CHAPTER 2

The Refuge Complex

Coyote
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Chapter 2—The Refuge Complex

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An afternoon storm passes over the Baca Refuge and the Sangre de Cristo Mountains. About 60 percent of the refuge's precipitation occurs as rain in July and August.

This chapter explains the management history, purpose, and special values of the refuge complex, as well as the development of the vision and goals for the CCP planning process. The headquarters for the three refuges is located in Alamosa, Colorado. Figures 7, 8, and 9 illustrate the base map and elevation of the three refuges.

As an integral part of the CCP and EIS process, in 2013, we undertook a study of the history of the hydrologic, physical, and biological processes affecting the three refuges (Heitmeyer et al. 2013a,b,c). During the study, called the hydrogeomorphic methodology evaluation (HGM) (Heitmeyer et al. 2013a,b,c), we interpreted the historical and current information about 1) geology and geomorphology, 2) soils, 3) topography and elevation, 4) hydrology, 5) aerial photographs and maps, 6) land cover and plant and animal communities, and 7) physical anthropogenic features (relating to the influence of human beings on nature) of the ecosystems of the refuge complex. The HGM study provided us with a better understanding of the hydrological history of the refuge complex, in addition to the physical and biological formations, features, and ecological processes of the three refuges and the surrounding region.

Every refuge in the Refuge System has a purpose for which it was established. This purpose is the foundation on which all refuge programs are built, from biology and public use to maintenance and facilities. Refuge purposes are found in the legislative acts or administrative orders that authorize either the transfer or acquisition of land for a refuge. An individual refuge may contain lands that have been acquired under a variety of transfer and acquisition authorities, giving a refuge more than one purpose. Table 2 lists the significant land authorizations for the refuge complex. The goals, strategies, and objectives in the final CCP and EIS are intended to support the purposes for which the refuges were established (refer to chapter 3, section 3.8).

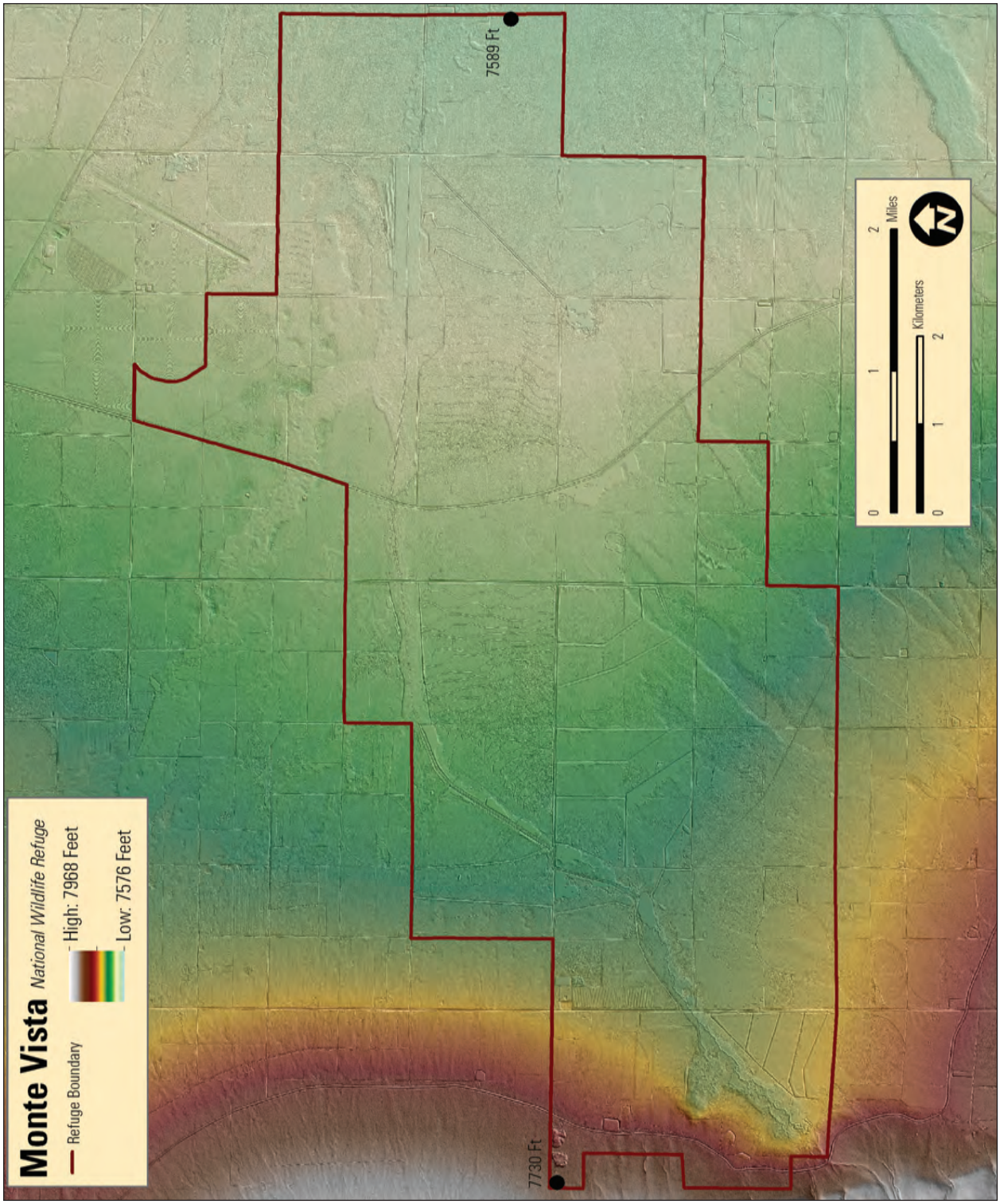

Figure 7. Base map and elevation for Monte Vista National Wildlife Refuge, Colorado.

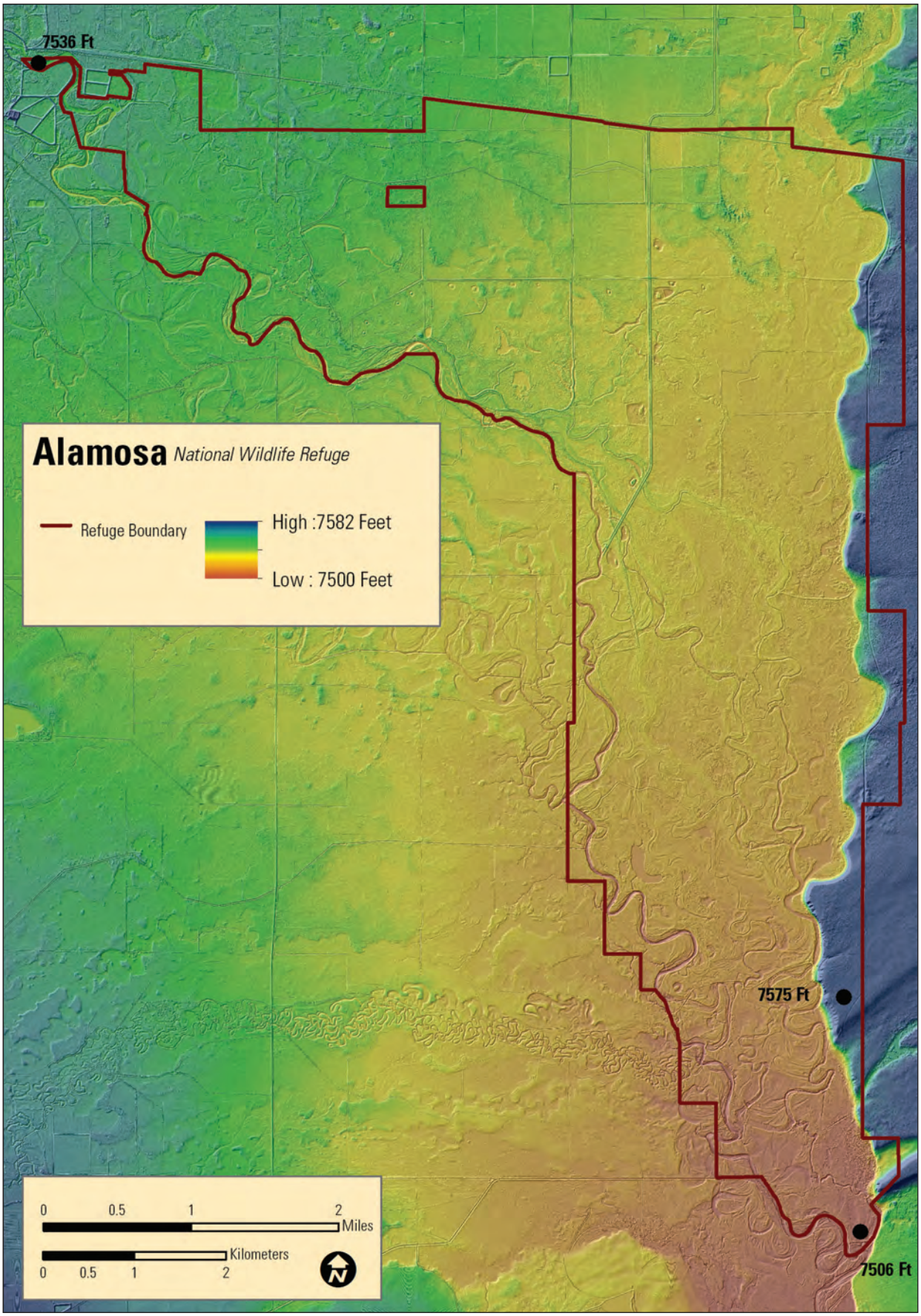

Figure 8. Base map and elevation for Alamosa National Wildlife Refuge, Colorado.

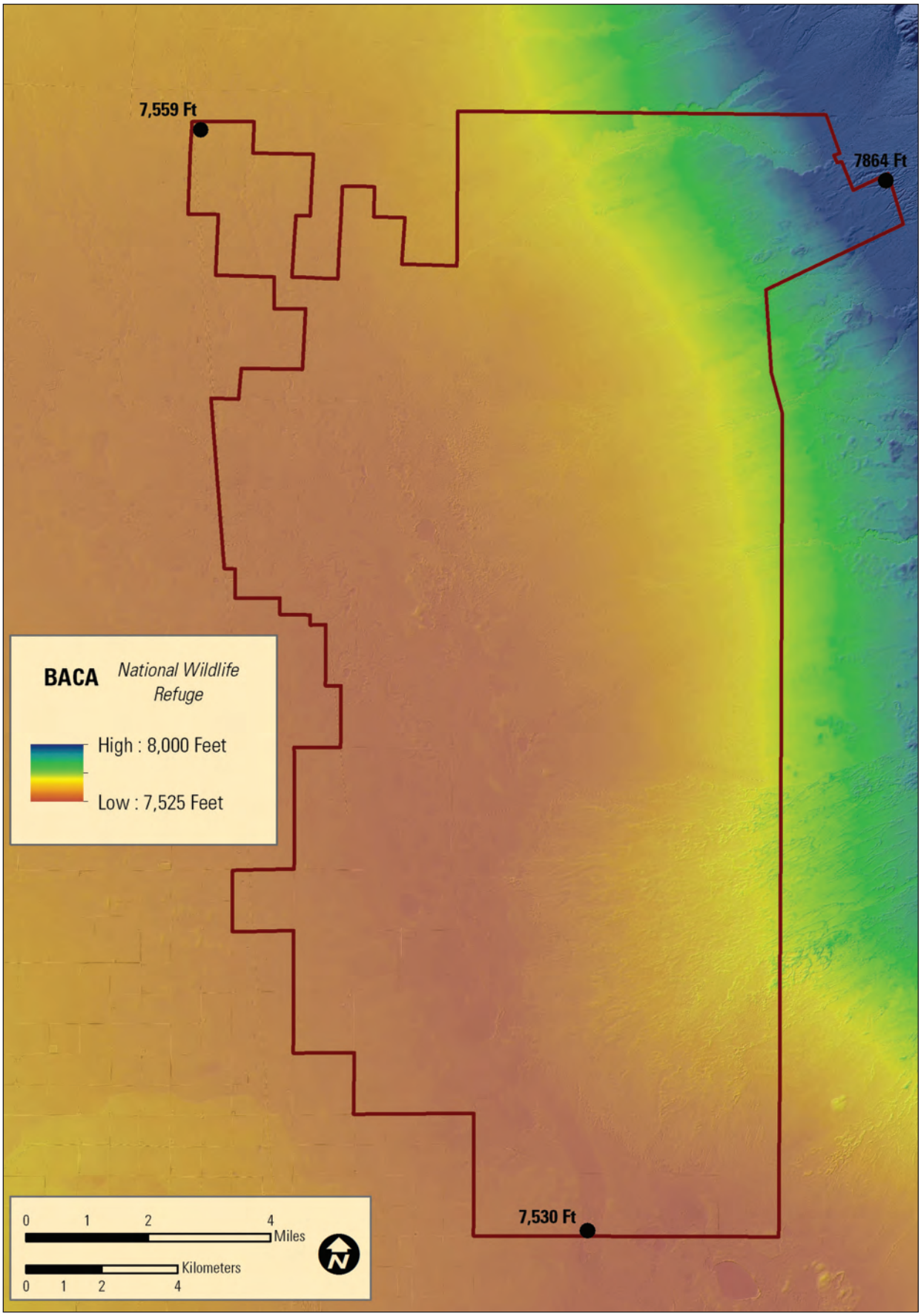

Figure 9. Base map and elevation for Baca National Wildlife Refuge, Colorado.

Table 2. History of significant land authorizations for the San Luis Valley National Wildlife Refuge Complex, Colorado.

Date	*Authority*	*Number*	*Subject*
May 26, 1952	Executive Order	10355	Delegated to the Secretary of Interior the authority of the President to withdraw or reserve lands of the United States for public purposes; supersedes EO 9337 (1943) and amended by EO 12608 (1987); pursuant to Public Law 248, 82nd Congress
Monte Vista National Wildlife Refuge			
June 10, 1952	Migratory Bird Conservation Act	45 Stat. 1222	Date approved by Migratory Bird Conservation Commission according to procedure; 3 tracts totaling 2,247 acres (first tract acquired 09/03/1952)
September 22, 1960	Public Land Order	2204	Withdrawal of 800 acres pursuant to EO 10355; 60FR9141
Alamosa National Wildlife Refuge			
June 27, 1962	Migratory Bird Conservation Act		Date approved by Migratory Bird Conservation Commission; same meeting enlarged Monte Vista National Wildlife Refuge (see above)
December 1, 1965	Public Land Order	3899	Withdrawal of 86 acres for Alamosa Refuge
May 18, 1965	Migratory Bird Conservation Act		Enlargement of refuge to 10,291 acres by Migratory Bird Conservation Commission
October 20, 1972	Public Law 92-514		Bureau of Reclamation Project Authorization Act of 1972 (Closed Basin Project); allowed for furnishing water for operation of Alamosa Refuge
Baca National Wildlife Refuge			
November 22, 2000	Public Law 106-530	114 Stat. 2527	Provision to establish the Great Sand Dunes National Park and Preserve and Baca National Wildlife Refuge (cited as Great Sand Dunes National Park and Preserve Act of 2000)
April 8, 2003	Federal Register	68 FR11579	First acquisition of 3,315-acre White Ranch property transferred from BOR as part of settlement agreement
May 2005			Conceptual management plan for Baca National Wildlife Refuge
August 10, 2005	Public Land Order	7641	Transferred administrative jurisdiction of about 1,179 acres, including surface and mineral estate and 3,991 acres of reserved Federal mineral estate
March 11, 2009	Public Law 111-8		Omnibus Appropriations Act amended Great Sand Dunes National Park and Preserve Act of 2000 to provide refuge purposes for Baca National Wildlife Refuge
March 20, 2013	NEPA document		Final interim elk management plan and environmental assessment for San Luis Valley National Wildlife Refuge Complex
Sangre de Cristo Conservation Area			
August 1, 2012	NEPA document		Finding of no significant impact signed by the Director of the Fish and Wildlife Service
September 14, 2012	Federal Register	77FR 67830	Establishment of the Sangre de Cristo Conservation Area through donation

2.1 Establishment, Acquisition, and Management History

Monte Vista and Alamosa National Wildlife Refuges are discussed first, followed by Baca National Wildlife Refuge and the Sangre de Cristo Conservation Area.

Monte Vista and Alamosa National Wildlife Refuges

Monte Vista and Alamosa Refuges were set aside under the same authority and consequently have identical purposes. They were established under the authority of the 1929 Migratory Bird Conservation Act (45 Stat. 1222; 16 U.S.C. §715d) "…for use as inviolate sanctuaries, or for any other management purposes, for migratory birds."

Monte Vista National Wildlife Refuge

The Monte Vista National Wildlife Refuge (Monte Vista Refuge) was established in 1952 as the first national wildlife refuge in Colorado, although plans to purchase this area were considered as far back as 1941 (FWS 1994). Although the refuge was originally going to be named the Spring Creek National Wildlife Refuge, officials felt that Spring Creek was too common a name, so the refuge was named after the nearby town of Monte Vista. On November 1, 1949, the proposed refuge was considered and approved by the Colorado Game and Fish Commission (MBCC 1952). Due to a delay in reaching a price agreement for the purchase of tracts for the proposed refuge, it was not approved by the Migratory Bird Conservation Commission until June 10, 1952 (MBCC 1952). The funding for three tracts was obligated in fiscal year 1952, with the first one obligated on September 3, 1952 (FWS 1994). The Bureau of Land Management withdrew 800 acres administered by the agency on September 19, 1960 (Public Land Order 2204 and 25 FR9141) from all forms of appropriation under public land laws, including mineral laws (Title 30, U.S.C., and chapter 2). In 1962, the Migratory Bird Conservation Commission authorized additional acreage to bring the total to 12,402 acres. Today, the acreage of Monte Vista Refuge is about 14,834 acres, of which 13,951 acres have been purchased by the Service (FWS 2013a) (figure 7).

Alamosa National Wildlife Refuge

The Migratory Bird Conservation Commission approved the establishment of Alamosa Refuge on June 27, 1962 (MBCC1962). It was officially established on July 25, 1963, with the signing of the deed for the first parcel. The Colorado Game, Fish and Parks Commission approved Alamosa Refuge on May 4, 1962. On December 1, 1965, about 86 acres administered by BLM were withdrawn from the public domain through Public Land Order 3899 (30FR15098). In 1965, the approved acreage was enlarged to about 10,291 acres (FWS 1969). The acquisition of several other parcels, such as the former Lillpop property, brought Alamosa Refuge to its current area of about 12,026 acres (FWS 2013a). Of this, 816 acres were acquired by another Federal agency, 10,905 acres were purchased by the Service, and 219 acres were donated (FWS 2013a) (figure 8).

Refuge Management History for Monte Vista and Alamosa National Wildlife Refuges

We completed a CCP for Monte Vista and Alamosa Refuges in 2003 that identified habitat and public use goals (FWS 2003). Since that time, we have sought to implement these goals, recognizing the water availability and quality constraints and the need for a different approach to designing and implementing future restoration and management efforts. This final CCP and EIS builds on the thinking from the 2003 CCP.

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A wetland area on Alamosa Refuge in winter.

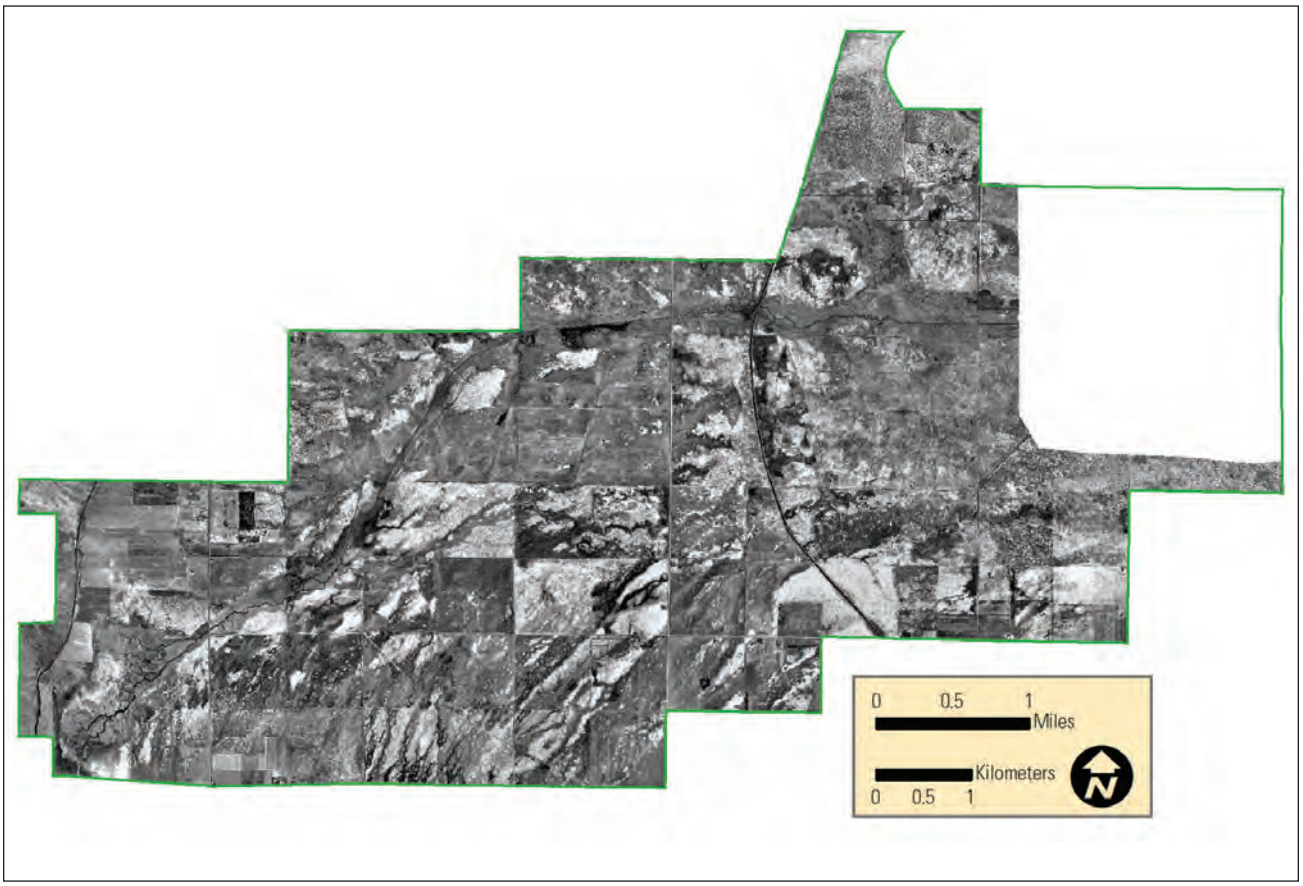


Figure 10. Aerial photograph of Monte Vista National Wildlife Refuge, Colorado, in 1941.

For over 100 years, the San Luis Valley has been irrigated to produce hay, small grains (wheat and barley), and vegetables (potatoes, peas, and lettuce). About 30 percent of the San Luis Valley is currently irrigated with surface water from the Rio Grande, Conejos River, and numerous smaller drainages, as well as pumped well water. The construction of over 2,000 miles of ditches and the pumping of ground water for irrigation has likely diminished the quality and quantity of many naturally occurring wetland areas while establishing new artificial wetlands. The wetlands originally associated with the creek and river systems in the San Luis Valley have been diminished by irrigation diversions by agricultural and wildlife managers (FWS 2003). However, irrigation practices have also resulted in the creation of thousands of acres of wet meadow habitats. These shallowly flooded, native plant meadows are usually hayed and grazed every year but still provide foraging habitat and some nesting habitat for migratory birds.

Some of the information about the landscape of the refuge complex prior to Euro-American settlement was taken from descriptions provided by the first refuge manager (P. Bryant); settlers from the early 1900s (communication obtained from refuge files); the original refuge master plan (FWS 1962); the maps produced by the 1874, 1875, and 1877 Wheeler expeditions; and the Rio Grande County Soil Survey.

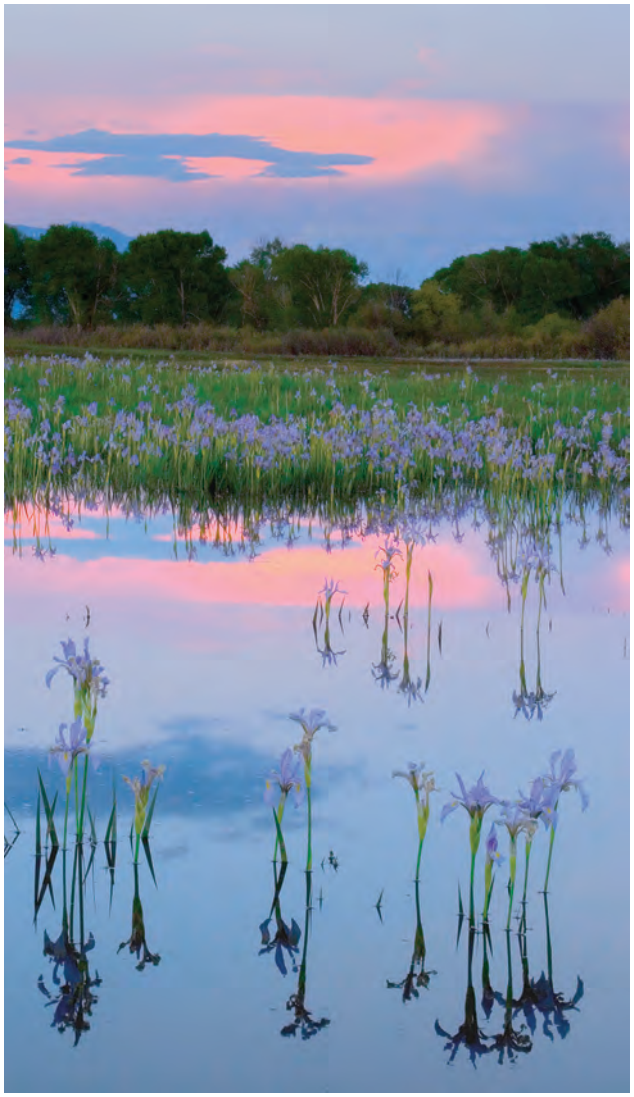
The area that became Monte Vista Refuge (figure 10) was largely devoid of palustrine emergent wetlands (wetlands permanently or semipermanently flooded). When these wetlands did occur, they were in the floodplains of Spring Creek, Rock Creek, and possibly Cat Creek. The natural flows in these creeks have been drastically reduced in the last 50 to 150 years and, in the case of Spring Creek, eliminated completely due to extensive ground water withdrawal. Therefore, the availability of naturally occurring palustrine emergent wetlands on the Monte Vista Refuge has been reduced. Wetlands with saturated soils, perennial wetland vegetation, and intermittent or temporary flooding may have been present, but they were probably dependent on ground water levels that were higher than current levels. The dominant plant community is believed to have been desert salt shrubland primarily consisting of rabbitbrush, greasewood, saltgrass, and alkali sacaton (Rocchio et al. 2000).

Between 1882 and the time the Monte Vista Refuge was established (1952), much of the shrubland

habitat was converted to wet meadows for livestock grazing and the production of hay and croplands via irrigation by private landowners. After the refuge was established, the development of water management facilities to emphasize wildlife habitat production on these irrigated lands began. Low levees were built throughout the refuge to maintain irrigation of the shallow water wetland vegetation and compensate, in part, for the loss of wetland habitat throughout the San Luis Valley. These wetlands completely rely on the delivery of surface water and pumped well water through a series of canals, ditches, and borrow areas.

The Alamosa Refuge lies in the Rio Grande floodplain and is part of what was referred to as the Alamosa Marshes, which was one of the largest wetland complexes in the San Luis Valley, as documented in the 1878 Wheeler expedition maps (U.S. Army Corps of Engineers 1878). By the late 1800s, the area that is now the refuge was managed for cattle grazing, and several irrigation ditches were established to irrigate meadows for the production of livestock forage.

After this land was converted to a national wildlife refuge in 1962, similar irrigation practices were continued. These combined irrigation practices have probably resulted in water being kept longer in some wetlands than was the case historically (see figure 11). Other changes in refuge habitat are the result of modifications to the hydrology of the Rio Grande; for example, it is speculated that flooding on the Alamosa Refuge occurred more frequently and covered most of what is now the refuge. Although natural flood water was no longer supplied by the Rio Grande, relatively few wetland impoundments were artificially created because oxbow and other wetland depressions still existed. Few improvements were made in the original water management infrastructure used by cattle ranchers, and water is still moved through this system to irrigate wetland vegetation throughout the refuge.



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A wetland on the Monte Vista Refuge.

Past Lawsuit

In 1992, Monte Vista Refuge was included in the nationwide compatibility lawsuit *National Audubon Society et al.* v. *Bruce Babbitt et al.* alleging that the Service had violated the National Wildlife Refuge Administration Act, the Refuge Recreation Act, NEPA, and the Administrative Procedures Act by allowing incompatible uses in the Refuge System (refer to chapter 1, section 1.2). Monte Vista Refuge was included because of its heavy reliance on livestock grazing in managing habitat. The Service settled the lawsuit with the plaintiffs out of court in October 1993 (59FR29289). The settlement agreement as it specifically related to Monte Vista Refuge required the Service to take six specific actions which were subsequently met (FWS 2003).

During the 1990s and early 2000s, this lawsuit and the resulting settlement had a substantial influence on the day-to-day operations of both refuges. As part of the settlement agreement, livestock grazing on the refuge complex was curtailed while a 5-year research study was conducted to evaluate various habitat management tools including livestock grazing. Dr. Leigh Fredrickson, a wetland ecologist from the University of Missouri, was selected to conduct the research, which began on both refuges in 1996. In recent years, the refuge complex has initiated a compatible, prescribed livestock grazing program to reduce decadent vegetation and pervasive weeds. Prescribed fire is also used when possible, but with many restrictions in place regarding the use of fire combined with limited staff resources, the refuge complex has not been able to achieve all of its habitat management objectives through prescribed fire alone.

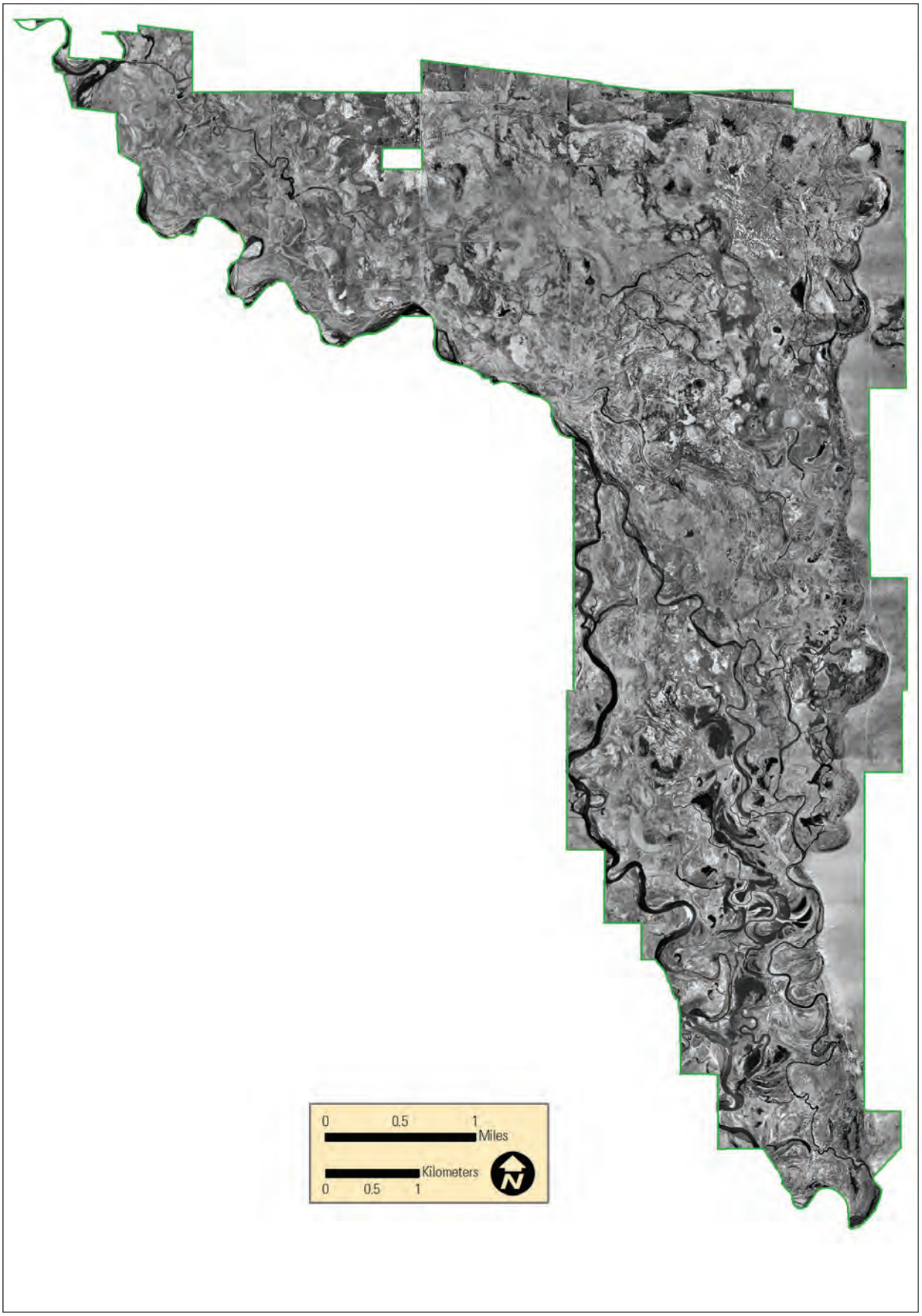

Figure 11. Aerial photograph of Alamosa National Wildlife Refuge, Colorado, in 1941.

Baca National Wildlife Refuge

Before the establishment of the Baca Refuge, the property was a private cattle ranch for more than 100 years (figure 12 shows an aerial photograph of the land in 1941). The Baca Refuge was authorized by Public Law 106-530 on November 22, 2000, as part of the Great Sand Dunes National Park and Preserve Act of 2000. The authorized refuge boundary is about 92,500 acres and is located in Saguache and Alamosa counties. In addition to authorizing the establishment of Baca Refuge, the act recognized the significant diversity of resources within the Great Sand Dunes ecosystem and elevated the former national monument to a national park. Section 6 of the act established Baca National Wildlife Refuge under the authority of the National Wildlife Refuge System Administration Act as amended by the Improvement Act. It also called for the protection of water resources, requiring the Secretary of Interior to "(1) protect and maintain irrigation water rights necessary for the protection of monument, park, preserve, and refuge resources and uses; and (2) minimize to the extent consistent with the protection of national wildlife refuge resources, adverse impacts on other water users." The legislation, which received widespread support, focused not only on protecting the region's hydrology, which the unique sand dunes ecosystem depends on, but also on protecting the exceptional ecological, cultural, and wildlife resources of the area (FWS 2005).

In May 2005, the Service finalized a conceptual management plan (CMP) to serve as a guide for managing Baca Refuge until a comprehensive conservation plan could be developed. Interim goals include 1) evaluating pre-acquisition management strategies in relation to wetland, upland, and riparian habitats; 2) assembling resource information; 3) assembling visitor services information and needs; 4) assembling operational and funding needs; 5) maintaining and evaluating pre-acquisition irrigation strategies; and 6) ensuring law enforcement protection. Since passage of the authorizing legislation for Baca Refuge, there has been little additional funding for managing the refuge complex so staffing has been limited. As discussed in chapter 1, section 1.2, all refuges are closed to public use until they are officially opened (FWS 2005).

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A wet meadow on the Baca Refuge. The 92,000-acre refuge boundary was authorized in 2000, and the first unit was acquired in 2003.

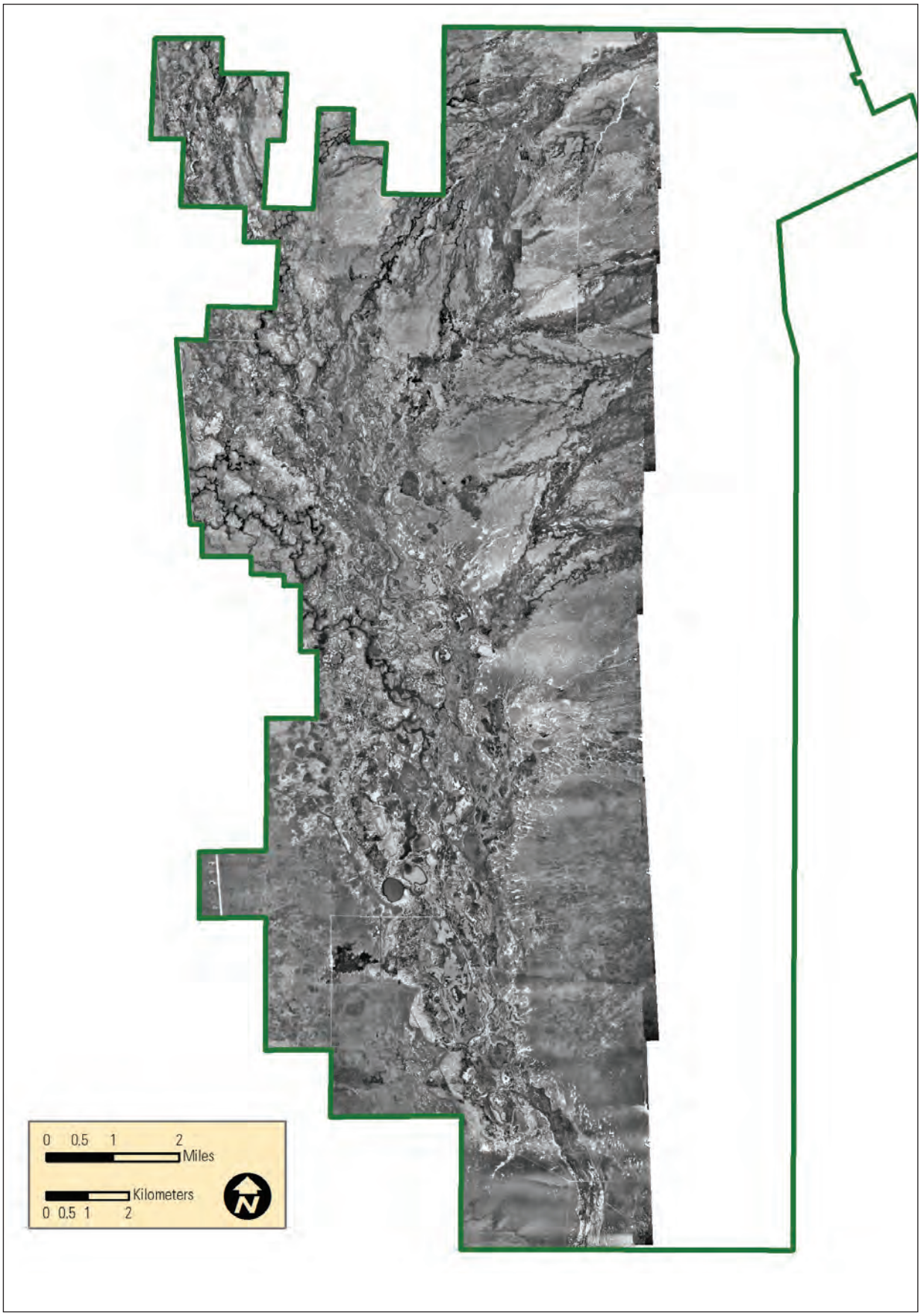


Figure 12. Aerial photograph of Baca National Wildlife Refuge, Colorado, in 1941.

On April 8, 2003, the Service acquired the first unit of the refuge when the 3,315-acre White Ranch property was transferred from the BOR to the Service (68FR11579), thus officially establishing the refuge. BOR purchased the White Ranch as part of a mitigation settlement for wetland losses resulting from the construction and operation of the Closed Basin Project, a division of the San Luis Valley Project (FWS 2005). In August 2005, Public Land Order 7641 transferred administrative jurisdiction of about 1,179 acres, including the surface and mineral estate and 3,991 acres of reserved Federal mineral estate, from BLM to the Service as part of Baca Refuge (70FR46536). Currently the Service has acquired about 85,941 acres. Of this, 28,558 acres are reserved from the public domain, 3,302 acres were acquired from another agency, and 54,081 acres were purchased by the Service (FWS 2013a) (figure 9). The largest remaining inholding within the authorized boundary is owned by The Nature Conservancy (TNC).

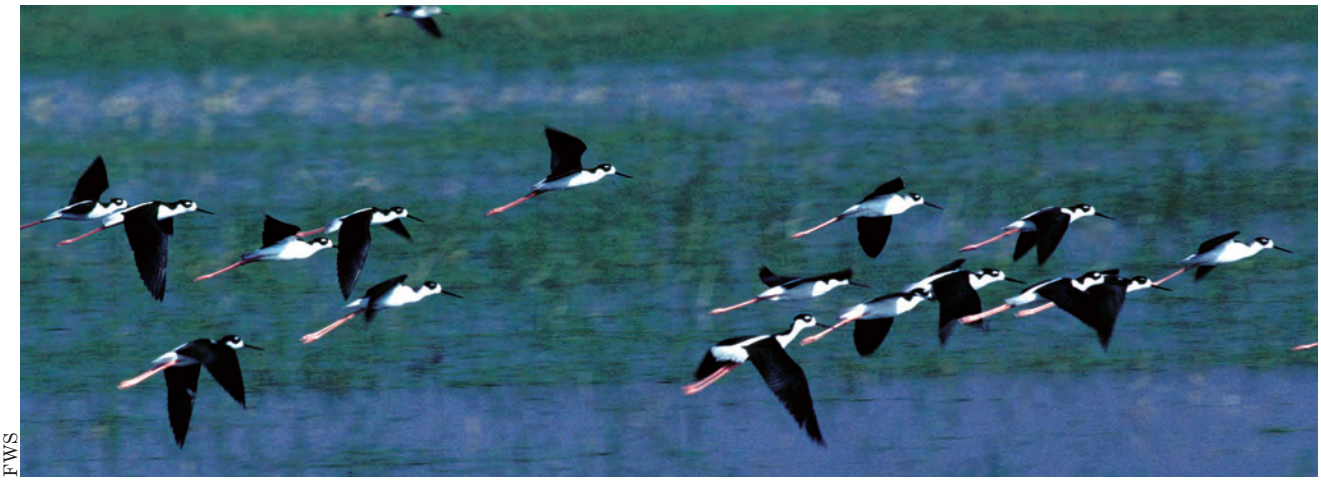
In 2009, Section 6 of the Great Sand Dunes National Park and Preserve Act was amended to explain the purpose and provide for the administration of Baca National Wildlife Refuge (Public Law 111-8; Omnibus Appropriations Act, March 11, 2009). The purpose of the Baca National Wildlife Refuge is to "restore, enhance, and maintain wetland, upland, riparian, and other habitats for native wildlife, plant, and fish species in the San Luis Valley." In administering the Baca National Wildlife Refuge, the Secretary shall, to the maximum extent practicable, "(A) emphasize migratory bird conservation; (B) take into consideration the role of the Refuge in broader landscape conservation efforts; and (C) '[subject to any agreement in existence as of the date of enactment of this paragraph, and to the extent consistent with the purposes of the refuge], use decreed water rights on the refuge in approximately the same manner that the water rights have been used historically.'"

In October 2009, an interagency land exchange between the State of Colorado and the United States was approved, which included lands owned by BLM, NPS, and the Service. Under this agreement, nearly 30,911 acres were added to Baca Refuge, about 25,765 acres of State land were added to the Great Sand Dunes National Park and Preserve, about 379 acres of State land were added to the BLM lands, and about 20,870 acres of BLM land were added to the State Land Board lands (DOI, BLM, and Colorado State Board of Land Commissioners 2009).

In 2013, we approved an interim elk management plan (FWS 2013d) for management of elk on the refuge complex until the CCP and EIS and required hunt management plans can be finalized.

Sangre de Cristo and San Luis Valley Conservation Areas

The Sangre de Cristo Conservation Area was approved on September 15, 2012, as the 558th unit of the Refuge System. It will conserve a network of vital wildlife habitat on up to 250,000 acres of the Sangre de Cristo Mountains within Costilla and Alamosa counties in Colorado and Taos County in New Mexico through voluntary conservation easements. The acquisitions will focus on the protection of sagebrush habitat as well as riparian corridors and associated uplands (FWS 2012b). On September 14, 2012, this new unit was established through an initial donation of 76,700 acres of land (77 FR 67830). Currently, over 167,200 acres have been protected through easements in the conservation area (FWS 2013a).



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Black-necked stilts skim the playa wetlands. A key purpose of all the refuges in the San Luis Valley is the protection of migratory birds.

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A wetland area on Alamosa National Wildlife Refuge. The refuge was established in 1962.

The San Luis Valley Conservation Area will conserve up to 280,000 acres of land within Alamosa, Saguache, Rio Grande, Conejos, Mineral, and Hinsdale counties in Colorado and Rio Arriba and Taos counties in New Mexico. Up to 250,000 acres will be protected through conservation easements and up to 30,000 acres could be protected through fee-title acquisition.

2.2 Special Values

Early in the planning process, the planning team and the public identified many outstanding qualities and values of the refuge complex. Refuge qualities are the characteristics and features of the refuge that make it special, valuable for wildlife and people, and worthy of national wildlife refuge status. These qualities can range from unique biological values to something simple like a quiet place to see a variety of birds and enjoy nature. The following summarizes the many qualities that make the refuge complex unique and valued:

- The refuge complex has large expanses of wet meadows and riparian areas that provide habitat for multiple life cycle needs for a high diversity of wildlife and plant species. Alamosa Refuge has large areas of protected wetlands along the Rio Grande corridor.
- The refuge complex provides habitat for many bird species including greater sandhill cranes, waterfowl, shorebirds, raptors, and passerines such as the endangered southwestern willow flycatcher. The entire Rocky Mountain population of greater sandhill cranes passes through the San Luis Valley during spring and fall migration.
- The refuge complex provides a variety of wetland habitats important for nesting and migration habitat for a diversity of waterbirds including ducks, white-faced ibis, American bitterns, and black-crowned night-herons. There is a high diversity of waterfowl and, locally, the refuges provide important nesting habitat. Wetlands on the refuges provide large areas of habitat for birds in the flyway. Historically, the area has had the capability to support a high density of nesting waterfowl species.
- Baca Refuge includes one of only two aboriginal Rio Grande sucker populations in Colorado.
- The refuge complex has about 1,300 vascular plant species, which makes the refuges some of the most diverse habitats in the West. The slender spiderflower is found on all three refuges.

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A cottonwood-willow riparian area along the Rio Grande in late fall. Ongoing drought and diversions along the river have affected the health of the river's riparian areas.

- The playa wetlands and sand sheets on the Baca Refuge are unique and important habitats. The area includes one of largest continuous sand sheet communities in the world.

- The headwaters of the Rio Grande begin just upstream of the San Luis Valley in the San Juan Mountains above Creede, Colorado. Historically, despite the desert environment, there has been an abundance of surface water in the valley due to mountain snowmelt.

- The San Luis Valley contains a unique confined aquifer system with artesian flows. There is also an unconfined aquifer. This is unusual, as these two types of aquifers are not often seen in proximity to one another. The refuges have surface and ground water rights with varying degrees of seniority and that are primarily designated for irrigation. Monte Vista Refuge has adjudicated water rights specifically for wildlife, which allows more flexibility than water designated exclusively for irrigation. Alamosa Refuge contains the last diversion on the Rio Grande in Colorado.

- There are 12,000 years of history and prehistory. This is a stunning period of time that is well documented. It is unusual to have this combination of abundance, quality, and continuous record of human history. The San Luis Valley has many important cultural resource sites, including the "Cattle Guard site" representing Paleoindian artifacts and the "Spanish Trail" site. There are over 2,000 known sites, which are probably a small fraction of what is really out there. The town of San Luis is the oldest incorporated town in the State.

- Nonprofits such as TNC broke ground for the Service to continue with preservation work and for the community to look at land conservation in a different way. Today, many nonprofit organizations exist in the valley.

- We have good relationships and partnerships with other agencies in addition to many opportunities to work with private partners for restoration actions.

- The Baca Refuge adjoins the Great Sand Dunes National Park and Preserve.

- The Monte Vista Crane Festival has become a significant tourist attraction in the valley and has become one of the largest wildlife viewing festivals in the State.

- There are beautiful landscape views as open lands provide tranquil reconnection to nature. There is not a lot of light pollution or noise pollution in the area, and the starry night sky and natural quiet, particularly around Baca Refuge and the adjacent Great Sand Dunes National Park and Preserve, are highly valued by local residents.

- The refuge complex's Friends group is a strong advocate for the refuge complex. Although the refuges are close to many communities and schools, many residents are not familiar with the refuges or the Refuge System. There is a huge opportunity to engage children and adults alike in discovering the wild places in their backyard.

- The area provides high-quality recreation opportunities. It has some of the best early season waterfowl hunting in the State. There is a potential for high-quality elk hunting.

- Although this is a sparsely populated valley, it is within a few hours of many urban areas. Monte Vista and Alamosa Refuges have auto tour routes and trails for birding and watching wildlife as well as offering high-quality hunting opportunities. There are many new opportunities for improved wildlife-dependent recreation, including opening Baca Refuge for public use.

- The Baca Refuge abuts lands owned by other conservation entities including NPS, TNC, CPW, and the Colorado State Land Board. Together these lands comprise a large and diverse assemblage of protected habitat.

- The refuge complex is part of a unique area with a variety of protected environments and large contiguous tracts of land managed by multiple agencies that work well together and a scientific community with high interest in the unique habitats.

2.3 Vision Statement

We developed a vision for the refuge complex at the beginning of the planning process. The vision describes the focus of refuge complex management and portrays a picture of the refuge complex in 15 years.

The San Luis Valley National Wildlife Refuge Complex, set in a high expansive desert valley, is cradled between the snow-capped peaks of the San Juan and Sangre de Cristo Ranges. Mountain snowmelt feeds the Rio Grande, numerous streams, and a dynamic ground water system creating a diverse mix of playas, wet meadows, and willow and cottonwood riparian corridors that are in stark contrast with the surrounding arid landscape. As reflected by 12,000 years of human history in the valley, the refuge complex attracts many people. Visitors experience the ancient song of the sandhill crane, witness evening flights of thousands of waterfowl, and listen to bugling elk. Through ever changing conditions like climate change, the refuges support and foster a collaborative spirit between their neighbors and partners to conserve the valley's treasured resources.

2.4 Goals

We developed seven goals for the refuge complex based on the Improvement Act, the purposes of the refuges, and information gathered during planning. These goals focus work toward achieving the vision and purposes of the refuges and outline approaches for managing refuge resources.

Habitat and Wildlife Goal

Conserve, restore, and enhance the ecological diversity and function of the San Luis Valley ecosystem to support healthy populations of native fish and wildlife, with an emphasis on migratory birds.

Water Resources Goal

As climate patterns change, we will protect, acquire, and manage surface and ground water resources to maintain and support management objectives.

Visitor Services Goal

Provide safe, accessible, and quality wildlife-dependent recreation and perform outreach to visitors and local communities to nurture an appreciation and understanding of the unique natural and cultural resources of the refuge complex and the San Luis Valley.

Partnerships and Refuge Complex Operations Goal

Secure and effectively use funding, staffing, and partnerships for the benefit of all resources in support of the refuge complex purposes and the mission of the Refuge System.

Actively pursue and continue to foster partnerships with other agencies, organizations, the water community, and private landowners to conserve, manage, and provide for the long-term sustainability of working landscapes within the San Luis Valley ecosystem.

Cultural Resources Goal

Protect significant cultural resources within the San Luis Valley National Wildlife Refuge Complex.

Research, Science, and Wilderness Review Goal

Use sound science, applied research, monitoring, and evaluation to advance the understanding of natural resource functions, changing climate conditions, and wilderness values in the management of the habitats within the San Luis Valley ecosystem.

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The Baca ranch headquarters is part of an eligible historical district on the Baca Refuge.