

# **Proposed Tulare Basin Wildlife Management Area**

## *Environmental Assessment, Land Protection Plan, and Conceptual Management Plan*

Kern National Wildlife Refuge Complex  
Kern and Tulare Counties, California

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# *Chapter 1 - Purpose of and Need for Action*

## **1.1 Introduction and Background**

California's Central Valley consists of the Sacramento Valley in the north and the San Joaquin Valley in the south. The Tulare Lake Basin is located in the southern San Joaquin Valley (Figure 1). Historically Tulare Lake was the largest fresh water wetland west of the Mississippi River, approximately 500 square miles at peak levels. Annual river flows created an extensive wetland habitat consisting of permanent wetlands, sloughs, ponds, and marshes as well as seasonal wetlands. The entire natural habitat has been lost to agricultural development and source water diversion.

Despite the substantial losses of wetland habitats within the Tulare Basin, the area is recognized in the Central Valley Joint Venture (CVJV) and the *North American Waterfowl Management Plan* (NAWMP) for its international importance in sustaining the life cycle of many migratory waterfowl and shorebirds of North America's Pacific Flyway. This area also provides important habitats for several priority species listed in the U.S. Fish and Wildlife Service, Birds of Conservation Concern 2002, Division of Migratory Bird Management, Arlington, VA.

Development is continuing at a steady pace in California. The San Joaquin Valley Region ranked second in California in growth of new urban land during 1996 to 1998, California Department of Conservation, June 2000. Loss of the area's native habitat may be contributing to the continued decline of the region's migratory waterfowl and shorebird populations, landbirds, Birds of Conservation Concern, and threatened and endangered species. The conversion of California's valuable Central Valley pasture land (grasslands) and wildlife habitat has accelerated, threatening the existence of many San Joaquin Valley wildlife species. Relocation of dairy operations from southern California and application of "biosolids" (residue from municipal sewage) have created a demand for space that competes with habitat needs of wildlife. The survival of existing duck clubs is influenced by these competing financial interests and land uses. These developmental pressures create situations that encourage action to prevent further losses of private wetlands. The owners and managers of most clubs within the project area have indicated that they are in support of protecting the remaining wetlands in the project area.

Many of the remaining private wetlands in the Tulare Basin are owned and primarily managed as organized hunting clubs and have been increasingly isolated by intensive development of surrounding lands. One half of the private hunting clubs within the proposed project area have gone out of existence since figures in a 1988 report by Jones & Stokes Associates were compiled (*Private Wetlands in the Kern-Tulare Basin, California: Their Status, Values, Protection, and Enhancement*). Twenty-five of the fifty clubs, representing approximately 1,300 acres or 38 percent of the managed private wetlands surveyed in 1988, have ceased operation and no longer provide migratory bird habitat. These losses are magnified by the fact that the wetland habitat base in the Tulare Basin is quite small. Many of the hunting clubs have a long and rich historical connection with the surrounding communities. Loss of these organized clubs diminishes the cultural as well as natural landscapes.

The Tulare Basin wetlands could provide wintering habitat and necessary forage for a population of migratory waterfowl in excess of 100,000 annually (2,000 USFWS midwinter inventory). Conservation efforts are necessary to address past wetland losses. The reduced habitat base is inadequate to attract and support the CVJV objective population levels at this time.

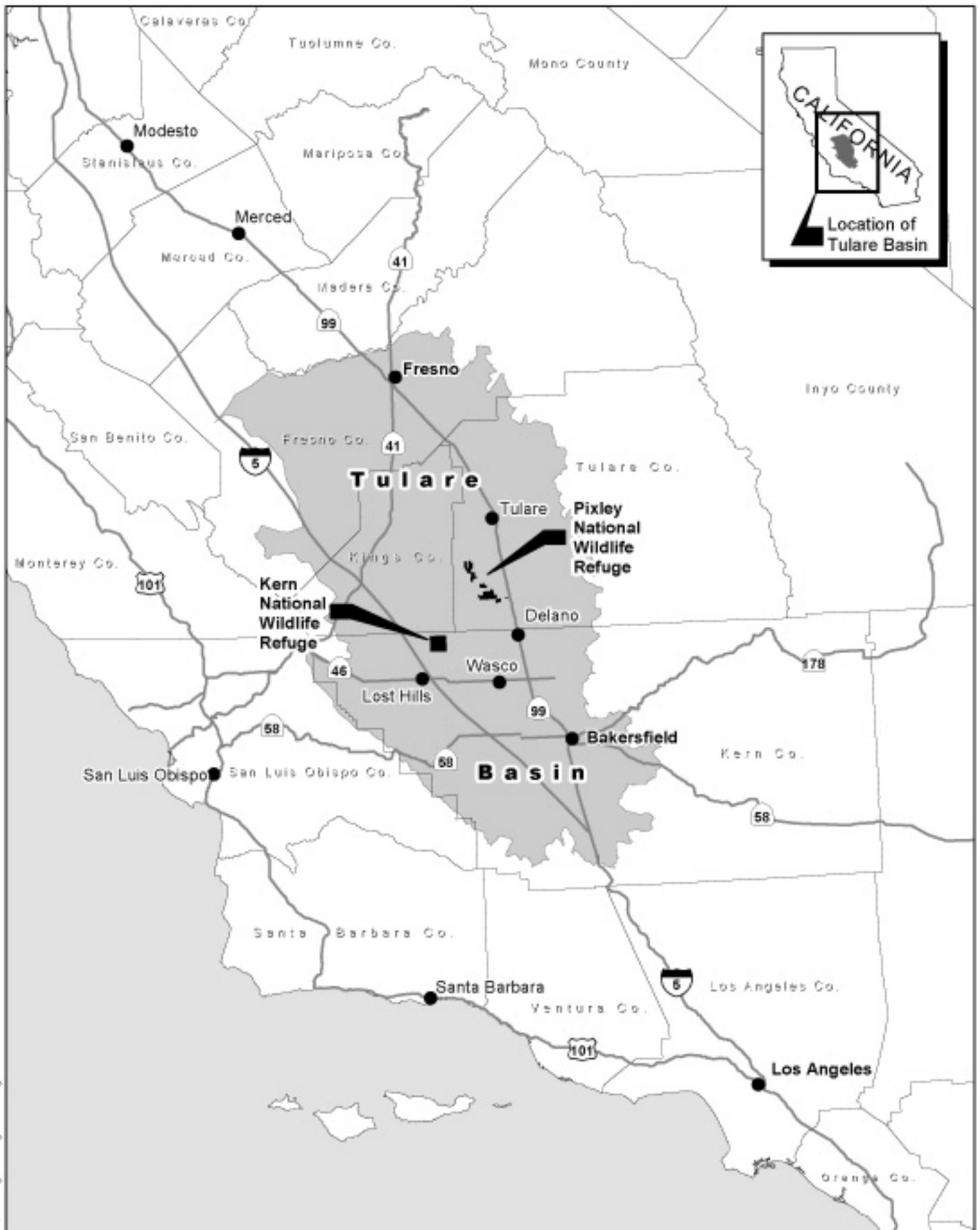


Figure 1. Location Map

The CVJV is a cooperative effort of conservation organizations, and Federal and State agencies formed to implement the NAWMP, which sets goals for restoring waterfowl populations. The NAWMP provides a broad framework for waterfowl conservation and management based on populations and habitat goals needed to restore and maintain waterfowl populations. The CVJV implementation plan (1990) goals are to: (1) protect 80,000 acres of existing wetlands through fee acquisition or conservation easement; (2) restore 120,000 acres of former wetlands; (3) enhance approximately 300,000 acres of existing wetlands; (4) enhance waterfowl habitat on 443,000 acres of private agricultural land; and (5) secure firm water and power supplies for existing State Waterfowl Areas, National Wildlife Refuges, the Grassland Resource Conservation District, and other private lands dedicated to wetland management.

The Tulare Basin region supports the last remnant wetlands and wildlife habitats left in the dramatically altered Tulare Lake watershed, including the few remaining private wetlands in a landscape that once supported millions of migratory birds. The declining network of sloughs and riverine wetlands are unable to support migratory bird populations that have annually visited the area in the recent (1970's) past. The associated upland habitats have also historically supported threatened and endangered species on a year-round basis, including populations of the San Joaquin kit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard.

## **1.2 Proposed Action**

In response to imminent threats to the limited remaining natural resources in the Tulare Basin area, the Service proposes to create a new Wildlife Management Area (WMA). The proposed action consists of establishing a new Wildlife Management Area boundary which will allow the U.S. Fish and Wildlife Service (Service) to purchase conservation easements to preserve the present character of the land. Protecting the habitat contained in the new WMA is important to achieve goals for recovery of migratory bird populations in North America's Pacific Flyway. Additionally, by protecting the upland habitats associated with remnant wetlands, upland-dependant listed species can continue to occupy these areas. Protecting the current low intensity land uses and wildlife habitats needed by federal trust wildlife species is a fundamental part of proposed actions. The focus of this proposal is to work with owners of existing managed wetlands to obtain conservation easements which protect these unique habitats in perpetuity while retaining active management and involvement of private landowners. Most of the targeted wetlands and associated uplands are owned and operated by organized hunting clubs.

The proposed easement program for protecting wildlife habitat would assist with the recovery of migratory waterfowl populations, shorebirds, and neotropical migratory birds of the Pacific Flyway and is consistent with the following wildlife conservation plans:

*Central Valley Habitat Joint Venture Implementation Plan (1990) and the North American Waterfowl Management Plan (1986).*

*U.S. Shorebird Conservation Plan's Southern Pacific Coast Regional Shorebird Plan (2000).*

*California Riparian Habitat Joint Venture's The Riparian Bird Conservation Plan (2000).*

*USFWS Recovery Plan for Upland Species of the San Joaquin Valley (1998).*

Perpetual conservation easements on uplands planted with wildlife compatible crops would be evaluated on a site specific basis. These areas could serve as buffers to the more sensitive habitat areas and enhance the use of wetlands by migratory birds by limiting disturbance levels. The variation in habitat quality and potential for listed species occurrence requires that on site evaluations be performed to determine the benefit to wildlife and the farming community. The residents of and visitors to the Tulare Basin region

would benefit from protection and management of wildlife habitats in buffer areas as open space of the Southern San Joaquin Valley becomes increasingly scarce.

### **1.3 Location and Description of Project Area**

The proposed project area is located in northern Kern and southern Tulare Counties near Kern and Pixley National Wildlife Refuges (NWR). This area is close to the south edge of the historic Tulare Lake in the southern San Joaquin Valley, California. Two transportation corridors frame the west and east boundaries of the proposed project areas, Interstate 5 and Highway 99 respectively. The proposed WMA follows the low-lying lands from Goose Lake north to a point west of Pixley NWR. Lands near Pixley NWR and the community of Alpaugh form the northern boundary (see Figure 2). The Land Protection Plan (Appendix A) includes a list of properties proposed for inclusion in the WMA, should property owners be willing to participate (see tract maps in Appendix A).

The arid habitat and surrounding agricultural fields of western Kern County are typical of the landscape being proposed for inclusion in this habitat conservation project. Originally, the natural runoff from the Kern River, Poso and Deer Creeks, as well as artesian wells fed natural wetlands along the stream channels and south shore of Tulare Lake. Ground water has replaced natural surface water sources for managing wetlands. As the landscape has become increasingly developed, primarily by agriculture and transportation corridors, the open space and wildlife habitats have become fragmented islands scattered across the San Joaquin Valley. Efforts by the California Energy Commission to inventory, map, and survey natural lands in the central valley found that “Only 2.9 percent of the 2,950-square-mile (7,640 sq. km.) Southern San Joaquin Valley floor still remains in “good” or better natural habitat condition (California Energy Commission 1991). Elevations range from 205 to 250 feet.

### **1.4 Purpose for Proposed Action**

The purpose of the proposed action is to: (1) protect key habitats for wetland dependant and sensitive species in support of the NAWMP and its CVJV goals for Tulare Basin; and (2) maintain the long term viability of private wetlands and associated uplands in Tulare Basin. The proposed conservation easement program is designed to benefit the local community by protecting the rural landscape and creating the Tulare Basin WMA to maintain habitat for migratory waterfowl populations, shorebirds, neotropical migratory birds of North America’s Pacific Flyway, and threatened and endangered species. The proposed WMA would represent a contribution by the Service to conserve the rich and varied natural resources of the Tulare Basin for the continuing benefit of the American people through a perpetual conservation easement program.

### **1.5 Decisions to Be Made**

This Environmental Assessment (EA) has been prepared to assist the Service’s planning and decision making regarding whether or not to establish a conservation easement area within the Tulare WMA study area, and given the scope of issues raised by the public, how big the new wildlife management area would be and how many easements would be acquired within its boundary. Two action alternatives were designed to accomplish Service planning objectives and goals for assisting with the recovery of migratory waterfowl populations, shorebirds, and neotropical migratory birds of North America’s Pacific Flyway, and protection of valuable wetlands within the project study area. These alternatives differ with regard to the size of the area to be protected and habitat restoration proposed. If it is determined that a WMA should be established, the decision maker will also have to (1) select an approved conservation project area boundary which best fulfills the purposes for creating the WMA based on the EA and associated

Figure 2. Proposed Tulare Basin Wildlife Management Project Area and Adjacent Conservation Lands



documents; and (2) determine whether the alternative selected for implementation would have a significant impact upon the quality of the human environment.

The authorities for this protection effort are the Migratory Bird Conservation Act of 1929 (16 U.S.C. 715-715d, 715e, 715f-715r) and Fish and Wildlife Act of 1956, as amended (16 U.S.C. 742(a)-754). The Migratory Bird Conservation Act established the Migratory Bird Conservation Commission to approve areas recommended by the Secretary of the Interior for acquisition with Migratory Bird Conservation Funds. The Fish and Wildlife Act authorizes the Service to use funds made available under the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601- 4611) to acquire lands, waters, or interests therein for fish, wildlife, and plant conservation purposes.

## **1.6 Changes to the Planning Documents**

The draft planning documents were distributed to the public in September of 2004 for a 30-day comment period. Based on public comments (see EA chapter 6) and additional analyses, the planning documents have been revised in addressing the size of the proposed WMA and potential water supply for lands identified for potential inclusion within the proposed WMA.

### **1.6.1 Size of the Project Area**

The draft planning documents proposed creation of a new Tulare Basin WMA of approximately 14,000 to 16,000 acres. During the public review period we received updated information regarding the extent of priority habitats within the study area as well as updated habitat protection goals pertaining to the CVJV Implementation Plan.

Based on a review of the draft environmental documents and comments received, the project boundary has been reduced in size from approximately 109,000 acres to approximately 57,000 acres, with priority one tracts totaling approximately 20,000 acres and priority two tracts totaling approximately 37,000 acres. All priority three and four tracts were removed from the project area and nearly half of the priority two tracts were also removed. The extent of priority two land tracts was considered to be in excess of the amount of land that could be protected in the foreseeable future.

The CVJV Implementation Plan has recently been revised and contains conservation objectives for the Tulare basin of 19,000 acres of wetland restoration, 8,592 acres of wetland protection, and 3,268 acres of annual wetland enhancement. Additionally conservation objectives have been set for non-breeding shorebirds that identify 31,440 acres of foraging habitat with water depths less than 10 centimeters. The specific requirements of foraging habitat for shorebirds will require additional wetland restoration in addition to the existing wetland habitats.

The recently revised goals and objectives for Tulare Basin reflect results of research by Dr. Joseph Fleskes and others that Pintail populations rely heavily on habitat that has been lost and is under continued risk of conversion within Tulare Basin. Wetland protection and restoration goals in Tulare Basin are critical to meeting waterfowl and shorebird population goals for the Pacific Flyway.

### **1.6.2 Water Supply for Private Lands**

Legal “water rights” are not an issue in this project, since no surface water rights are held nor used to supply water for wetlands management on any of the private wetlands in the proposed Tulare Basin WMA project area.

Water is obtained for most private wetlands in the Tulare Basin from individual wells. Ground water is a reliable supply source, as it is always present and pumping is not limited or adjudicated in the basin. Power and well maintenance costs are a concern to wetland operators. Pumping costs have risen as

ground water levels dropped and as energy costs have increased. On wetter than average years surface water supplies have been available to private wetland operators at less cost than pumping groundwater. Varying amounts of surface water were available to wetland operators in 1998, 1999, 2000 and 2003.

A local coalition of wetland interests, the Tulare Basin Wetlands Assoc. has recently (2004) organized an improvement district within the Semitropic Water Storage District (SWSD) specifically for the purpose of improving access to water supplies for private wetlands. The Semitropic Wildlife Improvement District (SWID) has the ability to establish assessments and utilize the legal authorities of the SWSD to conduct projects. The CVJV water and power committee has been reactivated and funded work by consulting engineer to evaluate water supply opportunities and identify improved water supply options for private wetlands in the Tulare Basin. These efforts by the Joint Venture and partners support the approach taken by the Service.

The approach to water supply and language anticipated in the easement documents will be the same as has been used in California's Central Valley (Grasslands) and Sacramento Valley wetland easements. The Service compensates the landowner for development rights and obtains access to the same facilities that are traditionally used to flood wetlands. The Service will have the right but not the obligation to flood wetlands if the owners chose not to. This approach has worked successfully in hundreds of easements covering approximately 100,000 acres. The premise is that private landowners will continue to be interested in managing and hunting their properties, as has been the case in previous projects.

# Chapter 2 – Alternatives

## 2.1 Introduction

Chapter 2 describes three alternatives: the No Action Alternative, and two action alternatives that would result in establishment of the Tulare Basin WMA boundary and provide the Service authority to acquire an interest in lands as part of the WMA. Under the no action alternative, a WMA project boundary would not be established and the Service would not pursue the acquisition of conservation easements.

This EA, the new Land Protection Plan (Appendix A), and the Conceptual Management Plan (Appendix B) describe the Service's involvement in general terms because these are decision-making documents for the primary purpose of establishing a new WMA land acquisition boundary and to offer the Service's conservation easement program to landowners whose properties support wildlife habitat of national importance. Under both the action alternatives, private ownership and land use in the study area would not substantially change if the Service initiates a conservation easement program.

## 2.2 Process Used to Develop the Alternatives

A team of Service resource specialists considered the following elements when they developed the alternatives for this project: (1) verbal comments provided during informal public scoping between 2000 and preparation of this document; (2) issues raised during meetings with various agencies, organizations, elected officials, and individuals during the formal scoping process; (3) waterfowl management goals and objectives of the *North American Waterfowl Management Plan* and Central Valley Joint Venture Program; (4) the mission of the Service to conserve, protect, and where necessary recover the nation's fish, wildlife, and plant resources for the enjoyment of present and future generations; and (5) existing habitat conditions and habitat restoration potential.

The Service also considered a variety of land protection methods in developing the range of alternatives, described in the Land Protection Plan. The Service believes that the acquisition of conservation easements represents the minimum possible interest or rights in lands and waters needed to meet habitat protection objectives. A reasonable range of alternatives for the creation of a new Tulare Basin WMA of approximately 20,000 to 22,000 acres have been explored and objectively evaluated. The proposed project could satisfy the wetland protection objective of the CVJV implementation plan and contribute to meeting nearly one half of the non-breeding shorebird conservation objective subject to management of the water depth.

Larger acquisition boundaries were considered too complex and potentially controversial to accomplish in a reasonable amount of time. The anticipated future losses of private wetlands can be prevented by diligent progress on this proposal. Any additional habitat losses and delays would result in reductions in habitat carrying capacity and migratory bird populations.

One of the important aspects of establishing a Wildlife Management Area in the Tulare Basin is the encouragement and positive reinforcement that will be provided to private wetland managers. This impact has been observed in the Grasslands Ecological Area in central California. The success of protecting important private wetlands has resulted in an increased interest by wetland conservation organizations to provide additional resources in the area. The protection of wetlands habitat in perpetuity from losses by changes in land use could give the Tulare Basin higher priority for wetland restoration efforts or enhancements. Organizations feel more secure investing time and resources in an area that is protected in perpetuity. The Tulare Basin has one state wildlife area at the north margin. Investigations

of establishing a new state wildlife area in the south part of the basin have begun. Having a stable block of private wetland habitat could provide an incentive for establishing a new state wildlife area.

Of primary importance are the few remaining high quality wetlands and native upland habitats in the proposed project area. Both action alternatives would provide the same level of protection for properties where easements are purchased. Native habitats within this area are extremely valuable for the species that depend upon them.

**2.3 Alternatives Considered but Eliminated** Several land protection proposals were dropped from further consideration during the scoping process because they did not reasonably meet the Service's purpose and stated need for the project, and consequently were not suitable for inclusion in the National Wildlife Refuge System (Refuge System). These proposals included requests from landowners to consider additional properties that were substantially outside the project study area, and therefore did not meet the identified purpose and need of the action.

- Complete fee acquisition of the lands on a willing seller basis, was not considered at this time. Fee acquisition would be largely unnecessary because a proposed easement program would essentially achieve the project's land protection goals. The Service anticipates a low need for fee acquisition within the project study area, however, fee-title is considered on a limited basis if a willing seller offered high quality habitat adjacent to similar habitats and did not desire to retain their ownership with a conservation easement.
- Acquiring 10,000 acres in habitat corridors of occupied or potential listed species habitat to connect disjunct tracts of protected lands. This action would have added complexity to the Service's proposed action.
- Accepting administrative or management responsibility for lands enrolled in either the U.S. Department of Agriculture's Wetland Reserve Program (WRP) or Central Valley Project Improvement Act (CVPIA) Land Retirement Program. It was determined that existing administrative jurisdictions would meet program needs.
- Establishing a smaller WMA project area could exclude some existing high value habitat and require priorities vary in different portions of the Tulare Basin. There is little biological basis for excluding remaining private wetland habitats. Available private wetlands could be crucial to the survival of Pacific Flyway migratory birds.

## **2.4 Description of Alternatives**

### **2.4.1 Alternative 1 - No Action**

The No Action Alternative represents no change from the existing management of lands in the study area. Under this alternative, the Service would not acquire interest in the lands in the study area for the purpose of establishing the Tulare Basin WMA.

The distribution, general location, and extent of land use in the study area and vicinity would continue to be guided by the appropriate County General Plan and zoning codes. The General Plan is the official overall policy statement of the County relating to land use and planning issues and provides a broad outline of future land use patterns. The zoning ordinance regulates land use by dividing the unincorporated areas of the County into districts or zones and specifies the uses that are permitted or

prohibited within each district. Under the No Action Alternative, existing land uses in the study area would remain unchanged in the long-term, and protection of the area's wildlife habitat would not likely happen.

#### **2.4.2 Alternative 2 - 20,000-acre Conservation Easement Project Area**

Under Alternative 2, the Service would establish a conservation easement project area (known as an approved Project Boundary) that encompasses the widely scattered private wetland habitats and associated uplands targeted by this proposal. This alternative proposes to protect 20,000 acres of wetland dependent wildlife and native habitats solely through acquisition of perpetual easements on wetlands and associated upland habitats from property owners willing to participate in the conservation easement program. Under this alternative, the Service would seek habitat protection through conservation easements (for specific parcels included see Appendix A, Table 1). With the protection of this habitat, the Service would also be contributing to protection and recovery of migratory waterfowl populations, shorebirds, landbirds and neotropical migratory birds of North America's Pacific Flyway, and federally listed threatened and endangered species. The protected habitats could continue to be used by the species concerned, see 3.2.5 and 3.2.6.

Under Alternative 2, as with the No Action Alternative, all easement properties would remain in private ownership with property taxes and land use largely unchanged. Establishing a WMA-conservation easement boundary does not grant the Service jurisdiction or control over lands within the conservation easement project boundary, and it does not automatically make lands within the boundary part of the Refuge System. Lands would not become part of the WMA or the Refuge System unless the Service has purchased an interest in a property from a willing seller.

#### **2.4.3 Alternative 3 - 22,000 Acres Combines Easement and Fee (Preferred Alternative)**

Alternative 3 includes lands identified in Alternative 2 for protection using perpetual conservation easements with the addition of an area, not to exceed 2,000 acres, of potential fee acquisition or optional conservation easements. All 22,000 acres could be protected via conservation easements if willing landowners choose to participate. The lands potentially considered for fee acquisition would exhibit high quality or unique habitat values or key habitat locations that would connect similar areas of high quality habitat.



# Chapter 3 - Affected Environment

## 3.1 Introduction

This chapter describes the physical, biological, social, and socioeconomic factors within the Tulare Basin WMA project area which could potentially be affected by implementing the action alternatives and are relevant to the issues described in Chapter 1. The geographic scope of the proposed project is 22,000 acres of private wetland and associated upland habitats targeted for permanent protection. The subject properties are located in discontinuous clusters across approximately 57,000 acres within the southern San Joaquin Valley portions of Kern and Tulare Counties. See 3.3.1 for proportions within each county.

Lands within the original study area are primarily intensively managed crop lands interspersed with unique native uplands, seasonal wetlands, and pasture lands that support a diversity of native wildlife and livestock grazing operations. There are isolated vernal pools, riparian wetland channels and other unique remnant features of the natural hydrology of the Tulare basin within the project area. However, this project proposal is focused on the existing managed private wetlands and is not intended to accomplish protection of these minor habitat components. While the boundaries for the proposed project area were developed to exclude properties that have been developed into incompatible crops, chicken ranches, urban infrastructure, and other areas that have lost much or all of their natural resource value, some of these properties may occur within the project area due to ongoing land use changes.

The *U.S. Shorebird Conservation Plan* (Manomet Center for Conservation Sciences 2001) lists mountain plover, snowy plover, and long-billed curlew as “highly imperiled species” the highest of five “conservation categories” due to documented population declines and relatively low population size compared with other shorebird populations. All of the preceding “highly imperiled species” along with several category 4 “species of high concern,” including short-billed dowitcher and western sandpiper would benefit from the habitat protection actions proposed for this project. A Central Valley Shorebird Working Group has formed to draft conservation implementation measures that will be incorporated into a revised Central Valley Joint Venture Implementation Plan that is in preparation. The Shorebird Working Group has identified the Tulare Basin as the first priority for action due to the current and historical significance of the wetland habitats for shorebirds and the immediate need for action relative to other locations within the state and region.

Recent research conducted on radio-tagged pintail and green-wing teal have documented changes in waterfowl distribution as a result of diminished private wetland habitats, reduced water supplies, and changes in agricultural irrigation practices (June 2000, Joe Fleskes et. al.). The changes in waterfowl distribution are being identified as potentially significant in both the Tulare and Grasslands sub-basins in the southern San Joaquin Valley. Changes in traditional waterfowl use areas can cause serious concerns to private wetlands managers who are motivated by waterfowl harvest and need income from hunters to sustain private operation costs. The loss of private wetlands in the Tulare Basin has been linked to changes in waterfowl distribution in Merced County and the San Joaquin River Delta.

## 3.2 Physical and Biological Environment

The weather in the area can be characterized as a dry, warm, Mediterranean climate. During the rainy season (October through April), the average rainfall is 6 inches. The average low temperature in the winter is 38 degrees Fahrenheit. The average high temperatures in the summer are typically just above 100 degrees Fahrenheit.

Based on 1988 and 1990 low altitude color air photos of the project area used by Kern County Planning Department to draft a habitat conservation plan (HCP), the following land cover types are estimated:

- 15 percent - Developed lands
- 15 percent - Moderate Value Wildlife Habitats
- 70 percent - High Value Wildlife Habitats

The majority of the proposed project area is dry upland habitat with wetland units scattered unevenly across the landscape. Approximately 6,000 acres of private wetlands are estimated to exist within the project area. Recent wetland restoration activities have added some new wetland habitats. The amount of managed wetland acreage varies annually, due to fluctuations in water availability and cost. Land use conversions since 1990 have increased the amount of developed land within the Tulare Basin area.

### **3.2.1 Annual Grasslands**

Most of the dry upland sites in the proposed project area are dominated by introduced annual grasses. Scattered alkali scrub communities that have been altered in varied degrees are also interspersed in the area. The upland sites are valuable to many migratory birds, such as raptors, mountain plover, long-billed curlew, as well as resident and special status species.

### **3.2.2 Agricultural Crop Fields**

Annual cereal grain crops and perennial legumes can benefit wildlife. Migratory birds make extensive use of grain fields when waste grain and stubble are seasonally available. Irrigation of crop lands creates ephemeral wetland habitats often used by shorebirds, especially killdeer and plover. Conservation easements can be designed to continue profitable farming operations while maintaining or maximizing wildlife habitat values. Wildlife compatible crops include but are not limited to wheat, barley, oats, milo, clover, alfalfa, vetch, rye, safflower, sudan, millet, triticale, and sorghum.

### **3.2.3 Pasture Lands**

Pasture vegetation is a mix of annual and perennial grasses in addition to legumes. The species mixture varies according to soil type and management practices such as, intensity of livestock grazing, irrigation, fertilization, and weed control. Some farms in the study area include irrigated pasture in their crop rotation system. These are frequently included in the category of agricultural lands.

Pasture lands with annual or perennial grassland vegetation support a variety of wildlife species. Given adequate vegetation at the onset of the nesting season, ground-nesting birds, including waterfowl, pheasant, and northern harrier, will nest in pastures. Irrigated pastures provide ephemeral foraging opportunities and roosting sites for many shorebirds, wading birds, waterfowl, and raptors. Dry or nonirrigated pastures that are closely grazed are important habitat for mountain plover, long-billed curlew, and burrowing owls. The dry uplands that these species rely on have become increasingly scarce over their range and are decreasing locally.

### **3.2.4 Threatened and Endangered Species**

Uplands in the study area support populations of the endangered blunt-nosed leopard lizard (*Gambelia [Crotaphytus] sila*), San Joaquin kit fox (*Vulpes macrotis mutica*), Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*), and Buena Vista Lake shrew (*Sorex ornatus relictus*) along riparian wetlands in the area. The uplands associated with targeted wetland parcels will be protected from intensive land use conversion when willing landowners accept conservation easement payments.

The *Recovery Plan for Upland Species of the San Joaquin Valley* (Recovery Plan) (1998) covers 11 species federally-listed as endangered or threatened. Several of these wildlife species, the blunt-nosed leopard lizard, Tipton kangaroo rat, Buena Vista Lake shrew, and San Joaquin kit fox, are found within

the proposed Tulare Basin WMA area. Approved recovery plans were previously prepared for blunt-nosed leopard lizard and San Joaquin kit fox in 1985 and 1983 respectively. The Recovery Plan (1998) represents a revision of the earlier recovery plans and identifies portions of this project area as important to the recovery to these species. Implementing one of the action alternatives for this project may benefit some of the listed species, but is not likely to have a significant effect on any of the listed species. Conservation easements do not preclude additional actions that could be taken to recover listed species.

### **3.2.5 Wintering Migratory Waterfowl**

Midwinter migratory waterfowl peak counts for 1975 and 2000 were 236,250 and 119,200, respectively. Annual peak counts during the past 15 years reflect a decline that has followed the reduction in wetland habitat base and available water for wetlands in the Southern San Joaquin Valley. Fifteen species of waterfowl commonly use San Joaquin Valley wetland habitats in winter.

Concentrations of five species of waterfowl have been recorded as greater than 50 percent of the wintering waterfowl in California. These five species using Tulare Basin habitats extensively in winter are pintail, gadwall, green-winged teal, cinnamon teal, and northern shoveler. The proposed Tulare Basin WMA area is considered an important part of the central San Joaquin Valley wetlands complex. The Tulare Basin is especially important for early migrant pintail. The loss of early season habitat has and continues to have far reaching effects to migratory waterfowl.

The waterfowl that winter in the Tulare Basin use habitats as a stopover site as they move to or from habitats at more southern locations and as the terminus of migration. Species such as the northern pintail, white-fronted goose, and cinnamon teal, winter in Basin wetlands. Waterfowl also breed in the Tulare Basin, the most common nesting species are mallard, gadwall, and cinnamon teal.

### **3.2.6 Shorebirds**

In winter and spring, the Central Valley supports tens of thousands of shorebirds—more than any other inland site in western North America. In fall, it is the second most important inland site to shorebirds after Great Salt Lake in Utah (Page and Shuford 2000). *The United States Shorebird Conservation Plan* (Manomet Center for Conservation Sciences 2001) states concern over land use changes and further habitat loss which is likely, “especially in the Central Valley.” A Shorebird Working Group, comprised of Central Valley Joint Venture partners, has been organized which is placing highest priority on conservation needs and opportunities of the Tulare Basin.

Species with regionally important populations in the Central Valley are the black-bellied plover (winter, spring), snowy plover (winter), killdeer (winter, summer), mountain plover (winter), black-necked stilt (fall-spring), American avocet (fall-spring), greater yellowlegs (fall, winter), whimbrel (spring), long-billed curlew (fall, winter), western sandpiper (spring), least sandpiper (winter), dunlin (winter), and long-billed dowitcher (fall-spring).

The Central Valley is one of only a few key wintering areas in the world for the mountain plover, which is proposed for Federal listing under the Endangered Species Act. The Central Valley also hosts two other bird species of special concern (species that may be candidates for listing as threatened) in California, the snowy plover and the long-billed curlew (CDFG, 1992). Three shorebirds, American avocet, black-necked stilt, and killdeer remain in Tulare Basin habitats to breed.

At least fifteen waterbird species other than shorebirds and waterfowl use wetland habitats, eight of which breed in the area. The most abundant are great blue heron, common moorhen, and sora.

### **3.2.7 Other Wildlife Use**

Northern harriers, red-tailed hawks, America kestrels, burrowing owls, and tricolored blackbirds are year-round residents. Wintering species include white-tailed kite, Cooper's hawk, Swainson's hawk, prairie falcon, and ferruginous hawk. An occasional bald eagle or peregrine falcon has been observed in the area.

Mammalian residents of the grasslands include the endangered San Joaquin kit fox, black-tailed jack rabbits, cotton tailed rabbits, coyotes, muskrats, raccoon, opossum, striped skunk, and California ground squirrel. Various small rodents are also common residents.

The sloughs, creeks and canals contain western pond turtles, along with fish species such as bullhead and channel catfish, striped bass, threadfin shad, and carp. These species also enter the various marsh areas when they are flooded from surface water sources. Invertebrates, such as freshwater clams, crayfish, and numerous insects also occur in the proposed Tulare Basin WMA. Western spadefoot is a species of concern that could be found in close proximity to wetlands.

### **3.3 Social and Economic Environment**

There are no urban incorporated communities within the proposed WMA boundaries. The following describes the proposed project area;

#### **3.3.1 Kern and Tulare Counties**

After refining a project area around known existing private wetland habitats, only small portions of Kern and Tulare counties remain within the proposed project area. The final project area proposal has been reduced to approximately 57,000 acres of priority one and two tracts. This reduced area is considered the entire habitat that can be protected in the foreseeable future with existing resource constraints.

The following social and economic data for Kern County fairly represents the region of the proposed project area. The 1999 populations estimate for Kern County totaled 648,400 people. The City of Bakersfield, the nearest urban center to the study area and the County seat, had a population of 230,800, in 1999 ([Http://factfinder.census.gov/home/en/datanotes/expstf190.htm](http://factfinder.census.gov/home/en/datanotes/expstf190.htm)).

Employment figures by industry in 1999 for Kern County area are as follows: Service 17.8 percent, Retail trade 16.0 percent, Government 21.6 percent, Agriculture 15.1 percent, Finance 3.4 percent, Construction 5.6 percent, Wholesale trade 4.0 percent, Transportation and Public Utility 4.1 percent, Manufacturing 5.4 percent, and Mineral Extraction 7.1 percent. Future growth and urban area expansion in Kern County, will likely result in both an increase in jobs and job diversity as well as contribute to the urban growth of Bakersfield. The proposed project area is influenced by the relative close proximity to southern California.

#### **3.3.2 Kern and Tulare Counties' General Plans and Williamson Act Program**

The counties' General Plans, designate lands in the proposed project area as open space with value as pasture land, row crops, and wildlife habitat. In 1967, the Kern County Board of Supervisors approved implementation in Kern County of the *California Land Conservation Act of 1965*, better known as the *Williamson Act*. The program, in place in a majority of California's 58 counties, provides tax reductions for lands under contract in exchange for maintaining land in agricultural uses for a period of 10 years. Under the Act, the state provides payments to the county to cover lost property tax revenues. The agricultural preserve established by Kern County for the Williamson Act program, overlaps with the Service's proposed Tulare Basin WMA. In fact, the Service's conservation easement program and the Williamson Act agricultural preservation program overlap and complement each other in many counties throughout California. Properties within a WMA easement area remain eligible for the Williamson Act

program. Landowners whose property falls within a Service WMA and the Williamson Act program can be compensated by both programs for maintaining their properties in agricultural production while providing benefits to California's wildlife.

### **3.3.3 Agricultural Production**

Kern and Tulare counties consistently rank among the state's top agricultural counties, producing in excess of \$6 billion in gross annual income, ranking numbers 4 and 2 respectively, in 2000 (Kings County Ag. Crop Report, 2001). These counties are leading producers of milk, grapes (wine), almonds, chicken, cotton, tomatoes, cattle, eggs, and alfalfa. Livestock grazing occurs on some of the grassland and irrigated pasture land within the WMA area.

### **3.3.4 Land Ownership**

Alternative 3 includes approximately 22,000 acres of private property. Alternative 3 includes those tracts within Alternative 2, with the additional potential fee acquisition of no more than 2,000 acres. The Land Protection Plan includes a listing of the individual parcels (Table 1). No new or additional zoning or land-use regulations would be created by the Service within the approved Refuge boundary of the proposed addition or on neighboring lands.

### **3.3.5 Property Tax**

Counties collect property taxes on private land within the proposed WMA. The Williamson Act enables counties and cities to designate agricultural preserves and offer preferential taxation to agricultural landowners based on the income-producing value of their property in agricultural use, rather than on its assessed value. In return for the preferential tax rate, the landowner is required to sign a contract with the county agreeing not to develop the land for a minimum 10-year period. Contracts are renewed annually for 10 years unless a party to the contract files for nonrenewal or petitions for cancellation. In 2001, there were approximately 1,719,863 acres and 1,114,948 acres of Williamson Act lands in Kern and Tulare Counties respectively (Department of Conservation).

The purchase of conservation easements on private land by the Service would not reduce property tax revenues to the counties, because the lands would remain in private ownership and subject to state or local tax assessments. If any land were purchased in fee (not to exceed 2,000 acres) the provisions of the Refuge Revenue Sharing Act, as amended (16 U.S.C. 715s), would apply. The Revenue Sharing payment is intended to offset losses in tax revenues to county government. Refuge Revenue Sharing Act payments can be calculated on the greater of: 75 cents per acre, 0.75% of the appraised value, or 25% of the net receipts collected from the Service.

### **3.3.6 Wildlife Dependent Recreational Uses**

The vast majority of lands within the proposed study area are privately owned. The focus of this conservation proposal is to sustain private waterfowl hunting clubs and the habitat that they provide. By acquiring conservation easements on private properties on a willing seller basis, the Service provides funds for the purchase that are available to support continued operation of these private habitats. All of the wetland dependent species found on the private clubs benefit from this proposed project. An additional benefit of this effort is sustaining the unique local culture that the hunting clubs represent. The California Department of Fish and Game (CDFG) recently acquired some parcels for management as an ecological reserve. Currently landowners do not allow recreational use or access by the general public. These lands would remain closed to the general public, because the Service would not purchase public access rights. Wildlife viewing on these lands is available along the network of county roads that cross the study area.



# *Chapter 4 - Environmental Consequences*

## **4.1 Alternative 1 - No Action**

The No Action Alternative represents no change from the existing management of lands in the study area. Under this alternative, the Service would not acquire interest in the lands in the study area for the purpose of creating the Tulare Basin WMA.

The distribution, general location, and extent of land use in the study area and vicinity would be guided by the appropriate county General Plan and zoning codes. The General Plan is the official overall policy statement of a county relating to land use and planning issues and provides a broad outline of future land use patterns. The zoning ordinance regulates land use by dividing the unincorporated areas of a county into districts or zones and specifies the uses that are permitted or prohibited within each district. Under the No Action Alternative, existing land use patterns in the study area would remain under the authority of the counties.

Long-term protection and restoration of the area's wildlife habitat would not be likely without some type of incentive to the landowner. Fragmentation of the existing natural habitat is likely to continue without landowner incentives. Two major forces are at work in removing suitable wildlife compatible habitats from within the project area they are: (1) increases in operation or maintenance costs for managed wetland habitats, especially water; and (2) increasingly intensive land uses, such as conversion from grass to row crops, orchards, vineyards, poultry farms, sewage disposal sites, and construction of new dairies. The impact of additional private wetland habitat lost from active management, including seasonal flooding, is a decrease in the carrying capacity for Pacific Flyway waterfowl populations. Based on the private wetlands that have been abandoned in the past 12 years, it is anticipated that 2,500 to 5,000 acres of wetlands and the associated uplands would be lost in the next decade under this alternative. There has been 13,461 acres of land committed to biosolids application within Kern County. The location of these disposal sites is in close proximity to the high quality habitat sites that are proposed for protection by this project. In one case, dust from the neighboring stock pile of organic material frequently blows into private wetlands.

Siting of new dairies in San Joaquin Valley counties has become controversial. Three new dairy projects are within immediate proximity of private wetland properties. Concerns over noise, glare from outdoor lighting, and activity levels associated with operation of an intensive agricultural enterprise have been voiced by owners of neighboring wetland habitats. Dozens of additional new dairy project permits are anticipated. Encroachment by dairies increases activity levels which may influence bird behavior, flight patterns, and habitat selection. In addition, new dairies provide an economic inducement for wetland owners to sell properties which are then converted to intensive forage crops, further exacerbating habitat losses in the Tulare Basin.

The substantial decline in private hunting clubs and their managed wetlands is documented in a 1988 report by Jones & Stokes Associates. California Department of Fish and Game biologist H. Leach recorded 123 duck clubs in south Tulare Basin in 1958 (acreage unknown, Goose Lake not included). A similar survey in 1974 reflected a drop of more than 50 percent in club numbers, to 60 (4,982 acres). Information collected in 1988 reflects loss of an additional 10 clubs with 30 percent less acreage (50 clubs, 3502 acres). Since 1988, an additional 25 duck clubs have gone out of existence. The flooded wetland acreage varies annually due to increased water costs.

This alternative would not address the loss or conversion of natural topography to more intensive land uses. Since many of the remnant private wetlands and associated uplands are located on relatively undisturbed sites, they often contain unique natural soil profiles and have the potential to host native plant communities.

#### **4.1.1 Impacts on Habitat Protection**

The existing private wetland habitats are expected to decline in size or be further degraded under this alternative. The impacts of no action would influence not only the local area but also have an impact on all the migratory bird species that use the central San Joaquin Valley grasslands. An absence of wintering migratory bird habitat in the southern San Joaquin Valley affects habitat use during the winter in the Central Valley and Sacramento River Delta (see waterfowl distribution in Section 1.1). Many shorebirds, raptors, and mammals exploit the food resources of wetlands during their annual life cycle. If existing habitats are not protected from conversion or development, waterfowl and shorebirds would be forced into other areas and/or concentrate in crowded conditions, which, when combined with poor habitat quality and adverse weather conditions have contributed to the spread of disease.

Botulism and avian cholera are chronic waterfowl disease problems. In some years, deaths attributed to botulism in California have exceeded 250,000 (Hunter et al. 1970). Similarly, avian cholera losses in California during one winter exceeded 70,000 birds (Rosen 1971). According to Friend (1981), the Central Valley, along with three other areas in North America, has developed into an avian cholera enzootic area. More than 33,000 waterfowl killed by disease, were picked up during the 1980 to 1981 winter season on public and private lands in California (USFWS unpublished report). In the absence of high quality fresh water wetlands, birds are likely to select agricultural drain water ponds that suffer various degrees of water quality impairment. As stated in the 1990 Rainbow Report (*A Management Plan For Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley, September 1990, Interagency report of the San Joaquin Valley Drainage Program*) "Effects on populations of wintering migratory birds (waterfowl, shorebirds, and long-legged wading birds, for example) would probably be severe as birds crowded into ever smaller areas of habitat, increase the incidence and impact of avian diseases." Service research scientists documented reproductive failures associated with use of drainage ponds that increase with the elevation of contaminants. Impacts of this sort affect the Pacific Flyway population and reproductive success rate.

The private properties eligible for conservation easements represent the last remaining hope for recovery of migratory bird populations to objective levels set in the CVJV implementation plan for the Tulare Basin. The No Action Alternative would result in lower population levels for migratory waterfowl, shorebirds and terrestrial species that use the associated uplands.

The following is quoted from recent research published in the *Journal of Wildlife Management* entitled "Distribution and Movements of Female Northern Pintails Radiotagged in San Joaquin Valley, California" by J. Fleskes, et al.

"... The greater decline in abundance of pintails wintering in the SJV seems due to a combination of factors, including improved habitat conditions elsewhere, loss of habitat in Tulare Basin, higher disturbance, lower survival, and other factors such as greater impact of drought in the SJV. Improvements that increase the carrying capacity of SJV habitats and winter survival of pintails in the SJV would likely increase SJV pintail populations. Adequate water supplies during early fall are essential to maintain SJV populations. Restoring Tulare Basin habitats is crucial to restoring pintails throughout the SJV, including the Grassland EA during late winter."

#### **4.1.2 Land Ownership Issue**

Land ownership patterns would continue to be influenced by economic forces leading to more intensive uses over time.

#### **4.1.3 Property Taxes**

The current property tax conditions would not change.

#### **4.1.4 Intensive Development and Land Use Conversion**

Irrigated farmland lost ground to large new urban increases as the California Department of Conservation's Farmland Mapping and Monitoring program (FMMP) conducted its 1998 biennial land use inventory. The San Joaquin Valley Region ranked second in the growth of new urban land during the 1996 to 1998 period. Converting wildlife compatible crops to orchards, dairies, poultry farms, and vineyards is occurring at an alarming pace in the region. Expanding the California Department of Corrections Delano State Prison, less than 10 miles east of the proposed project boundary, will increase the local population and increase development of the surrounding area. Agricultural crop acreage reports do not reflect the farm land lost due to land use changes because they are masked by the annual variation in farmed acreage due to water supply (Kern Co. agricultural commissioner, pers. comm. with Jack Marks). The number of acres farmed each year in the southern San Joaquin Valley is directly tied to available irrigation water supplies and variations in the quantity of water diversions in the Sacramento River Delta. A substantial amount of annual cropland is left idle each year due to changing economic conditions.

It is anticipated that as nearby communities grow the pressure for subdivisions or suburban encroachment would increase within the proposed project area. The area has large numbers of small parcels that could be developed for residential purposes. Several rural "ranchette" type residential land uses occur on small parcels within the area currently. The remote nature of the properties of interest to the Service and existing habitats would provide the only protection from future land use changes.

#### **4.1.5 Wildlife Dependent Recreation**

Waterfowl hunting is the primary use of the private properties that are targeted for protection by this project. It is anticipated that Alternative 1 would result in the gradual decline or elimination of traditional hunting clubs. Loss of the private wetland properties can be demonstrated to be a direct loss of wildlife habitat and also leads to a loss of public support or understanding of the needs of wildlife populations. The current landowners do not provide access to the general public on lands that are subject to this conservation project. The access is not expected to change in the future.

#### **4.2 Alternative 2 -20,000-acre Project - Easements Only**

Under Alternative 2, the Service would identify a conservation easement project area of approximately 57,000 acres within which the Service would seek to permanently protect approximately 20,000 acres of habitat. The goal of this alternative is to seek habitat protection through the purchase of conservation easements. With the protection of these natural wetlands and associated upland habitats, the Service would be contributing to protection and recovery of migratory waterfowl populations, shorebirds, and neotropical migratory birds of North America's Pacific Flyway, and federally listed threatened and endangered species by attempting to meet minimum habitat requirements to support stable populations.

The two predominant land uses of these 20,000 acres of wetlands and associated upland habitats are recreational hunting by organized duck clubs, and livestock grazing. Many of the existing clubs have long and rich historical connections with the surrounding communities. Under this alternative it is expected that land use on existing high quality habitats within the project area would remain unchanged.

The local economy, rural lifestyle and open space would be maintained in this area due to the Service acquiring perpetual conservation easements.

With this alternative, affects of fragmentation are likely to continue to occur, such as the loss of connectivity of biological processes. The isolation of native habitats can disrupt the interacting functional components of the larger system. Riparian habitats connecting these parcels are not proposed to be protected nor managed for maximum wildlife benefits. Past losses of habitat in locations that could be reconnected will not be addressed by habitat restoration.

#### **4.2.1 Impacts on Habitat Protection**

Creating the Tulare Basin WMA and securing conservation land use on 20,000 acres could make a contribution to the habitat protection and management goals of CVJV and NAWMP (see goals described on page 3). The Tulare Basin WMA would also contribute to protection of seasonally important shorebird habitat, see discussion in 3.2.6. Securing the future land use of private wetlands and associated uplands would help to reverse the long term decline in migratory bird populations that has occurred in the basin. The native topography and undeveloped lands represented by parcels within the proposed project area are very scarce natural resources (less than 3 percent of the surface area) in the San Joaquin Valley. This alternative would attempt to arrest further declines in the available habitat base. Securing perpetual conservation easements on approximately 20,000 acres of wetland habitat and associated uplands would prevent additional effects to the migratory bird populations that depend on these scarce resources. All of the existing private wetlands within the study area could be protected within this alternative. The risk of future wetland habitat losses is best demonstrated by the recurring losses that have been observed over the recent past. Several properties have ceased to be managed as wetlands in the past three years. Twenty-five wetland properties have gone fallow or have been converted to other uses since 1988.

Future conditions under this alternative would allow waterfowl populations in the Tulare Basin and Pacific Flyway migrants to rely on much the same habitat base that supports existing populations. Increases in local and regional migratory bird populations as a result of this alternative are not likely. This alternative would be a holding action to stop the rapid decline in natural resources. The future conditions described are based on the assumption that maintenance and management provided by private landowners would continue. The projected effect of this alternative is small, yet incrementally positive to all wetland dependant species. The effect of providing permanent protection to the targeted private lands is interconnected with other variables such as changes in water availability, management of public lands, and annual variation in climatic conditions that make separate analysis speculative.

#### **4.2.2 Land Ownership**

The fee ownership of land does not change when a conservation easement is created. Land remains private property with restrictions on future uses of the property. If this alternative is implemented, the Service would work with willing sellers to protect existing wetlands and associated upland habitats.

#### **4.2.3 Property Taxes**

Property taxes would not be directly affected by this alternative. Lands protected by conservation easements remain in private ownership and continue to generate property tax revenue.

#### **4.2.4 Intensive Development and Land Use Conversion**

Land use changes would be prevented on approximately 20,000 acres of existing wildlife habitat. Surrounding lands may continue to experience more intensive development over time. Fragmentation of wildlife habitat and increased levels of disturbance may become a concern.

#### **4.2.5 Wildlife Dependent Recreation**

Public access to the private properties would not change under this alternative because private landowners would continue to limit access as they desire. Implementing this alternative would contribute to the continuation of private hunting clubs and the local culture they reflect. The commitment and stewardship that private wetland operators demonstrate is recognized by neighbors and residents in the local community.

#### **4.3 Alternative 3 - 22,000-acre Project, Including 2,000 acres of Potential Fee Acquisition (Preferred Alternative)**

Alternative 3 includes lands identified in Alternative 2 for conservation easements only, with the addition of up to 2,000 acres of potential fee acquisition. Including these lands within the conservation easement program would increase protection to isolated wetlands and migratory bird habitat and create a foundation for future restoration activities.

The CVJV and the NAWMP, set goals for restoring waterfowl populations, see description in Section 1.6. Implementing this alternative with a goal of protecting 22,000 acres would make a measurable contribution to the habitat protection and management goals of CVJV and NAWMP. In the Tulare Basin this could mean preventing further migratory bird population declines within the basin and possibly increasing the percentage of the Pacific Flyway waterfowl population that winters in the basin from 5 percent to 8 percent. An increased level of management concern and monitoring of shorebird populations has occurred in the past decade. Within the Central Valley, the Tulare Basin WMA would contribute to protection of remaining limited shorebird habitat. Insufficient population data makes future population projections difficult. However, it appears that all available wetland habitats that contain preferred shallow water habitats would be used to the advantage of migrating shorebirds. Public comments indicate that the proposed protection measures would be very popular with local landowners and implementation could occur rapidly, subject to adequate funding.

##### **4.3.1 Impacts on Habitat Protection**

Securing perpetual protection on approximately 22,000 acres (including 2,000 acres potential fee acquisition) of wetland habitat and associated uplands would make measurable contributions toward the CVJV and NAWCA goals and partially offset past habitat losses. As described in Section 4.3 above, this alternative would stabilize declining migratory bird populations locally, and with implementation of the restoration components, could result in modest increases in migratory bird populations wintering in the Tulare Basin. A stable base of wintering waterfowl habitat in the area would reduce the dangers of disease outbreaks associated with large concentrations of birds on minimally adequate habitat or wetlands impaired by water quality contamination. Native uplands and undeveloped areas are often associated with wetlands in one ownership. Many resident species of wildlife, including threatened and endangered species use these upland habitats.

Preliminary discussions with Service biologists have highlighted the positive benefits of providing permanent protection to properties that, in most cases, have both upland and wetland habitat types present. In the absence of perpetual protection for the proposed project area, it is anticipated that more intensive development and economic development would occur, eliminating most wildlife benefits.

##### **4.3.2 Land Ownership**

This alternative would retain private ownership of approximately 20,000 acres of land protected by conservation easements. Up to 2,000 acres of fee acquisition could be added to the Kern National Wildlife Refuge Complex.

### **4.3.3 Property Taxes**

This alternative would have the same negligible effect as alternative 2 on the 20,000 acres of land protected through perpetual conservation easements. The lands remaining in private ownership would continue to be subject to local taxes. Any lands purchased in fee (not to exceed 2,000 acres) would result in Service payments in lieu of taxes as provided by the revenue sharing act. The formula for in lieu of tax payments according to the refuge revenue act is 0.75 times 1 percent of the assessed property value. In recent years, Congressional appropriations have provided approximately half of the calculated amount of payments in lieu of taxes.

### **4.3.4 Intensive Development and Land Use Conversion**

Implementation of this alternative would prevent the intensive development of up to 22,000 acres. This amount of habitat protection would provide measurable progress toward meeting CVJV goals for the Tulare Basin. These permanently protected lands could provide the minimum wetland habitat necessary to meet wintering waterfowl populations' needs.

### **4.3.5 Wildlife Dependent Recreation**

The control of private access on private lands with conservation easements would not change. Private landowners would continue to limit access as they desire. Implementation of this alternative will contribute to the continuation of private hunting clubs and the local culture they reflect. The commitment and stewardship that private wetland operators demonstrate is recognized by neighbors and residents in the local community.

Any land purchased in fee would be managed as part of the Kern NWR Complex and contribute to wildlife dependent recreation by reducing the isolation and fragmentation of existing habitats that is likely to occur as properties in "key" locations are developed for economic necessity.

## **4.4 Cumulative Impacts**

The action alternatives proposed for this project are planned within the context of other conservation efforts underway by various CVJV partners. While substantial amounts of work have been accomplished in other parts of California since the 1990 CVJV Implementation Plan was written, very limited achievements have occurred in the Tulare Basin. Restoration projects have been initiated by the U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS). The CDFG has contracts to support management on selected private properties. Both of these efforts are directly affected by the limitations of water supply and cost. Ducks Unlimited and California Waterfowl Association have assisted individual hunting clubs in making improvements to their water management facilities and moist soil management capabilities. These investments in private wetland habitat would be secured in perpetuity by implementing this proposal.

It is anticipated that the growing human population in California will result in continuing pressure on the few remaining natural landscapes within the central San Joaquin Valley, including the Tulare Basin. Concerted effort to protect existing wetlands and associated upland habitats is necessary to prevent the abandonment or conversion of the limited private lands providing migratory bird wintering areas. The proposed project is expected to result in modest benefits to wildlife. This action in concert with the many other efforts, however, referred to above by CVJV partners, may be able to protect sufficient wildlife habitat to perpetuate resident and migratory wildlife population for the foreseeable future.

**Table 1. Summary of Impacts By Alternative**

<b>Impact Topics</b>	<b>Alternative 1 No Action</b>	<b>Alternative 2 20,000 Acres</b>	<b>Alternative 3 22,000 Acres</b>
Habitat Protection	Minimal protection through existing zoning. Continued decline in extent and continuity of available habitat will result in measurable declines in migratory bird populations.	20,000 acres of habitat protected for the benefit of migratory birds and listed species. Decline in wetland habitat base will be arrested, to support stable waterfowl populations.	22,000 acres of habitat protected for benefit of migratory birds and listed species. Protection of connected lands facilitates restoration of habitat and potential for increased migratory bird populations.
Property Taxes	No change	No change due to conservation easements	No change on properties covered with conservation easements. In lieu of taxes paid on lands purchased in fee.
Land Ownership	No change	No change in fee ownership.	Small addition, not to exceed 2,000 acres of fee acquisition possible.
Wildlife Dependent Recreation	Anticipated habitat losses associated with lost hunting opportunities and reduction in local support for private duck clubs.	Conservation easements used to perpetuate private hunting clubs and wetland habitats they manage. Existing habitats continue to support migratory bird populations at current levels, thus maintaining existing wildlife dependent recreation opportunities.	Same benefits as Alternative 2 with potential to secure up to 2,000 acres of ‘key” habitat locations to avoid fragmentation.
Land Use Change	Continue to experience habitat losses and declining migratory bird populations.	20,000 acres of habitat protected from changes in land use resulting in stable habitat base.	22,000 acres of habitat protected from changes in land use resulting in stable habitat base.



# *Chapter 5 - Coordination, Consultation, and Compliance*

## **5.1 Agency Coordination**

The proposed creation of the Tulare Basin Wildlife Management Area has been discussed with landowners, conservation organizations; federal, state, and county governments; tribal representatives, and other local agencies, interested groups, and individuals. The Service has developed a strategic view of this proposal by incorporating the work of CVJV partners and integrating planning done by The Nature Conservancy, Ducks Unlimited, and various public agencies into this proposal.

Copies, on compact computer disk, of the environmental assessment and land protection plan were sent to federal and state legislative delegations, agencies, county and city governments, affected landowners, private groups, and other interested individuals (see Appendix C for distribution list) in September 2004 for a 30-day review. In addition, printed copies of this environmental assessment and land protection were available for review at the refuge office and public libraries. The environmental assessment and land protection plan were also available for review on our website at: <http://www.fws.gov/cno/refuges/planning>.

The Service has invited and continues to encourage public participation through the public involvement program consisting of public notices, meetings with potential affected landowners, government agencies, and private organizations.

## **5.2 Environmental Review and Consultation**

### **5.2.1 National Environmental Policy Act**

As a federal agency, the Service must comply with provisions of the National Environmental Policy Act of 1969 (NEPA). An environmental analysis is required under NEPA to evaluate reasonable alternatives that will meet the stated objectives, and to assess the significance of possible environmental, social, and economic impacts to the human environment. The environmental assessment serves as the basis for determining whether implementation of the proposal would constitute a major federal action significantly affecting the quality of the human environment. The environmental assessment facilitates involvement of government agencies and the public in the decision making process.

### **5.2.2 National Historic Preservation Act**

The Service has considered the potential effects of establishing the acquisition boundary for the Tulare Basin WMA on cultural resources of the area. Effects on archeological and historic resources from implementing the action alternative would not be expected to differ significantly from the “No Action” Alternative. A copy of the EA has been provided to the California State Historic Preservation Officer for review and comment. The Service will be required to complete additional compliance under the National Historic Preservation Act and other cultural resource preservation laws for any future restoration and management actions if the proposed WMA is established.

### **5.2.3 Endangered Species Act**

The Service’s Division of Refuge Planning initiated an informal Intra-Service Section 7 Consultation, under the requirements of the Endangered Species Act for the proposed creation of the Tulare Basin WMA. The Service’s Endangered Species Division provided a finding on April 17, 2004 of “May affect, but is not likely to adversely effect” for listed species and “no effect on proposed species/no adverse modification of proposed critical habitat.” The Service will be required to complete additional

consultation under Section 7 of the Endangered Species Act for any restoration or management program that would be developed subsequent to creation of the WMA.

#### **5.2.4 Other Federal Laws, Regulations, and Executive Orders**

In undertaking the proposal, the Service would comply with the following federal laws, executive orders, and legislative acts: Floodplain Management (Executive Order 11988); Intergovernmental Review of Federal Programs (Executive Order 12372); Protection of Historical, Archaeological, and Scientific Properties (Executive Order 11593); Protection of Wetlands (Executive Order 11990); Management and General Public Use of the National Wildlife Refuge System (Executive Order 12996); Departmental Policy on Environmental Justice (Executive Order 12898); Hazardous Substances Determinations (Secretarial Order 3127); Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970, as amended; Refuge Recreation Act, as amended; Refuge System Administration Act, as amended; and the National Wildlife Refuge Improvement Act.

#### **5.2.5 Distribution and Availability**

Copies of the revised documents will be available for viewing on our website at:

<http://pacific.fws.gov/planning> and will be made available to anyone who may wish to review them.

Arrangements for reviewing copies of the revised planning documents can be made by contacting the U.S. Fish and Wildlife Service, Kern National Wildlife Refuge, P. O. Box 670, Delano, California 93216 (telephone 661 725-2767); and the U.S. Fish and Wildlife Service, California/Nevada Refuge Planning Office, 2800 Cottage Way, Sacramento, CA 95825, (telephone 916 414-6502).

## *Chapter 6 – Public Comments with Responses*

The draft planning documents were distributed to the public on compact computer disk in September of 2004 for a 30-day comment period. Eight letters of comments were received from individuals along with three letters from units of local government. On the following pages, the comments received are printed in their entirety. The Service's responses to comments are in italics.

"Kevin Jones" <docjns@ocsnet.net>

10/14/2004 03:41 PM

As a land owner in the proposed Tulare Basin Wildlife Management Area, I strongly support your efforts to help protect habitat. Through time I have witnessed crucial habitat loss resulting in a negative impact to wetland wildlife. I favor alternative #3. Future generations will appreciate all of the hard work and dedication that went into this worthy project.

Sincerely,

Dr. Kevin T Jones

309 North D St.

Porterville, CA 93257

***Response:*** Comment noted

Jim Forrest  
917 Poplar Avenue  
Wasco, Ca 93280

October 12, 2004

U.S. Fish and Wildlife Service  
P.O. Box 690  
Delano, CA 93216

Attention: Scott Frazer

Response to Proposed Tulare Basin Wildlife Management Proposal

This document is a concise, accurate, and complete analysis of the need for wildlife and wetlands preservation in the lower San Joaquin Valley. It is also timely because of the rapid loss of wetlands and wildlife habitat due to rapid urbanization of the area. The total presentation shows depth of understanding of the problem and the possible solutions. While concise this document is also a presentation in depth.

There are three possible alternatives offered. Alternative one, that of no action is the least attractive, considering the long-term affects. Alternatives two and three are substantially the same. Both alternatives would allow for preservation of threatened wetlands and wildlife. However alternative three would allow for the purchase of two thousand acres of fee simple land. This would provide flexibility and alternatives for tying plots together.

After considerable study of the total proposal I am awed by the amount of work and understanding shown of the wetlands/wildlife needs of the target area. I would like to go on record as strongly supporting Alternative 3.

Signed: James A. Forest

*Response: Comment noted*

Scott Frazier  
Kern National Wildlife Refuge  
P.O. Box 670  
Delano, CA 93216

October, 9 2004

Mr. Frazier,

What is the grand total acreage of farmland that you intend to remove from cultivation? The 16,000 acres is implied to be a 1<sup>st</sup> step.

**Response:** *The top priority lands which the Service is interested in acquiring easements are not cultivated. There may be some "buffer" areas that could include lands cultivated in cereal grains that are beneficial to wildlife. No change in cultivated farmland is anticipated.*

Will this land be removed from the tax roles?

**Response:** *The preferred alternative is to purchase easements on up to 20,000 acres. Land protected by an easement remains private property and remains on the tax roles. An option to purchase 2,000 acres in fee will be considered for high quality habitat that connects adjacent wetlands when the owner desires to sell in fee rather than retain fee ownership. Any land purchased in fee would be removed from the tax roles and revenue sharing act payments would be made to the county by the federal government.*

Who is going to pay for the pumping of the H<sub>2</sub>O to flood this land? Are taxpayer dollars going to be used to subsidize (sic) Duck-clubs?

**Response:** *Pumping costs and water supplies remain the responsibility of the private landowner. No subsidy is proposed by this project.*

Should the federal government be pumping out ground water that is obviously dropping?

**Response:** *The federal government is not pumping groundwater. We do not anticipate current pumping activity to change as a result of the Service's proposed easement program.*

Are you using the 4 endangered species to hype this project? Purchase of leases are to be funded out of waterfowl funds? Preservation of wetlands is the stated goal to justify using these dollars. I find it hard to believe the endangered species habitat will be enhanced by flooding the 16,000 acres.

**Response:** *Many of the private wetland owners have adjacent dry uplands that are occupied by listed species. Protecting the adjacent uplands would be considered a secondary benefit of the proposed project. Existing wetlands would be maintained in addition to protecting uplands in the same ownership.*

Gordon Heebner  
305 N. Cottage St  
Porterville, CA 93257

**Julie Mayes'' <jmayes@theagentsyouwant.com>**

10/29/2004 10:46 AM

To whom it may concern,

We are currently representing clients that have property in the proposed Tulare Basin Wildlife Management Area. The parcels they own have been in escrow but have just cancelled. We brought this proposal to their attention and they are showing interest in it. The parcels they own are the following:

058-340-23

058-340-25

058-340-26

058-340-27

058-340-28

058-340-29

Could you please let us know if these parcels are actually in the proposed area & who they would need to contact regarding the sale of these parcels if they are.

Thank you,

Julie Mayes

McMillin Realty

Crisp/Cole Team

***Response:*** *The parcel numbers listed do not appear to be within the proposed project area.*

"Alex Carrassi" <alex@carrassi.com>

10/29/2004 09:07 AM

I fully support the efforts of the Department of Fish and Game in attempting to maintain the waterfowl habitat in our area. As an avid hunter and supported of hunters efforts to maintain areas for hunting I believe this project should definitely move forward. I have been a member of duck clubs since 1988 and spent thousands of MY dollars maintaining the habitat for wildlife. Many of those years the hunting was terrible because of the lost of habitat and the flight of birds has changed over the years due to the lost of habitat. I believe it's time for our government to assist us in our endeavor. We are losing land as rapidly as houses can be built.

Alex Carrassi  
Pintail Slough Land Company

***Response:*** Comment noted

**Arthur D Unger** <[alunger@juno.com](mailto:alunger@juno.com)>

10/25/2004 05:37 PM

Arthur Unger  
2815 La Cresta Drive  
Bakersfield, CA 93305-1719  
(661) 323 5569  
[alunger@juno.com](mailto:alunger@juno.com) preferred

Richard Smith  
US Fish and Wildlife Service  
CA/NV Refuge Planning Office  
[FW1PlanningComments@fws.gov](mailto:FW1PlanningComments@fws.gov) via e mail

Re Tulare Basin Land Protection Planning Study

October 25, 2004

I have not read Planning Update 4, except for the printed flyer you sent out. This will summarize my June 27, 2002 and April 16, 2003 comments and add a bit.

The Tulare Basin Land Protection Planning Study should be coordinated with the Kern County Valley Floor Habitat Conservation Plan (KCVFHCP), Metropolitan Bakersfield Habitat Conservation Plan, designation of critical habitat for the Buena Vista Lake Ornate Shrew, other HCPs, and CalFed's Environmental Restoration Plan. The goal should be to preserve large chunks of connected habitat for upland and wetland species.

***Response:** We are aware of the development of the KCVFHCP and that it is not final at this time. Our proposal to establish the Tulare Basin WMA is consistent with the goals of the KCVFHCP in that both projects are seeking protection of habitats important to species using the valley floor habitats.*

Much of this land should also be used for water recharge. With the added expense of planning, it will be possible to flood areas of habitat without jeopardizing any animal species. Biologists will need lots of warning before a recharge area is to be flooded. Small mammals may need to be trapped and moved to previously flooded areas that have been restored to habitat. This may be less of a risk when populations have been partly restored in the affected areas. I do not know if various animals can tolerate very slow flooding by moving to higher ground. Flooding is a threat to Valley Sink lands; few such lands exist and all of it may have to be preserved.

***Response:** The soil characteristics of some properties would allow for groundwater recharge to occur while others would not provide effective recharge. This conjunctive use of water is being explored by the Semitropic Water Storage District and others in or near the project area. Although it is expected that wetland management would continue to occur under our proposal, resulting in a certain amount of groundwater recharge, groundwater recharge is outside the scope of this project.*

Alternative 3 is the best of the considered alternatives, but it is not the best way to recover species. We need more money.

***Response:*** *Comment noted.*

Is there any chance that the possible loss of the Salton Sea as wildlife habitat could be mitigated in some small part by saving Tulare Basin Wetlands? In winter I have twice seen at least a dozen White Pelicans in the City of Bakersfield 2800 acre Water Recharge Area; do they use Tulare Basin Wetlands?

***Response:*** *Although white pelicans do occasionally use some wetlands in the Tulare Basin, use of Tulare Basin wetlands as mitigation for Salton Sea habitat losses is outside the scope of the proposed project. Adding increased levels of complexity could result in significant delays.*

Thank you for the opportunity to comment  
Arthur Unger

**"Daniel Meyer"** <danielm11974@hotmail.com>

10/30/2004 09:31 AM

To Whom It May Concern,

I read your article in the Bakersfield Californian of the Friday issue 10/29/04 discussing Kern County Wildlife Refuge. I was delighted in hearing the National Fish and Wildlife Service (NFWS) is purchasing easements of 16,000 acres to protect wetland near Tulare Lake.

I came to California as of September 1st, 2003. I grew up in Iowa outside of a very small town (population 400) called New Vienna. I believe everyone needs to be better stewards of the land. Protecting our limited resources is very crucial because of demanding pressures of humanity. I recently finished reading a book from the Author Mark Arax and Rick Wartzman called The King of California. The book informed me how land owners such as James G. Boswell changed large numbered acres of pristine wildlife habitat land and turned it into a large scale commodity production of agricultural goods. In the book it described historic environmental changes leading into todays loss of wildlife and its habitat because of diversion and drainage of California's fresh water supply. I'm very glad the NFWS as taken efforts to protect our fragile and limited resources and continues to do so. If I can help by volunteering please let me know.

Sincerely yours,

Daniel Meyer

***Response:*** Comment noted

"Steve Lindersmith" <[srl@pe.net](mailto:srl@pe.net)>

10/26/2004 03:15 PM

**From:** [Steve Lindersmith](mailto:Steve.Lindersmith)

**To:** [FW1PlanningComments@fws.gov](mailto:FW1PlanningComments@fws.gov)

**Sent:** Friday, October 22, 2004 11:58 AM

**Subject:** Tulare Basin WMA

We are looking at a piece of property that lies within the proposed Tulare Basin Wildlife Management Area. A portion of the property is currently being used as a private duck club, containing duck ponds, etc. Our plans include filling in the ponds, and using the property to grow feedgrains/silage, utilizing waste water from surrounding dairies to fertilize the crops.

Under existing U.S. Fish and Wildlife regulations/restrictions or ones that would evolve when the proposed Tulare Basin WMA is established, would we be permitted to utilize the property as described above.

Sincerely,

Steve Lindersmith

909-930-9390

[srl@pe.net](mailto:srl@pe.net)

**Response:** *Unless a conservation easement is sold by the landowner, the property would not be subject to any increased level of regulation by U.S. Fish and Wildlife Service as a result of the proposed Tulare WMA. The uses described would be subject to existing regulations by other county, state and federal agencies. Kern County may require land use permits depending on the type and quantity of fill or soil volume involved and the type of structures installed. The landowner is referred to the U.S. Army Corp of Engineers to determine if Section 404 of the Clean Water Act prevents filling of wetlands. Also, the landowner should be aware that many of the lands in the project area are currently occupied range for several threatened and endangered species.*

# RESOURCE MANAGEMENT AGENCY

5961 SOUTH MOONEY BLVD.  
VISALIA, CA. 93277  
PHONE (559) 733-6291  
FAX (559) 730-2653

BRITT FUSSEL Engineering  
VACANT Current Planning  
James A. Blair Transportation  
George Finney Long Range Planning  
Deborah West Support Services  
Roger Hunt Administrative Services

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**HENRY HASH, DIRECTOR**

**TOM SHERRY, ASSOCIATE DIRECTOR**

October 28, 2004

Scott Frazer  
Refuge Operations Specialist  
Kern National Wildlife Refuge  
P.O. Box 670  
Delano, CA 93216  
Phone: 661-725-276

Richard Smith  
Natural Resource Specialist  
U.S. Fish and Wildlife Service  
CA/NV Refuge Planning Office  
2800 Cottage Way, Suite W-1619  
Sacramento, CA 95825  
Phone: 916-414-6502

**Subject: Proposed Tulare Basin Wildlife Management Area (WMA) Environmental Assessment, Land Protection Plan, and Conceptual Management Plan**

**Dear Mr. Frazer and Mr. Smith:**

The Tulare County Resource Management Agency Long Range Planning Branch has reviewed the project/documents referenced above and offer this comment letter.

The Long Range Planning Branch agrees that Alternative 3 is the best course of action. The protection of environmental sensitive areas, especially in southwestern Tulare County, is in the best interest of the County for the conservation of natural areas that are uniquely Tulare County.

The protection of natural areas provides habitat for local species to thrive, recreation (i.e. bird watching etc.) and maintains the natural landscape of Tulare County. Other organizations such as the Sierra Riverlands Trust and the El Rio Reyes Trust have also acquired numerous areas within Tulare County to protect environmentally significant areas.

The comments provided are organized by topic categories listed below:

**Topic 1: General Plan and Zoning Map**

The Tulare Lake Basin is within the Rural Valley Lands Plan (RVLP) policy area. The RVLP policy statement states:

Amendment 94-008      In order to protect and maintain the agricultural viability of rural valley

areas, it shall be the policy of the County of Tulare to develop several exclusive agricultural zones, each containing a different minimum parcel size. In addition, it shall be the policy of the County to apply such zones to lands located outside adopted Urban Development Boundaries, where such boundaries have been adopted, and outside Urban Improvement Boundaries, where no Urban Development Boundary has been adopted, generally below and west of the six hundred foot (600') elevation contour line as it occurs in Tulare County...except where otherwise designated by the Land Use Element of the Tulare County General Plan.

The "Environmental Resources Corridor" of southwestern Tulare County is indirectly being preserved through large lot agricultural zoning. Attached is a Tulare County Zoning Map of the proposed Wildlife Management Area (attachment A).

**Response:** *Comment noted.*

## **Topic 2: Existing Plans, Policies & Documents**

Allensworth Study states in the Biological Resources section that the grassland in Allensworth is "...considerably different in character than the foothill grassland." The Allensworth area is considered a "...scenic target providing unique examples of some of the last remaining pristine areas of valley desert land within California." (Allensworth Environment Report pg. 33)

Wetlands Protection Section 312.3 of the Tulare County Comprehensive Policy Plan states the County's position on wetlands.

312.301 The disappearance of wetlands is one of the major problems of wildlife management in California and Tulare County should cooperate in attempts to preserve this valuable resource, which has value for flood control, water quality preservation and reduction of air pollution, as well as habitat for numerous species of wildlife. The Pixley Wildlife Refuge is an important adjunct to the flyway system, and should be encouraged to develop and enlarge if possible.

312.302 The county should expedite the continuance and enlargement of wetland preserves, which will provide waterfowl habitat necessary to the maintenance of the flyway route through the valley. Such wetlands should also be protected through flood control, water quality enhancement and air pollution control programs. (Environmental Resource Management Element: 28)

Roads are mentioned as the only public viewing access for the Wildlife Management Area (WMA). The document states that the WMA boundary will not have access routes as part of the Fish & Wildlife Service acquisition (easement). Consider the following Tulare County policy for public access rights:

111.601 High priority should be given to acquisition of public access rights to public water bodies throughout the county. Acquisition of such sites where they can fulfill more than one function such as protection of drainage-ways,

wildlife habitat, and scenic assets should be encouraged. All types of acquisition methods should be utilized, including open space easements, in-fee purchase, purchase of development rights and conditions of subdivision. (ERME: 32,53,101,109)

*Response: We note that our proposal is consistent with Tulare Co. policy on protecting wetlands.*

### **Topic 3: Threatened and Endangered Species**

Farming operations and the protection of habitat for threatened and endangered species raises the issue of incompatible uses. Litigation between farmers and entities for the protection of threatened and endangered species has become a hot topic in recent years. The following policy from Tulare County's Environmental Resources Management Element states the careful balance of protecting many land uses.

113.006 Goals for the plan are primarily to (1) attack the problem of how to conserve human life itself; (2) attack the problem of how to conserve the resources of Tulare County both man-made and natural; and (3) protect the tax base and man-made improvements that are necessary to the functioning of an agricultural economy that feeds a good portion of the world's population. (SY Safety Element: 3)

*Response: Comment noted.*

### **Topic 4 New Dairies**

The siting of new dairies on the valley floor locating within the proposed Wildlife Management Area should be considered. Tulare County's Animal Confinement Facilities Plan (Phase 1: Dairy/Bovine Animal Confinement Facilities) contains location policies for dairies.

3.1.4 A new dairy or other animal confinement facility shall not be located as follows:

- Within any Windshed Area for incorporated and unincorporated communities or within the Windsheds for areas zoned for residential use and containing at least thirty (30) legally-established dwelling units (for which the Windshed Area shall be measured from the outermost residential zoning boundary)—a 'Windshed Area' is defined as a one-mile setback from an incorporated or unincorporated community's Urban Area Boundary (however, for those communities that have an Urban Development Boundary but do not have an Urban Area Boundary, the Urban Development Boundary lines shall be used) or urban-type residential zoning boundary line;
- Within primary floodplains.
- Within 1000 feet of the boundary of a public park;
- In sink holes or areas draining into sink holes; or
- Within one-half mile (2640 feet) of school grounds or of the nearest point of a dwelling structure in a concentration of ten (10) or more occupied private residences [to qualify as a 'concentration', such residences must be legally established,

occupied, located within a contiguous area, and exceed a density of one dwelling unit per acre, excluding travel trailers]. As used herein, ‘legally established’ residences are defined as residences “established in accordance with all applicable building and zoning regulations”. (Animal Confinement Facilities Plan pg. 31)

For the complete document please request by calling (559) 733-6291 Long Range Planning Branch.

Adjacent lands where a new dairy is located could have off parcel impacts to a parcel newly acquired by the Fish and Wildlife Service. Examples include a dairy lagoon and species traversing dairy operations. The Environmental Assessment should further consider and discuss the topic of dairies.

***Response:** As Tulare County comments point out, the location of “new dairies could have off parcel impacts.” The County has full discretion on how and under what conditions new dairies will be allowed. The Service’s proposed project does not change the current regulatory process.*

#### **Topic 5: Scenic and Aesthetic Considerations**

The proposed Wildlife Management Area provides Tulare County an opportunity to address a General Plan goal of achieving beauty while accommodating for population growth. The Environmental Resources Management Element (ERME) provides the following polices for Tulare County (excerpt):

121.206

- Preserve open space through zoning and easements.
- Acquire or protect natural stream courses, watersheds, and wetlands.
- Preserve locally important natural and historic areas....
- Improve and protect habitat for fish and wildlife, especially endangered species.
- Meet outdoor recreation needs and protect outdoor recreation and scenic resources in a variety of ways.

***Response:** It appears that our proposal is consistent with Tulare County’s policy on scenic and aesthetic considerations.*

#### **Topic 6: Land Acquisitions**

Lands within the WMA Boundary proposed for acquisition will affect the County’s tax base. The Payment In Lieu of Taxes (PILT) program shall be utilized to reimburse the County for loss of tax dollars and it is advocated that the percentage that the County is reimbursed should be increased.

121.210 There are other lands in the County which need protection because of their value in protection of water quality and quantity; in conservation mineral resources; in preservation of wildlife species and in particular habitat for endangered species; for recreational use; for unique scenic or historic interest, and all the other natural resources mentioned in this report, and in adopting this report and recommendations contained therein, the Cities

and the County pledge themselves to preservation and conservation of these lands. Such lands are graphically shown on the Open Space Plan and the Recreation Plan, as well as being described in the narrative portion of the report. They will be protected through a combination of zoning, outright acquisition, easements and public-private agreement. (ERME: 160 and Section 100 pg. 79)

**Response:** *Revenue sharing act payments would be made for any land purchased in fee. These payments are intended to offset lost tax revenue.*

**Topic 7: Miscellaneous Comments and Ideas**

- Surrounding State acquisition (i.e. Colonel Allensworth State Park) should be considered as their mandates relate to the goals of the U.S. Fish and Wildlife Service, of better preserving this important natural and historic area, and of protecting habitat.
- Interpretational sites should be considered for the Wildlife Management Area to showcase the natural lands of Tulare County.

**Response:** *The location and management of surrounding State lands has been considered in presenting the proposed project alternatives. The Service's project is compatible with State agency efforts to protect lands and resources in the area, including Colonel Allensworth State Park. Interpretational sites may be added or considered if the proposed project is approved. The Service routinely enters into agreements with local and state agencies to collaborate on interpretation of joint conservation efforts.*

Thank you, for the opportunity to comment on the Tulare Basin Wildlife Management Area strategy. Please keep us on your mailing list for updates of or relating to the study, notice of any future meetings and the Record of Decision when completed.

Please dial (559) 733-6291 for more information.

Thank you,

George Finney, Assistant Director  
Long Range Division Planning Branch  
Tulare County Resource Management Agency

Enclosures: Map (map will be mailed for e-mailed comment letter)



**PLANNING DEPARTMENT**

**TED JAMES, AICP, Director**

2700 "M" STREET, SUITE 100  
BAKERSFIELD, CA 93301-2323  
Phone: (661) 862-8600  
FAX: (661) 862-8601 TTY Relay 1-800-735-2929  
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**RESOURCE MANAGEMENT AGENCY**

**DAVID PRICE III, RMA DIRECTOR**  
Community & Economic Development Department  
Engineering & Survey Services Department  
Environmental Health Services Department

October 26, 2004

File: USFW Tulare Basin WMA

Scott Frazer  
Refuge Operations Specialist  
Kern National Wildlife Refuge  
P.O Box 670  
Delano, CA 93216

**Re: Proposed Tulare Basin Wildlife Management Area  
Environmental Assessment, Land Protection Plan and Conceptual Plan**

Dear Mr. Frazer,

The Kern County Planning Department appreciates the opportunity to provide comments on the proposed Tulare Basin Wildlife Management Area. As proposed the plan would provide protection for 14, 000 to 16, 000 acres of private wetlands and associated upland habitat through conservation easements and fee acquisition from willing sellers. Staff provides the following comments:

**1. Page 16, Section 3.3.2** characterizes the Kern County General Plan designations for the area as "open space with value as pasture land, row crops and wildlife habitat." The updated Kern County General Plan (June, 2004) designations for the area are categorized as Resource. These designations range from 8.1 (Intensive Agriculture) to 8.5 (Resource Management). These designations allow a wide range of agricultural uses including irrigated cropland, orchards, and vineyards as well as single family homes at appropriate densities.

**Response:** *Comment noted*

**2. Page 18, Section 4.1.** As noted in this section dairy projects already exist in this area. Additionally, the Kern County Planning Department currently has 25 applications for Conditional Use Permits for

dairies, approximately 12 of which appear to be in the proposed management area. To assist in your evaluation of the impacts of these proposals, a list of current and proposed dairy applications has been attached.

These dairy proposals will be evaluated in two grouped Environmental Impact Reports. The first Program/Project EIR #1 will include nine near Wasco in conjunction with a Program EIR to evaluate the entire valley area of Kern County for siting, capacity and appropriate mitigation. The remainder of the projects will be evaluated in a second and possibly third group EIR. The Notice of Preparations for EIR #1 and EIR #2 are anticipated for January and February of next year. The Kern National Wildlife Refuge will be included in all notifications and opportunities to comment on these projects.

*Response: Comment noted.*

**3. Page 18, Section 4.1** The reference in this section to the environmental concerns of neighboring private owners of wetland properties to the proximity of dairies cites no studies or reference materials. Staff notes, that on Page 16, Section 3.3.4 the service specifically states that "No new or additional zoning or land-use regulations would be created by the Service within the approved Refuge boundary of the proposed addition or on neighboring lands." It is therefore not clear from the document how the USFW service intends to reconcile the issue of an acquired conservation easement or even fee ownership parcel adjacent to an unrestricted agricultural parcel that secures a Conditional Use Permit from Kern County to build and operate a dairy or other permitted agricultural use deemed "intensive" by the service. As the plan is based on the "willing seller" concept it should include discussion of the possibility and feasibility of a checkerboard pattern in the plan area and potential impacts.

*Response: We agree that past development and future changes will result in a checkerboard of differing land uses. The proposed project will improve the probability for wildlife populations, and waterfowl in particular, to survive in this landscape. Because waterfowl are mobile and can fly to isolated habitats, they may be well adapted to the changes if existing high quality habitat is protected.*

Kern County appreciates the opportunity to provide comments on the proposed plan. Please provide this department with all materials and notifications regarding completion and Notice of Decision on the project.

If you have any questions regarding this matter, please contact Lorelei Oviatt at (661) 862-8866 or [Loreleio@co.kern.ca.us](mailto:Loreleio@co.kern.ca.us).

Sincerely,

Lorelei H. Oviatt, AICP  
Supervising Planner

enclosure

cc: Richard Smith, US Fish and Wildlife Service, Sacramento, CA (w/o enclosure)



Tulare County Association of Governments

October 20, 2004

U. S. Fish and Wildlife Service  
Kern National Wildlife Refuge Complex  
P.O. Box 670  
Delano, CA 93216

RE: Proposed Tulare Basin Wildlife Management Area

To Whom It May Concern:

Thank you for the opportunity to provide comments on the Tulare Basin Wildlife Management Area (WMA), including the environmental assessment, Land Protection Plan, and the Conceptual Management Plan. The Tulare County Association of Governments (TCAG) has the following comments:

**Chapter 2-Alternatives**

Page 10, 2nd bullet - Although this alternative was considered, but eliminated, TCAG supports this alternative.

*Response: Comment noted.*

Page 11, 2.4.3 Alternative 3 - TCAG supports this alternative.

*Response: Comment noted.*

Page 16, 3.3.2 Kern, Kings, and Tulare Counties' General Plans and Williamson Act Program— The County of Tulare is currently in the process of updating the 40 year old general plan. Consultation with County staff would be recommended.

*Response: Service staff will participate in consultation with County staff on the general plan revision.*

Page 18, 3rd paragraph - There should be some discussion of potential conflicts between habitat preservation and farmland preservation.

*Response: The proposed project does not have a direct effect on farmland preservation efforts. Most of the Priority 1 lands the Service is seeking to protect through a conservation easement program are not currently in agricultural production. Conserving native landscapes and habitat is the focus of the proposed project. Any easements on lands in agricultural production are expected to promote continuation of wildlife friendly agricultural uses.*

Page 21, 4.2.1 Impacts on Habitat Protection - All the points discussed in the section should be emphasized in a summary or conclusion.

Page 22, Sections 4.3, 4.3.1 - All the points discussed in the section should be emphasized in a summary or conclusion. -

Page 24, Table 1 - Table summary should also appear in conclusion.

***Response:** The Service distributed Planning Update 4, in September of 2004, which included a summary of the proposed project alternatives. Another newsletter style Planning Update will be distributed to announce the final disposition of this project.*

### **Appendix (Land Protection Plan)**

Page 7, Land Protection Priorities Within the Planning Area Boundary - In the discussion of priorities, four listed, consideration should be given to provide coordination with privately owned conservation/mitigation banks in completing acquisition of lands in the WMA.

***Response:** While the Service is aware of and supports private conservation efforts, National Wildlife Refuge policy prevents direct involvement in mitigation banks*

Page 8, Summary of Proposed Action - Consideration should be given to provide coordination with privately owned conservation/mitigation banks in completing acquisition of lands in the WMA.

***Response:** While the Service is aware of and supports private conservation efforts, National Wildlife Refuge policy prevents direct involvement in mitigation banks.*

Index Map— Display County lines better and use, in addition of road names, a numbered road (i.e. Road 56).

***Response:** Maps in a revised Environmental Assessment will be modified.*

### **Appendix B (Conceptual Management Plan)**

Introduction — With acquisition of lands, coordinate with private conservation/mitigation banks, so missing pieces of the puzzle could be fitted together, and connectivity occur, with no cost to USFWS.

***Response:** While the Service is aware of and supports private conservation efforts, National Wildlife Refuge policy prevents direct involvement in mitigation banks. The concept of addressing a 10,000-acre corridor to connect conservation areas in the Tulare Basin was considered but eliminated, as noted in Chapter 2.*

### **Appendix C (Distribution List)**

Page 2, City and County Governments - Add “Tulare County Association of Governments” to the agency list.

***Response:*** *The TCAG will be added to the agency list.*

Again, thank you for the opportunity to comment on the WMA. Should you have any questions regarding the comments, please give me a call.

Sincerely,

Scott Cochran  
Regional Planner, TCAG

SC:ke

# References

California Department of Conservation. June 2000. *California Farmland Conversion Report 1996-1998*.

California Department of Fish and Game. 1992. *Bird Species of Special Concern*. Unpublished list July 1992. Nongame Bird and Mammal Section, Wildlife Management Division, California Department of Fish and Game, Sacramento, CA.

California Energy Commission. 1991. *Southern San Joaquin Valley Ecosystems - Protection Program*. Staff Report by Anderson, et.al.

Friend, M. 1981. *Waterfowl management and waterfowl disease: Independent or cause and effect relationships?* Trans. N. Amer. Wildl. and Natur. Resour. Conf. 46:94-103.

Fleskes, et al. June 2000. *Waterfowl distribution, movements and habitat use relative to recent habitat changes in the central valley of California, progress report*.

Fleskes, et al. 2002. *Distribution and movements of female northern pintails radiotagged in San Joaquin Valley, CA*. Journal of Wildlife Management, 66:138-152.

Hunter, B.F., W.E. Clark, P.J. Perkins, and P.R. Coleman. 1970. *Applied botulism research including management recommendations*. Wildlife Management Progress Report, California Department of Fish and Game, Sacramento, CA. 87 pp.

Jones & Stokes Associates, Inc. 1988. *Private Wetlands in the Kern-Tulare Basin, California: Their Status, Values, Protection, and Enhancement*.

Manomet Center for Conservation Sciences. May 2001. Second edition, *United States Shorebird Conservation Plan*. Manomet, Massachusetts 02345.

Marks, J. 2003. Personal communication between J. Marks of the Kern County Agricultural Commissioner's Office and Scott E. Frazer, U.S. Fish and Wildlife Service, Delano, CA.

Page, G.W., and Shuford, D. 2000. *Southern Pacific Coast Regional Shorebird Conservation Plan, Version 1.0*. Point Reyes Bird Observatory, 4990 Shoreline Highway, Stinson Beach, CA 94970.

San Joaquin Valley Drainage Program. September 1990. *San Joaquin Valley Drainage Program Interagency Report, A Management Plan For Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley*

Rosen, M.N. 1971. Avian cholera. Pages 59-74 in J.W. Davis, R.C. Anderson, L. Karstad, and D. O. Trainer. eds. *Infectious and parasitic diseases of wild birds*. Iowa State Univ. Press, Ames, Iowa. 344 pp.

U.S. Fish and Wildlife Service. 1998. *Recovery Plan for Upland Species of the San Joaquin Valley, California*. Region 1, Portland, OR. 319 pp.