

U. S. Department of the Interior  
Fish and Wildlife Service  
California/Nevada Operations Office

**FINDING OF NO SIGNIFICANT IMPACT**

**Environmental Assessment for Management of  
San Joaquin River National Wildlife Refuge  
Stanislaus and San Joaquin Counties, California**

The U.S. Fish and Wildlife Service (Service) has completed the Comprehensive Conservation Plan (CCP) and the Environmental Assessment (EA) for the San Joaquin River National Wildlife Refuge (Refuge). The CCP will guide Refuge management for the next 15 years. The CCP and EA (herein incorporated by reference) describe the Service's proposals for managing the Refuge and their associated effects on the human environment under four alternatives, including the no action alternative.

**Decision**

Following comprehensive review and analysis, the Service selected Alternative D for implementation because it is the alternative that best meets the following criteria:

- Achieves the mission of the National Wildlife Refuge System.
- Achieves the purposes of the Refuge.
- Will be able to achieve the Service's vision and goals for the Refuge.
- Maintains and restores the ecological integrity of the habitats and wildlife and plant populations on the Refuge.
- Addresses the important issues identified during the scoping process.
- Addresses the legal mandates of the Service and the Refuge.
- Is consistent with the scientific principles of sound fish and wildlife management and endangered species recovery.
- Facilitates priority public uses which are compatible with the Refuge purposes and the Refuge System mission.

**Alternative Considered**

Following is a brief description of the alternatives for managing San Joaquin River Refuge, including the selected plan (Alternative D). For a complete description of each alternative, see the draft EA. All four alternatives, including Alternative A, focus on management of the east unit of the Refuge for Aleutian Canada geese (and other geese and cranes) by maintaining roost ponds, growing grain crops and providing short-height grasslands.

*Alternative A (No Action Alternative)*

Under Alternative A, the Refuge would continue to be managed as it has in the recent past. The focus of the Refuge would remain the same: providing wintering habitat for the Aleutian Canada goose.

Under Alternative A, natural succession would occur on the remaining fee title lands, which are principally fallow agricultural lands. Visitor services would be limited to wildlife photography/observation from a platform. This Alternative was not selected for implementation because it does not include needed improvements which have been identified for habitat restoration, management of migratory birds and special status species and it does not accommodate the growing demand for wildlife-dependent recreation.

*Alternative B*

Alternative B adds to Aleutian Canada goose management the restoration of existing fallow agricultural lands into mostly wetland habitat and includes some riparian restoration. This alternative adds the greatest acreage of wetlands to the Refuge. Under Alternative B 1,927 acres of wetlands and

2,358 acres of riparian habitat would be restored. The visitor services program would include opportunities for all of the priority wildlife dependent uses, including fishing and hunting. This Alternative was not selected for implementation because it does not include needed improvements which have been identified for riparian habitat restoration and management of migratory birds and special status species.

#### *Alternative C*

Alternative C combines management for Aleutian Canada geese with conversion of fallow agricultural fields to wildlife habitat, but places greater emphasis on developing riparian habitat over wetland habitat to benefit a variety of woodland-dependent wildlife. Under Alternative C, 1,042 wetland acres and 3,639 acres of riparian habitat would be restored or enhanced. Wildlife observation/photography trails and/or auto-tour routes along with interpretation and environmental education would be included in a visitor services program, but hunting and fishing would be excluded. This Alternative was not selected for implementation because it does not include needed improvements which have been identified for wetland habitat restoration, management of migratory birds and special status species. Also, this alternative does not include hunting and fishing, which are priorities for the Refuge System.

#### *Alternative D (Selected Alternative)*

Alternative D combines elements of all three preceding alternatives. Under this alternative, the Service will manage the east unit for Aleutian Canada geese and other waterfowl. Also, the Service will restore both wetland and riparian habitats in proportions similar to their perceived occurrence before the land was used for agricultural purposes. Under Alternative D, 1,457 wetland acres and 3,224 acres of riparian habitat will be restored or enhanced. The water supply necessary under Alternative D will amount to approximately 20,000 acre feet per year. Visitor Services will include all priority public uses including hunting, fishing, wildlife observation and photography, environmental education, and interpretation. This alternative was selected because it will benefit both wetland and riparian dependent wildlife in a more balanced manner than the other alternatives. Both habitat types are scarce in the Central Valley and are critically important elements of the region's biodiversity. Alternative D also provides a balanced mix of compatible wildlife-dependent recreational opportunities to meet the growing demand in the region.

### **Effects of management of the Refuge in the human environment**

As described in the EA, implementing the selected alternative will have no significant impacts on any of the environmental resources identified in the EA. A summary of the impacts analysis and conclusions follows:

#### *Air Quality*

Under the selected plan, both short and long-term increases in pollutant emissions are expected. Short-term increases include dust and tailpipe emissions due to restoration projects and habitat management practices which disturb the soil and/or require the use of heavy equipment. Long-term minor increases in tailpipe and fugitive dust emissions due to increased visitor trips and the construction of parking lots will also occur. However, the selected plan would have an overall positive effect on air quality with the implementation of full restoration over time.

Limited prescribed fire will be used to manage noxious weeds, reduce fuels, or simulate natural disturbance regimes which may also temporarily impact air quality. Burning vegetation could temporarily increase PM10 concentrations in the area. Adverse impacts from prescribed fire are expected to be minimal due to the small burn size and smoke management practices which will be detailed in the prescribed fire plan prepared before each fire.

#### *Soils*

Under the selected plan, the Service will create and maintain wetlands. Soils, which had previously been exposed year round, will now be flooded for part to all of the year. This will alter soil development

in these areas, increasing anaerobic activities. Additional areas will be heavily planted to create riparian communities; this will decrease insulation affecting soil temperature; it will also provide a source for organic materials.

#### *Geology, Hydrology, Water Quality*

The selected plan will restore periodic flooding to portions of the Refuge by breaching levees. As riparian areas and floodplains are restored, side channels and deposition areas would develop, reducing fine sediments in the river. The new floodplains could provide water storage to help reduce downstream flooding. These beneficial impacts would be localized, and have minimal impacts on the greater San Joaquin River system. The selected plan also includes excavation and creation of elevated earthen mounds. The topography over which these actions occur is generally flat with only a few sources of flowing water. These actions are expected to have minimal water quality impacts through erosion. San Joaquin River flood waters may also contain contaminants that would be undesirable in the Refuge's wetlands. However, due to the infrequent nature of the flooding (every 5 to 10 years) and the ecosystem benefits of restoring natural floodplain process, this impact is not considered significant.

#### *Vegetation*

The selected plan will have positive impacts on vegetation. As wetland and riparian communities are restored, there will be an increase in species diversity, a decrease of non-native species components, and restoration of conditions that approach historical ecosystem components. The selected plan also includes measures to reduce the chance of noxious weed establishment.

#### *Wildlife and Fish Resources*

The selected plan will result in short-term and long-term benefits to wildlife. Under the selected plan, the Service will place fish screens on all lift pumps that provide water to the Refuge from the adjacent rivers. As a result, the potential for fish entrapment in the pumps' machinery would be reduced. Wildlife will also benefit through the increase of native habitats. Riparian and wetland habitat both provide high species diversity. Riparian wildlife that would benefit range from neotropical migrant birds to reptiles including a variety of snakes and lizards and small mammals such as rabbits and rodents. The wetland habitat expansion would benefit migrating waterfowl, various amphibian species, and water-dependent mammals such as beaver, muskrat and otter. These two habitat types are rare outside of the Refuge.

#### *Special Status Species*

Wetland expansion at the Refuge will benefit a number of protected species, including Aleutian Canada goose, sandhill crane, and possibly the giant garter snake. The inclusion of hunting under this alternative does pose some risk to the Aleutian Canada goose, due to the potential for accidental take. Riparian restoration will benefit special status wildlife species including the riparian brush rabbit and riparian woodrat. As the riparian area expands, elderberry shrubs would increase in number. This expansion should increase the numbers of valley elderberry longhorn beetle on the Refuge. Implementation of the selected plan could create some disturbance to special status species due to increased public use. To alleviate any negative effects, areas that are known to have sensitive species would have restricted public access and may have temporary closures instituted for protection during critical lifecycle periods.

#### *Visitor Services*

The selected plan will improve and expand a variety of wildlife dependent visitor services that focus on wildlife observation. Supporting facilities include foot trails, an auto tour route, informational kiosk, restrooms, a parking lot, and photography blinds. The Service will also establish hunting and fishing programs on the Refuge. Refuge visitation is expected to increase as programs are implemented, supporting facilities are developed, and the region's population grows. The overall increase in wildlife-dependent recreational opportunities is not significant.

### *Cultural Resources*

If any additional cultural resources are discovered on the Refuge during habitat restoration projects or visitor services improvements, the Service would take all necessary steps to comply with section 106 of the National Historic Preservation Act of 1966, as amended.

### **Public Review**

The planning process incorporated extensive public involvement in developing and reviewing the CCP. This included two public workshops, four planning updates, and public review and comment on the planning documents. The details of the Service's public involvement program are described in the CCP and EA.

### **Conclusions**

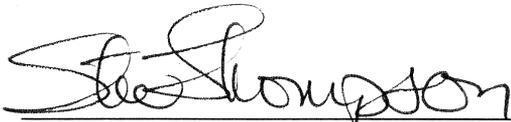
Based on review and evaluation of the information contained in the supporting references, I have determined that implementing Alternative D as the CCP for management of the San Joaquin River National Wildlife Refuge is not a major Federal action that would significantly affect the quality of the human environment, within the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969, as amended. Accordingly, the Service is not required to prepare an environmental impact statement.

This Finding of No Significant Impact and supporting references are on file at the U.S. Fish and Wildlife Service, San Luis National Wildlife Refuge Complex, 947-C West Pacheco Blvd. Los Banos, CA 93635, (209) 826-3508 and U.S. Fish and Wildlife Service, California/Nevada Refuge Planning Office, 2800 Cottage Way, Sacramento, California, 95825 (telephone 916-414-6500). These documents can also be found on the Internet at <http://pacific.fws.gov/planning/>. These documents are available for public inspection. Interested and affected parties are being notified of this decision.

### **Supporting References**

U.S. Fish and Wildlife Service. 2006. Final Comprehensive Conservation Plan for the San Joaquin River National Wildlife Refuge.

U.S. Fish and Wildlife Service. 2006. Draft Comprehensive Conservation Plan and Environmental Assessment for the San Joaquin River National Wildlife Refuge.



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