

ENVIRONMENTAL ASSESSMENT

RIGHT-OF-WAY PERMIT FOR TRAINING DIKE CONSTRUCTION AND LONG-TERM TRAINING DIKE MAINTENANCE SACRAMENTO RIVER NATIONAL WILDLIFE REFUGE CAPAY UNIT

I. PURPOSE AND NEED FOR ACTION

Proposed Action: The U.S. Fish and Wildlife Service (FWS) proposes to issue a right-of-way permit to Reclamation District 2140 (RD 2140) for the construction and long-term maintenance of a portion of the Army Corps of Engineers (Corps) *Hamilton City Flood Damage Reduction and Ecosystem Restoration, California Project* (also referred to as the J-Levee Project) on the Capay Unit of the Sacramento River National Wildlife Refuge (NWR).

Purpose of and Need for the Proposed Action: The right-of-way is needed to implement a joint flood damage reduction and ecosystem restoration project near Hamilton City, California. The construction and long-term maintenance of a training dike on the Capay Unit of the Refuge is part of a larger multi-purpose plan to provide flood reduction to 75-year frequency for Hamilton City through a new set-back levee, while restoring riparian habitats, ecosystem and hydrologic functions on 1,415 acres of the historic Sacramento River floodplain in the vicinity (ACOE 2004).

Decision to be Made: The FWS will decide whether issuing a right-of-way for the construction and long-term maintenance of the training dike would have any significant impacts on the human environment.

Issue Identification: No environmental issues with a right-of-way have been identified. No external scoping was conducted for the proposed right-of-way. The FWS has been a stakeholder in the planning process for the *Hamilton City Flood Damage Reduction and Ecosystem Restoration Project, California* over the past 15 years. The FWS completed a Fish and Wildlife Coordination Act Report for the restoration project which concluded that while any of the proposed alternatives would be acceptable for implementation, the FWS recommended alternative 5 because of the greater amount of restored habitat (USFWS 2004). The Corps selected Alternative 6 for implementation. Given the completed environmental documentation and level of FWS involvement in project planning no external scoping was necessary.

Identify any laws, regulations, or other NEPA documents that influence the scope of this EA:

- (1) Final Feasibility Report and Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the *Hamilton City Flood Damage Reduction and Ecosystem Restoration, California* (ACOE 2004) and Record of Decision (ACOE 2006a). The Feasibility Report and EIS/EIR evaluated three action alternatives and the Corps selected Combined Alternative 6 for implementation. The Final Feasibility Report and EIS/EIR provides a complete evaluation of the direct, indirect, and cumulative impacts of levee/training dike construction, including the training dike on FWS land (Sacramento River NWR, Capay Unit) for which the right-of-way is requested.

- (2) *Sacramento River National Wildlife Refuge Final Comprehensive Conservation Plan and Environmental Assessment (CCP)* (USFWS 2005). A CCP is designed to guide refuge management over a period of 15 years. Guidance within the CCP is in the form of goals, objectives, strategies and compatibility determinations. The CCP for the Sacramento River NWR identified projects such as the Hamilton City Flood Damage Reduction and Ecosystem Restoration Project under Goal 1: Wildlife and Habitat, Objectives 1.2, *Strategy 1.2.1 Modify privately constructed levees, restore or enhance topographic features, and other bank stabilization features on Refuge lands if supported by feasibility studies, associated hydrologic investigation, and NEPA documentation; 1.2.2 Coordinate with FWS-Ecological Services, U.S. Army Corps of Engineers, NOAA-Fisheries, State Reclamation Board, CDFW, irrigation districts, and effected groups about Refuge projects on a continual basis; 1.2.3 Work with Federal, State, county, levee and irrigation districts to investigate best management practices for habitat, water diversion, and flood management projects through technical studies and agency coordination.* A compatibility determination for the proposed right-of-way permit was provided for public review at the same time as the draft environmental assessment. No comments were received.

II. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

No Action: Under the No Action alternative the FWS would not issue a right-of-way permit to RD 2140.

Proposed Action: The proposed action is to issue a right-of-way to RD 2140 for the construction and long-term maintenance of a training dike on the Capay Unit of the Refuge. The right-of-way would facilitate construction of the Corps' Hamilton City Flood Damage Reduction and Ecosystem Restoration Project. The Corps' project consists of the following: Construction of a setback levee and training dike about 6.8 miles long that would have varying heights and consequently, varying levels of performance for flood damage reduction. The entire length of setback levee and training dike would have a gravel road for patrolling, and would be fenced along the landside. From the north point of the study area to roughly 4,000 feet south of Dunning Slough, a distance of 4.4 miles, the levee would be on average 7.5 feet high. Roughly 4,000 feet south of Dunning Slough, the average levee height would drop to 6 feet. This change reflects the difference in land use behind the levee at this point, which is largely agricultural. Just north of County Road 23, the setback levee would become a training dike, also 6 feet average height for about 1.6 miles south to its terminus. The training dike would reduce the frequency of flooding to adjacent agricultural lands and reduce damages from scouring flows. The training dike would also reduce the potential for backwaters flooding Hamilton City. The portion of the project training dike located on FWS land is approximately 2,300 feet long (Figure 1). Native vegetation would be restored on all project lands waterside of the new setback levee and training dike. Restoration would also occur on the land within Dunning Slough and the land south of the FWS property. Existing FWS and California Department of Fish and Wildlife (DFW) lands would not be restored as part of the project (ACOE 2004).

III. AFFECTED ENVIRONMENT

See Chapter 4 in the Final Feasibility Report and EIS/EIR for a complete description of the Affected Environment (ACOE 2004). The section of the Capay Unit of the Sacramento River NWR on which the training dike would be constructed is composed primarily of native perennial grasses. In 2007, the Capay Unit was restored to a variety of riparian habitats. The western boundary was purposefully not planted with woody plant species in order to provide a placeholder location for the training dike identified during preliminary planning.

IV. ENVIRONMENTAL CONSEQUENCES

See Chapter 5 in the Final Feasibility Report and EIS/EIR for a complete description of the Environmental Impacts (ACOE 2004). A summary of the site specific effects of the training dike is provided below.

Cultural Resources Impacts: Records search and pedestrian surveys were conducted at the Capay Unit project site and no prehistoric or historic-era resources were discovered (Rosenthal and Meyer 2009). Construction and long-term maintenance of the training dike would not result in impacts to cultural resources.

Soil Impacts: Training dike construction would 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 area would be restored to the current condition of native perennial grasses. The final area of impact would be limited to 4.5 acres (Figure 2).

Vegetation Impacts: Training dike construction would occur on the western boundary of the Capay Unit, which was purposefully not planted to woody species when the Unit was restored in 2007. Therefore, the construction of the training dike and long-term maintenance would have very minor impacts on plant communities relative to the 1,415 acres of habitat restoration associated with the overall project. In addition, any vegetation impacted in the temporary work zones would be restored to the existing condition of native grasslands limiting the loss to 4.5 acres.

Wildlife Impacts: Construction and long-term maintenance of the training dike would result in minor habitat modifications and will disturb wildlife.

Anticipated impacts on wildlife include temporal disturbances to species using habitat directly adjacent to the designated training dike 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 training dike would be impacted resulting in human induced disturbance. However, the Capay Unit and adjacent DFW lands have already been restored and provide a significant amount of alternative habitat for wildlife to utilize during both construction and operation and long-term maintenance. Although there is some temporary disturbance to wildlife due to construction activities, the disturbance is generally localized and would not adversely impact overall populations.

The *Hamilton City Flood Damage Reduction and Ecosystem Restoration, California* including levee/training dike 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 & 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 1,415 acres.

Visitor Services Impacts: Anticipated impacts of the right-of-way permit for training dike construction and long-term 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.

V. AGENCIES AND PERSONS CONSULTED:

California Department of Fish and Wildlife
Reclamation District 2140
The Nature Conservancy
U.S. Army Corps of Engineers

VI. REFERENCES

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.

Rosenthal, J. and J. Meyer. 2009. *Cultural Resources Survey and Geoarchaeological Investigation of the Hamilton City Flood Damage Reduction and Ecological Restoration Area, Glenn County, California*. Prepared by Far Western

Anthropological Research Group, Inc., Davis CA. Prepared for U.S. Army Corps of Engineers, Environmental Resources Branch, Planning Division, Sacramento, CA. Dated: March 2009.

USFWS (U.S. Fish and Wildlife Service). 2004. Fish and Wildlife Coordination Act Report, Hamilton City Flood Reduction and Ecosystem Restoration Project in Glenn County, California.

USFWS. 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.

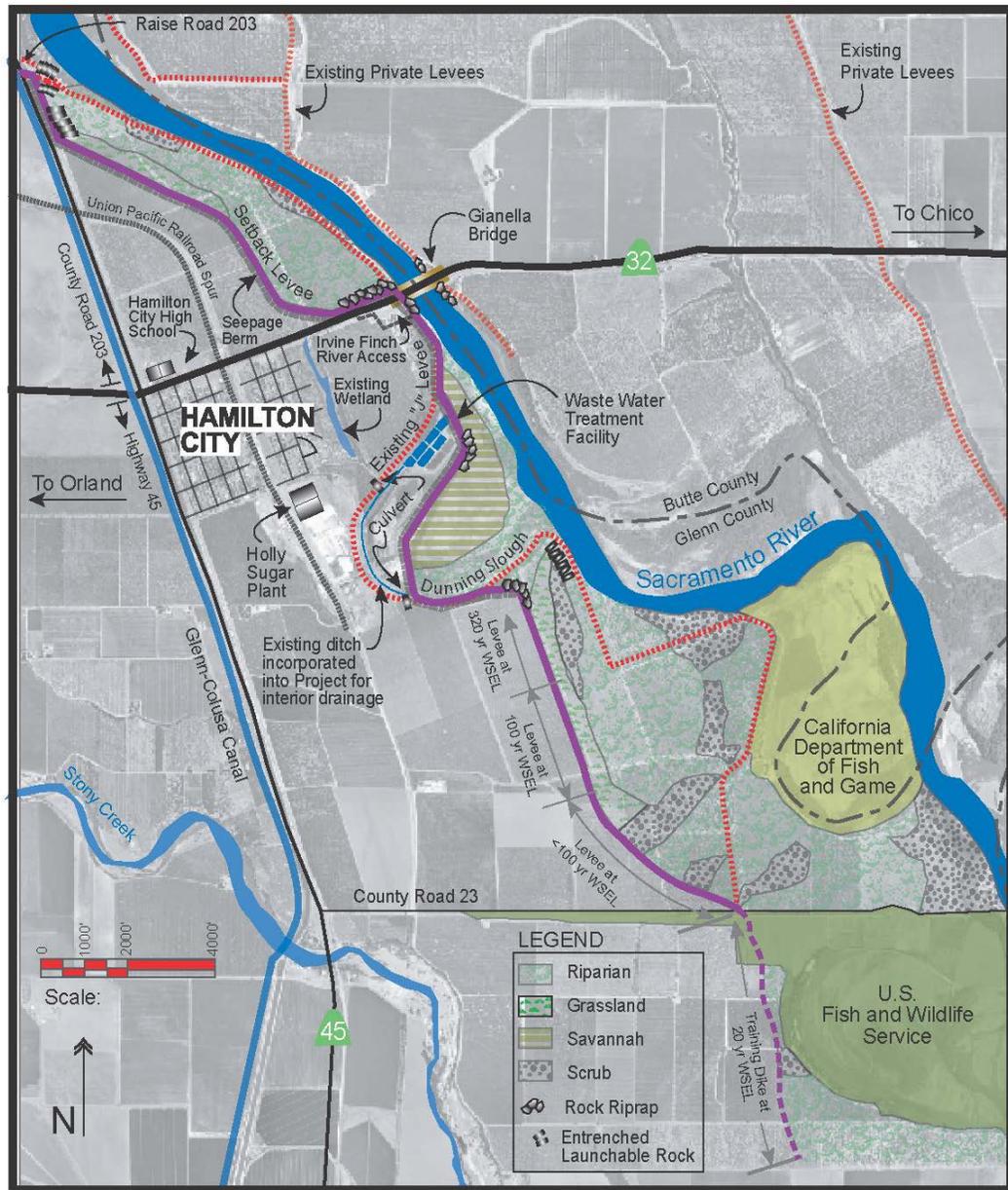


Figure 1. The Hamilton City Flood Damage Reduction and Ecosystem Restoration Project: note the set-back levee/training dike and restored floodplain riparian, grassland, savanna, and scrub habitats.

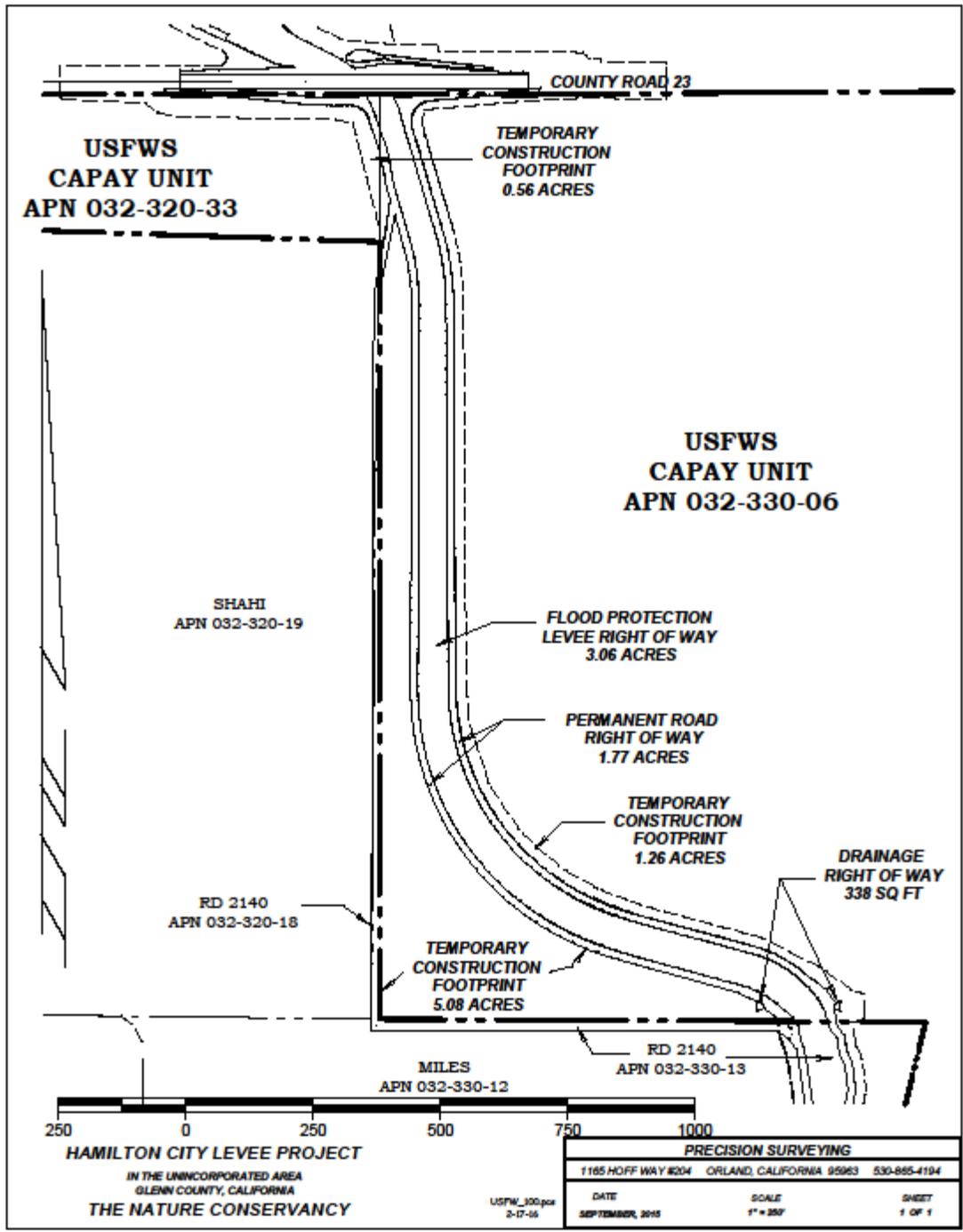


Figure 2. Sacramento River National Wildlife Refuge– Capay Unit: Hamilton City Flood Damage Reduction and Ecosystem Restoration training dike impact footprint.