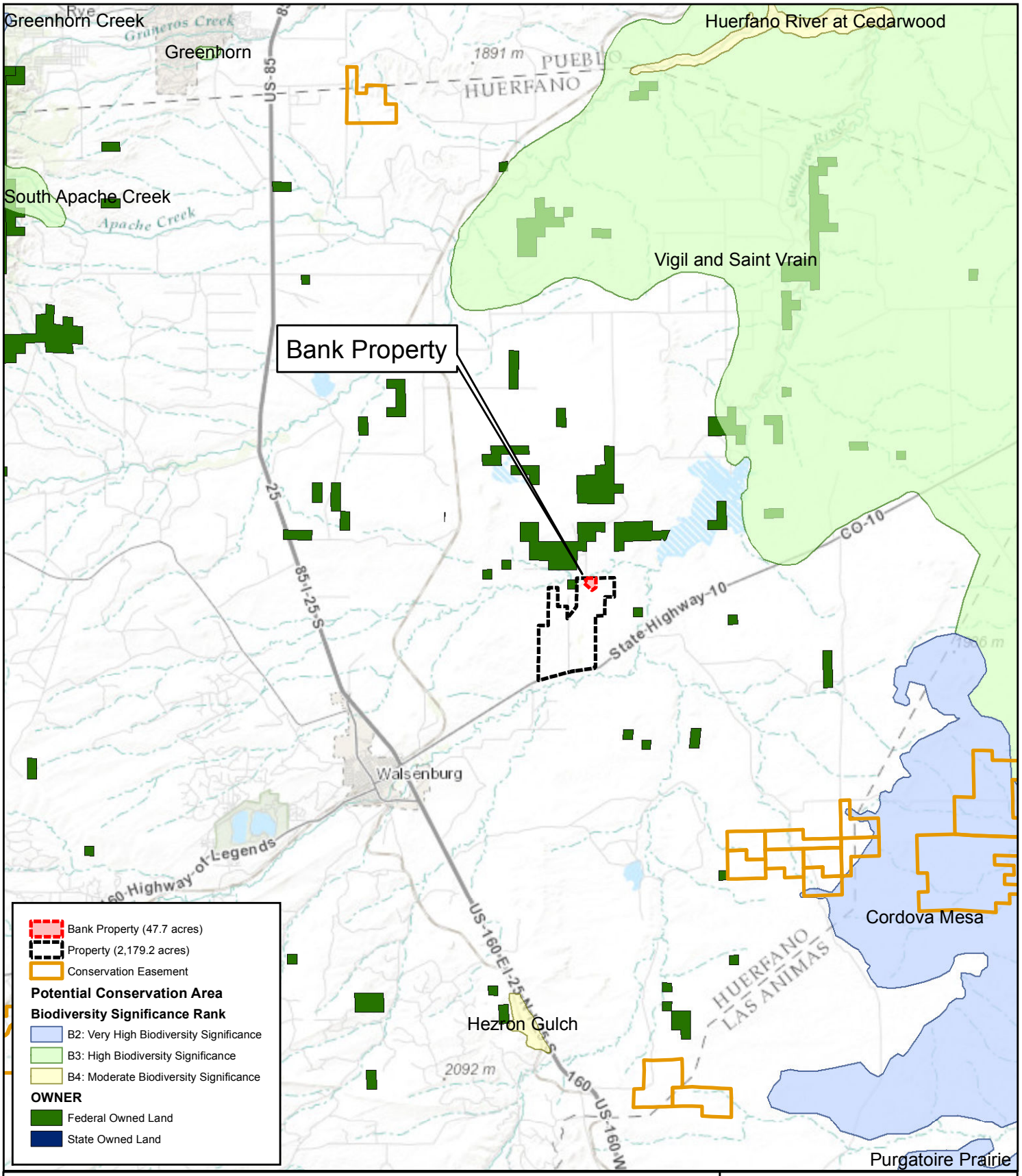

Figure 8. Current and Potential Conservation Areas within Vicinity of Bank Property

Maria Lake Mitigation Bank
Huerfano County, Colorado

N
W E
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0 1 2 4
Miles

wra
ENVIRONMENTAL CONSULTANTS

Map Prepared Date: 1/4/2016
Map Prepared By: czumwalt
Base Source: USGS Topo Quad
Data Source(s): WRA

Path: L:\Acad 2000 Files\24000\24316\GIS\ArcMap\Prospectus\Fig 8 Ownership.mxd

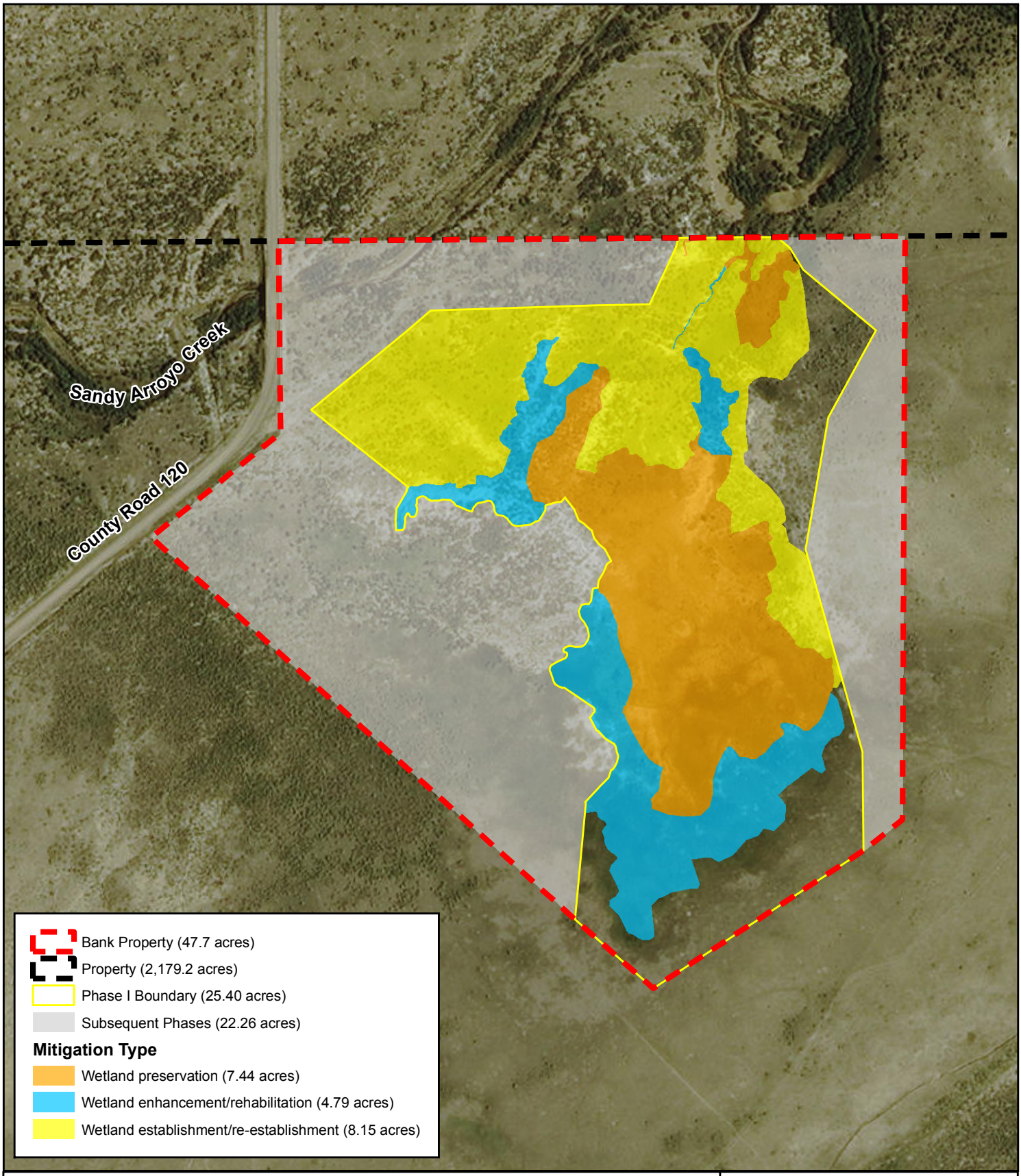

Figure 9. Development Plan for the Bank Property

N
W E
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0 150 300 600
Feet

Maria Lake Mitigation Bank
Huerfano County, Colorado

wra
ENVIRONMENTAL CONSULTANTS

Map Prepared Date: 1/7/2016
Map Prepared By: czumwalt
Base Source: USDA NAIP 2013
Data Source(s): WRA

Path: L:\Acad 2000 Files\24000\24316\GIS\ArcMap\Prospectus\Fig 9 Development Plan.mxd

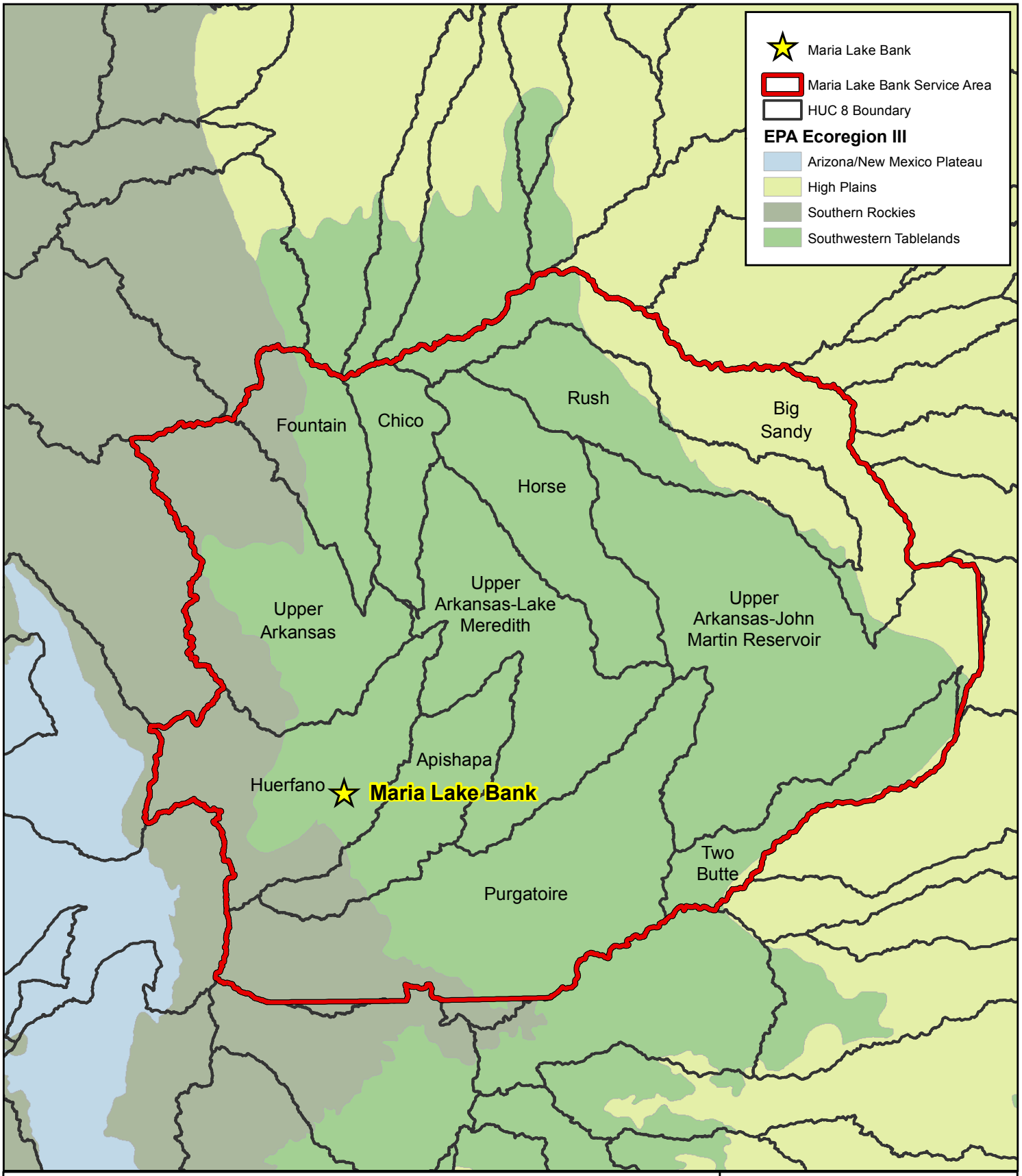


Figure 10. Potential Maria Lake Service Area

N
W E
S

0 10 20 40
Miles

wra
ENVIRONMENTAL CONSULTANTS

Maria Lake Mitigation Bank
Huerfano County, Colorado

Map Prepared Date: 1/5/2016
Map Prepared By: czumwalt
Base Source: National Geographic
Data Source(s): WRA, USACOE, USGS

Path: L:\Acad 2000 Files\24000\24316\GIS\ArcMap\Prospectus\Fig 10 Service Area.mxd

Appendix B: Bank Property Photographs

Photos taken December 3-4, 2015

Alkali muhly (*Muhlenbergia* asperifolia) dominated wetland area in northeast corner of Bank Property

Northern boundary of Bank Property.

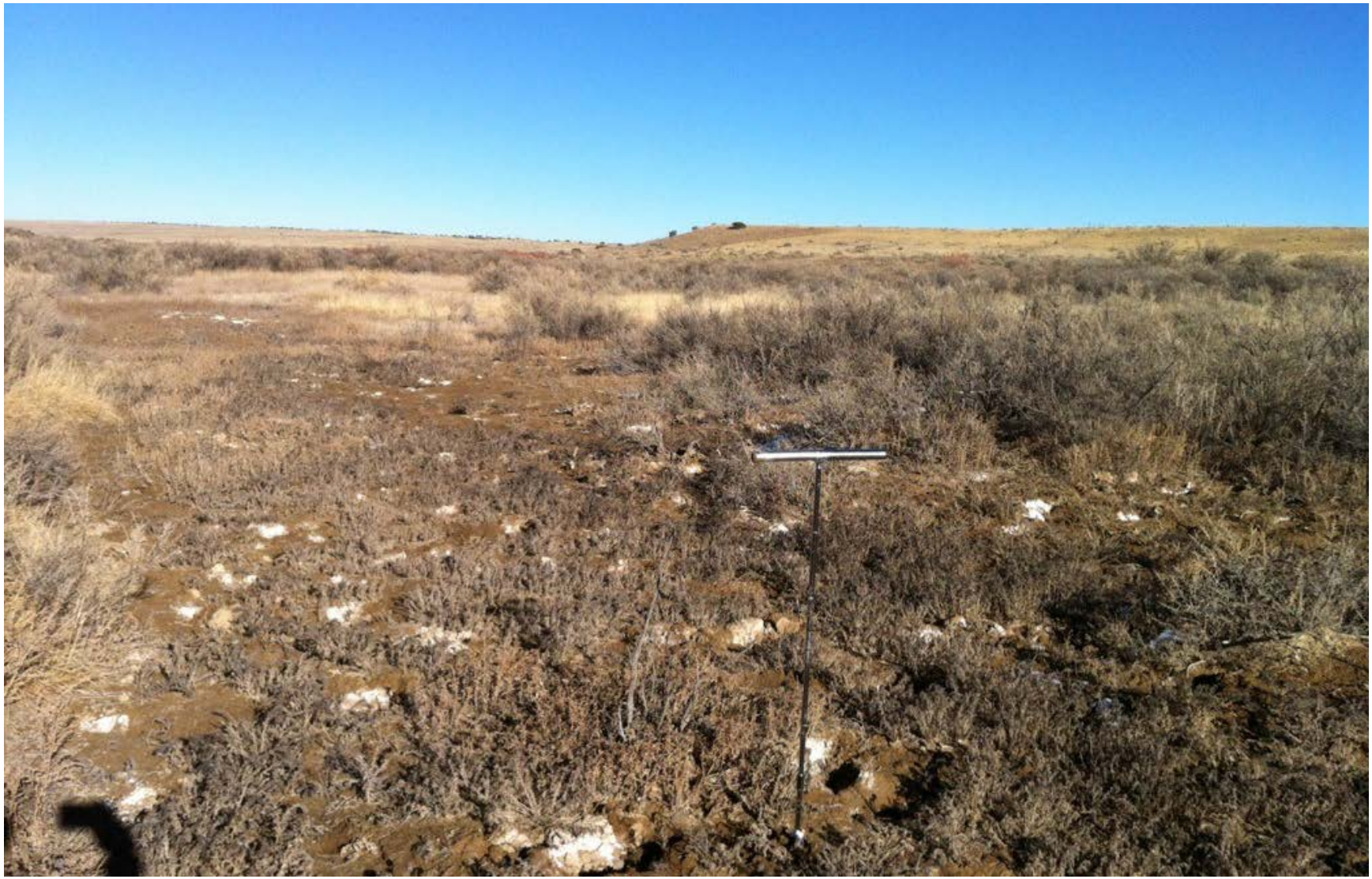
Wetland in central-eastern region of Bank Property; tule (*Schoenoplectus acutus*), alkali muhly (*Muhlenbergia asperifolia*), and foxtail barley(*Hordeum jubatum*) dominate

Upland area in northeastern region of Bank Property where slender wheat (*Elymus trachycaulus*) dominates

Greasewood flat in northeastern region of Bank Property with weak hydric soil indicators

Sparse pursh seepweed (*Sueada calceoliformis*) wetland in northeastern region of Bank Property.

Alkali sacaton (*Sporobolus airoides*) mixed with greasewood (*Sarcobatus vermiculatus*) in the northern region of the Bank Property



Pursh seepweed (*Sueada calceoliformis*) flat community with substantial hydric soil indicators in the northern reaches of the Bank Property

Edge of central emergent marsh at Bank Property; hydrology is on surface and soils are not saturated

Interior of central emergent marsh at Bank Property; water table at 36 inches and soils saturated throughout

West-central region of Bank Property supporting inland salt grass (*Distichlis spicata*) meadow

Appendix C: Wetland Delineation Report

Maria Lake Ranch: Wetland Delineation Report for Proposed Wetland Mitigation Bank

Prepared for: WRA, Inc.

Prepared by: Auckland Environmental Consulting
Author: Julia Auckland
Phone: 303-358-2687

December 31, 2015

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Figures

Appendices

1.0 Introduction

The Maria Lake Grazing Association, LLC (Owners) plans to develop a wetland mitigation bank (Bank) on a portion of their property located near Walsenburg, Colorado. They have contracted with WRA, Inc. (WRA) to assist with establishment of the Bank, including preparation of a prospectus. Auckland Environmental Consulting (AEC) has been subcontracted by WRA to provide field and technical support services. A wetland delineation for the portion of the property proposed for use as a wetland mitigation bank has been completed by AEC and this report summarizes the results of that wetland delineation.

1.1 Bank Location

Maria Lake Ranch (Ranch) is an approximately 2,180 acre property located in Huerfano County, six miles northeast of the City of Walsenburg (Figure A). The southern boundary of the Ranch is State Highway 10. Sandy Arroyo is located near the northern edge of the Ranch. The entire Ranch is on the United States Geological Survey (USGS) Maria Reservoir Quadrangle (Figure A).

The proposed Bank consists of 47.7 acres located in the northeast portion of the Ranch (Figure A). The Bank's western boundary is County Road 120. The northern boundary is the Ranch property line, which crosses Sandy Arroyo. The eastern and southern boundaries are based on topography, the extent of existing wetlands, and a buffer area. The Bank is located in the north half of Section 16 and the south half of Section 9, Township 27 South, Range 65 West. The approximate coordinates of the Bank center are 37.701095 latitude and - 104.675002 longitude (WGS 84 datum). The lowest portion of the Bank is along Sandy Arroyo and the land gradually slopes up to the south and east. Elevation ranges from approximately 5,810 to 5,850 feet above sea level.

1.2 Study Background

In January 2015, AEC mapped existing wetlands and potential mitigation bank areas on the Ranch. Between February and November 2015, additional wetland evaluation work was completed by AEC and WRA. The project team (Owners, WRA, and AEC) also coordinated with Chris Grosso of the US Army Corps of Engineers, including submittal of a draft prospectus and two onsite meetings (May 19 and November 12, 2015). There are multiple areas on the Ranch with existing wetlands and/or the potential for wetland creation. Ultimately, the wetland complex on the northeast portion of the Ranch was selected as the best location for a wetland mitigation bank because:

- There is a diverse assemblage of existing wetlands;
- There is a mix of wetlands in good and weedy condition (potential enhancement areas);
- There are potential areas for wetland re-establishment and creation;
- The area includes Sandy Arroyo;
- Other than Sandy Arroyo, it has a watershed that is entirely located on the Ranch; and
- The watershed is unaltered by irrigation activities.

2.0 Methods

A wetland delineation of the Bank area was completed by Julia Auckland of AEC on December 3 and 4, 2015. The delineation of wetlands and/or Waters of the US (WUS) (wetlands) was completed in accordance with the 1987 U.S. Army Corps of Engineers (Corps) Wetland Delineation Manual, the 2010 Great Plains Supplement, and the 2014 National Wetland Plant List. In addition to the wetland delineation, the vegetation communities within the Bank were mapped. Prior to the field work, the boundaries of vegetation types were mapped on aerial photographs. Weather data (National Weather Service) and soil types were reviewed (Natural Resource Conservation Service (NRCS, 2015a). Field work was completed during a warm period when the ground was not frozen and snow was melted. As much of the wetlands within the Bank area were delineated as time allowed (Figure B). Earlier in 2015, the Bank area was also visited on January 20 during the initial wetland mapping effort, on May 18 for a preliminary growing season evaluation, on September 24 with Nate Bello of WRA, and on November 13 with Chris Grosso of the Corps.

Representative photographs were taken and wetland determination sampling points (SP) were completed (Appendices A and B). Wetlands were defined based on vegetative, hydrologic and soil features. Soil pits were excavated within, and adjacent to, potential wetlands to verify indicators of wetland hydrology and hydric soils. Some pits were dug by hand using a shovel. Others were dug using a skid steer with a drill attachment (approximate 40” long x 10” diameter).

Plant nomenclature was first based on the "National List of Plant Species" (Corps, 2014) and then on “Colorado Flora: Eastern Slope” (Weber and Wittman, 2012). Wetland indicator status for plant species in the United States Fish and Wildlife Service National Wetlands Inventory Region 8 was referenced in the "National List of Plant Species" (Corps, 2014). Species were classified as OBL (obligate wetland species), FACW (facultative wetland species), FAC (facultative species), FACU (facultative upland), UPL (upland species) or NL (not listed). A plus (+) or minus (-) sign represents species nearer to wetter or drier ends of the indicator categories, respectively. Plant species classified as FAC, FACW, or OBL, are considered hydrophytic plants, and are wetland indicators.

Wetland hydrology indicators may include topographic positions, presence of standing water and/or saturated soil, profile conditions, drainage patterns, water marks, sediment deposits, and/or oxidized root channels in the upper 18 inches of the soil profile. Wetland soil indicators may include presence of color streaking (mottling), gleying (greenish-blue-grey coloration), reducing conditions, sulfidic odor, high organic content and organic matter streaking in the surface layer of sandy soils.

Once wetland vegetation extents were identified and wetland hydrology and soils were confirmed, the upland-wetland boundary and the ordinary high water mark (OHWM) were

recorded using a Trimble Geo7x Global Positioning System (GPS) unit. The preliminary vegetation mapping was ground-truthed and refined using a combination of aerial photograph review and GPS mapping. Vegetation communities were defined per the "U.S. National Vegetation Classification" (USNV) (NatureServe, 2015). Wetlands were also classified using the Cowardin classification system (Cowardin, et al., 1979). Classifications are further described in the results section. This data was used by AEC to create a map of delineated wetlands (Figure B) and by WRA GIS staff to create maps of vegetation communities in the Bank area (Figure C).

3.0 Site Description

The proposed Bank is located on an active cattle ranch. Cattle are generally grazed on the ranch from October to May. The Bank area is undeveloped. Sandy Arroyo is the lowest point in the Bank; from Sandy Arroyo, the land slopes up to the south and east via a series of gradual slopes interspersed with flat terrace-like areas. Thus, the Bank is positioned in a basin or "bowl" at the base of converging slopes. The majority of the area consists of a diverse complex of wetlands and transitional vegetation communities within the USNV "Warm & Cool Desert Alkali-Saline Wetland" macrogroup (NatureServe, 2015).

3.1 Soils

There are four soil types mapped in the Bank area (the first two are most abundant) (NRCS, 2015a and USDA, 1983):

- **"Apishapa silty clay" (Apishapa):** Apishapa soils are on floodplains or in slightly depressed areas on plains and terraces and have slopes of 0 to 4 percent. This series consists of very deep, somewhat poorly drained and poorly drained, slowly permeable soils that formed in alluvial parent materials derived from mixed rock sources. The top eight inches are clay loam, there is silty clay from eight to 14 inches, and clay below. The Aphishapa series is calcareous, moderately to strongly alkaline, and classified by the NRCS as a hydric soil.
- "**Manvel silty clay loam saline, 1 to 5 percent slopes" (Manvel):** Manvel soils are on fans, plains, and interfluves. Slopes range from 0 to 15 percent. This series consists of very deep, well drained soils that formed in alluvium derived from soft limestone and shale. The soil typically consists of silty clay loam throughout. Aphishapa is also calcareous and classified by the NRCS as a hydric soil, but this soil is slightly to moderately alkaline (less alkaline than Manvel).
- **"Schamber-Midway complex, 3 to 25 percent slopes" (Schamber-Midway):** This map unit is on hills, terrace, edges, and side slopes. The observed soil at SP17, an upland, most closely resembles the Midway series (Figure B, Appendix B). Midway soil is described as shallow, well drained, slightly saline, and moderately alkaline. The typical profile is an 18-inch thick layer of clay on top of platy shale. Runoff is rapid to very rapid. This soil is not classified as hydric.
- **Razor clay loam:** This map unit is on plains, hills and breaks to major drainages. Slopes are 0 to 25 percent. The soil is described as moderately deep, well drained, and slightly to moderately alkaline. The typical profile consists of six inches of silty clay loam on top of silty clay. This soil is not classified as hydric.

Observed soils generally matched the mapped types (Appendix B). Soils in the majority of the Bank are Manvel in the west half and Apishapa in the east half. Wetlands are present in areas mapped for both soil types, but are most strongly correlated with the more poorly drained and

alkaline Apishapa series. The Schamber-Midway complex and Razor clay loam are limited to the well-drained, higher elevation slopes along the southern and eastern perimeter of the Bank.

3.2 Hydrology

The most obvious hydrologic feature is Sandy Arroyo which flows through the northwest corner of the Bank. All of the wetlands in the Bank drain to Sandy Arroyo. This drainage was not observed to be flowing when visited in January, November, or December, 2015. However, the soil surface was observed to be saturated in November 2013; this is indicative of a water table that is close to the surface.

The main source of hydrology appears to be precipitation combined with additional surface flows from the surrounding hillsides. This water tends to pool in flat areas or slight depressions with poorly drained soils. This was consistent with the soil pit observations; in most locations the hydric soil indicators were near the surface.

Springs also appear to contribute to the wetland hydrology. Based on the presence of patches of more hydric vegetation, it appears that water is either seeping to the surface or present slightly below the surface. The largest of these areas is the alkaline marsh on the southeast side of the Bank (Figures B and C). Two sampling points were completed here in order to evaluate hydrology. At SP 16, soil was saturated on the surface and there was standing water at 36". Soils were depleted to a depth of 40". Sampling Point 15 is located 125 feet northwest and slightly (less than a foot) down gradient of SP 16. At this point, no saturation or standing water were observed within the 40" deep pit. Soils were only depleted in the top 20". Based on these observations, it appears that water is seeping out of the ground in limited areas (ex. SP 16) and then sustaining the marsh by spreading across the surface (ex. SP 15). There appear to be additional small springs scattered throughout the Bank, especially on the large upper terrace and adjacent slopes. Based on aerial photo review and on-site observations, the depth and volume of the water associated with these springs fluctuates seasonally and annually depending on precipitation.

3.3 Vegetation

The distribution of vegetation communities is strongly influenced by the topography, soils, hydrology, alkalinity, and grazing. There are wellA developed palustrine emergent wetlands on the flat terraces with poorly drained clay soils (Figures B and C). The most abundant vegetation community in these areas is alkali muhly (scratchgrass) (*Muhlenbergia asperifolia*; FACW) wet meadow, with Western Great Plains alkaline marsh present in wetter areas associated with slight depressions or springs. Slightly higher areas to the south are vegetated with inland saltgrass (saltgrass) (*Distichlis spicata*; FACW) meadows. The northwest portion of the Bank is

dominated by greasewood (*Sarcobatus vermiculatus*; FAC) dominated shrubland interspersed with sparsely vegetated pursh seepweed (*Suaeda calceoliformis*; FACW) flats. Wetland vegetation communities are described in more detail in Section 4.

There are six mapped upland vegetation communities, most occur on the higher slopes along the southern and eastern perimeter of the Bank (Figure C).

- **Blue grama shortgrass prairie**: This is the main upland vegetation community in the surrounding area, but within the Bank area this habitat is limited to highest slopes on the east side. Blue grama (*Bouteloua gracilis*; UPL) is the dominant species. Other common species include yucca (*Yucca glauca*; UPL), prickly pear cactus (*Opuntia polycantha*; UPL), and slender wheatgrass (slender wild-rye) (*Elymus trachycaulus*; FACU).
- **Fourwing saltbush/blue grama shrubland:** This community occurs at slightly lower elevations than, and is similar to, the blue grama shortgrass prairie, but with the addition of fourwing saltbush (saltbush) (*Atriplex canescens*; UPL). Saltbush cover ranges from 10 to 50 percent.
- **Kochia/perennial grassland:** This community occurs in the transition zone between blue grama shortgrass prairie uplands and saltgrass meadows (SP-17). The dominant species is kochia (Mexican fireweed) (*Bassia scoparia*; FACU). Cover of this non-native species at the time of the delineation was fifty percent or more. Kochia is allelopathic, inhibiting growth of other plant species. Other species include saltgrass, western wheatgrass (*Pascopyrum smithii*; FACU), common sunflower (*Helianthus annuus*; FACU), and blue grama. Based on aerial photographs, the extent of this community fluctuates from year to year, likely in response to rainfall and grazing.
- **Greasewood/kochia shrubland:** This community consists of greasewood shrubland with an herbaceous understory dominated by kochia. The species composition within the greasewood dominated area shifts along a hydrologic/elevational gradient. The wettest areas ("greasewood mesic shrubland") are described in the wetlands results section. In slightly drier areas, greasewood cover increases and the dominant herbaceous species are alkali sacaton (*Sporobolus airoides*; FAC) and kochia. As elevation increases, greasewood and alkali sacaton decrease, kochia increases and is the dominant herbaceous species. Native herbaceous cover is less than ten percent and includes patchy slender wheatgrass and blue grama in the highest areas.
- **Kochia**: Kochia seems to generally be indicative of upland areas in the Bank. However, there are two low areas where kochia is the dominant species. These include a large, low area on the north side of the wetland complex and a small patch on the south side of the Bank near SP18. These areas have 60-90% cover of kochia. Other species have less than 10% cover and include greasewood (FAC) and foxtail (*Hordeum jubatum*; FACW). The remaining area is bare ground. Both patches are at the same elevation as adjacent wetland areas. These are potential areas for wetland restoration.

3.4 Weather

Approximately one week before the site visit, six inches of snow fell and was followed by below freezing temperatures (NRCS, 2015b). Temperatures reached above freezing (42F) on December 2 and most of the snow had melted prior to the site visit. Weather during the site visit (December 3 and 4) was mostly sunny with a high of approximately 50F both days. Vegetation had not been crushed by the snow, dried inflorescences and seeds were generally present, and species identification was easy.

Weather during 2015 was atypical. Precipitation during the first half of the year totalled 14.09 inches (NRCS, 2015b). This is almost double the typical amount this period and the third highest amount on record. There were six inches of precipitation in May, triple the normal amount. This was followed by an average summer and slightly dry fall. Prior to 2015, the area experienced multiple years of drought conditions. The increased precipitation made a noticeable difference in herbaceous wetland vegetation height, density, and observed species.

4.0 Results

4.1 Wetlands

Most of the wetlands are within the USNV "Warm & Cool Desert Alkali-Saline Wetland" macrogroup (NatureServe, 2015). Weather conditions allowed time to delineate all of the potential wetland areas in the Bank except for Sandy Arroyo and some greasewood and saltgrass dominated potential wetlands on the western side of the Bank (Figures B and C). Species composition is affected by soil moisture levels, ground water levels, and alkalinity which both fluctuate seasonally and annually in response to precipitation. This can cause shifts in the extent of vegetation communities from year to year. Reviewing historic aerial photographs of the Bank during growing seasons in different years shows areas shifting back and forth from bare salt flats to vegetated meadows.

4.1.1 Alkali Muhly Wet Meadow

Alkali muhly is the dominant species on flat terraces with poorly drained clay soils (Figures B and C). Sampling Points 11 and 13 were completed in this habitat type (Appendix B). Sampling Point 11 was completed on a small, lower, terrace that appears to be one of the main areas of surface flow connecting the Bank wetlands to Sandy Arroyo. Sampling Point 13 was completed in the large upper terrace. Alkali muhly is the dominant species in this palustrine emergent marsh wetland and cover was typically 70A 90%. Other common species include saltgrass, foxtail, and Nutall's alkali grass (*Puccinellia nutalliana*; OBL). There are scattered tamarisk trees (salt cedar) (*Tamarix chinensis*; FACW) within this community type. They are typically located on the edges near greasewoodA dominated areas and total cover of this nonA native tree is approximately one percent.

4.1.2 Western Great Plains Alkaline Marsh

Western Great Plains Alkaline Marsh also occurs on the large, flat upper terrace, but in wetter areas associated with slight depressions or springs (Figures B and C). Sampling Points 15 and 16 were completed in this habitat type and the hydrology of these areas is discussed above in Section 3.2. The dominant species are hardstem bulrush (*Schoenoplectus acutus*; OBL) and cattails. Common three-square (*Schoenoplectus pungens*; OBL), Baltic rush (*Juncus balticus;* FACW), and foxtail are also common.

4.1.3 Saltgrass Meadow

Saltgrass meadow (SP 18) is common on the southern perimeter of the bank and extends south from the main flat terrace up a gradual slope. This vegetation community is characterized by dominance of saltgrass (50-80%) mixed with other hydrophytic species including Nutall's alkali grass (1-20%), and alkali muhly (5-30%). There are occasional patches of greasewood. Along the upland margins of this habitat, there is up to 10% cover of western wheat, slender wheatgrass, and kochia. Although saltgrass is categorized as a FACW, it can tolerate fairly dry conditions.

Thus the wetland/upland boundary was mostly determined based on other species. Alkali muhly and/or foxtail where typically present in wetland areas. These species dropped out and were replaced by kochia and wheatgrasses in uplands.

4.1.4 Alkali Sacaton Mesic Grassland

There was a patch of alkali sacaton mesic grassland (SP 21) on a low, slightly sloped area located between a pursh seepweed flat and a higher greasewood area. Alkali sacaton (66%) was the dominant species and there was also 10% cover of greasewood. Alkali sacaton is present throughout the Bank, but most often occurs mixed with greasewood. This species is less salt-tolerant than alkali muhly and saltgrass (NatureServe, 2015) and was observed to occur on more well-drained soils than those two species. This species is also noted to be sensitive to grazing pressure and may have decreased in the Bank area.

4.1.5 Pursh Seepweed Flat

Pursh seepweed flats occur in flat areas were water seems to pool (SP 12 and 14). Overall vegetative cover is low in these areas (10 to 60%) with pursh seepweed being the dominant species. Greasewood and kochia may also occur, but with less than twenty percent cover and typically much less. Hydric soil indicators were different at these points than the other wetlands. At SP12, soils from 15-36" were not saturated but they were more strongly depleted than the layers above. This could be indicative that the water table rises into this zone. However, soils at the nearby SP21 were only depleted from zero to 24", so another possible explanation is that there is a restrictive layer below 36" at SP12. Hydric soil indicators were not observed at SP14. This seems to be a problematic soil situation, likely resulting from the clay soils restricting the saturation depth.

4.1.6 Greasewood Mesic Shrubland

The northwest portion of the Bank is dominated by greasewood. The species composition within the greasewood shrublands shifts along a hydrologic gradient. In the wettest areas, shrub and herbaceous cover tends to be sparse (less than 30% in each strata); there is often a salt crust present; and common native herbaceous species include pursh seepweed, alkali muhly, and saltgrass (SP 19). Kochia is present, but typically not dominant.

Topography within the greasewood shrublands is characterized by small depressions and hummocks. Sampling Point 19 was completed in a relatively wet greasewood area with evidence of occasional surface flow. However, the hydric soil indicators were weak. Due to this data, the unusual weather, complex topography, and time constraints, the remaining greasewood dominated areas were conservatively mapped as upland (Figure C).

4.2 Waters of the US

NonA vegetated Waters of the US within the delineation area were limited to a small channel on the north edge of the mitigation bank (Figures B and C). This channel flows north from a low kochia area to Sandy Arroyo; from south to north, the width of the OHWM increases from two feet to approximately six feet and channel depth increases from one foot to approximately two feet. There was no standing water during the December site visit, but shallow (1-2") standing water was observed on May 18, 2015 when it was raining. The northern portion of the drainage is vegetated and mapped as a wetland (alkali muhly wet meadow).

4.3 Sandy Arroyo

Sandy Arroyo was not included in the wetland delineation. Based on past observations, the main channel consists of a mix of sedge (*Carex* spp.)(OBL) dominated palustrine emergent marsh and non-vegetated channel below the OHWM. There are dense patches of non-native tamarisk trees along the channel and surface saturation was observed in portions of the channel.

4.4 Jurisdiction

All of the mapped wetlands and waters within the Bank ultimately connect to Sandy Arroyo via a series of wetlands and the non-vegetated channel. Therefore, all of the wetlands and open water areas are assumed to be under the Corps' jurisdiction. However, only the Corps has the authority to make jurisdictional determinations.

5.0 Conclusions and Recommendations

The proposed Bank area is undeveloped and used for grazing cattle. The area consists of a diverse complex of wetlands and transitional vegetation communities located in a basin or "bowl" at the base of converging slopes. No modifications for irrigation have been made in the area or on the adjacent slopes. The majority of the upslope watershed is on the Ranch.

Vegetation is a dynamic mosaic of alkaline wetlands and transitional areas. Springs are a valuable source of moisture, but appear to fluctuate. Hydrology has also been impacted by multiple drought years followed by an unusually wet spring in 2015. Therefore, wetland boundaries were mapped conservatively and excluded most transitional greasewood mesic shrubland areas (Figure C).

Vegetation communities in the proposed bank area are in a relatively natural condition, but appear to have been moderately impacted by grazing and prolonged drought. Weed cover in the Bank area is fairly high, but consists almost entirely of two species, tamarisk and kochia. The majority of the tamarisk is located along Sandy Arroyo. Kochia is present in much of the proposed Bank area and dominant in some areas. Kochia is an annual and the seed only persists for about a year in the soil. The species is spread by "tumbleweeds;" this is probably why kochia is most common near the fence lines. Non-native species in the Bank area (primarily tamarisk and kochia), should be controlled.

Grazing pressure should be eliminated or reduced. Carefully managed grazing can be beneficial for many of the grass dominated vegetation communities. Additionally, grazing during the growing season can be used to limit kochia reproduction. However, too much grazing can have negative impacts. For example, heavy grazing will cause greasewood to increase and grasses such as alkali sacaton to decrease because the shrub is only moderately palatable and somewhat poisonous to livestock (NatureServe, 2015).

6.0 Limitations

The results and conclusions are based on conditions observed during the winter (non-growing season) and with limited time on a complex site. Time/weather constraints prevented (1) delineation of assumed jurisdictional waters and/or wetlands along Sandy Arroyo, (2) delineation of possible additional wetland areas in the southeast portion of the Bank. (Figures B and C).

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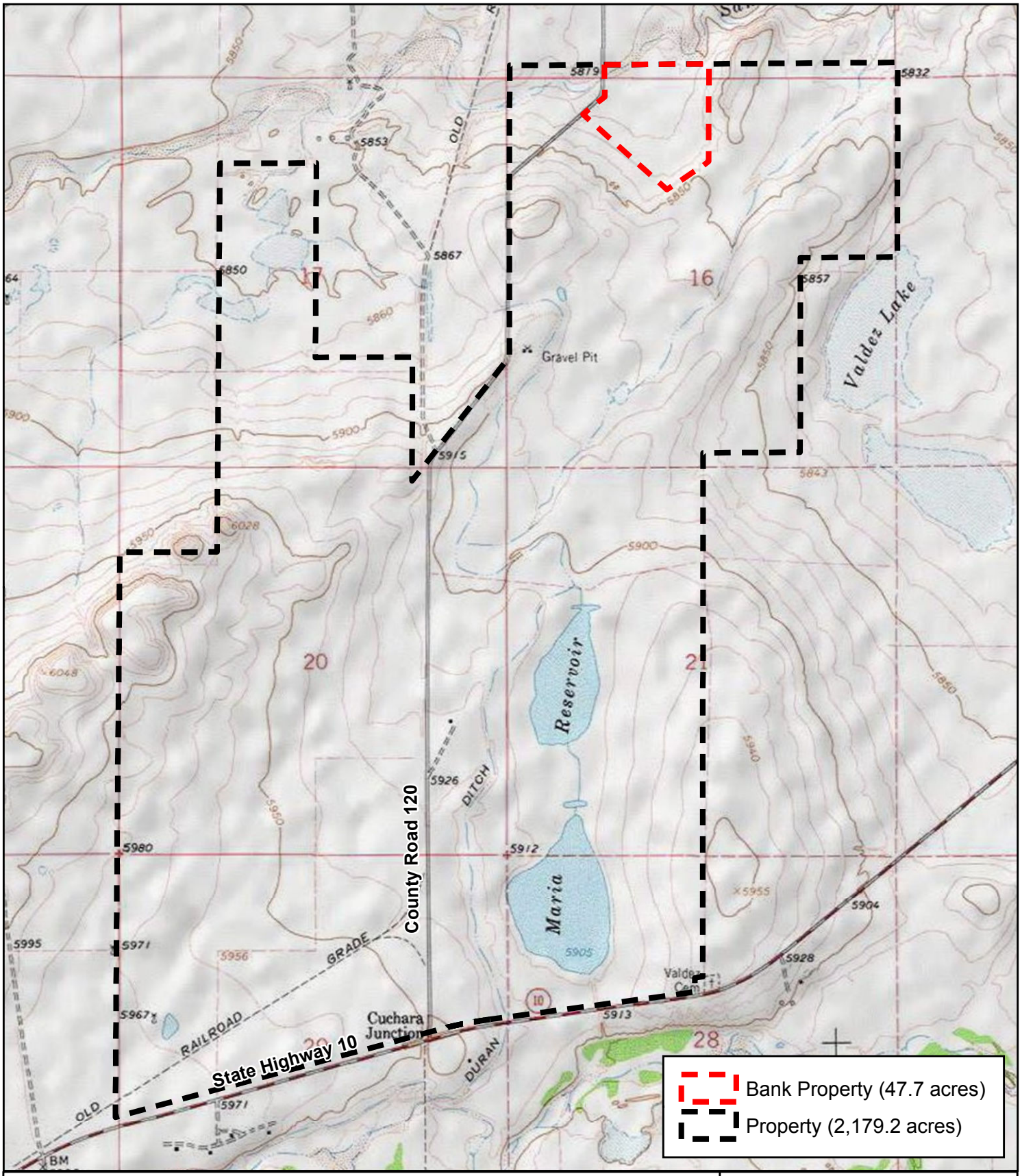


Figure A. Bank Location

Maria Lake Mitigation Bank
Huerfano County, Colorado

wra
ENVIRONMENTAL CONSULTANTS

Map Prepared Date: 1/5/2016
Map Prepared By: czumwalt
Base Source: USGS Topo Quad
Data Source(s): WRA

Path: L:\Acad 2000 Files\24000\24316\GIS\ArcMap\Prospectus\Fig 2 USGS Topo.mxd

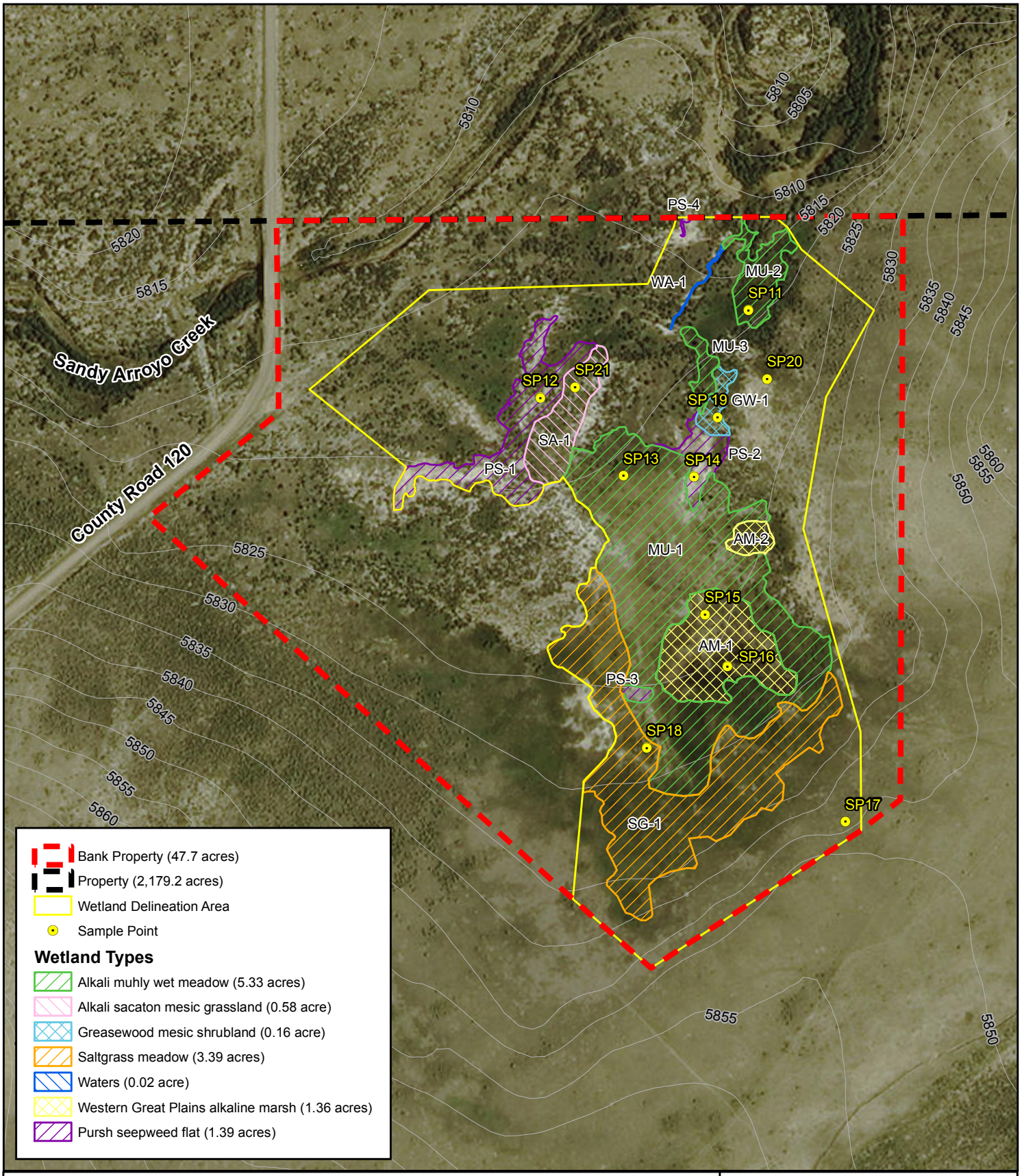


Figure B. Wetland Delineation Results

N
W E
S

0 150 300 600
Feet

Maria Lake Mitigation Bank
Huerfano County, Colorado

wra
ENVIRONMENTAL CONSULTANTS

Map Prepared Date: 1/7/2016
Map Prepared By: czumwalt
Base Source: USDA NAIP 2013
Data Source(s): Auckland Environmental Consulting

Path: L:\Acad 2000 Files\24000\24316\GIS\ArcMap\Prospectus\Fig B Delineation Auckland.mxd

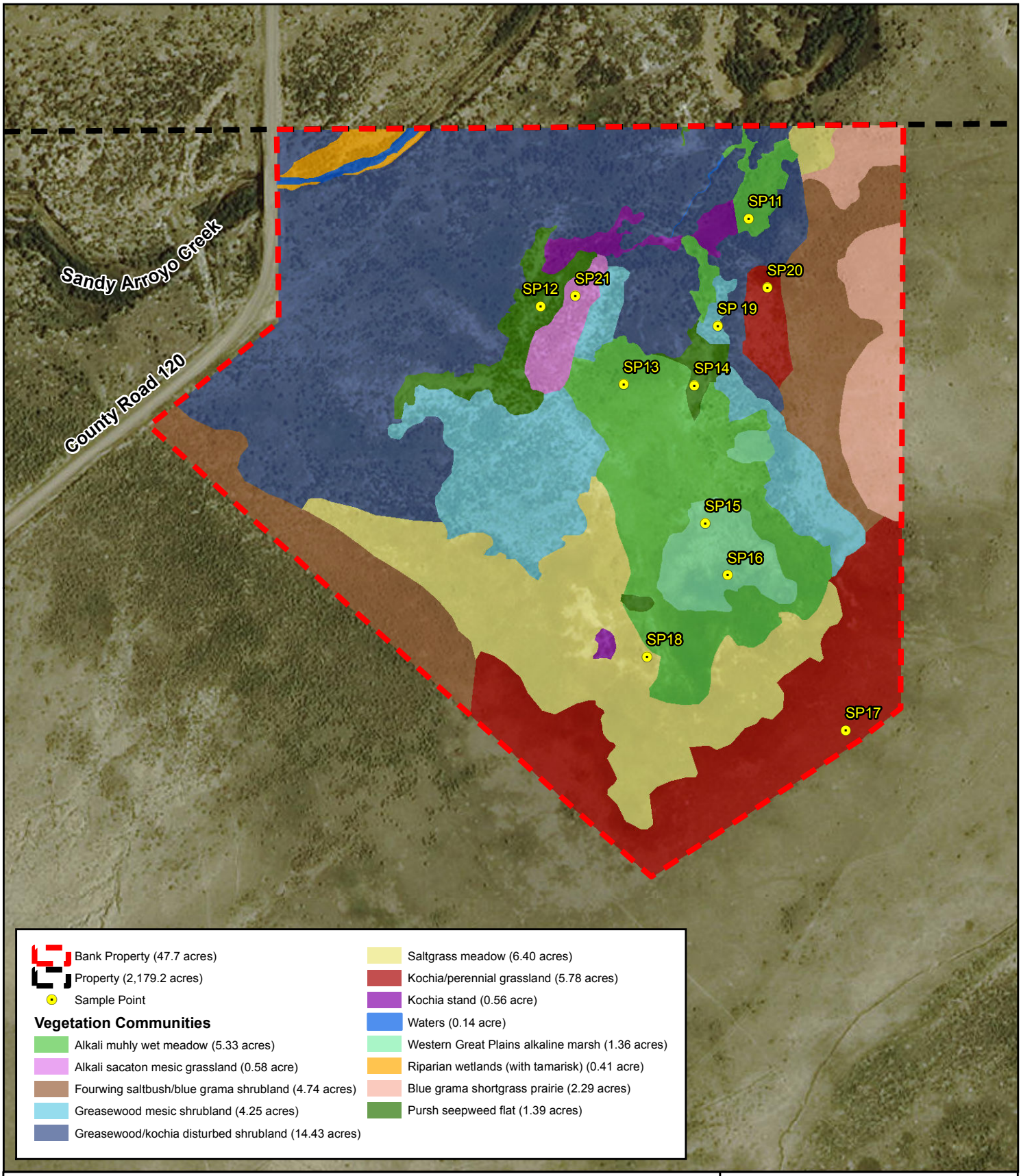


Figure C. Vegetation Communities

N
W E
S

0 150 300 600
Feet

Maria Lake Mitigation Bank
Huerfano County, Colorado

wra
ENVIRONMENTAL CONSULTANTS

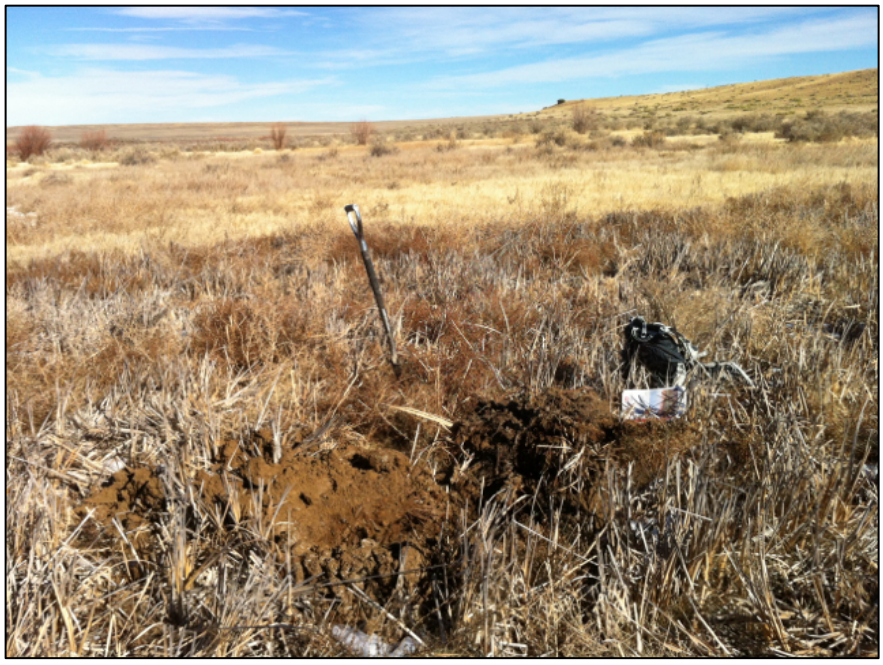
Map Prepared Date: 1/7/2016
Map Prepared By: czumwalt
Base Source: USDA NAIP 2013
Data Source(s): Auckland Environmental Consulting

Path: L:\Acad 2000 Files\24000\24316\GIS\ArcMap\Prospectus\Fig C Veg Comms.mxd

1. Sampling Point 12 (SP-12). Facing north along a low swale vegetated with representative pursh seepweed flat wetland vegetation. Disturbed greasewood shrubland (upland) is visible to the left and alkali sacaton mesic grassland (wetland) near SP21 is visible to the right.

2. SP-13 – facing southwest. A wetland sampling point was completed in the alkali muhly wet meadow. A low area dominated by kochia is visible in the background.

3. Facing southeast from SP-14. A pursh seepweed flat wetland sampling point was completed here.



4. Facing north from SP-15, an alkaline marsh wetland. Note the scattered tamarisk trees in the distance. At this location, hydrology was surficial and soils were not saturated.

5. Facing northeast from SP-16, an alkaline marsh wetland. This location seems to be on top of a spring because soils were saturated throughout, the water table was present at 36”, and soils were more depleted than at SP-15.

6. SP-17 facing north. Representative kochia/perennial grassland upland vegetation.

7. SP-18 facing northwest. Representative saltgrass meadow wetland vegetation.

8. SP-19 facing northwest. Representative greasewood mesic shrubland wetland.

9. SP-20 facing north. Upland area dominated by a small, dense patch of slender wheatgrass. Surrounding areas have high cover of kochia.

10. SP-21 facing northwest. Representative alkali sacaton mesic grassland wetland.

Appendix D: Real Estate Records and Assurances

686 Co. Rd 120 Walsenburg

COMMITMENT FOR TITLE INSURANCE
SCHEDULE A

File No.: 31523

1. **Effective Date:** August 01, 2014 at 8:00 AM
2. **Policy or Policies to be issued:** **Amount of Insurance**

   (a) A.L.T.A. Owner's Policy 2006 (Standard) $11,000,000.00

   Proposed Insured:

   TO BE DETERMINED

   (b) A.L.T.A. Loan Policy 2006 (Standard)

   Proposed Insured:

   TO BE DETERMINED

3. **The estate or interest in the land described or referred to in this Commitment is:**

   Fee Simple

   Excepting from such estate or interest, any right, title or interest in and to any oil, gas, minerals and mineral rights, any oil and gas leases, together with any rights associated therewith for which no search and examination has been made of the public records.

4. **Title to the said estate or interest in said land is at the Effective Date vested in:**

   MARIA LAKE GRAZING ASSOCIATION, LLC., AS TO PARCEL 1, DJS INVESTMENTS GROUP, LLC, AS TO PARCEL 3, SAM N. PERRY, AS TO PARCEL 4, and DONALD E. SIECKE AKA DONALD SIECKE, AS TO PARCEL 2

5. **The land referred to in this Commitment is described as follows:**

   SEE EXHIBIT "A" ATTACHED HERETO

   For information purposes only, the property address is purported to be:
   SEE EXHIBIT A, CO

COMMITMENT FOR TITLE INSURANCE
SCHEDULE A

EXHIBIT "A"
LEGAL DESCRIPTION

PARCEL 1:

Township 27 South Range 65 West of the 6th P.M.

Section 16: N1/2, SW1/4, W1/2SE1/4 and a tract of land described as follows: Commencing at the SW corner of Section 16, thence north 1320 feet to the NE corner of said SE1/4SE1/4 Section 17, thence north 92 feet to a point on the south side of County Road, thence south 37°58' west 116.7 feet along the south right of way boundary line of said county road to the north boundary of the SE1/4SE1/4 of Section 17, thence south 37°58' west along the south right of way boundary of said county road 1674.2 feet to the intersection of the south boundary of the SE1/4SE1/4 of Section 17, thence south 37°58' west 363.7 feet to the intersection of the west boundary of the NE1/4NE1/4 of Section 20, thence south to the SWcorner of the NE1/4NE1/4 of Section 20, thence east 1320 feet to the SE corner of the NE1/4NE1/4 Section 20, thence north 1320 feet to the place of beginning, being part of the E1/2SE1/4 of Section 17 and the NE1/4NE1/4 of Section 20

Section 17: SE1/4NW1/4, E1/2SW1/4, SW1/4SE1/4

Section 20: SE1/4NE1/4, E1/2SE1/4, SW1/4SE1/4, SW1/4, E1/2NW1/4, SW1/4NW1/4, W1/2NE1/4, NW1/4SE1/4 EXCEPT THAT PART CONVEYED TO MARIA LAKE SUBDIVISION

Section 21: W1/2 EXCEPT THAT PART CONVEYED TO MARIA LAKE SUBDIVISION

Section 28: All that part of the NW1/4 lying north of the right of way of State Highway No. 10 EXCEPT THAT PART CONVEYED TO MARIA LAKE SUBDIVISION

Section 29: W1/2NW1/4, NE1/4NW1/4, N1/2NE1/4, SW1/4NE1/4,SE1/4NW1/4, all of the E1/2SE1/4NE1/4, NE1/4SW1/4, NW1/4SE1/4 lying north of State Highway No 10 right of way also W1/2SE1/4NE1/4 lying north of state highway No. 10 being more particularly described as follows: Beginning at the point of intersection of the west line of the E1/2SE1/4NE1/4 of said Section 29 with the north right of way line of state highway No. 10, thence N00°08'32"W on said west line, 1160.23 feet to the NW corner thereof, thence S89°32'38"W 499.88 feet thence S89°32'38 W 168.01 feet on the south line of NE1/4NE1/4 of Section 29 to the NE1/4 corner of SW1/4 NE1/4, thence S00°06'58"E 1330.67 feet to a point on the northerly right of way line of said State Highway No. 10, thence northeasterly along said state highway right of way line to the point of Beginning, also the NW1/4SW1/4 less 9 acres to Lupe Martinez lying south of State Highway No. 10. EXCEPT THAT PART CONVEYED TO MARIA LAKE SUBDIVISION according to the records of the clerk and recorder for Huerfano County Colorado

AND

LOTS 1, 2, 3, 6, 11, 12, 14, 16, 19, AND 20, BLOCK 1, Maria Lake Subdivision, as shown on Survey 764, filed July 28, 2009 in the records of the clerk and recorder for Huerfano County, Colorado

LOTS 8, 10 AND 15, BLOCK 1, Maria Lake Subdivision, as shown on Survey 764, filed July 28, 2009 in the records of the clerk and recorder for Huerfano County, Colorado

LOTS 1-16, BLOCK 2, Maria Lake Subdivision, as shown on Survey 764, filed July 28, 2009 in the records of the clerk and recorder for Huerfano County, Colorado

PARCEL 2:

LOT 10, BLOCK 1, Maria Lake Subdivision, as shown on Survey 764, filed July 28, 2009 in the records of the clerk and recorder for Huerfano County, Colorado

PARCEL 3:

LOTS 4, 5, 7, 13, 17 AND 18, BLOCK 1, Maria Lake Subdivision, as shown on Survey 764, filed July 28, 2009 in the records of the clerk and recorder for Huerfano County, Colorado

PARCEL 4:

LOT 9, BLOCK 1, Maria Lake Subdivision, as shown on Survey 764, filed July 28, 2009 in the records of the clerk and recorder for Huerfano County, Colorado

COMMITMENT FOR TITLE INSURANCE
SCHEDULE A

COMMITMENT FOR TITLE INSURANCE
SCHEDULE B
PART I

File No. 31523

The following are the requirements to be complied with:

1. Payment to or for the account of the grantors or mortgagors of the full consideration for the estate or interest to be insured.

2. Proper instrument(s) creating the estate or interest to be insured must be executed and duly filed for record, to wit:

3. RELEASE OF DEED OF TRUST FROM SUNFLOWER BANK, N.A. TO MARIA LAKE GRAZING ASSOCIATION, LLC F/K/A MARIA LAKE GRAZING ASSOCIATION, LLP, RECORDED NOVEMBER 13, 2013 AT RECEPTION NO. 399021, AND ASSIGNMENT RECORDED AT RECEPTION NO. 39902, AND UCC RECORDED DECEMBER 2, 2013 AT RECEPTION NO. 399154

4. WARRANTY DEED FROM MARIA LAKE GRAZING ASSOCIATION, LLC., AS TO PARCEL 1, DJS INVESTMENTS GROUP, LLC, AS TO PARCEL 3, SAM N. PERRY, AS TO PARCEL 4, and DONALD E. SIECKE AKA DONALD SIECKE, AS TO PARCEL 2 TO (TO BE DETERMINED), TO BE INSURED.

COMMITMENT FOR TITLE INSURANCE
SCHEDULE B
PART II

File No. 31523

Schedule B of the policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company:

1. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the Effective Date but prior to the date the proposed Insured acquires for value of record the estate or interest or mortgage thereon covered by this Commitment.

2. The policy or policies to be issued will contain exceptions to the following unless the same are disposed of to the satisfaction of the Company:

3. Any facts, rights, interests or claims which are not shown by the public records, but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.

4. Easements or claims of easements, not shown by the public records.

5. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, and any facts which a correct survey and inspection of the premises would disclose and which are not shown by the public records.

6. Any lien or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the public records.

7. (a) Unpatented mining claims; (b) reservations or exceptions in patents, or an act authorizing the issuance thereof; (c) water rights claims or title to water whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records.

8. Any and all unpaid taxes, assessments and unredeemed tax sales.

9. Declaration of Protective Covenants for Maria Lake Subdivision recorded July 28, 2009 at Reception No. 384388

10. Easement between Marie Lake Grazing Association and San Isabel Electric Association, recorded September 11, 2009 at Reception No. 384846 and recorded March 24, 2014 at Reception No. 400023

11. Line Extension Contract between Marie Lake Grazing Association and San Isabel Electric Association, recorded October 14, 2009 at Reception No. 385163

12. Water Well and Pipeline Easement recorded October 6, 1972 at Book 331, Page 783

13. Resolution between Huerfano County and Maria Lake Grazing, recorded January 21, 2009 at Reception NO. 382430

NOTE: To comply with the provisions of C.R.S. 10-11-123, the Company makes the following disclosure:
a. That there may be record evidence that a mineral estate has been severed, leased, or otherwise conveyed from the surface and that there is a substantial likelihood that a third party holds some or all interest in oil, gas, other minerals or geothermal energy in the property; and
b. That such mineral estate may include the right to enter and use the property without the surface owner's permission.

NOTE: Colorado Division of Insurance Regulation 3-5-1, Section 7 Paragraph G requires that every title insurance company shall be responsible to the proposed insured(s) subject to the terms and conditions of the title insurance commitment, other than the effective date of the title insurance commitment, for all matters which appear of record prior to

the time of recorded whenever the title insurance company, or its agent, conducts the closing and settlement service that is in conjunction with its issuance of an owners policy of title insurance and is responsible for the recording and filing of legal documents resulting from the transaction which was closed.

END OF SCHEDULE B II

First American Title™

Privacy Information

We Are Committed to Safeguarding Customer Information

In order to better serve your needs now and in the future, we may ask you to provide us with certain information. We understand that you may be concerned about what we will do with such information - particularly any personal or financial information. We agree that you have a right to know how we will utilize the personal information you provide to us. Therefore, together with our subsidiaries we have adopted this Privacy Policy to govern the use and handling of your personal information.

Applicability

This Privacy Policy governs our use of the information that you provide to us. It does not govern the manner in which we may use information we have obtained from any other source, such as information obtained from a public record or from another person or entity. First American has also adopted broader guidelines that govern our use of personal information regardless of its source. First American calls these guidelines its Fair Information Values.

Types of Information

Depending upon which of our services you are utilizing, the types of nonpublic personal information that we may collect include:

- Information we receive from you on applications, forms and in other communications to us, whether in writing, in person, by telephone or any other means;
- Information about your transactions with us, our affiliated companies, or others; and
- Information we receive from a consumer reporting agency.

Use of Information

We request information from you for our own legitimate business purposes and not for the benefit of any nonaffiliated party. Therefore, we will not release your information to nonaffiliated parties except: (1) as necessary for us to provide the product or service you have requested of us; or (2) as permitted by law. We may, however, store such information indefinitely, including the period after which any customer relationship has ceased. Such information may be used for any internal purpose, such as quality control efforts or customer analysis. We may also provide all of the types of nonpublic personal information listed above to one or more of our affiliated companies. Such affiliated companies include financial service providers, such as title insurers, property and casualty insurers, and trust and investment advisory companies, or companies involved in real estate services, such as appraisal companies, home warranty companies and escrow companies. Furthermore, we may also provide all the information we collect, as described above, to companies that perform marketing services on our behalf, on behalf of our affiliated companies or to other financial institutions with whom we or our affiliated companies have joint marketing agreements.

Former Customers

Even if you are no longer our customer, our Privacy Policy will continue to apply to you.

Confidentiality and Security

We will use our best efforts to ensure that no unauthorized parties have access to any of your information. We restrict access to nonpublic personal information about you to those individuals and entities who need to know that information to provide products or services to you. We will use our best efforts to train and oversee our employees and agents to ensure that your information will be handled responsibly and in accordance with this Privacy Policy and First American's Fair Information Values. We currently maintain physical, electronic, and procedural safeguards that comply with federal regulations to guard your nonpublic personal information.

Information Obtained Through Our Web Site

In general, you can visit First American or its affiliates' Web sites on the World Wide Web without telling us who you are or revealing any information about yourself. Our Web servers collect the domain names, not the e-mail addresses, of visitors. This information is aggregated to measure the number of visits, average time spent on the site, pages viewed and similar information. First American uses this information to measure the use of our site and to develop ideas to improve the content of our site.

There are times, however, when we may need information from you, such as your name and email address. When information is needed, we will use our best efforts to let you know at the time of collection how we will use the personal information. Usually, the personal information we collect is used only by us to respond to your inquiry, process an order or allow you to access specific account/profile information. If you choose to share any personal information with us, we will only use it in accordance with the policies outlined above.

Business Relationships

First American Financial Corporation's site and its affiliates' sites may contain links to other Web sites. While we try to link only to sites that share our high standards and respect for privacy, we are not responsible for the content or the privacy practices employed by other sites.

Cookies

Some of First American's Web sites may make use of "cookie" technology to measure site activity and to customize information to your personal tastes. A cookie is an element of data that a Web site can send to your browser, which may then store the cookie on your hard drive.

FirstAm.com uses stored cookies. The goal of this technology is to better serve you when visiting our site, save you time when you are here and to provide you with a more meaningful and productive Web site experience.

Fair Information Values

Fairness We consider consumer expectations about their privacy in all our businesses. We only offer products and services that assure a favorable balance between consumer benefits and consumer privacy.

Public Record We believe that an open public record creates significant value for society, enhances consumer choice and creates consumer opportunity. We actively support an open public record and emphasize its importance and contribution to our economy.

Use We believe we should behave responsibly when we use information about a consumer in our business. We will obey the laws governing the collection, use and dissemination of data.

Accuracy We will take reasonable steps to help assure the accuracy of the data we collect, use and disseminate. Where possible, we will take reasonable steps to correct inaccurate information. When, as with the public record, we cannot correct inaccurate information, we will take all reasonable steps to assist consumers in identifying the source of the erroneous data so that the consumer can secure the required corrections.

Education We endeavor to educate the users of our products and services, our employees and others in our industry about the importance of consumer privacy. We will instruct our employees on our fair information values and on the responsible collection and use of data. We will encourage others in our industry to collect and use information in a responsible manner.

Security We will maintain appropriate facilities and systems to protect against unauthorized access to and corruption of the data we maintain.

DISCLOSURE STATEMENT

Pursuant to C.R.S. 30-10-406(3)(a) all documents received for recording or filing in the Clerk and Recorder's office shall contain a top margin of at least one inch and a left, right and bottom margin of at least one-half of an inch. The Clerk and Recorder will refuse to record or file any document that does not conform to the requirements of this section.

NOTE: If this transaction includes a sale of the property and the price exceeds $100,000.00, the seller must comply with the disclosure/withholding provision of C.R.S. 39-22-604.5 (Non-residential withholding)

NOTE: Colorado Division of Insurance Regulations 3-5-1 requires that "Every title entity shall be responsible for all matters which appear of record prior to the time of records whenever the title entity conducts the closing and is responsible for recording or filing of legal documents resulting from the transaction which was closed." Provided that First American Title Insurance Company conducts the closing if the insured transaction and is responsible for recording the legal documents from the transaction, exception number 5 will not appear on the Owner's Title Policy and the Lenders Policy when issued.

Pursuant to C.R.S. 10-11-122, the company will not issue its policy or policies of title insurance contemplated by this commitment until it has been provided a Certificate of Taxes due or other equivalent documentation for the County Treasurer or the County Treasurer's authorized agent; or until the Proposed Insured has notified or instructed the company in writing to the contrary.

The subject property may be located in a special taxing district. A Certificate of Taxes due listing each taxing jurisdiction shall be obtained from the County Treasurer or the County Treasurer's authorized agent. Information regarding special districts and the boundaries of such districts may be obtained from the Board of County Commissioners, the County Clerk and Recorder or the County Assessor.

NOTE: Pursuant to CRS 10-11-123, notice is hereby given:

This notice applies to owner's policy commitments containing a mineral severance instrument exception, or exceptions, in Schedule B, Section 2.

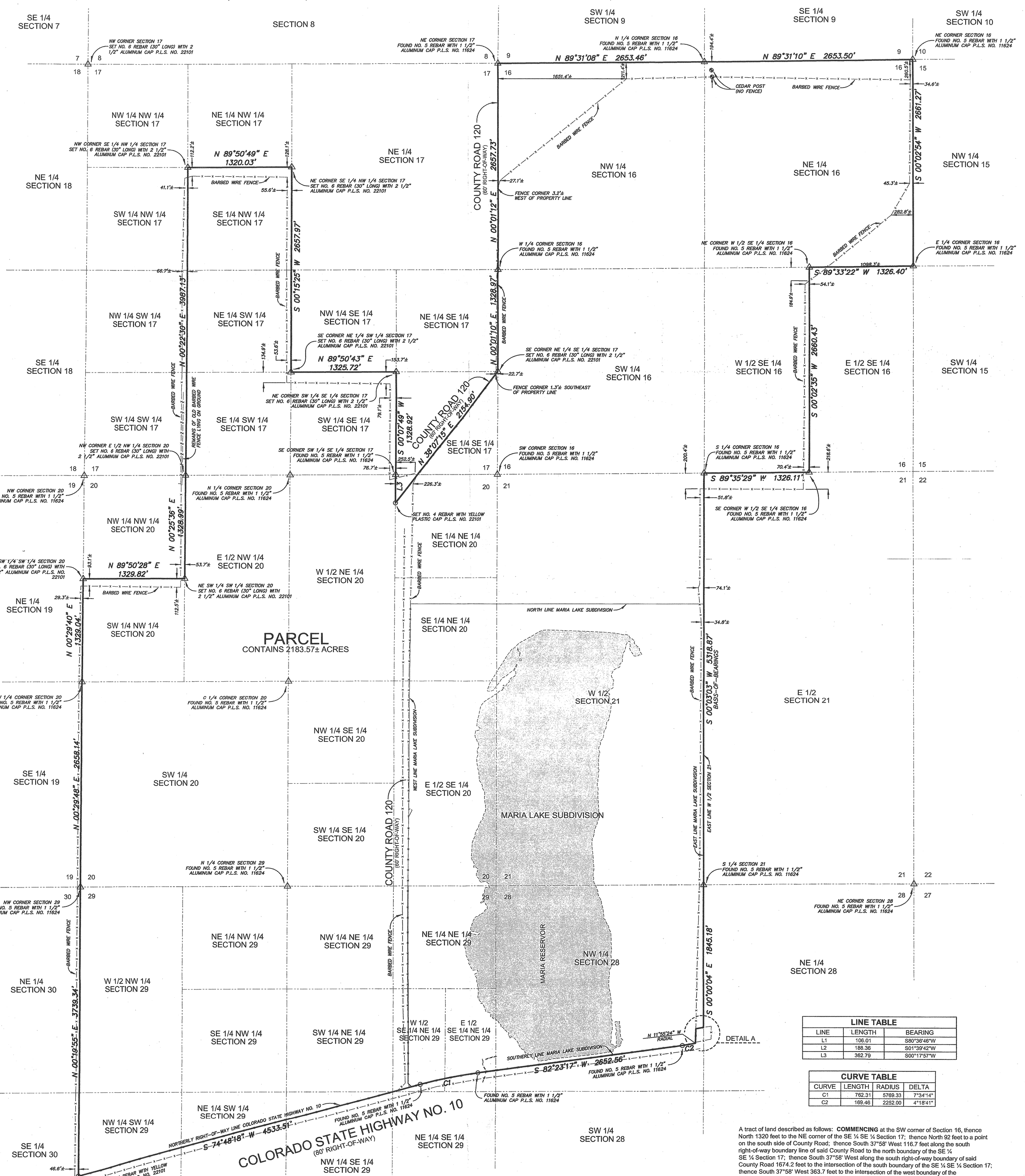
A. That there is recorded evidence that a mineral estate has been severed, leased, or otherwise conveyed from the surface estate and that there is a substantial likelihood that a third party holds some or all interest in oil, gas, other minerals, or geothermal energy in the property; and
B. That such mineral estate may include the right to enter and use the property without the surface owner's permission.

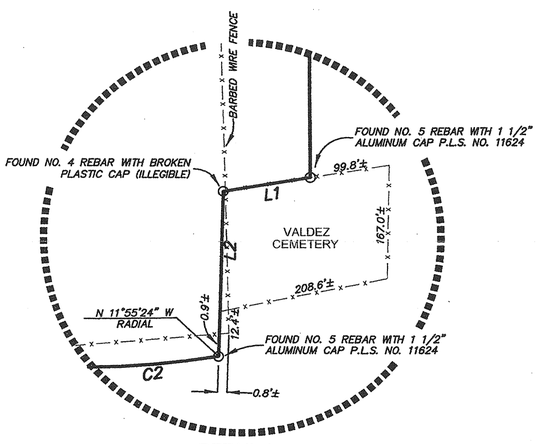
NOTE: Pursuant to Colorado Division of Insurance Regulations 3-5-1, Affirmative mechanic's lien protection for the Owner may be available (typically by deletion of Exception no. 4 of Schedule B, Section 2 of the Commitment from the Owner's Policy to be issued) upon compliance with the following conditions:

A. The land described in Schedule A of this commitment must be a single family residence which includes a condominium or townhouse unit.
B. No labor or materials have been furnished by mechanics or material-men for purposes of construction on the land described in Schedule A of this Commitment within the past 6 months.
C. The Company must receive an appropriate affidavit indemnifying the Company against un-filed mechanic's and material-men's liens.
D. The Company must receive payment of the appropriate premium.
E. If there has been construction, improvements or major repairs undertaken on the property to be purchased within six months prior to the Date of the Commitment, the requirements to obtain coverage for unrecorded liens will include: disclosure of certain construction information; financial information as to the seller, the builder and/or the contractor; payment of the appropriate premium, fully executed Indemnity Agreements satisfactory to the company, and, any additional requirements as may be necessary after an examination of the aforesaid information by the Company.

LAND SURVEY PLAT

THE N 1/2, THE SW 1/4 AND THE W 1/2 OF THE SE 1/4 OF SECTION 16, THE SE 1/4 OF THE NW 1/4, THE E 1/2 OF THE SW 1/4, THE SW 1/4 OF THE SE 1/4 AND A PORTION OF THE SE 1/4 OF THE SE 1/4 OF SECTION 17, THE SW 1/4, THE E 1/2 OF THE NW 1/4, THE SW 1/4 OF THE NW 1/4, THE W 1/2 OF THE NE 1/4, THE SE 1/4 OF THE NE 1/4, THE SE 1/4, AND A PORTION OF THE NE 1/4 OF THE NE 1/4 OF SECTION 20, THE W 1/2 OF SECTION 21, A PORTION OF THE NW 1/4 OF SECTION 28, THE NW 1/4, THE N 1/2 OF THE NE 1/4, A PORTION OF THE N 1/2 OF THE SW 1/4, A PORTION OF THE S 1/2 OF THE NE 1/4 AND A PORTION OF THE NW 1/4 OF THE SE 1/4 OF SECTION 29, ALL WITHIN TOWNSHIP 27 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN. HUERFANO COUNTY, COLORADO.





DETAIL A
(NOT TO SCALE)

LINE TABLE		
LINE	LENGTH	BEARING
L1	106.01	S80°36'46"W
L2	188.36	S01°39'42"W
L3	362.79	S00°17'57"W

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	762.31	5769.33	7°34'14"
C2	169.46	2252.00	4°18'41"

Mangini Reeves, Inc.
Professional Engineers and Professional Land Surveyors
4718 North Elizabeth St. – Pueblo, CO
(719) 544-0865 Fax (719) 544-0876

OWNER/TITLE:	MARIA LAKE GRAZING ASSOCIATION, LLP (LAND ACQUISITION AND MANAGEMENT, LLC.)
JOB DESCRIPTION:	LAND SURVEY PLAT
DETAILED BY: RMS	DATE: 3-22-10
JOB NUMBER: 2008-142	SCALE: 1" = 600'
FILE NAME: 08142LSP	SHEET NO. 1 OF 1
REF JOB NO.: 08142SUB-PRELIM	

A tract of land described as follows: **COMMENCING** at the SW corner of Section 16, thence North 1320 feet to the NE corner of the SE ¼ SE ¼ Section 17; thence North 92 feet to a point on the south side of County Road; thence South 37°58' West 116.7 feet along the south right-of-way boundary line of said County Road to the north boundary of the SE ¼ SE ¼ Section 17; thence South 37°58' West along the south right-of-way boundary of said County Road 1674.2 feet to the intersection of the south boundary of the SE ¼ SE ¼ Section 17; thence South 37°58' West 363.7 feet to the intersection of the west boundary of the NE ¼ NE ¼ of Section 20; thence South to the SW corner of the NE ¼ NE ¼ Section 20; thence East 1320 feet to the SE corner of the NE ¼ NE ¼ Section 20; thence north 1320 feet to the **PLACE OF BEGINNING**, being a part of the E ½ SE ¼ Section 17 and the NE ¼ NE ¼ Section 20.

Said Parcel contains 2183.57 acres, more or less.

I, RANDY G. REEVES, a Professional Land Surveyor registered in the State of Colorado, hereby certify that a survey of the above described premises was conducted by me or under my direct responsible charge in February 2010 and complies with the minimum standards of Land Surveys and Plats as set forth in Section 38-51-106 et, seq. C.R.S. 1995 (as amended.)

Randy G Reeves — 5-19-10

RANDY G. REEVES — **DATE**
PROFESSIONAL LAND SURVEYOR NO 22101

Section 16, Township 27 South, Range 65 West of the Sixth Principal Meridian:
N ½, SW ¼, W ½ SE ¼.

Section 17, Township 27 South, Range 65 West of the Sixth Principal Meridian:
SE ¼ NW ¼, E ½ SW ¼, SW ¼ SE ¼ .

Section 20, Township 27 South, Range 65 West of the Sixth Principal Meridian:
SW ¼, E ½ NW ¼, SW ¼ NW ¼, W ½ NE ¼, NW ¼ SE ¼, SE ¼ NE ¼, E ½ SE ¼, SW ¼ SE ¼

Section 21, Township 27 South, Range 65 West of the Sixth Principal Meridian:
W ½.

Section 28, Township 27 South, Range 65 West of the Sixth Principal Meridian:
All that part of the NW ¼ lying north of the right-of-way of State Highway No. 10.

Section 29, Township 27 South, Range 65 West of the Sixth Principal Meridian:
W ½ NW ¼, NE ¼ NW ¼, NW ¼ SW ¼, less 9 acres to Lupe Martinez.

N ½ NE ¼, SW ¼ NE ¼, SE ¼ NW ¼, all of the E ½ SE ¼ NE ¼, NE ¼ SW ¼, NW ¼ SE ¼ lying north of State Highway No. 10 right-of-way;

W ½ SE ¼ NE ¼ lying north of State Highway No. 10 being more particularly described as follows: **BEGINNING** at the point of intersection of the west line of the E ½ of the SE ¼ of the NE ¼ of said Section 29 with the north right-of-way line of State Highway No. 10; thence N 00°08'32"W on said west line 1,160.23 feet to the NW corner thereof; thence S 89°32'38"W 499.88 feet; thence S 89°32'38"W 168.01 feet on the south line of the NE ¼ NE ¼ of Section 29 to the NE ¼ corner of the SW ¼ of the NE ¼; thence S 00°06'58"E 1,330.67 feet to a point on the northerly right-of-way line of State Highway 10; thence northeasterly along said State Highway right-of-way line to the **POINT OF BEGINNING.**

AND

NOTES:

1.) A search for recorded rights of way and easements was done at the clients request.

2.) Bearings based on east line of the W ½ of Section 21, monumented at each end with a No. 5 rebar with 1 ½" aluminum cap P.L.S. No. 11624, assumed to bear S 00°03'03"W.

3.) All distances shown hereon are in U.S. Survey Feet.

4.) The location of underground and overhead utilities and improvements which may or may not exist on the parcel described hereon is not a part of this survey.

5.) No exception was provided for Valdez Cemetery. That portion of Valdez Cemetery located within the NW ¼ of Section 28 was not included in this survey.

NOTICE: According to C.R.S. 13-80-105, you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the certificate shown hereon.

Appendix E: Statement of Qualifications

ENVIRONMENTAL CONSULTANTS

COMPANY PROFILE

WRA, Inc. provides professional consulting services in plant, wildlife, and wetland ecology, GIS, CEQA/NEPA and landscape architecture. Formed in 1981, WRA is a certified small business (OSBCR ref. #13333) with 45 professionals that has completed over 1,600 projects for public agencies, non-profit, and private organizations. WRA has a wide range of project experience throughout California in a variety of region-specific habitats. The firm has completed award-winning projects recognized by the American Society of Civil Engineering, Association of Environmental Professionals, California Water Environment Association, and American Society of Landscape Architects.

Our professional and technical services include:

- Aquatic resources permitting (wetlands, streams, riparian, marine resources)
- California Coastal Zone biological surveys and permitting
- CEQA/NEPA Analysis
- Certified arborist services
- Conservation and mitigation bank planning and design
- GIS analyses and remote sensing
- Landscape architecture
- Preserve management and conservation planning
- Rare and endangered plant and wildlife surveys and permitting
- Trail and open space design
- Vegetation mapping and biological inventories
- Watershed assessments and planning
- Wetland and endangered species construction and post-construction monitoring
- Wetland and stream delineation and functional assessment

WRA is experienced in the application of federal and state wetland and endangered species regulations. Our biologists are trained in habitat evaluation methods and survey protocols used by resource agencies. They routinely conduct a broad range of plant and wildlife habitat evaluations, habitat/species monitoring and wetland and riparian studies. The firm provides evaluation, planning, implementation, and monitoring of wetlands and endangered species habitat restoration and mitigation projects.

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