United States Department of the Interior

BUREAU OF RECLAMATION
1243 "N" Street
Fresno, CA 93727

June 6, 2012

MEMORANDUM

To: Chuck R Siek
Supervisory Natural Resources Specialist

From: Jennifer L. Lewis
Endangered Species Act Branch

Subject: No-Effect Determination for *Reclamation District 773 Fabian Tract Spoils Reuse License* (11-051)

The Bureau of Reclamation (Reclamation) has reviewed Reclamation District 773 (District) request to reinforce their levee system for potential impacts to biological resources. The District requests a license to reuse Reclamation's spoils (i.e. dredged material that has been allowed to dry and settle on land) from the Fabian Track (Figure 1), located southeast of the Clifton Court Forebay approximately 8 miles northwest of the City of Tracy, to stabilize their levees. The reinforcement would include widening the backside (landside) of the levee road and reinforcing the levee by adding fill materials that has been lost via waterside erosion.

The District would remove spoils from Fabian Tract, (not to exceed 10,000 cubic yards (CY) of material annually) to a maximum of approximately 30,000 CY, with an excavator and transfer it by diesel trucks to specific District levee maintenance areas (Figure 1). Once onsite, the spoils would be spread and compacted by heavy equipment to reinforce existing levee sections.

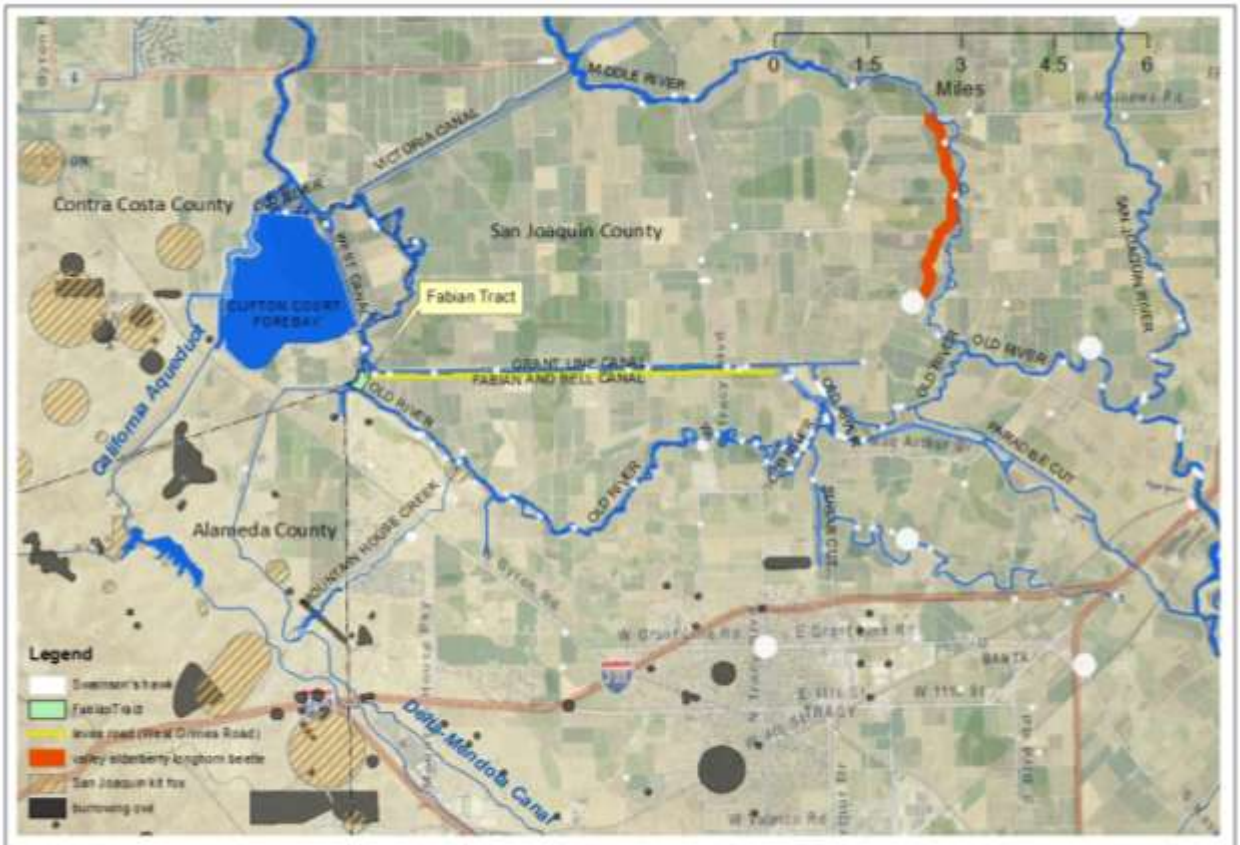
Equipment used during construction activities would include, but is not limited to, the following: Excavators, side dump tractors (for loading spoils materials), wheel loaders, wheel tractor-scrapers, motor graders, track-type tractor/bulldozers and similar equipment for loading, transporting, and compacting spoil/fill materials. Activities would occur from March 1 through November 1 each year (40 working days total estimated), for a duration of no longer than 5 years (2016).

On August 25, 2011, Reclamation surveyed the Fabian Tract and levee roads (West Grimes Road and Fink Road) by driving along existing paved and dirt roadways (Image 1). More focused field surveys for sensitive species were conducted by walking along the levee road and Fabian Tract property. The following observations were made:

- Agriculture was the dominant land use and varied from irrigated pastures to row crops to orchards.
- Pockets of elderberry shrubs near the eastern portion of the levee.
- The property had been baited for rodents.
- A few small mammal burrows were present.
- The waterside levee banks were steep and heavily vegetated with shrubby vegetation dominated by thickets of blackberries (*Rubus* spp.), wild rose (*Rosa californica*), willows (*Salix* spp.), alders (*Alnus* spp.), and buttonbush (*Cephalanthus occidentalis*).

- There were also narrow bands of large trees with understories of smaller trees including cottonwood (*Populus* spp.), valley oak (*Quercus lobata*), boxelder (*Acer negundo*), willow, and alder.

Reclamation requested an official species list from the USFWS via the Sacramento Field Office's website, http://www.fws.gov/sacramento/ES_Species/Lists/es_species_lists-form.cfm on June 1, 2012 (document number: 120601114212). The list is for the following USGS 7½ minute quadrangles (Quads): Vernalis, Tracy, Midway, Holt, Union Island, Lathrop, Woodward Island, Byron Hot Springs, and Clifton Court Forebay. Reclamation further queried the California Department of Fish and Game's (CDFG) California Natural Diversity Database for records of protected species within 10 miles of the Proposed Action location (CNDDB 2012). The two lists, in addition to other information within Reclamation's files, were reviewed to determine which species may be impacted by the proposed project, and includes; federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*; SJFK), the federally threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*; VELB), and protected under the Federal Migratory Bird Treaty Act; burrowing owl (*Athene cunicularia*) and Swainson's hawk (*Buteo swainsoni*) (Figure 1).



Reclamation District 773 Fabian Tract Spoils Reuse License	U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region	Figure 1. CNDDB Reports for Federal Protected Species. Last updated: May 2012 Project: CEC-11-051

San Joaquin kit fox. SJKF primarily inhabit grassland and scrubland communities but will also inhabit oak woodland, alkali sink scrubland, and vernal pool and alkali meadow communities. Contra Costa County is considered the northern most range for SJKF (USFWS 2010). They use ground squirrel burrows for their dens yet SJKF are reputedly poor diggers (Jensen, 1972; Morrell, 1972). The high clay content of most soils in this region may preclude kit fox from digging their own dens.

There are sightings of SJKF (with the most recent from 12 years ago: CNDDB 2012) approximately 2-3 miles west of Fabian Tract (Figure 1). The proposed action area contains only marginal foraging habitat. SJKF would are not likely to be present in the action area because of a lack of suitable habitat and absence of prey due to general canal operations and maintenance (O&M) activities and frequent ground disturbances from agricultural activities. Therefore, Reclamation has determined there would be ***no effect*** to SJKF from the proposed action.

Valley elderberry longhorn beetle. This species is nearly always found on or close to its host plant, elderberry (*Sambucus* species). There are four life stages in the animal's life: egg, larva, pupa, and adult. Females lay their eggs on the bark of living elderberry shrubs. When the larvae hatch, they burrow into the stems to feed and mature. The larval stage may last up to 2 years, after which the larvae enter the pupal stage and emerges into an adult. Adults are active from March to June, feeding and mating.

There are records for VELB within 3 miles of the levee (Figure 1). The proposed action area contains marginal foraging habitat, but any elderberry shrubs within the project area may be occupied by this species.

Provisions for avoidance of effects to valley elderberry longhorn beetle and its host plant are incorporated into the Proposed Action (see specific **Avoidance and Minimization Measures below**). By incorporating these avoidance measures for VELB, Reclamation has determined there would be ***no effect*** to this species.

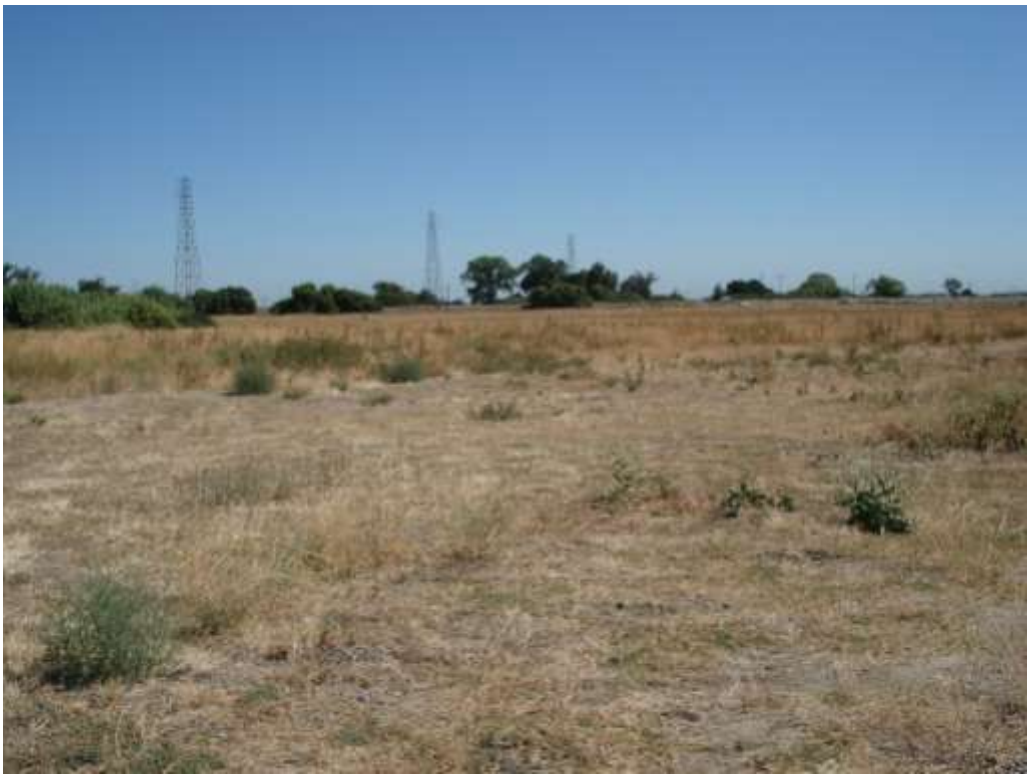


Image 1. Facing northeast overlooking Fabian Tract.

Burrowing owl. This small ground-dwelling owl is a yearlong-resident that exhibits high site fidelity to breeding areas and nesting burrows (Rich 1984, Lutz and Plumpton 1999, Ronen 2002). They live in ground squirrel and other mammal burrows, which it appropriates and enlarges for its own purposes (Martin 1973). Habitat for burrowing owls consists of open, well-drained soil; short, sparse vegetation; and underground burrows (Klute et al. 2003). They are typically found in short-grass grasslands, open scrub habitats, and a variety of open, human-altered environments, such as golf courses, airport runways

and agricultural fields. They are active day and night and are opportunistic feeders. Their diet includes insects, amphibians, reptiles, small mammals, and grass material. The nesting season for burrowing owls occurs from February 1 - August 31(CDFG 1995).

There are CNDDB-recorded occurrences for burrowing owls in the vicinity of the project; with the closest report approximately 0.5 miles to the south of Fabian Tract. These owls will nest in small colonies along earthen canal banks and other sparsely vegetated disturbed sites. Burrows are the essential component of burrowing owl habitat and would most likely be rare in the project area due to rodent population control measures and the general O&M activities along the levee road.

Avoidance measures for burrowing owl have been incorporated into the Proposed Action (see specific **Avoidance and Minimization Measures below**). By following these measures, Reclamation has determined there would be ***no take*** of this species.

Swainson's hawk. This species is a federal species of concern and protected under the federal Migratory Bird Treaty Act (MBTA). Swainson's hawks can be found in the grasslands and agricultural lands of California's Central Valley during spring and summer months. Their nesting season is from March 1 through September 15. They exhibit a high degree of nest site fidelity and nests are constructed in trees, including, but not limited to, Fremont cottonwood (*Populus fremontia*), willow (*Salix* spp.), Valley Oak (*Quercus lobata*), and eucalyptus (*Eucalyptus* spp) (Bloom 1980). Swainson's hawks have adapted to the use of some croplands, predominantly alfalfa, but also other row crops for foraging (Estep 1989). Swainson's hawks prey on small mammals, insects, and birds. Swainson's hawks are abundant in the south Delta and nest sites occur within one-half mile of the proposed project site.

Swainson's hawks are not typically disturbed by machinery, even in very close proximity to nests, and are attracted to farm machinery as it promotes foraging opportunity (uncovers prey). No nesting trees would be impacted and no foraging habitat would be lost. Swainson's hawks are unlikely to be impacted by the project.

Avoidance measures are incorporated into the Proposed Action to prevent any potential impacts to Swainson's hawk. Therefore, Reclamation has determined there would be ***no take*** of this species.

Avoidance and Minimization Measures

MBTA-1:

If construction would commence during the breeding season of February 1 through August 31, a qualified biologist or ornithologist would conduct pre-construction surveys for ground and tree-nesting raptors (including burrowing owls) at the Project site, in accordance with accepted survey protocols.

- If raptors are identified onsite or in the vicinity of the Project site during the preconstruction surveys, then an appropriate construction buffer area would be determined by the biologist/ornithologist, and the buffer area would be demarcated and avoided during construction. If it is not practicable to avoid said buffer areas during construction, then CDFG would be consulted for appropriate action prior to disturbance within the buffer areas.
- If no raptors are identified during the pre-construction surveys, then construction may commence without further mitigation for nesting raptors.

MBTA-2:

If construction would commence during the non-breeding season of September I through January 31, a qualified biologist or ornithologist would conduct pre-construction surveys for burrowing owls at the Project site, in accordance with accepted survey protocols.

- If burrowing owls are not detected onsite or in the vicinity of the site, then construction may commence without additional mitigation for burrowing owls.

- If burrowing owls are detected during the preconstruction surveys the Reclamation biologist would be notified. If identified they may be passively relocated by placing one-way doors in the burrows and leaving them in place for a minimum of three days. Once the project biologist/ornithologist has determined that all burrowing owls have vacated the site, then construction may proceed.

VELB-1:

- A 100-foot buffer from the shrubs dripline shall be established around each eligible elderberry shrub (stems >1″ diameter) located near treatment sites. The elderberry shrubs and buffers shall be clearly flagged and marked as an Environmentally Sensitive Area.
- No equipment (i.e. excavators, tractors, and wheel loaders) shall be used within the 100-foot buffer from the dripline of elderberry shrubs.

Conclusion

Reclamation has determined there would be ***no effect*** to listed species under the Endangered Species Act (16 U.S.C. §1531 et. seq.) and *no take* of species protected by the Migratory Bird Treaty Act with the incorporation of **Avoidance and Minimization Measures**, as listed above. This determination is largely reliant on lack of potential habitat associated with levee roads, ongoing O&M activities and agricultural practices, and the implementation of all measures. In addition, the District would coordinate closely with the Reclamation Biologist to ensure there are no impacts to endangered or sensitive species.

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