

Draft Compatibility Determination

Title

Right-of-way (Special Use Permit) for temporary construction activities associated with the Twin Cities Bridge replacement

Refuge Use Category

Rights-of-way and Rights to Access

Refuge Use Type(s)

Temporary construction right-of-way

Refuge

Stone Lakes National Wildlife Refuge

Refuge Purpose(s) and Establishing and Acquisition Authority(ies)

Emergency Wetlands Resources Act of 1986, the Fish and Wildlife Act of 1956, the Migratory Bird Conservation Act, and the Endangered Species Act of 1973. Refuge purposes are:

“... for 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) (Fish and Wildlife Act of 1956)

“... 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. § 742f(b)(1) (Fish and Wildlife Act of 1956)

“... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. § 715d (Migratory Bird Conservation Act)

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

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as the Refuge

System, is 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 (Pub. L. 105-57; 111 Stat. 1252).

Description of Use

Is this an existing use?

No

What is the use?

The U.S. Fish and Wildlife Service (Service) proposes to issue a Special Use Permit (SUP) to the County of Sacramento in conjunction with the California Department of Transportation (Caltrans) to allow temporary construction activities associated with replacing the Twin Cities Bridge (Bridge No. 24C-0053) on 0.3 acres of Stone Lakes NWR (figures 1, 2, and 3).

Is the use a priority public use?

No

Where would the use be conducted?

The project site is located along Twin Cities Road, west of Interstate 5 over Snodgrass Slough. The construction area overlaps with a 0.5-acre portion of the Refuge. The Temporary Construction Easement (TCE) area includes riparian habitat and stream/creek habitat bordering Snodgrass Slough (totaling 13,279 square feet or 0.3 acres in the Temporary Construction Easement area; see figures 1, 2 and 3).

When would the use be conducted?

Construction is anticipated to begin in spring of 2027. Construction of the bridge would occur at night so that the existing bridge can remain open, with the exception of a two-week-long detour. Notice will be given to the Service in advance of any night work. All in-water work will occur within the “dry season” (June 1 through October 15).

How would the use be conducted?

The proposed Project will not impede access to the Stone Lakes NWR during construction or operation of the new bridge. Additionally, Caltrans will place protective temporary ESA fencing along the limits of construction and prohibit construction-related disturbance beyond the fencing.

Within the temporary construction area, Caltrans will remove the majority of riparian vegetation in order to construct the proposed driveway and to accommodate the

amount of grading that is required. Vegetation removed will be hauled away from the jobsite. Because no water source is available post-construction, significant revegetation is unlikely. The County's plant establishment period is 120 days, but due to the lack of water source and the proposed 2:1 embankment slopes, replanting may not be feasible.

Caltrans will also construct a driveway (see figure 3) which will require the removal of vegetation and grading. Specifically, Caltrans will perform cut and fill construction activities (moving earth with haul trucks and/or flattening or terracing hills) within the construction area that overlaps with the Refuge.

In order to construct the bridge, the contractor will need access to the slough. The portion of Snodgrass Slough within the project area will be closed to boating activities during in-water work. However, Snodgrass Slough navigability will be maintained to the maximum extent feasible during construction. Depending on the construction method, the contractor may use a barge or a temporary trestle to construct the proposed bridge. All in-water work will be limited to invasive plant species removal, installation of dewatering coffer dams, installation of piles, and installation of a temporary channel crossing.

Dewatering coffer dams

Temporary coffer dams will be used to dewater the area surrounding existing piers prior to the removal of existing piles. The coffer dams will enclose an area of approximately 80 feet by 40 feet. To minimize sedimentation, pumped water will pass through a sediment settling device or pond before returning to Snodgrass Slough.

Installation of piles

Pile driving will be necessary for installation of bridge piers and coffer dams. Construction is planned to minimize the amount of noise due to pile driving. To reduce noise, piles will be driven using vibratory hammers to the maximum extent feasible, after which point, impact hammers will be used to reach the required pile depth.

Installation of temporary channel crossing bridge

The project will require construction of a temporary channel crossing for equipment access and staging within the secondary channel as well as a temporary work bridge comprised of timber beams or other structural components approved by the project engineer. The temporary channel crossing will be constructed of clean/washed gravel on top of a geotextile to ensure that the material is easily removable from the channel. Because construction will occur over multiple different dry seasons, the temporary crossing would need to be removed from the channel prior to the rainy season and rebuilt the following year.

Why is this use being proposed or reevaluated?

The County of Sacramento and Caltrans need the SUP in order to perform construction for the replacement of the Twin Cities Bridge. The current bridge is functionally obsolete and will be replaced with a structure that meets current standards, including increasing the width of the bridge to provide class II bike lanes. The project will also include modifications to the approaches of the bridge east and west of Snodgrass Slough.

Availability of Resources

The refuge's cost to administer and manage the SUP is negligible (estimated to be 5 hours of Refuge time). The Refuge has sufficient resources to administer the SUP.

Anticipated Impacts of the Use

Potential impacts of a proposed use on the refuge's purpose(s) and the Refuge System mission

Construction associated with this temporary right-of-way would have minimal negative impacts to natural resources including air quality, vegetation, and wildlife. Impacts will result from pruning and removal of vegetation for temporary construction access and cut and fill activities for construction of the bridge approaches. For water work within the slough, the contractor may use a barge or a temporary trestle. Impacts to resources in the immediate vicinity of the construction area are summarized below.

Impacts associated with the temporary construction easement would be minimal because activity is limited to a minor portion of land within the refuge (0.5 acres) and because the portion of the refuge affected by the TCE is already moderately disturbed by roadways and agricultural activity.

Short-term impacts

Vegetation

The overall ground surface of the temporary construction easement is vegetated with box elder (*Acer negundo*), Fremont cottonwood (*Populus fremontii*), alder (*Alnus sp.*), valley oak (*Quercus lobata*) and willow (*Salix sp.*) of various ages and sizes. The understory includes a mixture of native and non-native shrubs and herbaceous vegetation including Himalayan blackberry (*Rubus armeniacus*), grape (*Vitis californica*), poison oak (*Toxicodendron diversilobum*), wild oats (*Avena fatua*), and ripgut brome (*Bromus diandrus*). The slough margins are thick with aquatic plants such as duck weed and water hyacinth, along with floating wood, litter and other detritus found in backwaters. Riparian habitat within the TCE will need to be removed from the site. The total surface disturbance is estimated to be 0.3 acres as shown in

figure 1. A select number of oak trees within the proposed disturbed area will be removed (figure 4). Impacts to oak trees were found to be less than significant with mitigation (Caltrans and County of Sacramento, 2016). Mitigation would include planting replacement trees on- or off-site at a minimum ratio of 1:1 for each dbh inch removed - an expected total of 221 inches. Following bridge construction, the temporary easement is unlikely to be re-vegetated due to a lack of water source and the slope of the proposed embankment.

Resident and Migratory Birds

The Refuge provides habitat to migratory birds such as waterfowl and the greater sandhill crane, as well as resident species including western flycatchers (*Empidonax difficilis*), yellow warblers (*Dendroica petechia*), MacGillivray's warblers (*Oporornis tolmiei*), and song sparrows (*Melospiza melodia*). Riparian areas also provide perches and cover for species that forage in or over water.

Mature trees within the construction area represent potential nesting habitat for other migratory birds and/or birds of prey, specifically the Swainson's hawk. As such, removal of a tree or disturbance near a tree due to construction activities could result in the loss of an active nest. Construction activities could also negatively impact species and their habitats due to noise from equipment or ground disturbance from construction activities such as pile driving.

Additionally, any construction conducted at night could negatively impact species via the presence of humans during the construction process or via the presence of artificial light used to illuminate the site (Hockin, et al., 1992). Such disturbances can make habitat less appealing to resident and migratory birds, resulting in an overall loss of habitat.

Threatened and Endangered Species

The Refuge provides potential habitat for the following federally listed endangered and threatened species: giant garter snake, delta smelt, valley elderberry longhorn beetle, western yellow-billed cuckoo, vernal pool tadpole shrimp, and vernal pool fairy shrimp. The construction area does not overlap with vernal pool habitat, nor does it contain any elderberry shrubs, which are an essential habitat component for the valley elderberry longhorn beetle. Therefore, there would be no effect to the valley elderberry longhorn beetles nor vernal pool species.

Snodgrass Slough has not been identified as a specific area of importance to delta smelt spawning. Because of its steep banks and earthen substrate, the slough is not likely to be used by delta smelt for spawning; rather, delta smelt require shallow edge-waters lined with hard substrates for spawning activities. Therefore, it is not likely that construction activities will impact delta smelt as the Project site does not overlap with spawning habitat (Caltrans and County of Sacramento, 2016).

Impacts on the federally listed western yellow-billed cuckoo are expected to be

minimal, if any. There are no known current or historical occurrences of cuckoo breeding pairs within the Project site and the amount of riparian habitat in and around the construction area is too small to support nesting activities. Although construction of the proposed project will result in the temporary loss of riparian habitat that the cuckoo could use for dispersal, there is habitat available directly adjacent to the Project site that the cuckoo could utilize. There are therefore no anticipated impacts on this species.

Giant garter snakes (GGS) inhabit marshes, sloughs, ponds, small lakes, low gradient streams, and other waterways and agricultural wetlands, such as irrigation and drainage canals and rice fields. Essential habitat components consist of (1) adequate water during the snake's active period from early spring through mid-fall to provide a prey base and cover, (2) emergent, herbaceous wetland vegetation, such as cattails and bulrushes, for escape cover and foraging habitat; (3) upland habitat for basking, cover, and retreat sites; and (4) high elevation uplands for cover and refuge from flood waters. Riparian woodlands do not provide suitable habitat for the giant garter snake because of excessive shade and inadequate prey resources (U.S. Fish and Wildlife Service, 2007).

Construction work within the snake's aquatic habitat would include the installation of coffer dams for the removal of existing bridge piles and the installation of piles for the new bridge. Excavation within the snake's upland habitat will be limited to the removal of the existing bridge abutments, the installation of the new abutments, and excavation along the bridge approaches for the placement of drainage ditches. Other construction activities within the snake's upland habitat include the placement of fill material to raise the bridge approaches, and the paving of roadways and driveways (Caltrans and County of Sacramento, 2016).

Equipment associated with excavation, coffer dam installation, grading, and paving has the potential to result in direct impacts to GGS. Due to the loss of habitat as well as the potential for the Project to result in take, it was determined that the proposed Project may affect and is likely to adversely affect GGS. Because suitable habitat for this species (stream/creek) comprises only 22% of the total construction area (788 square feet) within the refuge, the impacts on this species within the refuge are expected to be small.

Formal Section 7 Consultation with the Fish and Wildlife Service regarding the proposed construction activities was initiated in 2016 and a Biological Opinion issued (USFWS 2017). The Service determined in that opinion that the Bridge Replacement Project would not jeopardize the continued existence of giant garter snakes. The determination was based on the following: 1) the habitat impacts and increase in the overall bridge footprint will not be substantial; 2) the implementation of the conservation measures will reduce the adverse effects; and 3) giant garter snakes should be able to continue to utilize the area after construction is complete. All other listed species that may be present are not likely to be affected by the project (USFWS 2017).

Wildlife Dependent Recreation

The portion of Snodgrass Slough that overlaps with the project scope will not be open for boating access during any in-water construction. For the remainder of the construction period, navigability in Snodgrass Slough will be maintained to the maximum extent feasible, but recreational boating could be inaccessible during periods of construction. Therefore, recreation could be negatively impacted during periods of in-water construction.

Long-term impacts

There are no additional long-term impacts anticipated due to replacing the Twin Cities Bridge over Snodgrass Slough.

Public Review and Comment

This draft Compatibility Determination will be available for public comment consistent with 603 FW2.12A(9). The public comment period will be a total of 30 days starting, September 8, 2025. Any comments received will be considered before this Compatibility Determination is finalized. The public will be made aware of this opportunity to comment through the Refuge's website and social media. It will be made available electronically on the refuge website and social media.

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

- The County will provide a new entrance and lockable gate at the Refuge boundary since the current one will be removed for construction and to ensure that the Service has adequate safe clearance for large farm equipment to enter the refuge from Twin Cities Road.
- All work would be confined to the 0.3-acre area of the temporary construction easement.
- All trees and vegetation that are removed in the temporary construction easement will be revegetated under the Vegetation Restoration and Monitoring Plan.
- Notice will be given to the Service in advance of any night work performed in the temporary construction easement area.
- All work would be conducted in accordance with the Special Use Permit issued by the Refuge.

- Caltrans will take the following mitigation measures during construction to avoid impacts on migratory birds (MBTA) and/or birds of prey (Caltrans and County of Sacramento, 2016):
 - If construction begins outside the February 1 to August 31 breeding season, there will be no need to conduct a preconstruction survey for active nests.
 - Trees intended for removal shall be removed during the period of September through January to the greatest extent possible, in order to avoid the nesting season.
 - If construction activity or vegetation removal is to commence between February 1 and August 31, a survey for active bird nests shall be conducted by a qualified biologist within one month prior to the start of construction related activity (including clearing, grubbing, and grading). The survey area shall include the Project site, and a survey radius around the Project site of 50 feet for MBTA birds and 500 feet for birds of prey.
 - If no active nest of a bird of prey or MBTA bird is found during the focused survey, a letter report documenting survey methods and findings shall be submitted to the Environmental Coordinator, and no further avoidance and minimization efforts will be required.
 - If any active nest(s) of MBTA birds or birds of prey are found during surveys, the Environmental Coordinator and CDFW shall be contacted to determine appropriate avoidance/protective measures. The avoidance/protective measures shall be implemented prior to the commencement of construction.
 - Measures should be taken prior to the nesting season (February 1 - August 31) to prevent birds from nesting on the bridge structure. Techniques to prevent nest establishment include the installation of bird-netting, removing and disposing of partially constructed and unoccupied nests on a regular basis to prevent their occupation, or a combination of these techniques.
- Caltrans will take the following measures to mitigate impacts to giant garter snakes (Caltrans and County of Sacramento, 2016):
 - Construction and ground disturbing activities shall be initiated during the snake's active season (May 1 through October 1) when snakes are expected to actively move and avoid danger. Tree removal may occur prior to the snake's active season as long as trees are removed by hand or through the use of equipment operated within currently paved roadways.
 - Clearing and grubbing shall be confined to the minimum area necessary to facilitate construction activities.

- Flag and designate giant garter snake habitat to be avoided within or adjacent to the Project site as Environmentally Sensitive Areas. These areas should be avoided by all construction personnel.
- Twenty-four-hours prior to the commencement of construction activities, the Project site shall be surveyed for giant garter snakes by a Service-approved biologist. The biologist will provide the Service with a written report that adequately documents the monitoring efforts within 24-hours of commencement of construction activities. The Project site shall be re-inspected by the monitoring biologist whenever a lapse in construction activity of two weeks or greater has occurred.
- A Worker Environmental Awareness Training Program for construction personnel shall be conducted by a Service-approved biologist for all construction workers, including contractors, prior to the commencement of construction activities.
- During construction operations, stockpiling of construction materials, portable equipment, vehicles, and supplies shall be restricted to the designated construction staging areas and all operations shall be confined to the minimal area necessary.
- A Service-approved biologist shall monitor all “in-water” work. The biologist shall periodically inspect the Project site throughout project construction to ensure that all avoidance and minimization measures are being appropriately implemented.
- If snakes are encountered during construction activities, the biologist shall notify the Service immediately to determine the appropriate procedures related to the collection and relocation of the snake. A report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the snake, within one (1) business day. The biologist will be required to report any take of listed species to the Service immediately by telephone at 916-930-5603 and by electronic mail or written letter addressed to the Bay Delta Fish and Wildlife Office, within one (1) working day of the incident.
- Project-related vehicles shall observe a 20-mile-per-hour speed limit within construction areas, except on existing paved roads where they shall adhere to the posted speed limits.
- Best Management Practices (BMPs) will be implemented to minimize the potential for erosion and sedimentation into nearby water bodies.
- After completion of construction activities, the applicant will remove any temporary fill and construction debris and, wherever feasible, restore disturbed areas to pre-project conditions. Restoration work includes such activities as revegetating the banks and active channels with a seed

mix similar to pre-project conditions.

- Prior to construction, the County shall obtain a biological opinion from the U.S. Fish and Wildlife Service or documentation that consultation with USFWS has concluded in a “not likely to adversely affect” determination. The project proponent shall mitigate for permanent impacts to giant garter snake habitat through the purchase of similar habitat credits at a ratio of 1:1 (or to the satisfaction of USFWS) at a Service-approved mitigation bank.

Justification

The County solicited public comments through the California Environmental Quality Act (CEQA) process in 2016 and has identified mitigation measures for anticipated impacts to wildlife and other listed species. Caltrans will provide the Refuge with a new entrance and lockable gate at the Refuge boundary and all work will be conducted within the construction area boundaries in accordance with the Special Use Permit. All other stipulations identified in this document are expected to be complied with.

The impacts of the construction activities outlined in the SUP could potentially impact nesting habitat for birds such as the Swainson’s hawk and the listed yellow-billed cuckoo, as well as for listed species such as the giant garter snake and delta smelt. The impacts of construction activities on these species are expected to occur, as detailed in the “Impacts” section. However, because the construction area that overlaps with the refuge is small in scale (0.3-acres), impacts on the species’ overall population and health are expected to be small. No other listed species are expected to be impacted by this use because their habitat is not present in the construction area (see the “Impacts” section for more details).

In summary, the purposes of the Refuge are centered on conserving and protecting migratory birds, fish and wildlife resources, and threatened and endangered fish, wildlife and plants. Issuing an SUP for the construction of the Twin Cities Bridge project as described above would not materially interfere with or detract from the fulfillment of the Refuge System mission or the purposes of Stone Lakes NWR.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director Signature and Date

Mandatory Reevaluation Date

This Compatibility Determination will not need to be re-evaluated; its purpose will extend until construction is complete.

Literature Cited/References

Caltrans and County of Sacramento. 2016. Mitigated Negative Declaration and Initial Study for the Twin Cities Road Over Snodgrass Slough Bridge Replacement Project. Sacramento, CA.

Hockin, D., Ounsted, M., Gorman, M., Hill, D., Keller, V., & Barker, M. A. 1992. Examination of the Effects of Disturbance on Birds with Reference to its Importance in Ecological Assessments. *Journal of Environmental Management*, 36, 253-286.

U.S. Fish and Wildlife Service (USFWS). 2007. Final Comprehensive Conservation Plan. Sacramento, CA.

U.S. Fish and Wildlife Service (USFWS). 2017. Formal Consultation on the Twin Cities Road over Snodgrass Slough Bridge Replacement Project. San Francisco Bay-Delta Fish and Wildlife Office, Sacramento, CA.

Figures

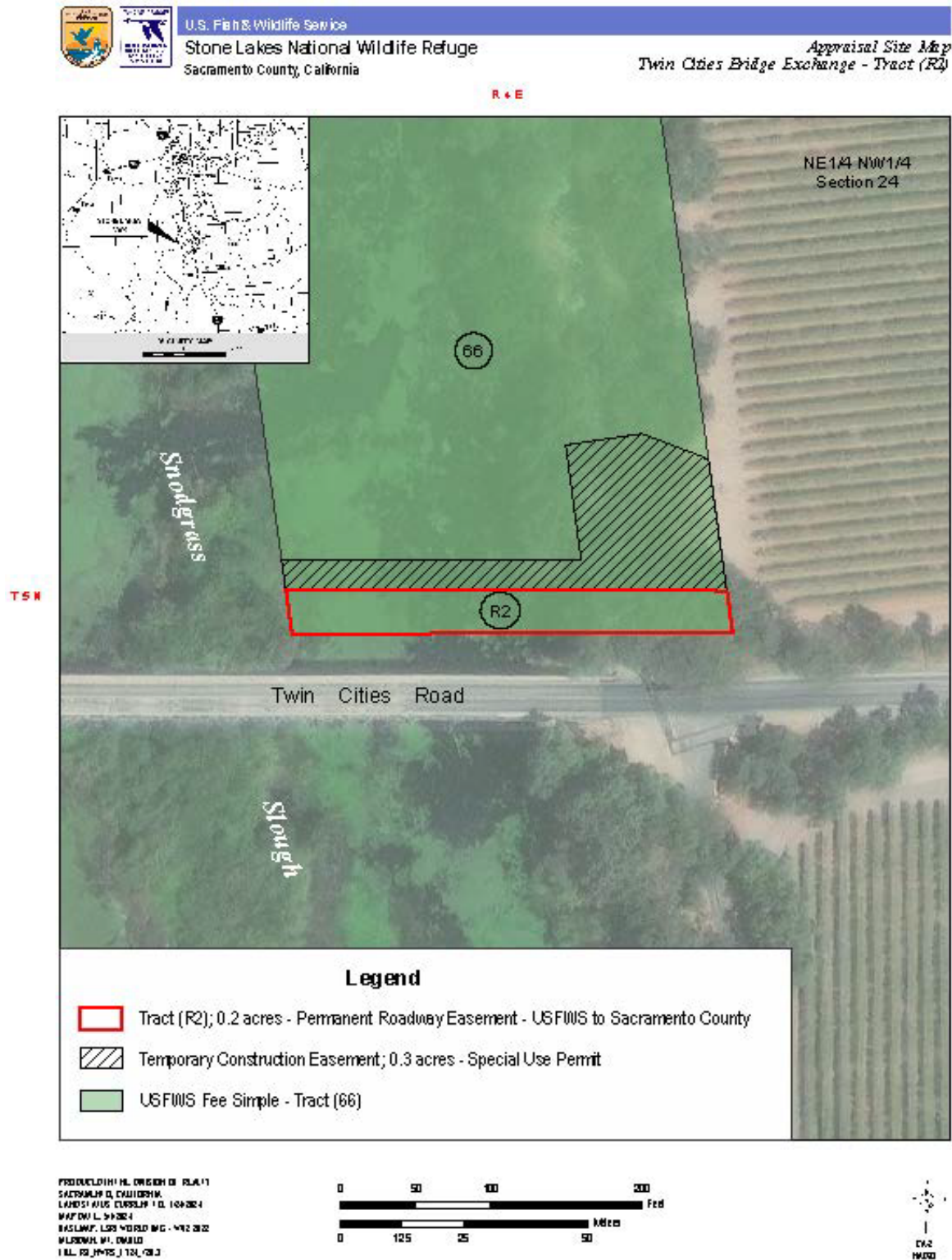


Figure 1: Map of temporary construction easement on Stone Lakes National Wildlife Refuge (NWR).

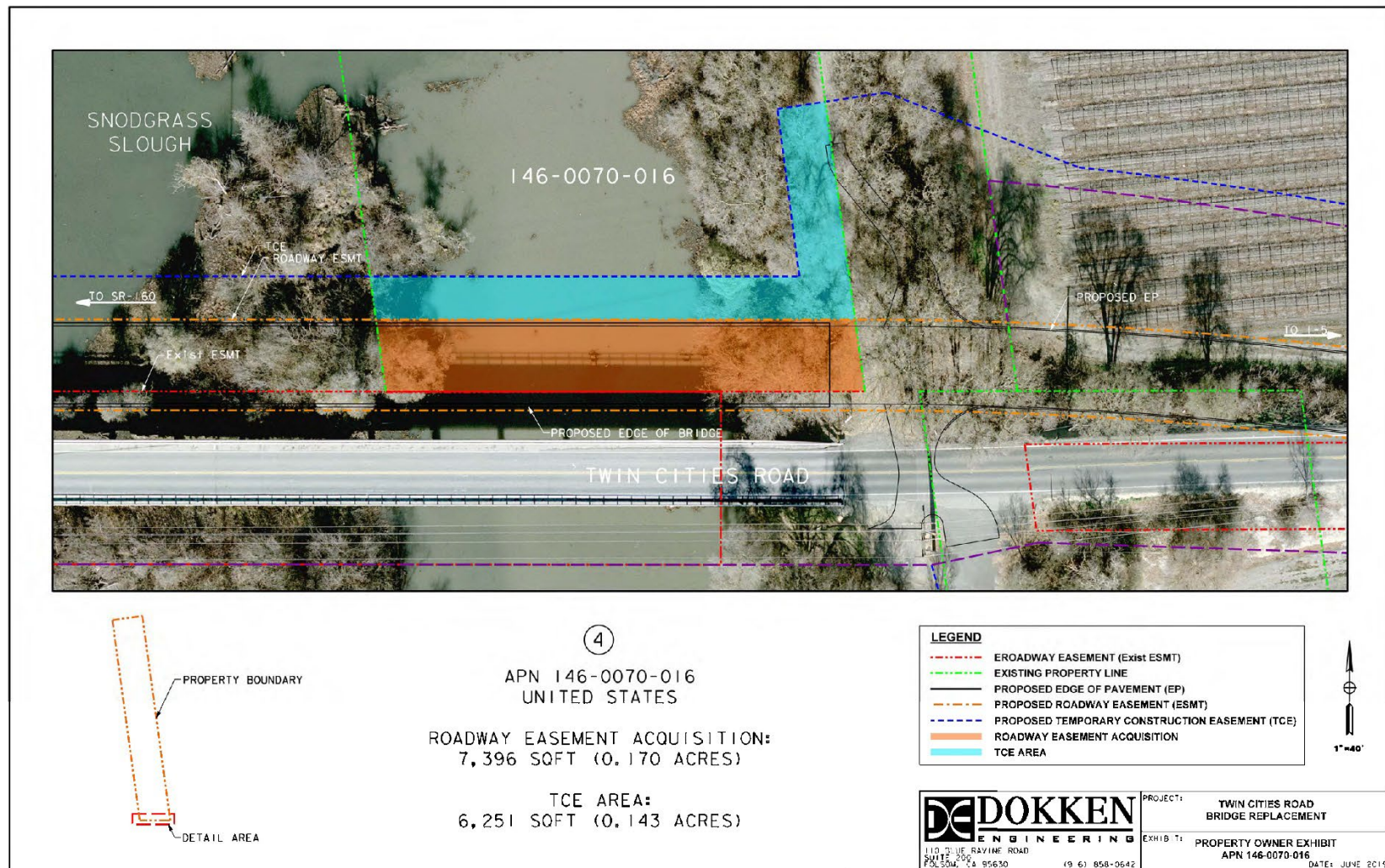


Figure 2: Map of a portion of the proposed temporary construction easement on Stone Lakes NWR.

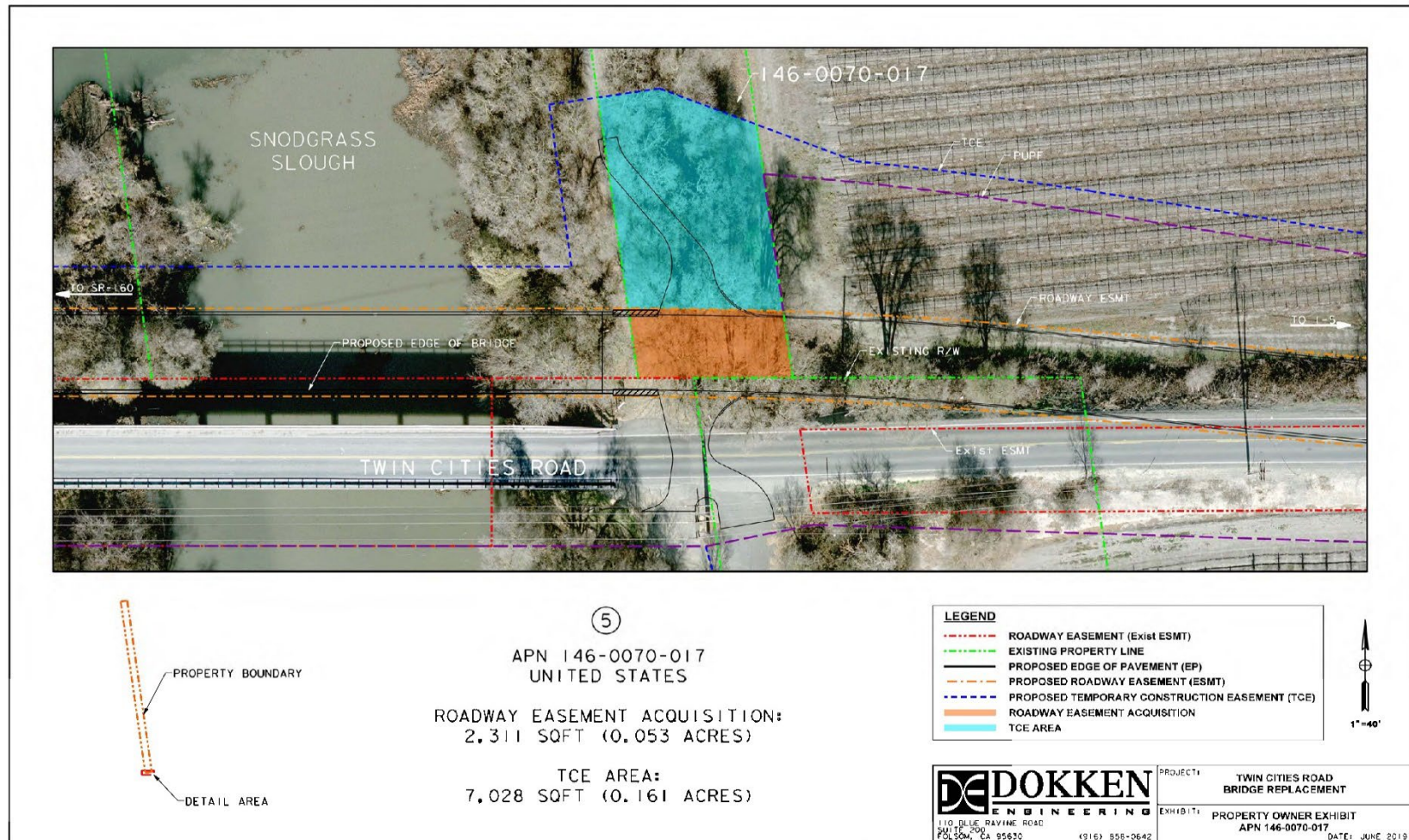


Figure 3: Map of proposed driveway within the temporary construction easement of Stone Lakes NWR.

Plate IS-12: Individual Oak Trees

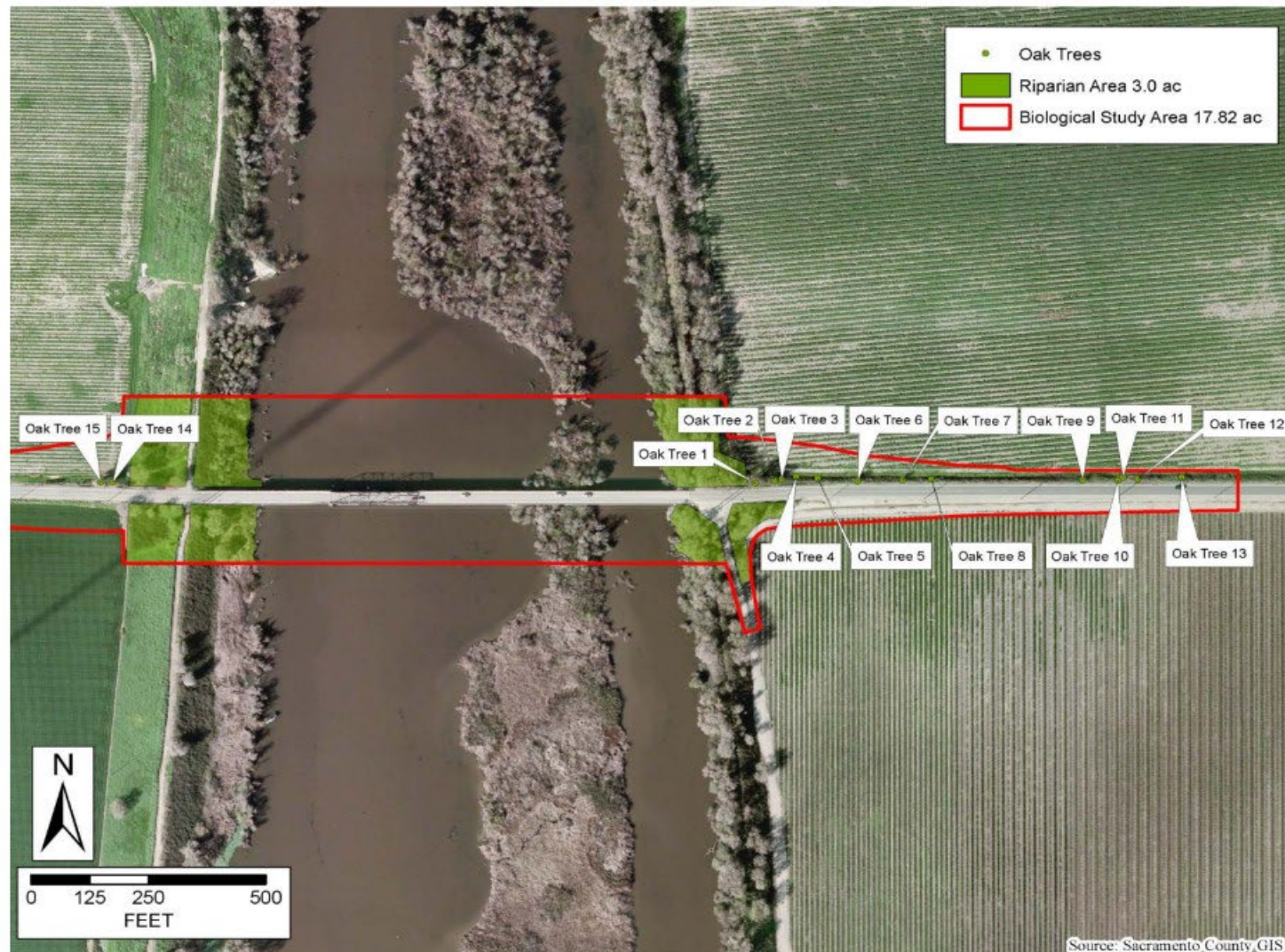


Figure 4: Oak Tree Removal within the construction area on and adjacent to Stone Lakes NWR.