

## **COMPATIBILITY DETERMINATION**

*(January 2016)*

**Use:** Right of Way Permit for Construction and Long-term Operation and Maintenance of a Training Dike for the *Hamilton City Flood Damage Reduction and Ecosystem Restoration, California* (J-Levee Project)

**Refuge Name:** Capay Unit, Sacramento River National Wildlife Refuge, located in Glenn County, California.

### **Establishing and Acquisition Authority(ies):**

Sacramento River National Wildlife Refuge (Refuge) was established in 1989. Approximately 11,000 acres of the approved 18,000 acres have been acquired. Legal authorities used for establishment of the Refuge include: the Endangered Species Act of 1973 as amended (16 U.S.C. 1531-1543: 87 Statute 884), the Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901(b) and the Fish and Wildlife Act of 1956 (16 U.S.C. 742).

### **Refuge Purpose(s):**

Sacramento River Refuge purposes include:

“... to conserve (A) fish or wildlife which are listed as endangered species or threatened species .... or (B) plants ...” 16 U.S.C. Sec. 1534 (Endangered Species Act of 1973)

".. the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions ..."16 U.S.C. 3901(b) (Emergency Wetlands Resources Act of 1986)

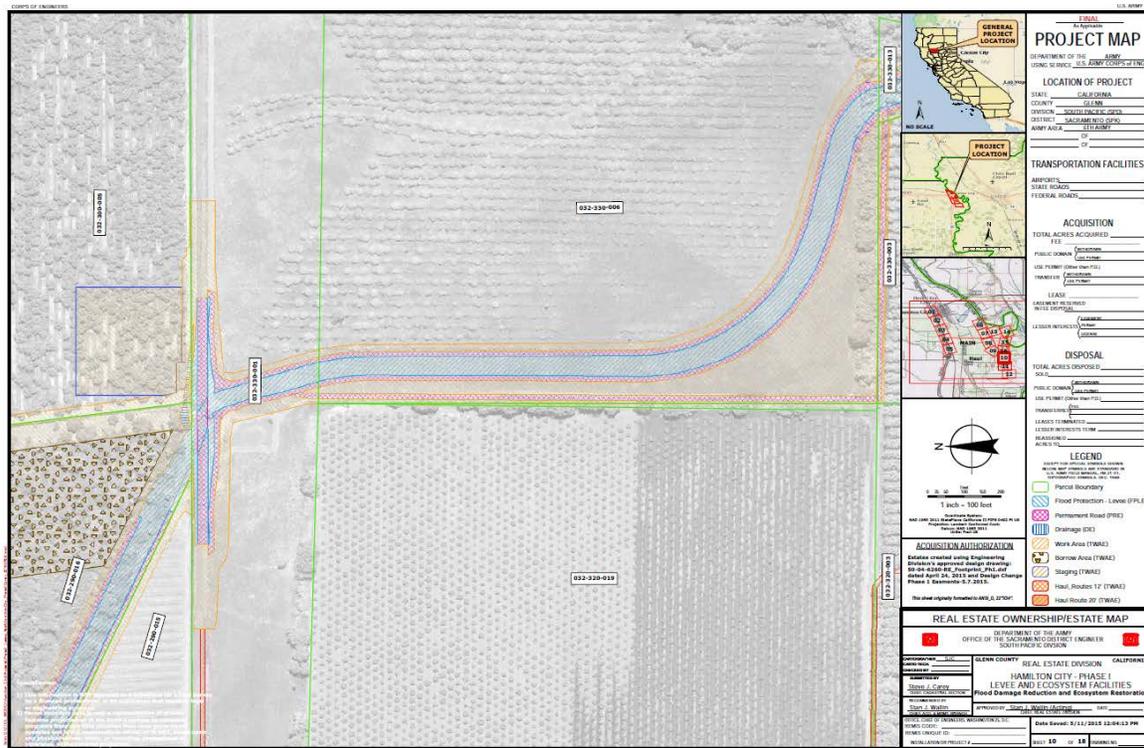
“... for the development, advancement, management, conservation, and protection of fish and wildlife resources ...” 16 U.S.C. 742f (a) (4) “... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ...” 16 U.S.C. Sec. 742f (b) (1) (Fish and Wildlife Act of 1956)

**National Wildlife Refuge System Mission:** “To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.” (National Wildlife Refuge System Administration Act of 1966, as amended [16 U.S.C. 668dd-ee]).

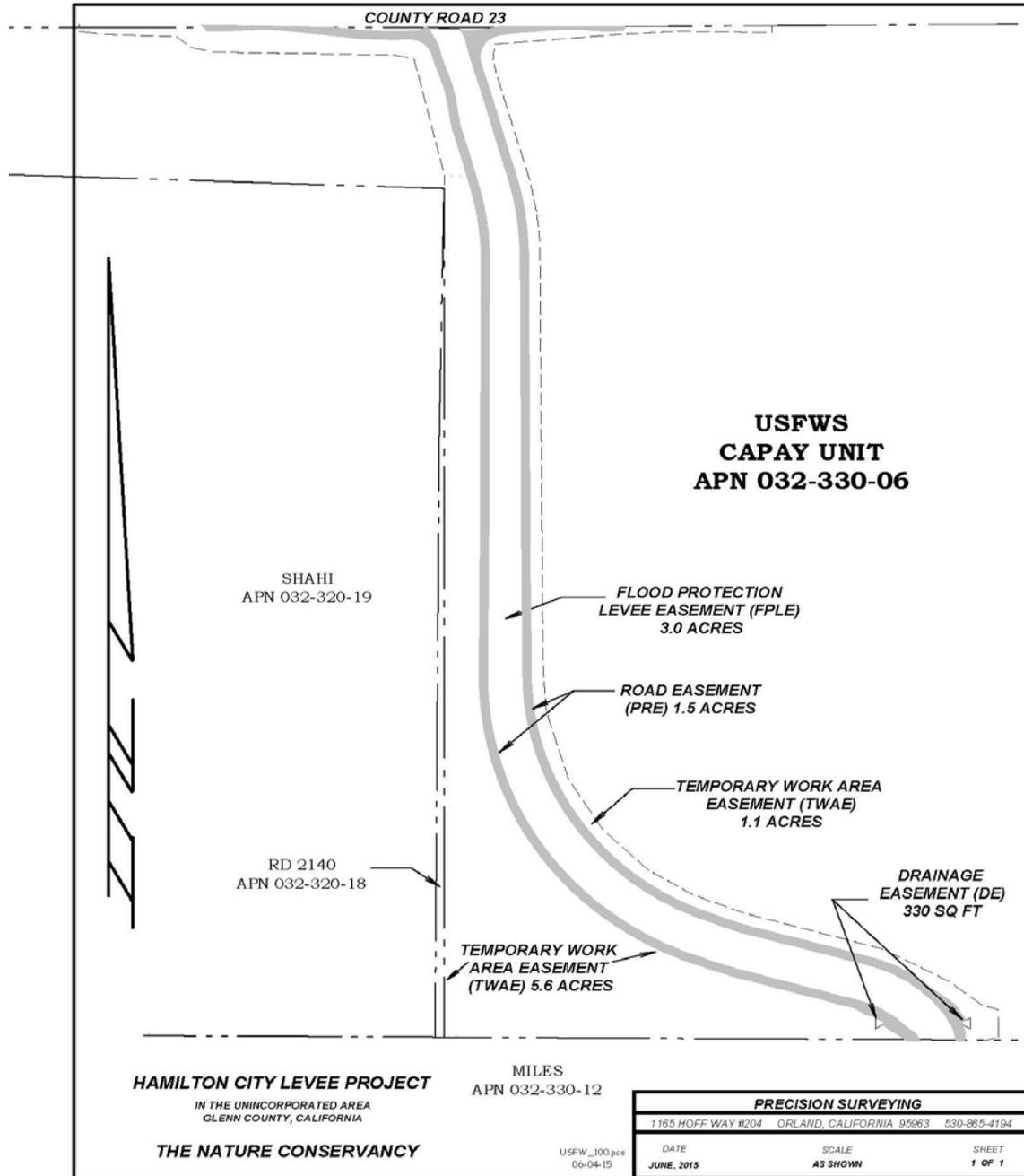
**Description of Use:** The U.S. Fish and Wildlife Service (USFWS) proposes to issue a right of way permit to Reclamation District 2140 (RD 2140) for the construction and maintenance of a portion of the Army Corps of Engineers J-Levee Project on the Capay Unit of the Sacramento River National Wildlife Refuge (SRNWR). This Project is described and evaluated in the Final Feasibility Report and Environmental Impact Statement/ Environmental Impact Report (EIS/EIR) for *Hamilton City Flood Damage Reduction and Ecosystem Restoration, California* (ACOE 2004, 2006a). The proposed permit will facilitate a multi-purpose plan to reduce flood

damage to Hamilton City and restore ecosystem and hydrologic functions to a portion (1,415 acres) of the historical Sacramento River floodplain in the vicinity of Hamilton City, California. The overall project includes removal of an existing levee, construction of a setback levee and training dike, and riparian/ floodplain habitat re-vegetation. The new set-back levee and training dike will provide flood reduction benefits to the community of Hamilton City and vicinity to 75-year flood frequency and provide ecosystem restoration benefits in the form of riparian habitat restoration and natural river processes by allowing bank movement and river meander on the floodplain. The Service has been a stakeholder in the planning process for the last 15 years. The J-Levee Project is within the approved boundary of the Refuge and is the type of project envisioned in the Final Comprehensive Conservation Plan and Environmental Assessment (CCP/EA) completed in 2005 (USFWS 2005) that would assist in meeting the refuge purposes.

Figure 1. Project area and extent of Right of Way Permit within the Capay Unit of Sacramento River National Wildlife Refuge.



**Figure 2. Land Survey of Project area and acres affected on Sacramento River National Wildlife Refuge, Capay Unit.**



**Availability of Resources:** The following funding/annual costs (based on FY 2015 costs) would be required to administer and manage levee/training dike construction and maintenance activities as described above:

	<b>Annual Costs</b>
Administration, monitoring, and law enforcement	\$1,000
<b>TOTAL</b>	<b>\$1,000</b>

Refuge operational funds are currently available through the Service budget process to administer this program.

**Anticipated Impacts of Use:**

Chapter 5 in the Final Feasibility Report and EIS/EIR provide a description of the overall project impacts (ACOE 2004). In considering the compatibility of the use we are examining the potential site specific effects of the work proposed on USFWS land relative to current conditions. The flood damage reduction portion of the J-Levee Project involves the Army Corps of Engineers constructing approximately 2,300 feet of training dike, six feet in height, through the Capay Unit, after which RD 2140 will operate and maintain the training dike to provide flood control (ACOE 2006b).

Soil Impacts: Training dike construction will cause physical impacts on soil surfaces. Approximately 11 acres of grassland will be impacted during the construction of the training dike. However, those areas in the temporary work are will be restored to the current condition of native perennial grasses. The final area of impact will be limited to 4.5 acres. A total of 1,415 acres of agricultural lands (primarily production orchards) will be restored to riparian floodplain habitat resulting in a considerable increase in available habitat for wildlife and the elimination of long-term agricultural operations that compact the soils.

Plant Impacts: Training dike construction will occur on the western boundary of the Capay Unit. This area was purposefully not planted to woody species when the Unit was restored in 2007 as a placeholder location for the training dike identified during preliminary planning. Therefore, it is anticipated that the construction and long-term maintenance will have very minor impacts on plant communities located onsite. In addition, following completion of the J-Levee Project 1,415 acres of riparian habitat would be restored adjacent to the Sacramento River. . Vegetation impacted in the temporary work zones will be restored to the existing condition of native grasslands.

Wildlife Impacts: Training dike construction and long-term maintenance will result in minor habitat modifications and will create disturbances to wildlife. Disturbances vary with the wildlife species involved and the type, level, frequency, duration, and the time of year such activities occur. Whittaker and Knight (1998) note that wildlife response to disturbance can include attraction, habituation, and avoidance. Human induced avoidance by wildlife can prevent animals from using otherwise suitable habitat. Disturbance can have negative effects such as increasing the energy demands on wildlife. Flight in response to other disturbance can lower songbird nesting productivity, cause disease, and in extreme cases (predation) can result in death.

Hammitt and Cole (1998) conclude that the frequent presence of humans in wildland areas can dramatically change the normal behavior of wildlife, mostly as a result of unintentional harassment.

Seasonal sensitivities are also important in wildlife responses to human disturbance. For example, when an animal species is already stressed, human disturbance can compound the effect on that individual. Examples of these disturbances include: regularly flushing birds during nesting, exposing juvenile animals to greater predation levels, or causing mammals to flee during winter months. These disturbances can cause large amounts of stored fat reserves to be burned. Hammitt and Cole (1998) note that females (such as deer) with young are more likely to flee from a disturbance than those without young. This indicates increased sensitivity to human disturbance during the breeding season.

Anticipated impacts of levee construction and maintenance on wildlife include temporal disturbances to species using habitat directly adjacent to the designated levee right of way. During the construction period, which is expected to take several months (July through September) over a three year period, areas immediately adjacent to the levee will be impacted resulting in human induced disturbance. However, the Capay Unit and adjacent California Department of Fish and Wildlife lands have already been restored and provide a significant amount of alternative habitat for wildlife to utilize. Although there is some temporary disturbance to wildlife due to construction activities, the disturbance is generally localized and will not adversely impact overall populations.

The *Hamilton City Flood Damage Reduction and Ecosystem Restoration, California* including levee construction and long-term maintenance was evaluated under the Endangered Species Act for federally threatened valley elderberry long-horned beetle, western yellow-billed cuckoo and giant garter snake by the U.S. Fish and Wildlife Service in 2004, amended in 2008, and 2015(2009-F-0209-R003). The USFWS Biological Opinion includes an incidental take statement that provides exemptions from prohibitions against take of the beetle due to project related activities, but most if any adverse effects were found to short-term in nature. The limited effects to habitat during the project construction will be more than off-set with replacement plantings and the habitat restoration of approximately 1,415 acres. In addition, project impacts were considered under the National Historic Preservation Act, Clean Water Act, and the Clean Air Act.

Visitor Services Impacts: Anticipated impacts of the right of way permit for training dike construction, operation and maintenance on visitor service access will be minimal as the Special Use Permit for access and construction requires a traffic safety plan to allow public access during the period of construction. Some temporary closures may be required during construction in the immediate vicinity of County Road 23 which is owned and operated by Glenn County and out of the refuge's authority. Moreover, following completion of the J-Levee Project, the 1,415 acres of restored habitat, will be turned over to the various state and federal land management agencies. It is likely that the Service will acquire a significant percentage of this land. The U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and California Department of Parks and Recreation currently allow public access on adjacent properties and will likely allow public access on a large portion of the area once the project is completed.

Public Review: This compatibility determination will be posted on the Refuge's website and available to the public for a 30-day review period. Extensive public involvement has been conducted for the J-Levee Project. This compatibility determination is consistent with the project identified in the Final Feasibility Report and EIS/EIR. The Army Corps of Engineers and project proponents conducted numerous stakeholder and general public meetings for 10 years. The project has been extensively coordinated with the public and with federal, state and local resource agencies. In 2006, the Record of Decision for the Final Feasibility Report and EIS/EIR for the *Hamilton City Flood Damage Reduction and Ecosystem Restoration, California*, was signed by the Assistant Secretary of the Army (Civil Works). The Executive Office of the President agreed with the findings in a letter of concurrence signed in November of 2006.

**Determination:**

Use is Not Compatible

Use is Compatible with the Following Stipulations

**Stipulations necessary to ensure compatibility:**

Stipulations for construction and long-term operations and maintenance are enforced through the Right of Way Permit issued by the USFWS to RD 2140.

**Construction and Long-term Operations and Maintenance:**

- RD 2140 will comply with all State and federal environmental regulations.
- RD 2140 bears all construction and operations and maintenance requirements and costs related to the training dike.
- Construction, operation, and maintenance is confined to the designated access roads and specified project area .
- Temporary work zone areas disturbed by or during construction will be restored to original condition of native grasses.
- Access roads and other areas disturbed by maintenance activities will be restored to original condition of native grasses.
- All facilities, such as roads, signs, gates, parking barriers, damaged or altered by the construction, operations, and maintenance activities will be replaced prior to the conclusion of the project.
- Regulatory and directional traffic safety signs will be installed to clearly mark designated routes of travel and areas closed to the public.

- The contractor will be responsible for implementing traffic control safety plan during construction and major repairs.
- Routine law enforcement patrols will be conducted during the construction period and also during periods of operation and maintenance.

**Justification:** The Service’s basic authority for granting right-of-way permit is the National Wildlife Refuge System Administration Act (16 U.S.C. 668dd(d)). Under the Fish and Wildlife Service Manual 340 FW 3, (3.6) (C), right-of-way permit may be used when the type of use will substantially alter the real property and is of a permanent or long term nature. Generally easements should be used only when public utilizes are Permits and/or easements for Federal aid or a public highway may be granted without limits. Primary reasons for this determination include the following: The Service will benefit from the larger Hamilton City Flood Damage Reduction and Ecosystem Restoration Project by meeting several goals and objectives identified in the Sacramento River National Wildlife Refuge Final Comprehensive Conservation Plan (CCP). The Hamilton City Flood Damage Reduction and Ecosystem Restoration Project helps implement the following aspects of the SRNWR CCP - Goal 1: Wildlife and Habitat, Objectives 1.1, 1.2, 1.3, 1.4, 1.5, 1.8, and 1.9; Goal 2: Visitor Services, Objective 2.1 2.2, 2.3; and Goal 3: Partnerships, Objective 3.1, 3.2; Goal 4: Resource Protection, Objective 4.1 and 4.2.

The stipulations outlined above should minimize potential impacts relative to wildlife/human interactions. In our opinion, allowing the construction and long-term maintenance of the J-Llevee training dike on the Capay Unit will facilitate an increase in riparian floodplain restoration, natural river processes, and improve wildlife-dependent recreation. The associated stipulations will not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the Refuge.

**Mandatory Re-Evaluation Date (2025):**

- Mandatory 15-year Re-Evaluation, Date will be provided in Final EA/CCP (for priority public uses)
- Mandatory 10-year Re-Evaluation (for all uses other than priority public uses)

**NEPA Compliance for Refuge Use Decision**

- Categorical Exclusion without Environmental Action Statement
- Categorical Exclusion without Environmental Action Statement
- Environmental Assessment and Finding of No Significant Impact
- Environmental Impact Statement and Record of Decision

## **Documents & Literature Cited**

ACOE (U.S. Army Corps of Engineers). 2004. Hamilton City Flood Damage Reduction and Ecosystem Restoration, California Final Feasibility Report and Environmental Impact Statement/Environmental Impact Report.

ACOE 2006a. Record of Decision for the Final Feasibility Report and Environmental Impact Statement/Environmental Impact Report for the Hamilton City Flood Damage Reduction and Ecosystem Restoration, California. Dated: July 2004.

ACOE. 2006b. Levee Owner's Manual for Non-Federal Flood Control Works: The Rehabilitation and Inspection Program. Public Law 84-99. Dated: March 2006.

USFWS (U.S. Fish & Wildlife Service). 2005. Sacramento River National Wildlife Refuge Final Comprehensive Conservation Plan. Final June 2005. Prepared by California/Nevada Refuge Planning Office, Sacramento, CA and Sacramento National Wildlife Refuge Complex, Willows, CA.

**Refuge Determination**

Prepared by: \_\_\_\_\_  
(Signature) (Date)

Wildlife Refuge Manager/  
Project Leader  
Approval: \_\_\_\_\_  
(Signature) (Date)

**Concurrence**

Refuge Supervisor: \_\_\_\_\_  
(Signature) (Date)

Assistant Regional  
Director, Refuges: \_\_\_\_\_  
(Signature) (Date)