

BASELINE DOCUMENTATION REPORT



Silt River Preserve Conservation Easement Garfield County, Colorado

Prepared For

Aspen Valley Land Trust

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Prepared By

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October 25, 2010

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ATTESTATION

SILT RIVER PRESERVE CONSERVATION EASEMENT GARFIELD COUNTY, COLORADO

In compliance with Title 26 of the Internal Revenue Code [§1.170A-14(g)(5)], and to the best of my knowledge, this Baseline Documentation Report, including text, maps, and photographs, is an accurate representation of the Silt River Preserve conservation easement property on _____, 20____, the time of the conveyance of the conservation easement. The conservation values include relatively natural habitat, open space, and recreation.

Town of Silt, GRANTOR
David Moore, Mayor

Date

Aspen Valley Land Trust, GRANTEE
Martha Cochran, Executive Director

Date

PREPARER CERTIFICATION STATEMENT

SILT RIVER PRESERVE CONSERVATION EASEMENT
GARFIELD COUNTY, COLORADO

I, the undersigned, prepared this Baseline Documentation Report in accordance with Treas. Reg. 1. 170A-14(g)(5)(i)(D). To the best of my knowledge, this Baseline Documentation Report, including text, maps, and photographs, is a true and correct representation of the Silt River Preserve conservation easement at the date of my signature below.

I certify that I am a qualified provider of conservation easement due diligence. As principal biologist at Rare Earth Science, I have personally prepared baseline documentation reports for more than 150 conservation easement projects in eight Colorado counties, and am familiar with the natural resources of the region. My recent relevant project experience includes rare plant surveys in Delta and Montrose counties, co-authorship of *Colorado Sagebrush: A Conservation Assessment and Strategy* (prepared for the Colorado Division of Wildlife in 2005), and a *Migratory Bird Status Literature Review* (prepared for the Uncompahgre Field Office of the U.S. Bureau of Land Management in 2009). I earned a Bachelor of Science degree in Biological Sciences from Stanford University in 1988 and have 21 years of experience in consulting practice.



Dawn R. Reeder, Principal Biologist
Rare Earth Science, LLC

October 25, 2010

Date

CONTACTS & BASIC INFORMATION SUMMARY

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CONSERVATION EASEMENT NAME
Silt River Preserve Conservation Easement

ACREAGE
Approximately 132 acres

PROPERTY ADDRESS
Rural, Garfield County, Colorado

COUNTY PARCEL NO.
Part of Garfield County Tax Parcel 2179-114-00-114>

PHYSICAL LOCATION
Parts of Sections 9 & 10, Township 6 South, Range 92 West (6th Principal Meridian), Garfield County, Colorado

LEGAL DESCRIPTION
See the Deed of Conservation Easement for a complete legal description

ACTIVITY ENVELOPE
The Deed of Conservation Easement allows a 3-acre activity area for a boat ramp, parking, picnic area, and restrooms.

1 INTRODUCTION

Colorado Revised Statutes (CRS) provide for the establishment of conservation easements to maintain land “in a natural, scenic, or open condition, or for wildlife habitat, or for agricultural [...] or other use or condition consistent with the protection of open land having wholesome environmental quality or life-sustaining ecological diversity” [CRS §38-30.5-101].

Toward these ends, the Town of Silt (“grantor”) will be conveying a perpetual conservation easement on a property in Garfield County, Colorado, to Aspen Valley Land Trust (“Land Trust” or “grantee”). The property will be known as Silt River Preserve, and will conserve wildlife habitat and open space, while providing recreational opportunities for the public. The grantee is a non-profit corporation and a “qualified organization,” as defined in §170(h) of the Internal Revenue Code, and a charitable organization as required under CRS §§38-30.5-104(2).

The Silt River Preserve parcel was part of the 1,300-acre Valley Farms, a ranch owned by the McPherson family. It was purchased in 1964 by Roger Dixon and leased back to the McPherson family for continued ranching. In the 1980s, the Stillwater development, a 1,300-unit community with two golf courses was approved for Valley Farms and the property was annexed into the Town of Silt. The development failed to proceed and the property was de-annexed in 2008. Upon Mr. Dixon’s death, the entire property was bequeathed to the Dixon Water Foundation of Dallas, Texas, who is selling the property to the Town of Silt. Funding for the purchase of the property by the Town of Silt is being provided by Great Outdoors Colorado, Aspen Valley Land Trust, Garfield County, the Town of Silt, Bill Barrett Corporation, Encana, Williams Production, and the Colorado River Conservation District.

It is a condition of the sales contract that demolition debris and refuse be removed from the property before closing. This baseline documentation report shows the condition of the property prior to removal of demolition debris and refuse; the baseline documentation photos and text regarding debris and refuse will be updated in 2011 (when weather permits) to reflect conditions at the time of closing.

The grantee requires baseline documentation for all conservation easement conveyances it accepts. This report, together with other materials in the grantee’s files, addresses all applicable items in the grantee’s Baseline Documentation Report Checklist. Figure 1 shows the property’s regional setting and location in relationship to other conserved private property and public lands, as well as directions to the property. Figure 2 shows the topography of the property and its surroundings. Figure 3 provides an aerial overview of the property and a key to documentary photograph locations. Figure 4 maps improvements, vegetation communities and other important features on the property. Figure 5 shows soil types on the property, and Figure 6 presents the ranges of selected wildlife species. A list of global positioning system (GPS) coordinates for the locations of selected property features and documentary photographs is included as Attachment A.

1.1 Methods

Methods of baseline documentation included a field visit to the property on September 30, 2010, review of information provided by the grantee, and research of available publications and other relevant documents, as cited.

Mapping for this document was created using ESRI® geographic information systems (GIS) software, ArcGIS 9.3™ and a recreational-grade handheld GPS unit. Base maps consist of U.S.

Geological Survey (USGS) 7.5-minute topographic quadrangle and National Agricultural Imagery Program (NAIP) aerial photography digital mosaics available for public download through the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS). Data resources used to create regional mapping (Figure 1), soils mapping (Figure 5), and wildlife range maps (Figure 6) are cited on the figures themselves. The photopoint map (Figure 3) was created by mapping GPS waypoints marked at documentary photograph locations. The improvements map (Figure 4) was created by interpreting recent aerial photographs and by mapping GPS waypoints of certain point features and tracks of roads, trails, and fence lines on the property. Consequently, the improvements map must not be considered a survey of improvements, but rather a simple inventory sketch. Vegetation mapping (Figure 4) was created by interpreting recent aerial photographs, combined with a walkabout survey of the property. It should be noted that vegetation mapping boundaries cannot accurately represent the intergrade between plant communities.

1.2 Property & Setting Description

The Silt River Preserve Conservation Easement property (hereinafter, “property”) is approximately 132 acres in Garfield County, Colorado, within Sections 9 & 10, Township 6 South, Range 92 West (6th Principal Meridian), immediately south of the Town of Silt (Figure 1). A complete legal description of the property is provided in Exhibit A of the Deed of Conservation Easement (CE Deed).

The property is situated in the Colorado River valley at the northern foot of Battlement Mesa in the eastern extents of the Colorado Plateau Physiographic Province. To the north and northwest are the Roan Cliffs and the Roan Plateau. The property features naturally vegetated lands across fairly level topography at an average elevation of approximately 5,410 feet above mean sea level (Figure 2), and includes an approximately 0.6-mile reach of the Colorado River. Approximately 4 acres of the property are affected by improvements, including a former ranch headquarters area and ranch roads. The property’s appearance at the time of the conservation easement donation is shown in the documentary photographs (following the figures after the main text of this report). The documentary photographs were taken at the photopoint locations shown on Figure 3.

Historic uses of the property have included seasonal pasture for domestic livestock, hay production, small-scale gravel mining, recreational hunting and fishing, and wildlife habitat. Minor seasonal livestock grazing is presently occurring on the property; however the property has not been actively ranched for several years and has fallen into a state of neglect. The property adjoins private lands owned by the grantor to the east and south. To the west is an aggregate mining operation, and to the north is the Colorado River and residential areas of the Town of Silt.

1.3 Directions to the Property

To reach the property from Exit 97 on Interstate 70 in Silt, Colorado:

- Head west from Exit 97 on River Frontage Road and proceed east to the intersection of River Frontage Road and County Road 311 (Divide Creek Road) on the right (south).
- Turn right (south) on Divide Creek Road and drive over a bridge over the Colorado River approximately 0.5 mile to a “Y” junction in the road.

- Bear right (west) at the “Y” junction onto County Road 346 (Rifle-Silt Road) and drive approximately 9.4 miles to the driveway to the property on the right (north) side of the road.
- Turn right (north) into the driveway and travel about 800 feet to Rising Sun Ditch, an irrigation canal which demarks the property’s south boundary.

1.4 Summary of the Property’s Conservation Values

The purpose of the conservation easement donation is to preserve, in perpetuity, the following conservation values:

1. Relatively Natural Habitat. The property features relatively natural riparian woodlands and shrublands associated with a 0.6-mile reach of the Colorado River, ponds, agricultural fields, and semi-desert shrublands which provide forage, cover, and breeding grounds for a diverse array of wildlife species in the region, including species considered rare, threatened, or endangered by the federal government or State of Colorado. The property lies entirely within the Rifle Stretch of the Colorado River Megasite Potential Conservation Area (PCA) designated by the Colorado Natural Heritage Program (CNHP). CNHP recognizes the Colorado River Megasite PCA as an area of “very high biodiversity significance” with a protection urgency rank of “high” (Lyon et al. 2001). The property supports nesting and wintering bald eagles (a state-listed threatened species), and features two documented bald eagle nests in its older cottonwood galleries. The property lies within the range of northern river otter, a species recognized under Colorado State law as threatened. River otters were recently re-introduced to the upper Colorado River and the property’s riparian corridor provides good denning and hunting habitat for this species, and the conservation easement will buffer the riparian corridor from development. Suitable habitat exists on the property for western yellow-billed cuckoo, a candidate for listing under the federal Endangered Species Act. The property also provides habitat for wildlife recognized by the State of Colorado as Species of Concern: ferruginous hawk (winter foraging habitat), northern leopard frog (breeding habitat), and greater sandhill crane (migratory habitat). The property lies within elk and mule deer winter range, mule deer severe winter range, and within a mule deer resident population area mapped by the Colorado Division of Wildlife (CDOW). Elk and mule deer find good cover and browse in the variety of habitats on the property, and are important to the biodiversity and economy (hunting and tourism revenue) of the region and the state. The property and the region-at-large are under intense pressure for energy, gravel, and residential development as evidenced by surrounding land uses. The conservation project on the property is an important measure in helping to buffer these impacts.
2. Open space. The property’s aesthetically-pleasing and harmonious array of shapes and textures, created by mosaic of water features and relatively natural vegetation, provide natural scenic enjoyment to the general public and contribute to the openness and variety of the overall landscape in the region, which is undergoing increased residential, mineral, and light industrial development. The property (especially the river corridor) is visible from Interstate 70, from the Salt Lake City – Denver Amtrak route, and to recreational boaters on the Colorado River. The property is also visible from Garfield County Roads 331 and 346 (Dry Hollow Road and Rifle-Silt Road). Scenic views across the property’s open space from public roads and rights-of-way include Battlement Mesa and the Roan Cliffs. Preservation of the property will yield significant public benefit

because its open space provides a) scenic enjoyment for the general public, b) relatively natural wildlife habitat at the site-specific level and habitat connectivity at the landscape level, c) agricultural lands, and d) recreational opportunities for the public. The property features lands capable of being irrigated (supported by irrigation water rights and irrigation infrastructure), a year-round supply of stock water, and is capable of supporting seasonal livestock grazing on its cultivated and native rangelands. The U.S. Department of Agriculture (USDA) recognizes certain soils on the property as “prime farmland if irrigated and reclaimed of excess salts” due to the combination of soil properties and growing season. Conservation of open space is recognized as important to the general public by State of Colorado Statutes (with specific reference to wildlife habitat, scenic views, and agricultural lands) and by policies set forth in the Garfield County Comprehensive Plan.

3. Recreation. The conservation easement on the property will provide for public access to the Colorado River for boating and fishing opportunities, and will incorporate recreational amenities of vital importance and benefit to the surrounding communities, such as a boat ramp, walking trails, and a picnic area.

2 PHYSICAL CHARACTERISTICS OF THE PROPERTY

2.1 Existing Improvements

The appearances of improvements are shown in the documentary photographs (following the figures after the main text), whose locations are keyed to Figure 3. Figure 4 shows the locations of improvements and other important features. GPS coordinates for photopoint locations are provided in Attachment A.

- Structures. Buildings on the property at the time of the field visit were limited to a small barn in the former headquarters area of the property (Photopoint 20, looking east) and an old log dugout or cellar structure (dilapidated; Photopoint 22), west of the former headquarters area. A concrete pad for a mobile home still existed in the south part of the headquarters area (Photopoint 18). It appeared that the mobile home had recently been demolished; demolition debris was piled near the concrete pad. Three small, crude wooden hunting blinds were observed on the property: two on the south bank of the river in the east part of the property (for example, Photopoint 15 looking northwest), and one on the south bank of the east-most pond (Photopoint 9).
- Utilities. Utilities on the property were an overhead powerline entering the property / former headquarters area from the south and terminating near the concrete pad (Photopoint 18). Near the concrete pad was a partially buried concrete septic vault. Water wells are discussed below.
- Groundwater wells. Four groundwater wells were observed on the property, including a domestic well near the former mobile home location and three groundwater monitoring wells in the northeast part of the property on the south side of the Colorado River (for example, Photopoint 13, looking east-by-northeast). The domestic water well is approximately 120 feet deep, and the monitoring wells are approximately 30 feet deep (Rare Earth 2010a). Two of the monitoring wells were not property covered and secured.
- Roads & trails. Access to the property is via a gravel lane from the south (off County Road 346) into the former headquarters area (Photopoint 18). This lane continues north

through the livestock corrals to the vicinity of the ponds and toward the northeast property corner. Beyond the immediate vicinity of the ponds, the roads on the property were faint and primitive, providing access to the south riverbank in the east part of the property, or to irrigation infrastructure (Photopoints 11, 13, and 16).

- Fences. The property was partially perimeter-fenced and cross-fenced with multi-strand barbed wire livestock fencing. What perimeter fence that did exist did not precisely follow the west and east property boundaries in the river corridor where woodlands were dense (see Figure 4). Livestock corrals constructed of a variety of materials were present in the vicinity of the barn (Photopoint 20, looking east).
- Ponds. Three small pond basins (ringed with or vegetated with wetland or mesic plant species) existed on the property. These pond basins were created by historic small-scale gravel mining on the property. No water was present in the pond basins at the time of the field visit (Photopoints 9, 10, and 12); however, based on the vegetation associated with them, they hold water seasonally and are either charged by floodwaters from the Colorado River or by shallow groundwater. The ponds appeared to be interconnected by buried culverts. The east-most pond was situated near a head gate on Last Chance Ditch and has potentially been filled with irrigation water in the past. A large dirt mound near the east-most pond is likely a soil overburden pile removed from the pond locations prior to gravel mining. An improvements survey (High County Engineering 2010) prepared for the property shows a fourth pond (northwest of the largest pond mapped on Figure 4 of this report); however, this pond basin was not distinctly visible during the field visit.
- Irrigation infrastructure. Rising Sun Ditch (bounds the property on the south; Photopoint 17), and Last Chance Ditch (Photopoint 8) traverses the property in a general east-west direction (Figure 4). Rising Sun Ditch is a large irrigation canal that is lined and partially buried along its alignment. The Hang diversion ditch (Photopoint 7), a partially piped irrigation ditch lateral originating at a head gate on Rising Sun Ditch in the west-central part of the property, serves lands to the west. During the field visit, leakage from the Hangs diversion ditch and Last Chance Ditch appeared to be supplying some sub-irrigation to the area west of the ponds. It appeared that a head gate on Last Chance Ditch supplied irrigation water to charge the east-most pond, which in turn apparently cascaded to the other two ponds via buried culverts. Irrigation water rights are associated with the property and will be encumbered by the CE Deed.
- Dumps. Two historic ranch dumps were observed on the property during the field visit. One was located at the east-west interior fence line in a small draw in a north-facing slope (Photopoint 21), and contained wood debris (pallets and old lumber), fencing materials and rusted scrap metal). The second dump was in the east part of the property near the south river bank. It consisted of food cans, rusted scrap metal (including pieces of car bodies) wood debris, and a few tires (Photopoint 14). A large debris pile and scattered appliances and household items were present in the former headquarters area during the field visit (Photopoint 18). This debris was apparently recently created by the demolition of a mobile home that once rested on the concrete foundation in the former headquarters area. Dumps and debris on the property at the time of the field visit are described in more detail in an Environmental Site Assessment prepared for the property (Rare Earth 2010a).

2.2 Geology & Soils

The property lies near the boundary of two major physiographic provinces: the dissected sedimentary mesas and domed mountains of Colorado Plateau to the west, and the rugged, high-elevation peaks of the Southern Rocky Mountains to the east. In general, the property is positioned on the northeastern edge of the Colorado Plateau, and on the southeastern edge of the Piceance Basin. The major fold structure of the Piceance Basin is the steeply (approximately 40° to 90°+) westward-dipping strata of the Grand Hogback Monocline, which was formed during the White River Uplift and thrust westward during the Laramide Orogeny in Late Cretaceous through Eocene time. The Grand Hogback demarcates the eastern boundary of the Piceance Basin.

The Piceance Basin is an asymmetrical syncline that encompasses more than 7,000 square miles and is divided roughly in half by the Colorado River. It is the largest structural basin in western Colorado. Deep-water marine sediments were deposited in the Piceance Basin during the Late Cretaceous Period (approximately 80 million years ago [Ma]) including thick accumulations of carbonaceous sandstone, limestone and shale of the Mesaverde Group (Map Unit Kmv), and the Mancos Shale. Deposition of non-marine sediments occurred in the Cenozoic Era, along with regional uplift and mountain building events including the White River, Uncompahgre, Sawatch, and Gunnison Uplifts. All of these uplifts bound the modern-day Piceance Basin. Tertiary sedimentary rocks within the basin include alluvial, deltaic, and lacustrine deposits of the Wasatch and Green River Formations (approximately 40-70 Ma). Younger geologic units include valley-fill and terrace deposits of Quaternary age (approximately 1 Ma) in river and stream valleys.

The Geologic Map of the Silt Quadrangle, Garfield County, Colorado (USGS Miscellaneous Field Studies Map MF-2331, 2001) was reviewed for an understanding of local surface and subsurface geologic conditions (Rare Earth 2010b). The property is entirely comprised of Holocene & Late Pleistocene floodplain and stream-channel deposits (Map Unit Qfp) that overlie bedrock Paleocene & Eocene Wasatch Formation (Map Unit Tw). Qfp includes moderately well-graded, slightly bouldery, pebble- and cobble-gravel in a sandy or silty matrix, with an average thickness of about 60 feet along the Colorado River. The property is also located near the center of the shallow Rifle syncline.

The U.S. Department of Agriculture's (USDA's) Natural Resources Conservation Service (NRCS 2008) Soil Survey of the Rifle Area, Colorado, Parts of Garfield and Mesa Counties identifies four soil types at the property, including: Arvada loam, 1 to 6 percent slopes (Map Unit 3, approximately 45 percent of the property's acreage); Halaquepts, nearly level (Map Unit 27, approximately 5 percent of the property's acreage); Torrfluvents, nearly level (Map Unit 65, approximately 25 percent of the property's acreage); and Wann sandy loam, 1 to 3 percent slopes (Map Unit 72, approximately 25 percent of the property's acreage). USDA considers Map Unit 72 to be "Prime farmland if irrigated and reclaimed of excess salts." Map Unit 72 was formerly irrigated on the property. Mapped soil units are shown on Figure 5.

2.3 Hydrology

The principal surface water feature is an approximately 3,200-foot reach of Colorado River frontage (including part of a wooded island and a narrow, seasonally inundated side channel) across the property's north boundary (Figure 4). Associated with the Colorado River is a corridor of relatively robust riparian woodlands with a native and naturalized shrub understory (Photopoints 1, 2, 3, 4, 13, and 15). The Colorado River has relatively high flows during spring

runoff and large precipitation events, and relatively low flows during the rest of the year, especially during irrigation season. The entire property lies within the Colorado River Megasite PCA (Figure 1), which is considered by CNHP to possess “outstanding” biodiversity significance because of the assemblage of plant and animal species it supports. The Colorado River and its riparian corridor contribute significantly to the uniqueness and importance of the natural areas on the property, and in the region. According to a recent landscape-scale mapping effort by the Southwest Regional Gap Analysis Project, riparian habitat constitutes less than 3 percent, and wetlands constitute less than 0.1 percent, of the total area of western Colorado. Nevertheless, about 72 percent of all reptile species, 77 percent of all amphibians, 80 percent of all mammals, and 90 percent of all bird species occurring in the Colorado Plateau region routinely use riparian areas for food, water, cover or migration routes. About 30 percent of the Colorado Plateau’s bird species use riparian corridors, wetlands, and other aquatic areas to the exclusion of upland habitats (Knopf 1989).

Other surface water features on the property include the west edge of the narrow riparian corridor of Dry Hollow Creek (which bounds the property on the east; Photopoint 16, looking northeast), and Rising Sun Ditch (which bounds the property on the south). Last Chance Ditch also traverses the property in a general east-west direction (Figure 4), as well as Hangs lateral, a partially piped lateral from Rising Sun Ditch that serves lands to the west. That part of the property lying north of Last Chance Ditch is within the Special Flood Hazard Area subject to inundation by a 1 percent annual chance (i.e., 100-year) flood event (Rare Earth 2010a). The Colorado River and immediate bank areas are located within the floodway. Last Chance Ditch supports a narrow band of graminoid wetland on its margins, whereas Rising Sun Ditch is lined and partially piped in the vicinity of the property and its banks are mostly devoid of vegetation. Three pond basins (resulting from historic gravel mining activities on the property) support limited wetland vegetation and hold water only seasonally. These ponds are inundated during high water events and seasonally by groundwater, and may have been intentionally charged by irrigation water at one time.

2.4 Vegetation

The property features historically irrigated fields, native riparian woodlands and shrublands, dryland pasture, and semi-desert shrublands (Figure 4). Together, these vegetation communities (described in the bulleted paragraphs below) provide a mosaic of foraging, cover, and nesting habitat for many species of wildlife.

- Historically irrigated field (55 acres; Photopoints 5, 16, 19, and 23). The property’s historically irrigated fields were established by previous owners prior to the 1950s and maintained until the late 1990s. At the time of the conservation easement donation, irrigation practices had been ceased for several growing seasons, and the condition of the fields was poor. These fields had only remnant and scattered pasture grasses and alfalfa, a high percentage of bare ground, and fairly extensive growth of ruderal weeds, primarily kochia (*Kochia scoparia*), and Russian knapweed (*Acroptilon repens*). Also present, but less prevalent, were the non-native herbaceous plants field bindweed, Canada thistle (*Cirsium arvense*), Russian thistle (*Salsola kali*), and Scotch thistle (*Onopordum acanthium*), and weedy native plants such as purple aster (*Machaeranthera canescens*) and curlycup gumweed (*Grindelia squarrosa*). The historically irrigated field west of the pond basins also had clumps of prickly pear and Claret cup cacti. Some leakage from Hang’s Diversion 2 Ditch (off the Rising Sun Ditch) was occurring to the west part of this pasture, supporting sparse growth of pasture grasses and foxtail (*Hordeum jubatum*). The historically irrigated fields could be returned

to productivity if reseeded and irrigation is resumed. If irrigation is not resumed, these fields will eventually revert to semi-desert shrublands with an understory dominated by non-native grasses and forbs.

- Riparian areas (39 acres; Photopoints 1, 2, 3, 4, 13, and 15). Riparian areas on the property included woodlands, shrublands, and herbaceous plant communities associated with the Colorado River corridor (including a river island in the northeast part of the property, a river side channel / slough in the northwest part of the property, and Last Chance Ditch). Riparian woodlands were dominated by open stands of approximately 40-year-old (or older) Rio Grande cottonwoods (*Populus deltoides wislizenii*) on the terrace and side channel and on the river island. Several younger narrowleaf cottonwoods (*Populus angustifolia*) and a few Utah juniper (*Juniperus osteosperma*) trees were scattered throughout. Tamarisk or salt cedar (*Tamarix* sp.) and Russian olive (*Eleagnus angustifolia*), and to a lesser extent, Siberian elm (*Ulmus pumila*), three widely naturalized non-native riparian woodland species in the region, were present throughout the woodland, and were most dense along the side channel in the northwest part of the property (Photopoints 3 and 4) and in the immediate vicinity of the pond basins. Robust patches of the native riparian shrub three-leaf sumac (*Rhus trilobata*) were scattered throughout the woodland understory, along with coyote willow (*Salix exigua*) and occasional clumps of river hawthorn (*Crataegus rivularis*). Tamarisk, Russian olive, and Siberian elm appeared to be considerably less common in the riparian woodland on the island than in the woodland south of the river, while three-leaf sumac was more prevalent. Ground cover in the drier parts of the woodland south of the river consisted primarily of non-native kochia, Russian knapweed, and smooth brome (*Bromus inermis*), with scattered stands of native saltgrass (*Distichlis spicata*). In and near the river side channel (identified as a potential jurisdictional wetland by Western Ecological Resource, Inc. [WERI 2006]), herbaceous ground cover consisted of native graminoids such as softstem bulrush (*Schoenoplectus tabernaemontani*), spikerush (*Elymus sp.*), Nebraska sedge (*Carex nebrascensis*), three-square bulrush (*Scirpus americanus*), arctic rush (*Juncus arcticus*), and cattails (*Typha latifolia*), and non-native or cultivar grasses such as smooth brome, barnyard grass (*Echinochloa crus-galli*), rabbitfoot grass (*Polygonum monspeliensis*), and redtop (*Agrostis gigantea*). Herbaceous weeds such as sorrel (*Rumex* sp.), ironweed (*Bassia hyssopifolia*), and common cocklebur (*Xanthium strumarium*) were common in the side channel area, along with native wild licorice (*Glycyrrhiza lepidota*) and Western white clematis (*Clematis ligusticifolia*). Last Chance Ditch supported discontinuous stands of cattails and reed canary grass (*Phalaroides arundinacea*) along its banks. Most immediate low riverbank areas were well vegetated with coyote willow and stands of wetland graminoids (marked as “riparian shrubland” on Figure 6), including spikerush, three-square bulrush, and field horsetail (*Equisetum arvense*). Many decadent or dead cottonwoods were present in the riparian woodlands (both on the island and south of the river). Several large slash piles resulting from cleanup of dead wood south of the river were present in the riparian corridor. Woody debris and standing snags are an important component of wildlife habitat in riparian corridors, especially for rodents, cavity-nesting songbirds, great blue herons, and raptors (three bald eagle platform nests and a heron rookery were present in old cottonwoods on the property). Very few cottonwood saplings were observed in the riparian woodland south of the river, presumably because of heavy browsing by wintering wild ungulates or historically heavy livestock grazing. Cottonwood sapling recruitment will become increasingly more important for stand replacement in this corridor as the existing cottonwoods age. The Rio Grande cottonwood-three-leaf sumac vegetation association is considered by CNHP to be *imperiled* at the state and

global levels (Carsey et al. 2003). The importance of the riparian habitat on the property is discussed in Section 2.4.

- Semi-desert shrubland (16 acres; Photopoints 6, 14, and 24). A few areas of remnant semi-desert shrubland existed on the property at the time of the baseline field visit. One area lies between the river and Last Chance Ditch in the east part of the property, upstream of the side channel inlet where the river terrace is relatively high. This area is vegetated with big sagebrush (*Artemisia tridentata*), Russian knapweed, and western wheatgrass (*Pascopyrum smithii*). A semi-desert shrubland west of the dryland pasture appeared to have been historically cleared. A few big sagebrush and greasewood (*Sarcobatus vermiculatus*) shrubs had colonized the area, along with clumps of prickly pear cactus (*Opuntia* sp.) and Claret cup (*Echinocereus triglochidiatus*). Herbaceous ground cover was primarily Russian knapweed and kochia. A third area occupied by remnant semi-desert shrubland lies in the south part of the property in an area that was previously situated south (upgradient) of Rising Sun Ditch (the ditch alignment was recently moved to the south of this shrubland). This community was dominated by robust greasewood, with scattered rubber rabbitbrush (*Ericameria nauseosa*), and had an herbaceous layer consisting mostly of kochia. Shrub canopy cover was approximately 50 percent, and was composed of mostly mature shrubs. Semi-desert shrub communities provide habitat for many ground-dwelling rodents and reptiles, hunting habitat for raptors, breeding habitat for several species of shrub-obligate songbirds, and cover and winter browse for big game ungulates.
- Pond basin (3 acres; Photopoints 9, 10, and 12). Three pond basins created by historic gravel mining operations on the property supported an array of wetland graminoid plants, primarily foxtail, cattails, kochia, and softstem bulrush. Kochia was prevalent in the drier margins. No water was present in the pond basins during the baseline site visit, which area assumed to interact with the alluvial aquifer of the river. A recent wetland delineation for the property (WERI 2006) identified the pond basins as potential jurisdictional wetlands.
- Ruderal ground (4 acres). Areas identified as ruderal on the property include the north bank of Rising Sun Ditch, and the headquarters area (immediate area of the barn, corrals, and old trailer foundation). These areas are permanently disturbed and have a significant percentage of bare ground or weed cover.

3 LAND MANAGEMENT PRACTICES

3.1 Cultivation & Grazing

At the time of the field visit, the property appeared to be in a state of minimal management. The historically irrigated fields were infested with the noxious weed Russian knapweed and several other ruderal weed species indicative of inconsistent or inadequate irrigation and/or historically unsustainable grazing practices. The previous owner leased the land out for limited livestock grazing and other ranching activities, and a few horses were present on the property at the time of the field visit. No hay crops or other crops were being produced on the property at the time of the field visit; however, the fields on the property were recently in a mix of pasture grasses and alfalfa.

3.2 Weeds & Weed Control

Several Garfield County noxious weed (Co. Dept. of Agriculture 2010) were observed on the property, including Russian knapweed, salt cedar, Russian olive, Scotch thistle, and Canada thistle. Salt cedar and Russian olive were present throughout the riparian corridor and in the vicinity of the ponds. Russian knapweed was fairly ubiquitous across the property, occurring most heavily in the historically irrigated fields and extending into native plant communities more sparsely.

Other weeds observed on the property, especially in historically irrigated fields and ruderal areas, were annual mustards, kochia, and Russian thistle (*Salsola kali*). These non-noxious weeds are widespread in the region and are not considered to be directly harmful to livestock or wildlife. Historic overgrazing may have contributed to the herbaceous weed infestations across the property.

The grantor currently does not manage weeds on the property. Russian knapweed and salt cedar present the primary threat to the integrity of the native plant communities on the property, especially the riparian woodland associated with the Colorado River corridor.

3.3 Minerals

At the time of the conservation easement donation, the grantor did not own all of the mineral rights associated with the property. In accordance with §170(h) of the Internal Revenue Code and related Treasury Regulations, the grantor obtained an opinion from a professional geologist regarding the potential for surface mining on the property. The geologist's review of the property's mineral resources (Rare Earth 2010b) concluded that the probability of extraction or removal of minerals from the property by surface mining methods is "so remote as to be negligible," however the "possibility exists for future oil and/or gas drilling via methods other than surface mining" on the property and adjoining lands. Nevertheless, surface disturbances associated with oil & gas development are typically considered to be temporary and reclaimable, and can be compatible with the purposes of conservation easements with proper planning. No active mining of any kind was occurring on the property at the time of the baseline field visit. A few small pond basins on the property were created by historic gravel mining activities (Rare Earth 2010a, 2010b).

4 RELATIVELY NATURAL HABITAT

The property features relatively natural habitat conservation values (see Section 1.3 for a summary of the property's conservation values). The property's aquatic areas, riparian shrublands and woodlands, and semi-desert shrublands provide important relatively natural habitat and habitat linkages for wildlife in the area.

The locations of vegetation communities, surface water resources, and soil types are shown on Figures 4 and 5. Soils, surface water resources, and vegetation communities on the property are described in Sections 2.2, 2.3, and 2.4 of this report, respectively. The appearance of the property's relatively natural habitat is depicted in documentary photographs following the main text of this report. Documentary photographs were taken at the photopoints shown on Figure 3. The ranges of selected wildlife species are mapped, relative to the property, on Figure 6. The GPS coordinates of the photopoints are included in Attachment A to this report.

4.1 Threatened, Endangered, or Special Concern Wildlife

The property provides habitat or habitat linkages for several species recognized by the federal or state governments as threatened or of special concern, including bald eagle, river otter, northern leopard frog, greater sandhill crane, ferruginous hawk, and western yellow-billed cuckoo. Each of these species is discussed, in turn, below.

- **Bald eagle.** Although bald eagles were removed from the federal threatened and endangered species list in June 2007, the federal government will continue to monitor their recovery under the U.S. Endangered Species Act at least through the year 2012. The bald eagle is listed as threatened under Colorado's Nongame, Endangered, or Threatened Species Conservation Act (CDOW 2010). The property lies within bald eagle winter range, winter foraging range, and a roost area mapped by the Colorado Division of Wildlife (CDOW) in the Colorado River corridor (Figure 6), and wintering bald eagles certainly frequent the property and its vicinity to prey on rodents and carrion. The property also provides appropriate breeding habitat for bald eagles, which are uncommon breeders in Colorado. Three bald eagle nests were documented in 2008 (Petterson 2008) in mature cottonwoods on the property (two on the mid-channel island, one in the old cottonwood stand west of the former headquarters; see Figure 4). Two of these nests were "active" (Nest B and Nest C) and one (Nest A) was dilapidated (Petterson 2008). During February and March of 2008, one pair of bald eagles exhibited nesting behavior at Nest C (main site; Photopoint 20, looking northwest) and Nest B (alternate site; pictured above near top of cottonwood tree). In June or July 2008, Petterson saw evidence that the pair successfully fledged up to three young from Nest C; the pair moved to Nest B in 2009 (pers. comm.). During summer of 2010, the grantee observed a pair of bald eagles with two chicks utilizing Nest C. Nests B and C were observed during the baseline field visit, but Nest A was not located.
- **River otter.** The property lies within the range of northern river otter (Figure 6), recognized as threatened and protected under the Colorado Nongame, Threatened, or Endangered Species Conservation Act. River otters were recently re-introduced to the upper Colorado River, and the property's riparian corridor provides good denning and hunting habitat for this species. May. A pair of river otters requires approximately 1.5 to 8 miles of stream or shoreline depending on prey resources, and stream flow of at least 50 cubic feet per second (Boyle 2006). Other requirements are food resources (fish, small mammals), good water quality, riparian vegetation providing at least 50 percent cover along banks, and other cover in or along streams such as woody debris or boulders (Boyle 2006). Bank stability and maintenance of floodplain structure provide opportunities for denning.



- Northern leopard frog. The northern leopard frog, a Colorado State Species of Concern, could potentially occur along banks and shallow portions of the pond and streams on the property. Population declines of this frog in Colorado are believed to be a result of habitat changes and the introduction of the increasingly abundant bullfrog in lowland areas. Breeding sites along streams and ponds change in suitability in response to climatic changes and flooding (Hammerson 1999). The property's perennial pond provides nearly ideal, stable breeding habitat for leopard frog.
- Greater sandhill crane. The property lies within the migratory flyway of Rocky Mountain populations of greater sandhill cranes that summer in Idaho, Montana, Wyoming, and northwest Colorado, and winter in New Mexico (Tacha et al. 1992). Rocky Mountain populations of greater sandhill cranes have declined due to development, conversions of agricultural lands to other uses, and loss of wetland habitat. Cranes occasionally utilize open fields, sandbars, and backwater areas in the Colorado River valley to rest and feed during spring and fall migrations. The property's open fields and river bar areas offer a relatively large area from which small kettles of resting cranes can spot approaching predators or human intrusion.
- Ferruginous hawk. The property provides suitable winter habitat for ferruginous hawks. Ferruginous hawks are relatively rare in western Colorado and their populations are thought to be in decline throughout much of their range in the mid-west and western U.S. due to uncertain causes (Bechard et al. 1995). Preferring semi-arid grasslands and shrublands with scattered trees (Bechard et al. 1995), this State of Colorado Species of Concern (CDOW 2010) preys on rabbits, squirrels, and other rodents in the region. Small-scale agricultural operations and ranching are considered compatible with conservation of ferruginous hawk populations (Bechard et al. 1995).
- Western yellow-billed cuckoo. The property provides potential habitat for the yellow-billed cuckoo, a candidate species for listing under the ESA whose preferred habitat is old-growth cottonwood forests or woodlands with dense, scrubby understories of willows or other riparian shrubs (Kingery 1998; Hughes 1999). Probably never common in western Colorado (Bailey and Niedrach 1965), this bird is now considered an extremely rare summer resident and nearly extirpated in western Colorado (Kingery 1998; Righter et al. 2004). Reasons for decline of the yellow-billed cuckoo throughout the western U.S. have been attributed to destruction of its preferred riparian habitat due to agricultural conversions, flood control projects, and urbanization (Hughes 1999).

4.2 Big Game

The property lies within the overall ranges of game species including mule deer, American elk, black bear, and mountain lion, all big game species that are of economic importance to Garfield County and the State of Colorado, and that contribute significantly to the biodiversity of the region.

- American elk. The property lies within overall range of American elk. CDOW maps the property as American elk winter range (Figure 6). The elk population in Colorado was reduced to 500 to 1,000 animals in the early 1900s due to market hunting. Restoration efforts by CDOW over the past several decades have resulted in a currently high elk population of approximately 280,000 animals. Approximately 45,000 elk were harvested by hunters in 2008 (CDOW 2009), generating large revenues both directly and indirectly for the state (a total of 223,439 hunting licenses were issued). As river bottomlands and

lower elevation agricultural lands come under increasing developmental pressure in western Colorado, prime elk winter range is diminishing. Elk find browse and cover in the property's riparian corridor. Elk scat was observed during the field visit in the southwest historically-irrigated field.

- Mule deer. The property lies within overall range of mule deer, within mule deer severe winter range, and within range of a mapped resident population (Figure 6). While mule deer numbers are likely to be highest on the property during spring or fall as they migrate between their winter and summer concentration areas, mule deer utilize the property year round. The property's riparian woodlands provide good cover, forage, and fawning areas for mule deer. Mule deer, like elk, are important to the biodiversity of the region, and generate revenues directly and indirectly for the state through hunting programs. As such, the property provides ideal transitional range for mule deer. Mule deer sign was common on the property during the baseline field visit.
- Mountain lion. The property lies within the overall range of mountain lion, a wide-roaming species with a relatively large territory size requirement. Mountain lion can be expected to occur on the property occasionally, following the movements of mule deer, one of their primary prey species.
- Black bear. The property lies within the overall range of black bear, a wide-roaming species with a relatively large territory size requirement. Black bear can be expected to occur on the property, especially during fall, when they use riparian corridors to forage in stands of fruit-bearing shrubs.

4.3 Other Wildlife

The property provides habitat or habitat linkages for small animals with large home ranges moving across the surrounding landscape. The riparian habitat on the property provides nesting and/or foraging habitat to a variety of migratory songbirds, shorebirds, and waterfowl. Many species of migratory songbirds are declining in all or parts of their range due to habitat loss or modification (Sauer et al. 2009). Raptors including golden eagle, sharp-shinned hawk, red-tailed hawk, and great-horned owl are likely to hunt on, and possibly nest on, the property. A great blue heron rookery is mapped on the property by CDOW (Figure 6). Great blue herons forage regularly along the riparian corridor on the property. A red-tailed hawk was observed in the tall cottonwood stand near the headquarters area during the field visit.

The Colorado River supports a sport fishery, namely for non-native trout. A number of native fishes are documented to occupy the reach of the Colorado River in the vicinity of the property, including the flannelmouth sucker and the mountain whitefish, both considered vulnerable and fairly uncommon (Lyon et al. 2001).

Small mammals such as coyote, fox, bobcat, beaver, badger, striped skunk, raccoon, cottontail, jackrabbit, porcupine, long-tailed weasel, squirrels, chipmunks, mice, voles, and shrews are known or expected to inhabit or visit the property and utilize its mosaic of habitat types. Several bat species are expected to occur as seasonal migrants or visitors on the property. Reptiles and amphibians anticipated to occur on the property are western terrestrial garter snake, bull snake, western rattlesnake, sagebrush lizard, Woodhouse's toad, and tiger salamander.

5 OPEN SPACE

The property provides scenic views and agricultural open space for the benefit of the public (see Section 1.3 for a summary of the property's conservation values). The open space conservation value of the property is described in detail below and depicted in figures and documentary photographs following the main text of this report. Documentary photographs were taken at the photopoints shown on Figure 3. The GPS coordinates of the photopoints are included in Attachment A to this report.

5.1 Scenic Characteristics

The property possesses good scenic characteristics. The property's aesthetically-pleasing and harmonious array of shapes and textures, created by its open river channel, broad corridor of mature cottonwood woodlands, fields, and semi-desert shrublands, provide natural scenic enjoyment to the general public and contribute to the openness and variety of the overall landscape in the region. The river corridor, with its mid-channel island and stately cottonwood galleries, is visible to the public traveling in vehicles on Interstate-70, by rail in Amtrak passenger cars, or by boat on the river. The property is also visible from County Roads 346 and 331. Scenic views across the property's open space from public thoroughfares include Battlement Mesa and the Roan Cliffs.

5.2 Agricultural Resources

The NRCS considers certain areas of the property to be "prime farmland if irrigated and reclaimed of excess salts" (Figure 5). Preservation of the property's open space, which is capable of providing rangeland and irrigated pasturage for domestic livestock, will also conserve habitat for threatened, endangered, or special concern species, as well as an important seasonal and transitional range for elk and mule deer (Section 4).

5.3 Significant Public Benefit

Preservation of the property under a conservation easement will yield significant public benefit because its open space provides a) scenic enjoyment for the general public, b) wildlife habitat at the site-specific level and habitat connectivity at the landscape level, c) preservation of agricultural lands, and d) recreational opportunities to the public.

Preservation of the property will continue to provide an opportunity for the general public to appreciate its scenic values, and is important for preserving regional resources with the potential to provide local food and attract tourism to the area. A significant benefit to the public is provided by the conservation easement on the property because of the strong likelihood that development of the property would lead to or would contribute to degradation of the relatively natural habitat and the scenic and rural character of the area. Open space (including relatively natural habitat and agricultural lands), and scenic views are important resources that benefit the public by bringing significant hunting and tourism revenues to the State of Colorado and Garfield County.

A conservation easement on the property is supported by policy at the federal, state, and regional/local levels.

- Federal policy. At the federal level, a conservation easement on the property is consistent with the federal Farmland Protection Policy Act, P.L. 97-98, 7 U.S.C. §4201, et seq., whose purpose is "to minimize the extent to which federal programs contribute to

the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to assure that federal programs are administered in a manner that, to the extent practicable, will be compatible with State, units of local government, and private programs and policies to protect farmland." §170(b)(1)(E)(iv) of the Internal Revenue Code as amended by the 2006 Pension Protection Act and extended by the 2008 Farm Bill creates a conservation easement incentive in the form of an increased tax deduction and carry-forward period for landowners conserving their properties through the use of perpetual conservation easements (with even greater tax benefits available to agricultural landowners provided that the conserved property remains available for either agricultural or livestock production, or both).

- State policy. Colorado Revised Statutes (CRS) provide for the establishment of conservation easements to maintain land "in a natural, scenic, or open condition, or for wildlife habitat, or for agricultural [...] or other use or condition consistent with the protection of open land ..." [CRS §38-30.5-101]. The Colorado Wildlife and Parks and Outdoor Recreation statutes [CRS §33-1-101 and §§ 33-10-101], provide, respectively, that "It is the policy of the State of Colorado that the wildlife and their environment are to be protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people of this state and visitors to this state" and that "It is the policy of the state of Colorado that the natural, scenic, scientific, and outdoor recreation areas of this state are to be protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people of this state and visitors of this state."

The Colorado Department of Agriculture Statutes [CRS §§ 35-1-101, et seq.] provide in part that "it is the declared policy of the State of Colorado to conserve, protect, and encourage the development and improvement of its agricultural land for the production of food and other agricultural products." The agriculture statutes provide that, "the soil resources and fertility of the land, and the ... prosperity of the farming population ... and the waters of the rivers ... are matters affected with a public interest" [CRS §35-3-102(a)]. Furthermore, the "welfare of this state has been impaired ... by destruction of its soil fertility, by uneconomic use and waste of its land, by exploitation and wasteful ... use of its soil resources" [§35-3-102(b)]. The Colorado Department of Transportation statutes [CRS §43-1-401, et seq.], provide that the "preservation and enhancement of the natural and scenic beauty of this state" are of substantial state interest.

The Western Governors' Association Policy Resolution 08-21 supports "voluntary incentive-based methods for preserving open space, maintaining land and water for agricultural and timber production, wildlife and other values."

- Regional & local policy. The establishment of a conservation easement on the property is consistent with local policies. Part of the property lies within the Colorado River Megasite PCA designated by CNHP (Figure 1). CNHP recognizes the Colorado River PCA as an area of "very high biodiversity significance" with a protection urgency rank of "high" (Lyon et al. 2001). PCAs are land units deemed important to the continued existence of ecological processes that support one or a suite of rare or significant features, and are intended to assist local governments with land-use planning and conservation strategies. CNHP deems the establishment of conservation easements an appropriate mechanism for protecting PCAs and encompassing private lands.

The establishment of a conservation easement on the property is consistent with the goals and policies set forth in the Garfield County Comprehensive Plan (2000). During

the drafting process of the Comprehensive Plan, the citizens of Garfield County identified the following issues pertaining to agricultural lands in the county (Section III, Part 6): “The rollover of agricultural land into more intense uses is accelerating in the County; Historical agricultural lands are also those lands which present the least development constraints (geology, topography, water availability); As the rural areas of the County continue to develop, the need to ensure compatibility between these uses and active agricultural lands will intensify;” and “A growing number of traditional agricultural lands can be expected to intensify into agricultural businesses, which may affect County land use policies designed for traditional ranching, grazing and crop production.”

To address the agriculture issues in Garfield County, the Comprehensive Plan identifies the following goals (Section III, Part 6): Ensure that existing agricultural uses are allowed to continue in operation and compatibility issues are addressed during project review; Consider the use of Transfer of Development Rights; Join farmers and ranchers together to develop a land use plan for agriculture; Consider land trusts and conservation easements. Policies outlined by the Comprehensive Plan addressing these goals include “6.1) Agricultural land will be protected from infringement and associated impacts of higher-intensity land uses through the establishment of buffer areas between the agricultural use and the proposed project; 6.2) Densities greater than the underlying zoning will be discouraged if the proposed development would adversely affect the adjacent agricultural operations;” and “6.3) Clustered development will be strongly encouraged in areas that present potential incompatible uses.”

During the drafting process of the Comprehensive Plan, the citizens of Garfield County identified the following issues pertaining to open space and applicable to conservation of private property (Section III, Part 5): “The rural nature of Garfield County, which has maintained important visual corridors in an undeveloped state, is transitioning to more intensive land uses; Visual corridors of particular importance need to be identified and policies tailored to each corridor;” and “Zoning, Subdivision and PUD (Planned Unit Developments) regulations must be consistent with general County open space and recreational objectives.”

To address the open space issues in Garfield County, the Comprehensive Plan identifies the following goal, which is applicable to private land conservation (Section III, Part 5): “Garfield County should provide adequate recreational opportunities for County residents, ensure access to public lands consistent with BLM/U.S. Forest Service policies, and preserve existing recreational opportunities and important visual corridors.” Policies outlined by the Comprehensive Plan addressing this goal include “5.2) Important visual corridors will be identified and appropriate policies developed to address the retainment of open space areas that link communities in the County,” and “5.3) If physically possible, subdivisions and Planned Unit Developments will be encouraged to design open space areas to become contiguous with existing and proposed open spaces adjacent to the project.”

6 RECREATION

The conservation easement on the property will provide for public access to the Colorado River for boating and fishing opportunities, and will incorporate recreational amenities of vital importance and benefit to the surrounding communities, such as a boat ramp, walking trails, and picnic areas.

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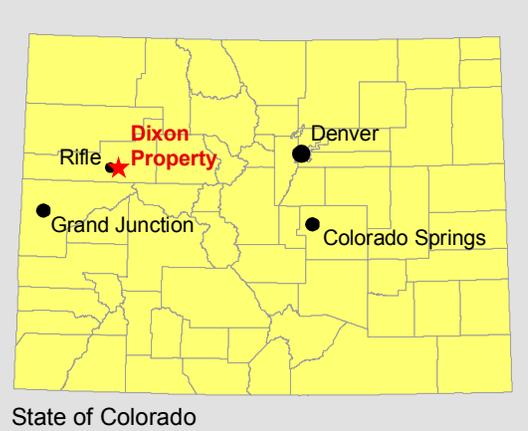
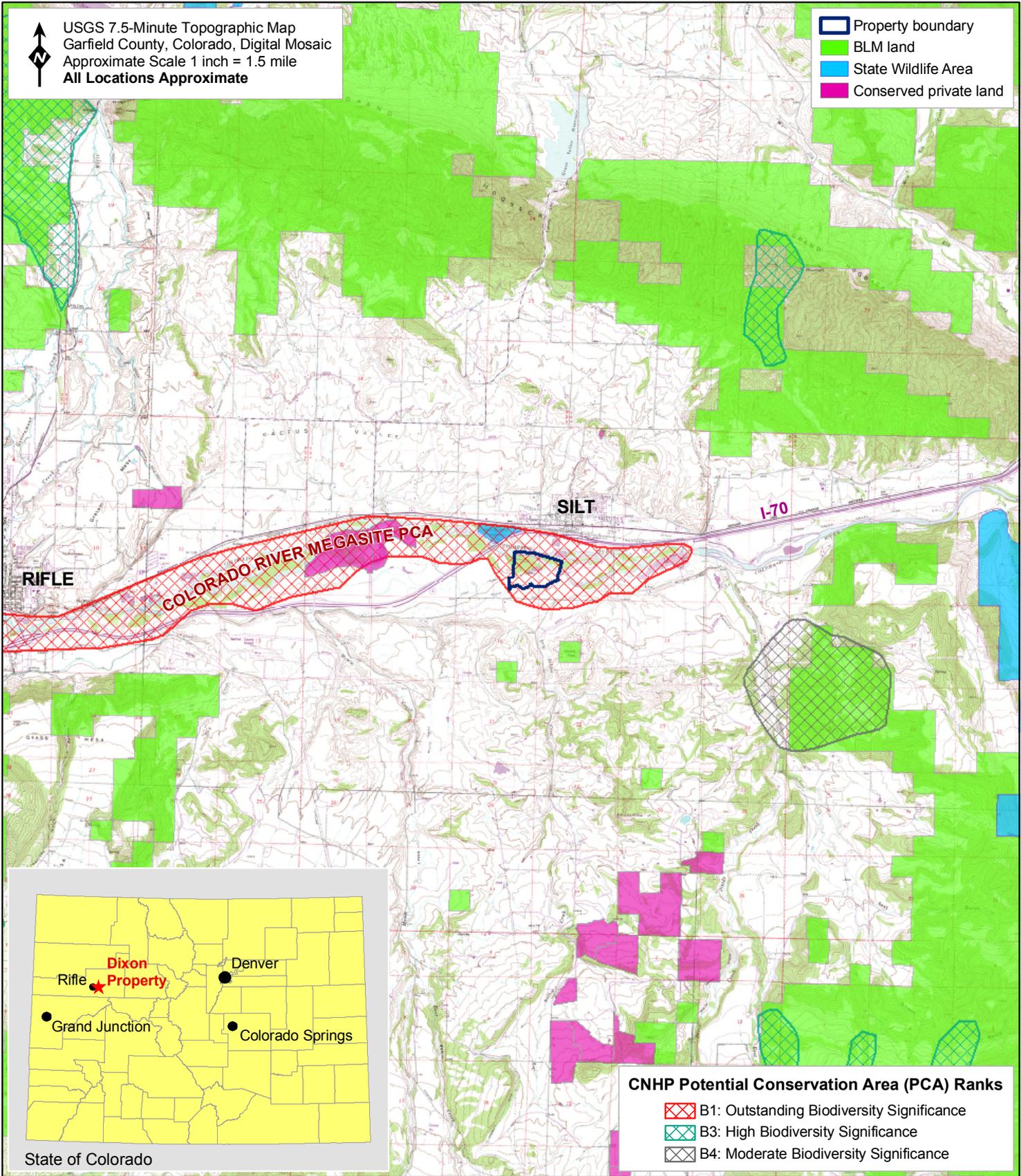
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FIGURES



USGS 7.5-Minute Topographic Map
 Garfield County, Colorado, Digital Mosaic
 Approximate Scale 1 inch = 1.5 mile
 All Locations Approximate

-  Property boundary
-  BLM land
-  State Wildlife Area
-  Conserved private land



- CNHP Potential Conservation Area (PCA) Ranks**
-  B1: Outstanding Biodiversity Significance
 -  B3: High Biodiversity Significance
 -  B4: Moderate Biodiversity Significance

DATE: October 2010
 DRAWN: D. Reeder

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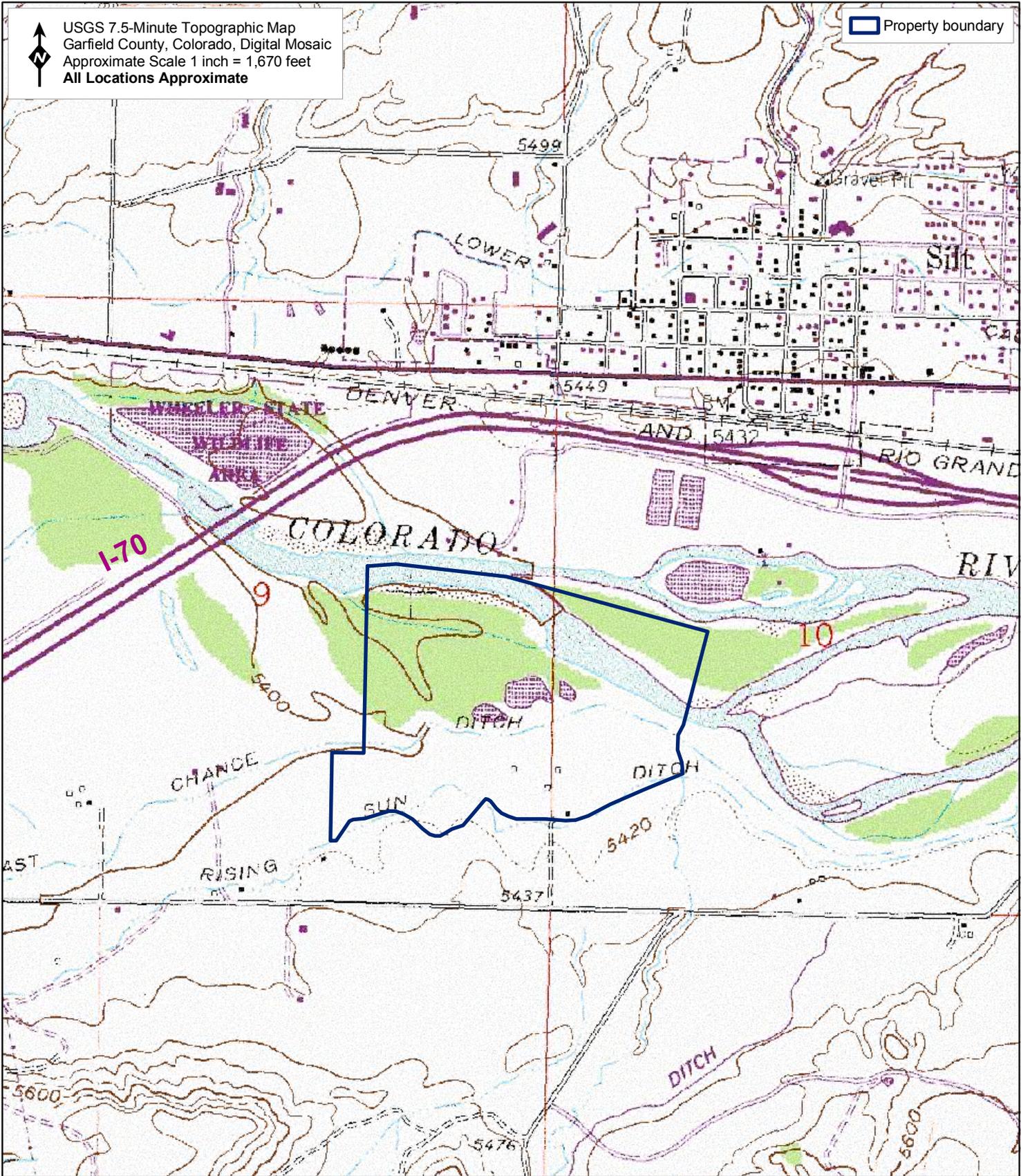
REGIONAL MAP
SILT RIVER PRESERVE CONSERVATION EASEMENT
BASELINE DOCUMENTATION REPORT
 Garfield County, Colorado

FIGURE
1



USGS 7.5-Minute Topographic Map
 Garfield County, Colorado, Digital Mosaic
 Approximate Scale 1 inch = 1,670 feet
 All Locations Approximate

 Property boundary



DATE: October 2010
 DRAWN: D. Reeder

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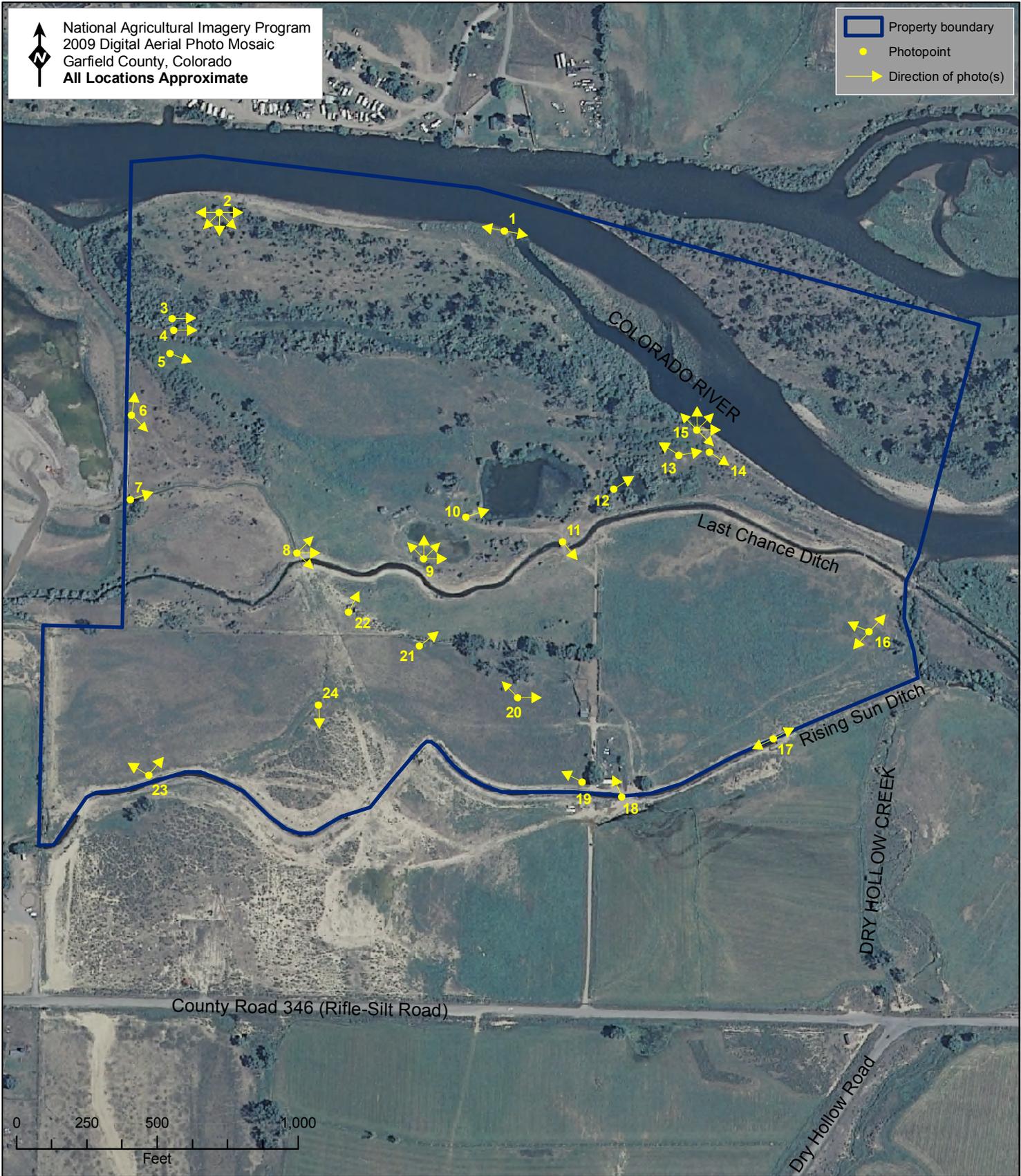
TOPOGRAPHIC MAP
 SILT RIVER PRESERVE CONSERVATION EASEMENT
 BASELINE DOCUMENTATION REPORT
 Garfield County, Colorado

FIGURE
2



National Agricultural Imagery Program
 2009 Digital Aerial Photo Mosaic
 Garfield County, Colorado
 All Locations Approximate

-  Property boundary
-  Photopoint
-  Direction of photo(s)



DATE: October 2010
 DRAWN: D. Reeder



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**AERIAL PHOTOGRAPH
 & PHOTOPPOINT LOCATIONS**

**SILT RIVER PRESERVE CONSERVATION EASEMENT
 BASELINE DOCUMENTATION REPORT
 Garfield County, Colorado**

**FIGURE
 3**

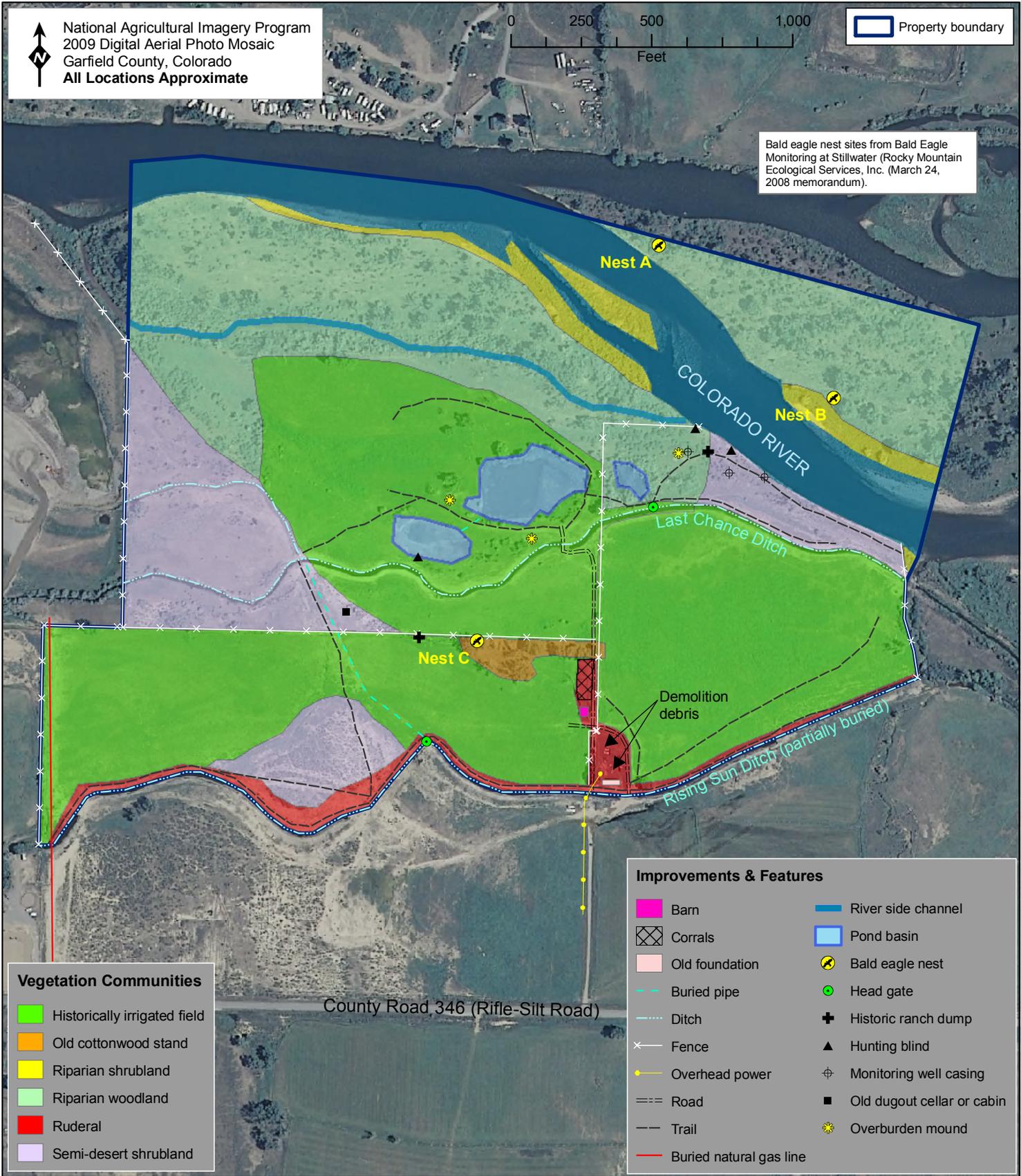


National Agricultural Imagery Program
 2009 Digital Aerial Photo Mosaic
 Garfield County, Colorado
 All Locations Approximate



Property boundary

Bald eagle nest sites from Bald Eagle Monitoring at Stillwater (Rocky Mountain Ecological Services, Inc. (March 24, 2008 memorandum).



Vegetation Communities

- Historically irrigated field
- Old cottonwood stand
- Riparian shrubland
- Riparian woodland
- Ruderal
- Semi-desert shrubland

Improvements & Features

Barn	River side channel
Corrals	Pond basin
Old foundation	Bald eagle nest
Buried pipe	Head gate
Ditch	Historic ranch dump
Fence	Hunting blind
Overhead power	Monitoring well casing
Road	Old dugout cellar or cabin
Trail	Overburden mound
Buried natural gas line	

County Road 346 (Rifle-Silt Road)

DATE: October 2010
 DRAWN: D. Reeder

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**IMPROVEMENTS, VEGETATION,
 & BALD EAGLE NEST LOCATIONS**
 SILT RIVER PRESERVE CONSERVATION EASEMENT
 BASELINE DOCUMENTION REPORT
 Garfield County, Colorado

**FIGURE
 4**

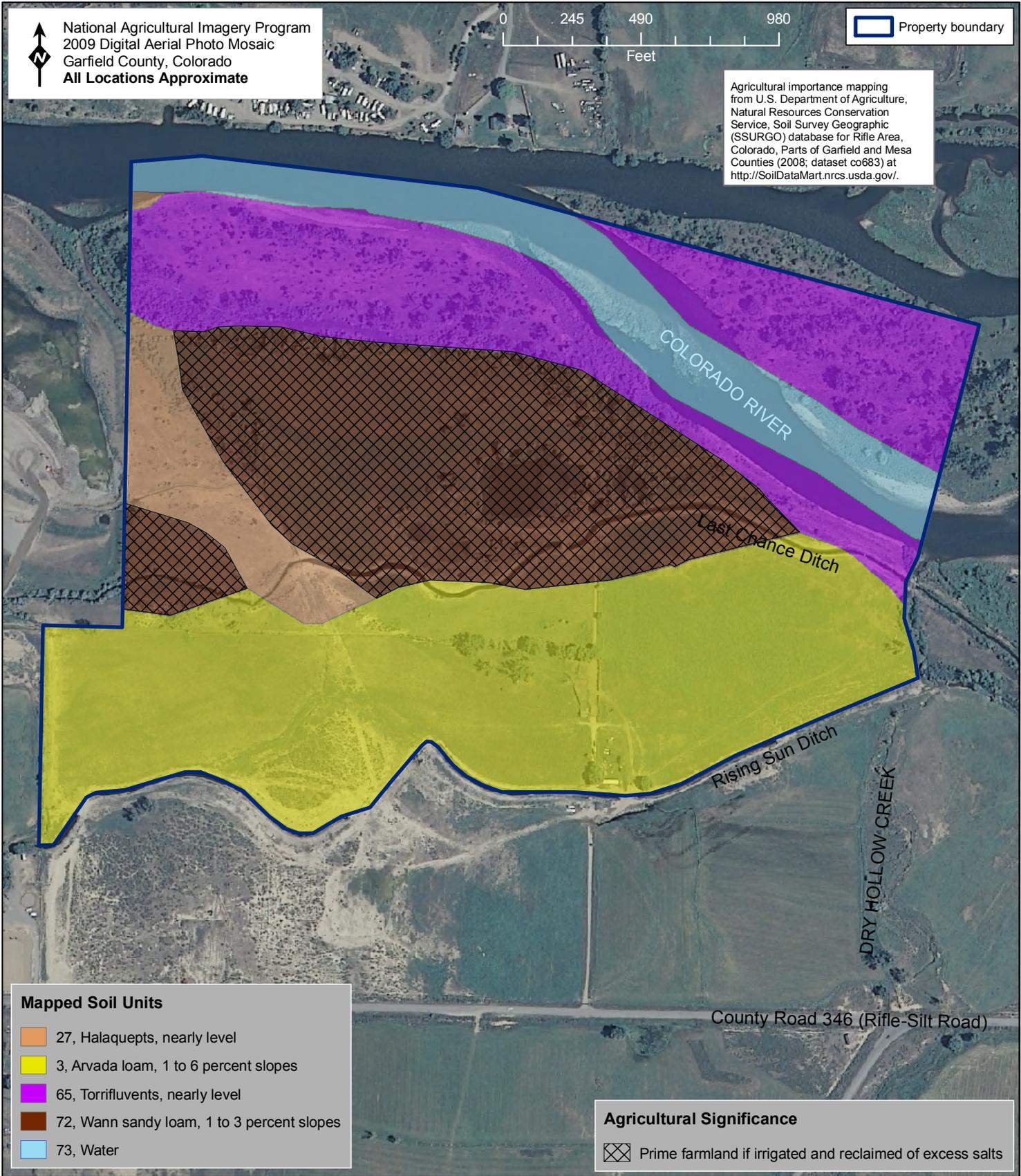


National Agricultural Imagery Program
 2009 Digital Aerial Photo Mosaic
 Garfield County, Colorado
 All Locations Approximate



Property boundary

Agricultural importance mapping from U.S. Department of Agriculture, Natural Resources Conservation Service, Soil Survey Geographic (SSURGO) database for Rifle Area, Colorado, Parts of Garfield and Mesa Counties (2008; dataset co683) at <http://SoilDataMart.nrcs.usda.gov/>.



- Mapped Soil Units**
- 27, Halaquepts, nearly level
 - 3, Arvada loam, 1 to 6 percent slopes
 - 65, Torrifuvents, nearly level
 - 72, Wann sandy loam, 1 to 3 percent slopes
 - 73, Water

- Agricultural Significance**
- Prime farmland if irrigated and reclaimed of excess salts

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SOILS MAP

**SILT RIVER PRESERVE CONSERVATION EASEMENT
 BASELINE DOCUMENTION REPORT
 Garfield County, Colorado**

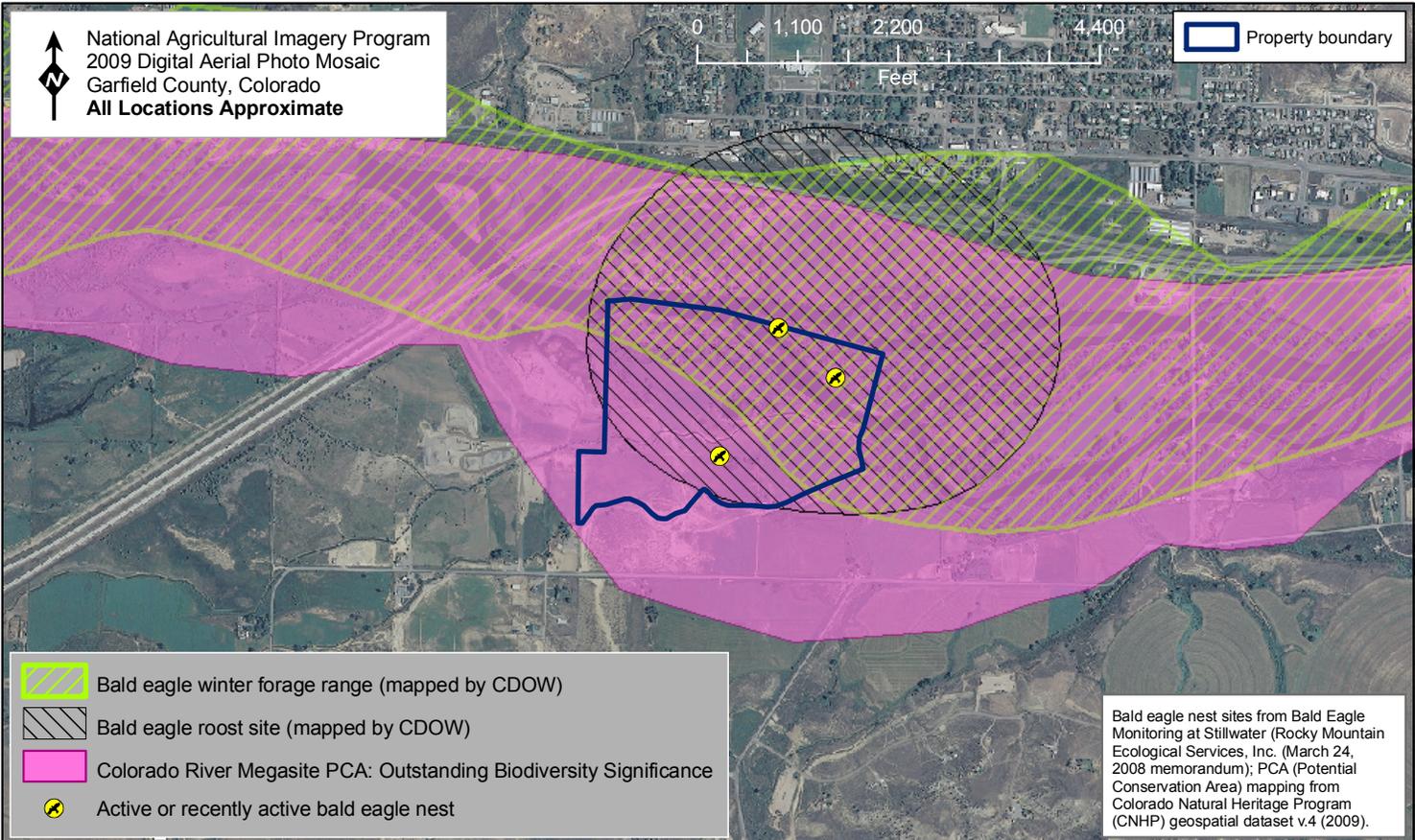
**FIGURE
 5**



National Agricultural Imagery Program
2009 Digital Aerial Photo Mosaic
Garfield County, Colorado
All Locations Approximate

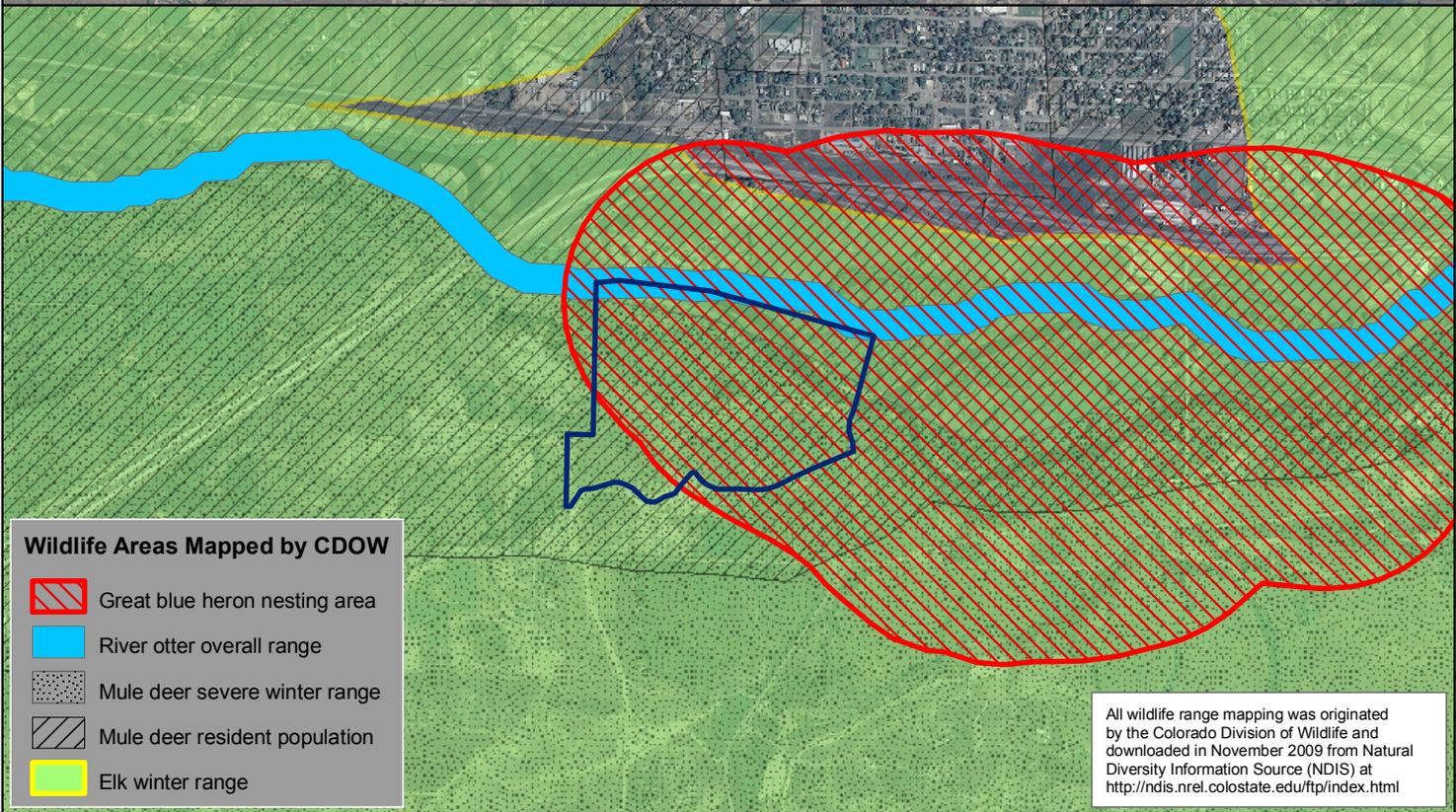


Property boundary



- Bald eagle winter forage range (mapped by CDOW)
- Bald eagle roost site (mapped by CDOW)
- Colorado River Megasite PCA: Outstanding Biodiversity Significance
- Active or recently active bald eagle nest

Bald eagle nest sites from Bald Eagle Monitoring at Stillwater (Rocky Mountain Ecological Services, Inc. (March 24, 2008 memorandum); PCA (Potential Conservation Area) mapping from Colorado Natural Heritage Program (CNHP) geospatial dataset v.4 (2009).



Wildlife Areas Mapped by CDOW

- Great blue heron nesting area
- River otter overall range
- Mule deer severe winter range
- Mule deer resident population
- Elk winter range

All wildlife range mapping was originated by the Colorado Division of Wildlife and downloaded in November 2009 from Natural Diversity Information Source (NDIS) at <http://ndis.nrel.colostate.edu/ftp/index.html>

DATE: October 2010
DRAWN: D. Reeder



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WILDLIFE RANGE MAPS
SILT RIVER PRESERVE CONSERVATION EASEMENT
BASELINE DOCUMENTION REPORT
Garfield County, Colorado

FIGURE
6

DOCUMENTARY PHOTOGRAPHS

(Keyed to Figure 3)



Photopoint 1. Looking east-by-southeast from south bank of Colorado River toward mid-channel island from near tip of small nearshore island (9/30/10).



Photopoint 1. Looking west-by-northwest at riparian shrub community on south river bank downstream of small nearshore island (9/30/10).



Photopoint 2. Panorama looking east through west (left to right) at riparian woodland in northwest part of property (9/30/10).



Photopoint 3. Looking east in exotic riparian woodland north of small river side channel in northwest part of property (9/30/10).



Photopoint 4. Looking east in small river side channel in northwest part of property (9/30/10).



Photopoint 5. Looking east-by-southeast across historically irrigated field in northwest part of property; ground cover is Russian knapweed (9/30/10).



Photopoint 6. Looking north-by-northeast at west boundary fence (10/9/09).



Photopoint 6. Looking southeast from west boundary at semi-desert shrubland (degraded condition) in west part of property (9/30/10).



Photopoint 7. Looking west-by-northwest at Hangs diversion lateral in west part of property (9/30/10).



Photopoint 8. Panorama looking northeast through southeast (left to right) at historically irrigated field, Last Chance Ditch, and Hangs diversion crossing of Last Chance Ditch (9/30/10).



Photopoint 9. Panorama looking northwest through east (left to right) from south bank of west-most pond basin; hunting blind pictured on right (9/30/10).



Photopoint 10. Looking east-by-northeast at largest of three pond basins (9/30/10).



Photopoint 11. Looking southeast from concrete bridge crossing of Last Chance Ditch and ranch road (9/30/10).



Photopoint 12. Looking northeast at east-most pond basin (9/30/10).



Photopoint 13. Looking east-by-northeast from overburden pile near south riverbank at monitoring well, river, and mid-channel island (9/30/10).



Photopoint 13. Looking northwest from overburden pile at native riparian shrub understory (9/30/10).



Photopoint 14. Looking southwest at historic ranch dump area near south riverbank in east part of property (9/30/10).



Photopoint 15. Panorama looking northwest through southeast (left to right) from south riverbank at crude hunting blind (left) and mid-channel island (9/30/10),



Photopoint 16. Looking northeast at ranch road in historically-irrigated east field and riparian corridor of Dry Hollow Creek on east boundary (9/30/10).



Photopoint 16. Looking southwest at ranch road in historically-irrigated east field (9/30/10).



Photopoint 16. Looking northwest at historically-irrigated east field (9/30/10).



Photopoint 17. Looking southwest at Rising Sun Ditch on south property boundary (9/30/10).



Photopoint 17. Looking northeast at buried alignment of Rising Sun Ditch on south property boundary (9/30/10).



Photopoint 18. Looking north-by-northwest at former ranch headquarters area (9/30/10).



Photopoint 19. Looking northwest at historically-irrigated southwest field (9/30/10).



Photopoint 20. Looking east at barn and corrals (9/30/10).



Photopoint 20. Looking northwest at old cottonwood stand with bald eagle nest ("Nest C") and picnic table (9/30/10).



Photopoint 21. Looking northeast at historic ranch dump on fence line west of old cottonwood stand (9/30/10).



Photopoint 22. Looking north-by-northeast at old dugout structure in west part of property (9/30/10).



Photopoint 23. Looking northwest at southwest historically-irrigated field from Rising Sun Ditch (9/30/10).



Photopoint 23. Looking northeast at southwest historically-irrigated field from Rising Sun Ditch (9/30/10).



Photopoint 24. Looking south at semi-desert (greasewood) shrubland in southwest part of property (9/30/10).

ATTACHMENT A

Coordinates for Photopoints & Selected Property Features

**Silt River Preserve Conservation Easement
Coordinates for Photopoints and Selected Property Features**

Date of Field Visit: September 30, 2010
Datum: NAD83 / UTM Zone 13N

Waypoint	Description	UTM Easting	UTM Northing	Elevation (ft)
1	Photopoint 1	271078	4380278	5376
3	Photopoint 2	270770	4380298	5384
7	Photopoint 3	270719	4380183	5387
8	Photopoint 4	270721	4380171	5376
9	Photopoint 5	270717	4380146	5390
11	Photopoint 6	270675	4380079	5384
12	Photopoint 7	270674	4379988	5394
14	Photopoint 8	270854	4379930	5388
15	Photopoint 9; hunting blind	270991	4379923	5392
18	Photopoint 10	271037	4379969	5398
19	Photopoint 11	271141	4379942	5387
22	Photopoint 12	271196	4379999	5390
23	Headgate on Last Chance Ditch (fills ponds?)	271239	4379983	5386
25	Photopoint 13	271266	4380035	5394
27	Photopoint 14	271300	4380039	5387
29	Hunting blind	271323	4380039	5393
30	Photopoint 15	271286	4380063	5401
31	Monitoring well casing; no cover	271321	4380017	5399
33	Monitoring well casing	271360	4380013	5397
36	Photopoint 16	271472	4379845	5386
39	Photopoint 17	271368	4379729	5396
40	Photopoint 18	271205	4379666	5395
41	Photopoint 19	271162	4379682	5383
42	SW corner of barn	271153	4379752	5386
43	Photopoint 20	271093	4379773	5391
44	Base of tree with bald eagle nest ("Nest C")	271060	4379804	5398
45	Photopoint 21	270987	4379829	5396
46	Photopoint 22	270910	4379866	5394
48	Scotch thistle patch (10 feet in diameter)	270883	4379849	5398
50	Photopoint 23	270694	4379690	5416
53	Old headgate on old Rising Sun Ditch alignment	270851	4379686	5409
54	Photopoint 24	270877	4379765	5401
55	Rising Sun Ditch daylight from buried segment	270882	4379764	5401