Chapter 4 — Environmental Consequences

For alternatives A and B described in section 2, the following narrative documents the analysis of environmental effects expected to occur from implementing each of the alternatives.

Effects on the Physical Environment

The estimated effects of each alternative on mineral, soil, and water resources, and on the Service's ability to address climate change, are described below.

Alternative A (No Action)

Development and associated habitat loss could continue on lands outside of existing protected areas; in riparian areas, development may cause erosion and sedimentation that ultimately could adversely affect aquatic species like the Rio Grande cutthroat trout. Additionally, surface water rights will continue to be subject to sale, altering hydrology that currently benefits many wildlife species. Further land protection would be limited to the efforts of other agencies and organizations. The Service's role would be limited to programs such as Partners for Fish and Wildlife; no Land and Water Conservation Fund monies would be expended in the project area by the Service for further land protection outside of the immediate vicinity of existing refuge units. Important water-dependent wildlife habitat would remain vulnerable to reallocation of surface water off site or changes to how existing water rights are exercised.

Alternative B (Proposed Action)

The establishment of the SLVCA will primarily maintain current land use practices, and is therefore unlikely to substantially affect soil resources in the valley. There may be some reduction in erosion and sedimentation due to prevention of subdivision and development. The SLVCA wouldn't supersede existing mineral rights, and the program is therefore unlikely to affect mineral resources. The Service is unlikely to pursue acquisition of interests in lands with outstanding surface mineral leases or rights because the associated destruction of surface vegetation and need for reclamation would diminish the wildlife value of such land. Habitat that depends on continuation of current water use practices would be protected from degradation caused by the sale of surface water rights or substantial changes to water use. There could be a net benefit to aquifer recharge if any of water rights acquired by the Service through this plan were adjudicated for instream flow (M. Estep, personal communication to M. Dixon, March 2012).

Effects on the Biological Environment

This section describes the likely effects of the project on species and their habitats.

Alternative A (No Action)

The Service's Partners for Fish and Wildlife program would remain active within the project area, where it works cooperatively with landowners to voluntarily improve habitat on private land. Habitats would continue to be protected due to the ongoing efforts of agency partners and nongovernmental organizations, primarily through easements funded by private donations, the NRCS Wetland Reserve Program (WRP), and North American Wetlands Conservation Act (NAWCA) grants. These efforts are laudable and have conserved valuable habitat, particularly wetlands. However, they tend to under-represent non-wetland riparian forest and uplands such as sagebrush steppe, both of which are particularly important for federally listed species and candidates for listing in the project area. Further, the demand for both NAWCA and WRP funds is much higher than historically available funding. Also, unlike a Land and Water Conservation Fund easement program, NAWCA requires matching funds, which may or may not be available. Therefore, there would likely continue to be erosion of habitat quality and a decrease in ecological resiliency due to land cover changes and associated fragmentation, introduction of exotic species, and construction of man-made structures that are incompatible with habitat use by some wildlife.

Outright habitat loss due to conversion of land to other uses is perhaps the most obvious threat to wildlife in most areas. In the SLVCA, this can take the form of conversion from natural to agricultural land

cover, changes to irrigation regimes, and development of land for commercial or residential use. This habitat destruction, along with construction of associated infrastructure such as water diversion structures, can result in the fragmentation of habitat. The effects of fragmentation on wildlife have been intensively studied in ecology and wildlife biology (for a conceptual review, see Collinge 2009).

Both the loss and fragmentation of riparian habitat are real concerns in the SLVCA. Riparian areas are necessary for the maintenance of medium and large mammal diversity in agricultural landscapes (e.g. Hilty and Merenlender 2004), and for both breeding and stopover habitat for neotropical migratory songbirds in human-altered landscapes (Pennington, Hansel, and Blair 2008). Valley floor riparian areas provide nest habitat for the threatened southwestern willow flycatcher and the candidate yellow-billed cuckoo, and the slow but continued loss of this habitat under alternative A would have an impact not just on regional species diversity, but also on the potential persistence of imperiled species.

Besides providing habitat in and of themselves, riparian areas also serve as corridors for animal movement. Facilitating animal movement across complex mosaic landscapes is critical in a time of global environmental change. One of the greatest ecological threats of climate change is that species and varieties that are adapted to specific environmental conditions may die out because they are isolated from habitats that may have those conditions in the future (Loss et al. 2011). Under alternative A, there is continued risk of development in previously contiguous riparian corridors, as well as in unprotected areas along the Sangre de Cristo Mountains in Costilla County, Colorado, and northern Taos County, New Mexico, which could endanger the future existence of populations and species under future climate conditions. The latter area is also habitat for the Canada lynx which is federally listed as threatened; development of that region, which could occur under alternative A, may isolate lynx in the southern Sangre de Cristos from those in the rest of the Rocky Mountains.

Alternative B (Proposed Action)

Establishment of the SLVCA would enable the Service to permanently protect up to 530,000 acres of vital wildlife habitat, in addition to that already held in Alamosa, Baca, and Monte Vista NWRs. While there are several conservation initiatives by other government agencies and private land trusts underway in the project area, the SLVCA specifically targets habitat that is necessary for migration and/or breeding of Federal trust species, namely migratory birds and a handful of federally listed and candidate species. The conservation area should complement and enhance the ecological benefits of existing public and private conservation lands and habitat improvement programs by capturing habitats not included in these programs and by helping to link together the existing protected area.

The use of easements and limited fee-title to protect and buffer riparian habitats under alternative B would benefit both obligate riparian species like the southwestern willow flycatcher, bats like the Yuma myotis, and species that simply use the riparian areas as corridors to move from point to point, like bobcat and black bear. Of particular interest are the willow and cottonwood riparian forests along the Rio Grande, Conejos, and San Antonio Rivers, which are used by dozens of species of migratory songbirds. In the rivers and tributaries themselves, the use of easements could maintain conditions suitable for imperiled fish such as the Rio Grande cutthroat trout, Rio Grande chub, and Rio Grande sucker by preventing development of houses and roads, which can cause siltation and changes in water chemistry and temperature. Easements would also prevent conversion of shrub steppe near riparian areas to cropland, which can lead to increases in sediment, nitrogen loads, and temperatures in associated streams.

The presence of wetlands in the midst of a high-mountain desert provides an irreplaceable resource to regional, and in some cases continental, populations of breeding and migrating shorebirds, wading birds, and waterfowl. Water costs in the San Luis Valley are increasing due to restrictions on the use of ground water, and water is likely to become an increasingly complex issue due to projected changes in runoff timing and uncertainty regarding future precipitation trends (Ray et al. 2008). This may encourage landowners who have quality wetlands to change how they exercise their water rights, to the detriment of species that use those wetlands. The easements may include language restricting changes to existing beneficial uses of water, meaning that willing sellers would agree to maintain practices that are of value to wildlife. For example, water could not be sold off of the property where water rights were being exercised when the easement was purchased unless the new use was deemed more beneficial to wildlife. This could be especially important for the sandhill crane, since the vast majority of its Rocky Mountain population uses the marshes and wet meadows of the San Luis Valley as a stopover during spring and fall migrations (Drewien and Bizeau 1974). Many of these wetlands would not exist at present without current land use practices.

Sagebrush shrubland and steppe are not widespread in the project area, but are found in a ring above the desert scrubland and below the pinyon-juniper woodland in the far northern, southeast, and southwest portions of the valley. Much of this land is managed by the BLM. The largest areas of this vegetation in

the region are in Costilla County, Colorado, and these areas are almost entirely privately owned and not under conservation easements. Colorado Parks and Wildlife has identified that area as potential but unoccupied habitat for the Endangered Species Act candidate Gunnison sage-grouse. Sage-grouse, as well as other sagebrush obligates, are particularly sensitive to disturbance, especially the construction of vertical structures in their habitat, which could happen if homes and associated power lines were constructed. Much of that area has been subdivided into small parcels, but little real development has occurred to date outside of small towns and cities. Given those factors, and the lack of attention being given to that habitat type by conservation partners at present, land protection under alternative B is likely to play an important role in preventing modification of this important ecosystem. It is unknown if there will be future attempts to reintroduce Gunnison sage-grouse to that area, but certainly it would be unlikely to happen if the existing habitat were altered.

As discussed under alternative A, there are large unprotected areas along the spine of the Sangre de Cristo Mountains in Costilla County, Colorado, extending into Taos County, New Mexico. Alternative B would allow the Service to use its acquisition authority to complement efforts by private land trusts to protect this important wildlife corridor and Canada lynx habitat.

Effects on Cultural Resources

The estimated effects of each alternative on cultural resources are described below

Alternative A (No Action)

Some cultural resources could be adversely affected by activities such as development and road construction on lands outside of existing public and private conservation lands. While the rate of development is not rapid at present, the San Luis Valley is rich with millennia of human history, and much of the valley's history is poorly documented. There are legitimate concerns that important sites may be destroyed or irreparably disturbed in the absence of protection.

Alternative B (Proposed Action)

There is the potential for greater protection of cultural resources than under alternative A because the easement terms that prevent development of land in ways that could adversely affect wildlife could also prevent destruction of Native American, Hispano, and other historical American sites.

Effects on the Socioeconomic Environment

This section describes the estimated effects of the alternatives on land use, ecosystem services, land ownership, and the regional economy.

Alternative A (No Action)

Landownership patterns will continue to change in accordance with market forces, as will resulting modification of ecosystem services and changes in cost of public service delivery by local government. Landowner compensation through conservation easements would remain available through other Federal programs and the efforts of nongovernmental organizations.

Alternative B (Proposed Action)

Social and Economic Impacts of Conservation Easements and Fee-title Acquisitions

Conservation easements and fee-title acquisitions provide public benefits for local residents, communities, and governments. Easements and fee-title acquisitions also reshape future development patterns, affect property values, and inject new money into local communities. There are many dynamic variables at play when considering the social and economic effects of conservation easements and fee-title acquisitions, especially given that potential purchases may span decades. Due to future uncertainty surrounding such factors as the likelihood and timing of easements and acquisitions; the availability of Service funds to purchase lands; and population growth, land values, and agricultural commodity prices, the social and economic impacts of the easements and acquisitions cannot be quantified in this analysis. However, these impacts can be described qualitatively. This analysis discusses the following effects of conservation easements and fee-title acquisitions in the SLVCA:

- conservation values in the region
- benefits to local communities
- landowner compensation
- effects to local government net revenue

Table 4, located at the end of this section, provides a summary of the social and economic impacts of conservation easements and fee-title acquisitions in the SLVCA.

Conservation Value. Conservation easements and fee-title acquisitions can protect values associated with biodiversity and wildlife abundance, maintain aesthetic beauty, and protect social and culturally significant features of landscapes and livelihoods (Millennium Ecosystem Service Assessment 2005; Ehrlich and Ehrlich 1992; Daily 1997). Ecosystem services, such

as water purification, oxygen production, pollination, and waste breakdown, are also maintained for local residents through land preservation (Millennium Ecosystem Service Assessment 2005). The primary public benefit of Service conservation easements and fee-title acquisitions is enhanced and preserved wildlife habitat. As development stressors increase over time, many key off-refuge habitat areas may become less available due to conversion to non-wildlife habitat uses. Habitat preservation has been shown to stabilize and increase wildlife populations (Reynolds and others 2001). Conservation easements on private lands strengthen the resiliency of species habitat and provide opportunities for wildlife movement and adaptation for years to come.

Benefits to Local Communities. Although local residents may not be able to explicitly use or access land protected by conservation easements, protected lands act as a buffer that benefits residents through increased biodiversity, recreational quality, and hunting opportunities on publicly accessible wildlife refuges and on some private lands (Rissman et al. 2007). It is well documented that open space carries positive values to local residents and communities, as well as to passers-by (McConnell and Walls 2005). This is evidenced by the success of open space preservation ballot initiatives at the local, county, and State levels. Banzhaf et al. (2006) point out that between 1997 and 2004, over 75 percent of the more than 1,100 referenda on open space conservation that appeared on ballots across the United States passed, most by a wide margin.

It is also well documented that open space and protected natural areas can increase surrounding property values (see McConnell and Walls 2005 for a comprehensive review). The reciprocating value of open space on property values will vary depending on landscape characteristics and location attributes (for example, distance to the conserved area) (Kroger 2008). The permanence of the open space is also an influencing factor. Typically, open space that is permanently protected (such as refuge lands and lands protected with perpetual conservation easements) will generate a higher enhancement value to local properties than land that has the potential for future development (Geoghegan et al. 2003). Location and demographic factors in the region can also influence the relative level of property enhancement value. For instance, open space may generate larger amenity premiums for property in more urbanized areas and where median incomes are higher (Netusil et al. 2000), which isn't to say there isn't the chance for property values to increase substantially in rural areas as well (Vrooman 1978, Phillips 2000, Crompton 2001, Thorsnes 2002).

Conservation easement and fee-title purchases would also inject new money into the local economy. The sale of conservation easements and fee-title lands provides landowners with additional revenue. Some percentage of these funds may be spent in the local economy, including purchasing new real estate, consumer goods, or services in the local area. Conservation easements may also help maintain the character of a region by protecting a traditional and historic way of life and the associated working landscape. Land with historic commercial use, such as ranching, forestry, and farming, is often compatible with or beneficial to wildlife refuge objectives (Jordan et al. 2007, Rissman et al. 2007). Conservation easements provide financial benefits for landowners that may enable them to preserve the natural and historic value of their farm, ranch, and open space lands, and to pass this legacy on to their children and grandchildren. In addition to maintaining a cultural heritage, the preservation of farming and ranching operations can result in economic benefits to the local economy. Farmers' costs for equipment, supplies, and materials may be spent in the local economy, thus stimulating local businesses and supporting local employment. Farm workers will also spend their salaries in the local economy, thus supporting further local employment.

Lands acquired through fee-title purchases would be managed by the Service. These lands would be converted from farmland to managed wetlands, which could result in a loss of agricultural production income for farmers and the elimination of farming-related purchases. However, maintenance of large intact expanses of wetland habitat through fee-title acquisition would require active management by the Service and the associated purchase of new equipment and supplies to manage these lands for wildlife habitat. Acquisition of additional fee-title lands and conservation easements may also result in increased recreation-related spending by visitors.

Landowner Compensation. The Service proposes to buy conservation easements from willing sellers at fair market value. The fair market value of a conservation easement is determined through an appraisal process. An appraiser estimates how much the land would sell for unencumbered by the conservation easement (the "before" value) and how much the land would sell for with the conservation easement in place (the "after" value). The value of the conservation easement is equal to the before value minus the after value, or the difference in the fair market value of the property with and without the easement. Landowners may also choose to donate conservation easements to the Service. The donation of a conservation easement may qualify as a tax-deductible charitable donation, which may result in Federal income tax benefits. The sale of a conservation easement for less than its fair market value (called a "bargain sale") may also qualify for tax deductions. Landowners may be able to claim a charitable income-tax donation equal to the difference between the fair market value and the bargain sale price of their easement. Income from the sale of

a conservation easement may be taxable. Please note that the Service does not give tax advice. Landowners considering entering into a conservation agreement with the Service should consult a tax advisor or attorney for advice on how a conservation easement would affect their taxes and estate.

Conservation easements reduce the value of the encumbered property. A conservation easement will reduce the fair market value of an estate because the easement permanently removes some of the estate's development potential. The reduction in value depends on the potential development value of the land and the level of restriction agreed upon in the easement. In general, an easement on land located in an area with high development pressure will have a greater effect on the value of the land than an easement on land located in an area with low development pressure, and an easement that is more restrictive will have a greater effect on the value of the land than an easement that is less restrictive. The Service will purchase easements at their appraised fair market value; therefore, easements on lands with high development pressure will receive higher payments.

For fee-title acquisitions, land owners would be compensated for the fair market value of the land. Land owners would forfeit all rights of ownership and turn the property over to the Service.

Effects on Local Government Net Revenue. The effects of conservation easements and fee-title acquisitions on the net revenue of local government are complex and speculative; many variables are at play, and realizing the effects often requires time. Local governments collect revenue through intergovernmental transfers, property taxes, sales taxes, personal income taxes, and other charges, such as permitting. These revenues are then spent to provide community services such as fire and police services, schools, infrastructure, and public spaces. Conservation easements and fee-title purchases affect the location of future development, and therefore affect both future revenues and costs for local governments. The following sections describe the possible effects to local government revenues and costs. Overall, the SLVCA conservation easement program and limited fee-title purchases are expected to have negligible effects on local government net revenues (revenues minus costs).

Effects on Local Government Revenues. Property taxes constitute the largest source of local governments' own revenue (Urban Institute and Brookings Institution 2008), and are not expected to be substantially affected by conservation easements in the SLVCA. Property taxes are assessed based on the value of property. For most types of properties, county assessors use fair market value to determine property tax liabilities; however, agricultural land is often assessed differently. In many States, the assessed value of agricultural land is determined based on the productive value of the land rather than on the fair market value of the property. The fair market value of land is the amount that a property is estimated to sell for. This value includes both the productive value of the land and any speculative value associated with the possibility of developing the land. Conservation easements reduce the fair market value of property by removing the speculative value associated with possible development; however, conservation easements generally do not affect the productive value of agricultural land.

The SLVCA would include land in two States: Colorado and New Mexico. In both States, property taxes for agricultural land are assessed based on the productive value of the land or farm income[1] (Colorado Division of Property Taxation 2006; New Mexico Taxation and Revenue Department 2011). In the SLVCA, the majority of properties that will enter into conservation-easement agreements with the Service will be classified as agricultural land; thus, there will be little affect on the current property tax base for the nine-county area. Some of the lands in the SLVCA that will enter into easements are currently fallow and do not classify as agricultural lands. For these properties, assessors may assess the fair market value of the land based only on the uses permitted by the easement. This could result in a small reduction in property tax revenue in some counties within the region. The reduction in property taxes will be dependent on the percent of easement acres that are purchased on fallow land (versus agricultural land), and on the reduction in the market value of the fallow lands.

The purchase of fee-title lands at fair market value will reduce the amount of property tax revenue collected by local governments because the Service is exempt from taxation on its property holdings. Under Federal fee-title ownership, counties would qualify for reimbursement of some property tax revenue foregone under the Refuge Revenue Sharing Act (RRS) of 1935, which allows the Service to make annual payments to local governments in areas where fee-title purchases have removed land from the tax rolls. Under provisions of the RRS Act, local counties receive an annual payment for lands that have been purchased by full fee-title acquisition by the Service. Payments are based on the greater of 75 cents per acre or 0.75 percent of the fair market value. The exact amount of the annual payment depends on Congressional appropriations, which in recent years have tended to be substantially less than the amount required to fully fund the authorized level of payments. In fiscal year 2010, actual RRS payments were 22 percent of authorized levels.

1 Special rules and statues apply in each State to determine if land in agricultural production and land in conservation easements is eligible to be assessed as agricultural land.

Local government revenue associated with personal income is expected to remain relatively constant within the nine-county area. Conservation easements and fee-title acquisitions in the SLVCA would affect the location and distribution of development, but are not expected to change the rate or density of human population growth. Redistribution of population growth could affect the distribution of personal-income-related revenues across the counties, but is expected to have little effect on total revenues within the nine-county area. There would be a one-time increase in landowner income as the Service purchases the easement or land in fee-title. Fee-title purchases that result in the conversion of land out of agricultural production could reduce farmer income and expenditures on agricultural supplies purchased in the local area. However, these lands would be converted to wetland habitat, likely requiring habitat improvements and ongoing maintenance. These management activities would result in an increase in the amount of money spent on supplies purchased in the local area, as well as the potential for additional income for new Service employees.

Effects on Local Government Costs. Land protection through conservation easements and fee-title acquisition could result in a reduction in future expenditures for local governments and municipalities. New residential developments require local governments to provide services such as fire protection, police services, and schools, and to construct new infrastructure such as roads, parks, and water and electric-delivery systems. The costs to provide government services for new residential developments often exceed new revenues derived from the developments. This is especially true for rural residences, which tend to have higher costs for county governments and school districts than urban residences. In 2001, the American Farmland Trust found that, on average, the cost to provide community services to new residential developments was $1.15 for every $1.00 of revenue generated by those developments (American Farmland Trust, 2001; Coupal et al. 2002). A study conducted in Wyoming found that community service costs averaged $2.01 for every $1.00 of revenue for rural residential lands; in contrast, the average cost to provide services for lands under agricultural production averaged $0.54 for every $1.00 of revenue (Taylor and Coupal 2000).

Unavoidable Adverse Impacts

This section describes adverse effects which may be unavoidable when carrying out alternatives A and B.

ALTERNATIVE A (NO ACTION)

Loss of wetland, riparian, and upland vegetation and their associated habitat values would continue due to development of areas outside of those protected by partner agencies and land trusts.

ALTERNATIVE B (PROPOSED ACTION)

No direct or indirect unavoidable adverse impacts to the environment would result from the selection of alternative B. An easement and limited fee-title program would not result in adverse impacts on the physical or biological environment. The selection of an approved boundary for the SLVCA and concurrent authorization to go forward with an easement program would not, by itself, affect land ownership or value, or other aspects of the socioeconomic environment.

Irreversible and Irretrievable Commitment of Resources

Any commitments of resources that may be irreversible or irretrievable because of carrying out alternatives A or B are described below

ALTERNATIVE A (NO ACTION)

There would be no commitment of resources by the Service if alternative A were selected. The Service could still exercise its authority to acquire inholdings or for minor expansions of existing refuges, but would not be obligated to do so.

ALTERNATIVE B (PROPOSED ACTION)

The establishment of the SLVCA would not, of itself, constitute an irreversible or irretrievable commitment of resources. However, if interests in land were acquired through the use of Land and Water Conservation Fund or donations, the administration of the easement provisions would require an irreversible and irretrievable commitment of resources. The monitoring of easements would represent a minor increase in overall Service costs borne by the San Luis Valley NWR complex.

Short-Term versus Long-Term Productivity

Following is a discussion of short- and long-term effects.

ALTERNATIVE A (NO ACTION)

Continued efforts to conserve habitats would be ongoing through the efforts of Service activities like

Partners for Fish and Wildlife and the efforts of other agency and nonprofit partners. Important wetland and upland habitats would be expected to continue to be lost at current rates of conversion, which would have long-term negative implications on the maintenance of the ecological communities they support.

Alternative B (Proposed Action)

The Service would be authorized to purchase perpetual easements only from willing sellers, providing an immediate short-term economic benefit to landowners. This may provide capital for expansion of agricultural operations, or simply permit struggling operators to stay in business. This is particularly relevant given the changes to Colorado water law, which now require ground water users to purchase increasingly expensive surface water to minimize their impact on senior surface water users. This infusion of capital at an opportune time would likely have important long-term benefits to the economy of the San Luis Valley. The conservation of habitats under this program would also have important short- and long-term ecological benefits. The program would preserve habitat currently used by wildlife, including federally protected species. This would result in the preservation of the area's biodiversity, which is important for long-term ecosystem stability and function in arid environments (Maestre et al. 2012). By preventing fragmentation, particularly in wildlife corridors like riparian areas and along the Sangre de Cristo Mountains, the program would promote long-term ecological resiliency to habitat perturbations such as large wildfires and climate change.

Cumulative Impacts

As defined by NEPA regulations, a cumulative impact on the environment "results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions" (40 CFR 1508.7). The following describes the past, present, and reasonably foreseeable actions related to the proposed SLVCA. A discussion follows regarding the cumulative impacts of these actions in combination with the actions of alternatives A and B.

Past, Present, and Reasonably Foreseeable Future Actions

A number of private and public organizations have successfully implemented land protection programs in the San Luis Valley through negotiation of conservation easements with willing landowners. One specific example is a coalition of local governments, landowners, and nonprofit organizations that is working to conserve land as part of the mitigation strategy in the draft San Luis Valley Habitat Conservation Plan planned for release in June 2012. The Service assumes that these land protection efforts will likely continue in the foreseeable future.

The State of Colorado is implementing new laws regarding ground water augmentation, wherein landowners who use ground water for irrigation will have to purchase surface water rights to offset any adverse impacts on downstream users.

There is ongoing interest in the San Luis Valley for renewable energy development. There are small-scale commercial solar facilities currently deployed in the San Luis Valley, and the Department of Energy and the BLM are studying the impacts of additional facilities being developed on public land (BLM and DOE 2010). The BLM is currently reviewing the potential impacts of expanded geothermal leasing on public lands in the San Luis Valley (BLM 2012). The potential for increased energy production in the San Luis Valley has led to planning for the construction of a high-capacity transmission corridor through the valley, crossing the Sangre de Cristo Mountains at La Veta Pass. Planning for that power corridor has stalled; however, interest in building another corridor to promote energy reliability is ongoing.

Alternative A (No Action)

Under this alternative, there would be no cumulative impacts on the environment since the Service would not undertake any additional land protection measures.

Alternative B (Proposed Action)

The continuing land protection efforts of others, combined with the proposed action, may have non-linear, positive effects on wildlife populations. Since this alternative would focus on federally regulated species (i.e., priority migratory bird species and species listed or being considered for listing under the Endangered Species Act), implementation would result in accelerated protection of habitats for those species. The Service seeks to coordinate its land protection efforts by promoting active communication with conservation partners on land protection opportunities as they arise so that the organization whose program is most appropriate can seek the acquisition of a particular land interest. The public and private conservation entities in the San Luis Valley have a long-standing friendly relationship and view each other's conservation objectives as largely complementary. However, there are specific instances where potential conflict could arise without this communication, such as riparian habitat of the southwestern willow flycatcher. The Service does not intend to compromise the ability of local government to meet its mitigation targets in the San Luis Valley Habitat Conservation Plan. To this end, the Service would not undertake any acquisition of

southwestern willow flycatcher habitats along the Rio Grande or Conejos Rivers without discussing the opportunity with our conservation partners. The Service would defer to partners in all instances where they need to seek an interest in the land first.

The impacts of new Colorado water law on water availability and cost may be cumulative with the impacts of the Service's easements, which would include language restricting the sale of surface water rights from lands protected under this program. Because the easements would maintain current water use practices on lands where an interest is acquired, these impacts are unlikely to be significant.

The presence of a Service interest in land could preclude construction of commercial energy production or transmission infrastructure on that property if such activity is deemed to be incompatible with the purpose of the SLVCA; this would result in unknown effects due to potentially limiting where such facilities could be sited.

Any impacts of the proposed action that are cumulative with the actions of others will largely be determined by 1) the number of landowners willing to enter into easement agreements with the Service and 2) the amount of funding available for acquisition of these easements.

Table 4. Social and economic impacts of conservation easements and fee-title acquisitions.

	Social and economic impacts	
Issue	*Conservation easements*	*Fee-title acquisitions*
Conservation value	■ Migration corridors and habitat for deer, elk, moose, and migratory birds will be preserved.	■ Same as for easements plus the conservation value of fee-title lands may be greater than easement lands because the Service would have the ability to increase conservation value through projects on the land.
Affects to local communities	■ The public will enjoy increased biodiversity, recreational quality, and hunting opportunities on nearby publicly accessible refuges and some private lands. ■ Neighboring property values may increase. ■ Positive economic impacts may result from new landowner money injected into the local economy. ■ Traditional and historic ranching and farming landscapes will be preserved.	■ Same as for easements except traditional and historic ranching and farming landscapes may not be preserved. ■ Positive economic impacts may also result from increased Service habitat improvement expenditures injected into the local economy. ■ Possible increase in refuge visitation and associated impacts of visitor spending in the local economy. However, neighbors and other public may be affected by increased accesses to refuge lands.
Landowner compensation	■ Land owners will be compensated for the fair market value of the easement. ■ Easements will reduce the fair market value of the encumbered property. ■ Landowners maintain the majority of use rights, but forfeit their right to develop or subdivide the land. Other possible restrictions include development of vertical structures, or diversion or sale of water rights.	■ Land owners will be compensated for the fair market value of the land. ■ Land owners forfeit all rights of ownership and turn the property over to the Service.
Affects on local government net revenue	■ No changes to property tax revenues are expected for agricultural lands. ■ Property tax revenues from fallow lands will decrease. ■ Other government revenues, such as personal income tax, may be redistributed throughout the region. ■ Land protection through conservation easements could result in reduced future service costs for local governments and municipalities.	■ The Service does not pay property taxes on land they own; thus, county tax revenue would decline. ■ Lost property tax revenues are partially replaced with Refuge Revenue Sharing payments.