

FINAL

**Upper Santa Clara River Arundo/Tamarisk
Removal Program –
Santa Clarita Site Specific Plan**



 **Ventura County Resource Conservation District**

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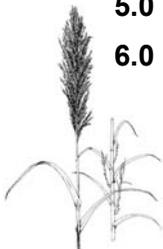
Upper Santa Clara River Watershed Arundo/Tamarisk Removal Plan – Santa Clarita Site Specific Plan

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ACRONYMS

BMP	best management practice
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
dB	decibel
DPR	California Department of Pesticide Regulations
DWR	California Department of Water Resources
EIR/EA	Environmental Impact Report and Environmental Assessment
EPA	U.S. Environmental Protection Agency
GPS	global positioning system
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
QAPP	Quality Assurance Project Plan
RWQCB	Regional Water Quality Control Board
SCARP	Upper Santa Clara River Watershed Arundo/Tamarisk Removal Plan
SKW	Sawyer Keeler-Wolf
TMDL	total maximum daily load
TNC	The Nature Conservancy
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWCD	United Water Conservation District
VCRC	Ventura County Resource Conservation District



Upper Santa Clara River Watershed Arundo/Tamarisk Removal Plan – Santa Clarita Site Specific Plan

Part I Project Overview



Part I. PROJECT OVERVIEW

1.0 INTRODUCTION AND PROJECT DESCRIPTION

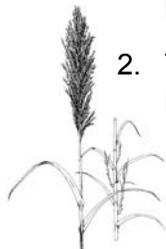
The Santa Clara River is one of the largest relatively natural river systems in Southern California. The headwaters of the main stem are located southeast of Acton in the San Gabriel Mountains and pass through large portions of the Angeles National Forest in Los Angeles County. The river flows approximately 84 miles from its headwaters westward through Los Angeles and Ventura Counties to its delta between the Cities of Ventura and Oxnard. The river and its tributary system have a total watershed area of about 1,634 square miles. The portion of the river within Los Angeles County is referred to as the “upper Santa Clara River” while the portion in Ventura County is referred to as the “lower Santa Clara River.” The upper Santa Clara River watershed (Figure 1) consists of approximately 680 square miles of mostly rugged topography, natural land, and some developed areas.

Multiple threats to the ecological health and water quality of the Santa Clara River exist. One of the threats is the establishment of noxious and invasive plant species, particularly *Arundo donax* (hereafter referred to as arundo) and *Tamarix* species (hereafter referred to as tamarisk). Arundo and tamarisk are both well suited for the climate offered along the Santa Clara River. Because they are hearty plants that reproduce and grow quickly, they form dense stands of biomass that crowd out native species, increase flood and fire hazards, and soak up and transpire large amounts of surface and groundwater. These plants can out-compete native plant species and impair water and habitat quality; thus, they are not desirable plants for public safety, public health and ecological reasons.

The upper Santa Clara River Watershed Arundo/Tamarisk Removal Plan – Santa Clarita Site Specific Plan (hereafter referred to as Site Specific Project) will eradicate arundo and tamarisk, as well as smaller stands of other invasive plant species. The project area is a 297-acre site along the main stem of the Santa Clara River centered under the McBean Parkway Bridge, and includes a portion of two major tributaries: the South Fork and San Francisquito Creek (Figure 2).

The Site Specific Project is part of a larger overall arundo and tamarisk removal plan along the Santa Clara River, known as the upper Santa Clara River Watershed Arundo/Tamarisk Removal Plan (SCARP). This plan consists of three major elements:

1. A long-term plan for arundo and tamarisk removal for the entire upper Santa Clara River sub-watershed including both the main stem of the river and all substantial tributaries. The long-term plan will provide programmatic vegetation and wildlife baseline data, including a broad menu of removal techniques and associated best management practices (BMPs) needed to reduce impacts. It will also detail the regulatory issues associated with such removal projects to a sufficient level of detail to facilitate the issuance of programmatic permits by regulatory agencies for future removal projects.
2. The Site Specific Project itself, which includes removal of arundo, tamarisk, and other incidental invasive species on a highly visible 297-acre reach of the Santa Clara River and

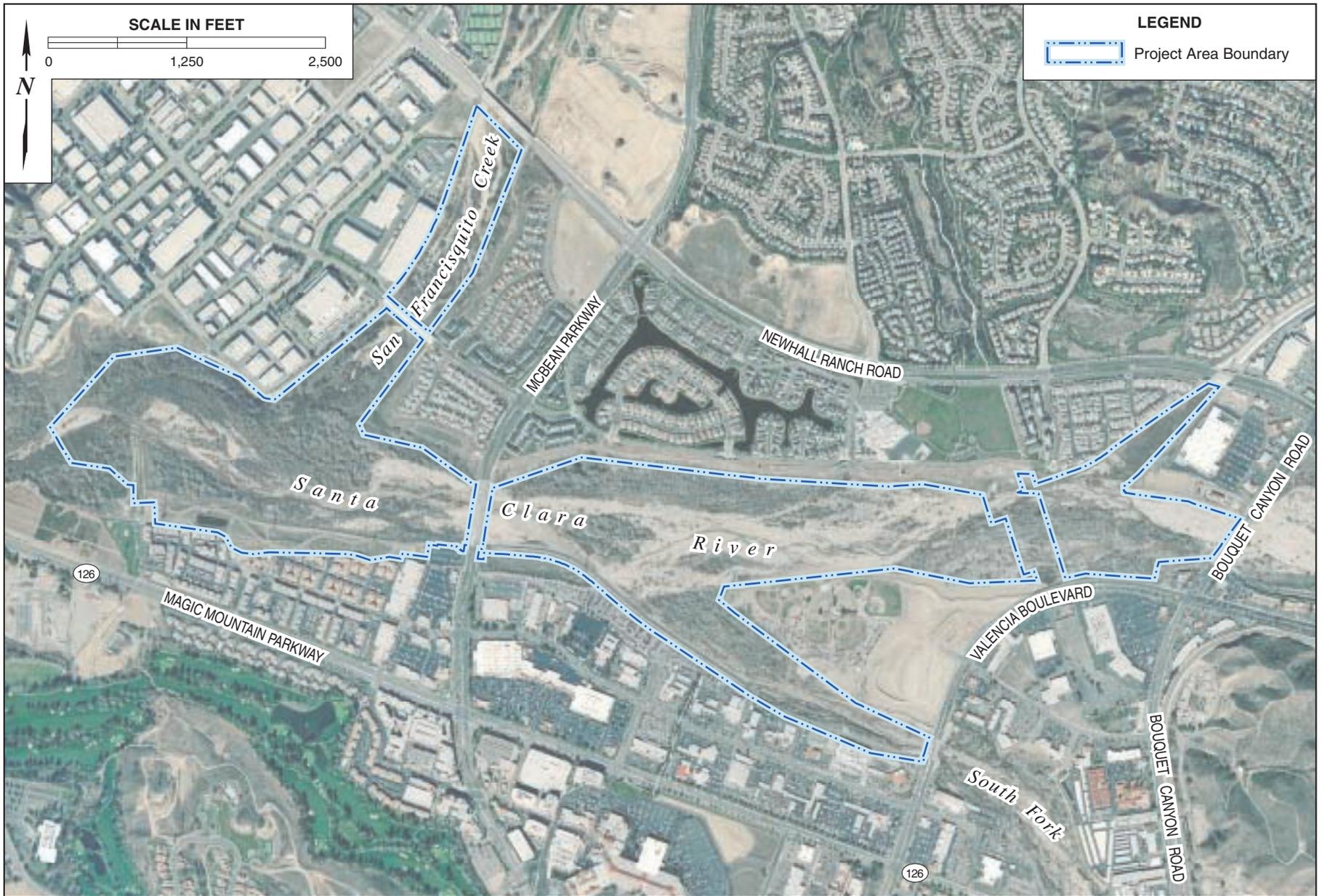




SCARP

Site Specific Project – Regional Location
City of Santa Clarita, Los Angeles County

FIGURE
1



SCARP

Site Specific Project – Project Vicinity
CPageity of Santa Clarita, Los Angeles County

FIGURE

2

the lower reaches of two major tributaries just above the confluence of San Francisquito Creek and the South Fork of the Santa Clara River. The Site Specific Project includes a Quality Assurance Project Plan (QAPP), which outlines a plan for collecting pre- and post-project water quality data. This QAPP has been reviewed and certified by the Los Angeles Regional Water Quality Control Board.

3. A Programmatic Environmental Impact Report and Environmental Assessment (EIR/EA) as required under the California Environmental Quality Act and National Environmental Policy Act (CEQA and NEPA), respectively. The EIR/EA will assess the impacts of implementing the long-term plan, propose mitigation measures to reduce associated impacts, and consider alternatives which may be capable of meeting the project's objectives while eliminating or mitigating substantially significant impacts.

2.0 PROJECT OBJECTIVES

As part of the SCARP, the Site Specific Project would result in removal of noxious and invasive plants from a highly visible 297-acre area of the river located in the City of Santa Clarita; act as a low impact arundo and tamarisk removal demonstration project for interested agencies, landowners, and non profits; and stimulate public interest in, and support for, such removal projects.

Site Specific Project Goals:

- Demonstration project for the SCARP to stimulate interest and public support of removal projects.
- Improve habitat for wildlife, particularly for threatened and endangered species.
- Improve water quality and water flow within the project area.
- Provide a model project for the City of Santa Clarita's efforts to improve the ecology of the Santa Clara River.
- Educate the local community about the problems caused by non-native, invasive species, particularly arundo and tamarisk.
- Monitor effectiveness and continuing treatment as needed for up to 5 years.

The Site Specific Project will involve the use of crews who will remove stands of arundo and tamarisk by hand using cut-and-daub or foliar spray methods (discussed in the Eradication Plan, Section 1.1 of Part II of this document). Generally, these crews will start upstream and work their way downstream in phases, spending one or two weeks per phase removing arundo and tamarisk.



Stand of Arundo along Santa Clara River bank



3.0 PROJECT COLLABORATION

The Ventura County Resource Conservation District (VCRCD) is the lead agency for the Site Specific Project and the upper Santa Clara River Watershed Arundo/Tamarisk Removal Plan. The VCRCD is a special district of the state whose mission is to provide assistance to rural and urban communities to conserve, protect, and restore natural resources. The VCRCD is working under a Memorandum of Understanding with the Antelope Valley Resource Conservation District. As the lead agency for this project, the VCRCD has developed this Site Specific Project, and will coordinate and oversee its implementation. The VCRCD has worked in close coordination with federal, state, and local regulatory agencies to develop this plan and ensure that its implementation will be in compliance with all regulations and ordinances. Others collaborating in the development and implementation of this Site-Specific Plan include:

- the California Conservation Corps (performing implementation)
- the Los Angeles Agricultural Commissioner's office, Weed Hazards and Pest Management Division (consulting on methods and performing implementation);
- the City of Santa Clarita Environmental Services Department (partnering with VCRCD to develop the plan and obtain public support for the project); and
- the City of Santa Clarita Parks and Trails Department (consulting on access and staging areas, accepting mulch for city landscaping projects).

4.0 THE PROBLEM: ARUNDO, TAMARISK, AND OTHER NOXIOUS AND INVASIVE PLANT SPECIES

4.1 Arundo

Arundo is a large perennial grass native to the Mediterranean and was introduced by Spanish settlers to the western United States in the early 1800s. Arundo has been historically harvested commercially for musical instrument production and is useful for fencing, roofing, and fiber production. It can tolerate a wide variety of



Arundo stands within Project Area



Resprouting stem of Arundo

environmental conditions and attain heights of up to 30 feet. Once established, it forms large, filamentous, continuous underground stem masses, known as rhizomes. Rhizomes grow horizontally and can quickly spread over several acres, forming large colonies that have hundreds of stems that grow very close together. The plant primarily reproduces vegetatively by spreading outward from existing rhizomes (underground stems) and from pieces of stem broken off from

the parent plant, allowing the plant to spread rapidly throughout watershed systems (California Exotic Pest Plant Council 2000). In the spring and summer, arundo grows at a rate of several

inches per day; leaves are one to two inches wide and grow up to a foot long. Arundo produces two-foot-long dense, plume-like flower heads, which appear during August and September. Arundo stands within the project area and their associated density levels are displayed in Figure 3.

The invasiveness of arundo substantially affects water quality, water conservation, native biological resources, flood control, and fire risk. Once introduced, arundo has the capability to spread rapidly, forming extensive rhizome systems that out-compete native riparian vegetation and require human intervention to remove.

Negative Effects of Arundo:

- Reduction in surface and groundwater availability through rapid transpiration
- Alterations in channel morphology by retaining sediments and constricting flows
- Increased bank erosion due to the diversion of water around established stands
- Increased fire fuel loads, thereby encouraging wildfire intensity and spread
- Displacement of riparian habitat due to dense monocultures of arundo and through monopolization of soil moisture
- Reduction in the food supply (particularly insects) of riparian-dependent wildlife
- Reduction of wildlife utilization of an infested area
- Displacement of native trees, reducing the shading of surface water, resulting in higher water temperatures and lower dissolved-oxygen content

4.2 Tamarisk

Tamarisk, also known as salt cedar, is native to south Eurasia and was introduced to the United States at the turn of the 20th century for cultivation. It was historically used for erosion control, as a windbreak, for shade, and for ornamental purposes (Bossard et al. 2000). Tamarisk is tolerant of highly saline habitats, and it concentrates salt in its leaves. Over time, as leaf litter accumulates under tamarisk plants, the surface soil can become highly saline, thereby impeding future colonization by many native plant species (TNC 1998). Tamarisk also contributes salinity to surface waters. Tamarisk is an aggressive, woody invasive plant species that is relatively long-lived, and can tolerate a wide range of environmental conditions once established. It spreads by seed (of which individual plants produce over 50,000 annually) and through the adventitious sprouting of roots from dropped cuttings. It is abundant where surface or subsurface water is available for most of the year, including stream banks, lake areas, pond margins, springs, canals, ditches, and some washes. Disturbed sites, including burned areas, are particularly favorable for tamarisk establishment (Bossard et al. 2000). One adult tamarisk tree consumes approximately four





SCARP

Site Specific Project – Arundo and Tamarisk Percent Cover
 City of Santa Clarita, Los Angeles County

FIGURE

3

acre-feet (more than 1.3 million gallons) of groundwater annually. Tamarisk flammability increases with buildup of old and dead woody material within the plant. Dense stands of tamarisk can be highly flammable and tamarisk is likely to persist following fire and expand its dominance with repeated burning of low-elevation riparian plant communities (Busch 1995). Figure 3 shows stands of tamarisk within the project area.

4.3 Other Noxious and Invasive Plant Species

In addition to arundo and tamarisk, other incidental noxious and invasive plant species are present within the project area and may also be removed when encountered. Mature tree removal will be determined during implementation.

These plants species include: black locust (*Robinia pseudoacacia*), oleander (*Nerium oleander*), tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), palm trees (*Washingtonia robusta*), gum trees (*Eucalyptus* spp.), peppertrees (*Schinus* spp.), Russian thistle (*Salsola tragus*), perennial pepperweed (*Lepidium latifolium*), and tree-of-heaven (*Ailanthus altissima*).



5.0 SITE SPECIFIC PROJECT

5.1 Project Location

The proposed project site (Figure 2) is located in the City of Santa Clarita within and along the banks of the Santa Clara River and the lowest reaches of two of its major tributaries, San Francisquito Creek and the South Fork. The 297-acre project site is located within the 500-year floodplain within the established boundaries of the Newhall Ranch/City of Santa Clarita conservation easement. The conservation easement boundary includes the riverbed, lower banks, and part of the upper bank of the main stem and south fork of the river and San Francisquito Creek. The project site is generally bounded by industrial parks and residential



neighborhoods accessed by Newhall Road to the north, Town Center Drive to the south, and by Bouquet Canyon Road on the east. The project ends approximately 1,500 yards east of Interstate 5.

The project site includes the main stem of the Santa Clara River extending from Bouquet Canyon Road downstream 2.1 miles, under the McBean Parkway Bridge to just east of Interstate 5. It also includes a portion of the South Fork extending 0.66 miles to Soledad Canyon Road and a portion of San Francisquito Creek extending 0.68 miles to Newhall Ranch Road. Proposed access routes and equipment staging areas are generally located on level areas along the top of the banks of the river and its tributaries.

5.2 Land Use

The City of Santa Clarita is the only incorporated city within the upper watershed and supports a population of approximately 162,900 (California Department of Finance 2003). Land uses surrounding the project site (Figure 4) include parks, multi-family and single-family residential areas, and commercial areas (City of Santa Clarita 2003). Figure 5 also displays selected parcels adjacent to the project site that contain land uses which may be potentially sensitive to noise, herbicide application or other project activities. These parcels include Bridgeport Elementary School, Creekside Housing Complex and South River Village Apartments. Finally, a public recreational trail runs along the river on both the north and south banks, surrounding the project site.

5.3 Environmental Setting

5.3.1 Hydrology

The Santa Clara River through the project site is a broad alluvial channel, which varies in width from about 800 feet at the site's upstream (east) end, to 1,200 feet from bank to bank near the site's downstream (west) end. The River's tributaries are considerably narrower within the project area. The widest tributary, the South Fork of the Santa Clara River, averages about 500 feet in the project



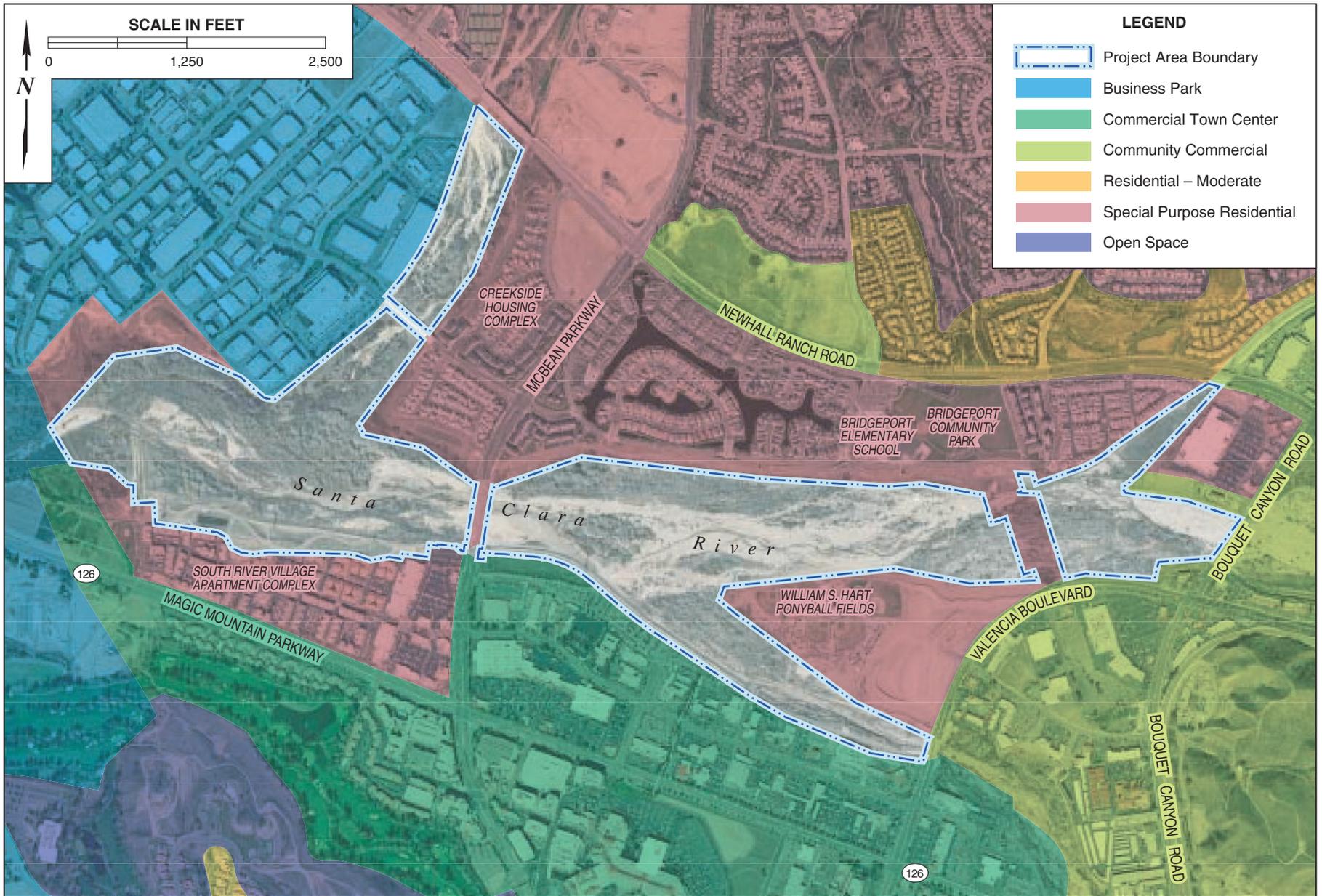
View of the river hydrology looking upstream from project area



View of river hydrology in downstream portion of the project area

area, followed by San Francisquito Creek at an average of 400 feet, and Bouquet Canyon is the narrowest with an average width of 250 feet. Bridges, notably McBean Parkway and Bouquet Canyon Road constrict both the Santa Clara River and its tributaries, which narrow the Santa Clara River to less than half its typical width.

The channels of both the Santa Clara River and its tributaries are bounded by well-defined often steep banks, with existing and planned urban development generally set back from 100 to 200 feet from the top of the bank. Soils in the channel itself consist of river wash



FIGURE

SCARP

Land Uses Surrounding the Site-Specific Project Area

4



SCARP

**Site Specific Project – Vegetation Communities
City of Santa Clarita, Los Angeles County**

FIGURE

5

sediments, dominated by a mix of coarse sands and gravels. Historically, the project area exhibited roughly 75 percent or more cover of large stands of riparian vegetation consisting of a mix of native cottonwoods and willows heavily infested with arundo. The remaining 25 percent of the site supported the active river channel and open gravel and sandbars.

However, the river channel and its tributaries are dynamic environments and the floods of December 2004 and February 2005, at least temporarily, reshaped channel characteristics. Overall vegetative cover was substantially reduced, with the central portions of the river channel and its tributaries largely cleared of emergent vegetation, leaving overall vegetative coverage in the 50 percent range, primarily concentrated along and adjacent to the banks. Within the broad active channel area, the river and its tributaries both exhibit the substantial braiding characteristic of streams in such alluvial settings.

5.3.2 Soils

Soils in the project area are primarily loamy to sandy loam and are typically very deep. Slopes in the project area range between zero through two percent. Permeability of project area soils ranges from moderate to rapid. Runoff is slow and the hazard of erosion is slight in these soils except in the terrace escarpments where runoff is medium to rapid and the hazard of erosion in moderate to high. Plant roots can typically penetrate 60 inches or more in these soils. The specific types of soils in the project area include: Mocho loam, Sorento loam, Cortina sandy loam, sandy alluvial land, riverwash, terrace escarpments, and Hanford sandy loam (USDA 1970). Within the bed of the river itself, soils consist mostly of riverwash, which is a sandy/gravelly mixture washed down from upstream (USDA 1970).

5.3.3 Water Quality

The quality of surface water and groundwater in the Santa Clara River and hydraulically connected aquifers are monitored and evaluated by the California Department of Water Resources (DWR) and United Water Conservation District (UWCD) in accordance with the state water-quality standards. DWR provides periodic assessments of the surface water and groundwater quality conditions on a watershed basis under its water quality evaluation program, and advises the Regional Water Quality Control Board (RWQCB) during preparation of water quality control plans, to ensure protection of the State's water supply. The UWCD provides local monitoring of water quality conditions within the district boundary, including the lower Santa Clara River watershed and associated groundwater basin.

Other water quality management efforts that have been completed or are in progress include development of a chloride total maximum daily load (TMDL) for the upper reach of the Santa Clara River, a nutrient TMDL, and on-going National Pollutant Discharge Elimination System (NPDES) permit-related monitoring. In general, the waters in the Santa Clara River and its tributaries have been modified by the draw down of aquifers from decades of pumping, the release of treated effluent, and imported water. Further, discharges from wastewater treatment plants, and non-point source pollution from agriculture and fisheries in the watershed have changed the flow and concentration of nutrients and other contaminants in the watershed (U.S. Geological Survey [USGS] 1998).



As part of the overall SCARP program and as described previously, the VCRCDD developed a QAPP designed to measure and monitor the potential effects of the proposed project's eradication efforts on water quality. The QAPP was submitted to the RWQCB and was certified as being an acceptable program for measuring potential water quality effects. Field measurements were taken at two locations along the Santa Clara River – one upstream and one downstream of the project site. Samples were taken to provide baseline water quality conditions for the project site to facilitate comparison with post-eradication water quality data. The pre-eradication and final water quality monitoring report will be attached as an appendix to this plan upon completion of the post-eradication monitoring.

5.3.4 Vegetative Environment

Historically, vegetation within the 297-acre project site has been dominated by several types of riparian woodland, interspersed with small areas of open channel containing sand and gravel bars and smaller areas of great basin plant communities. Limited areas of upland communities such as non-native grasslands also occur. Extensive stands of the invasive arundo and tamarisk exist throughout the site, primarily intermixed with native habitat. Detailed mapping of the site's vegetation was conducted from November 2004 through January 2005. These surveys revealed riparian habitats covering almost 80 percent of the project site.

The floods of December 2004 and February 2005 substantially reduced in-channel vegetative cover of the site, increasing open channel, sand bar and gravel bed coverage, particularly in the central portions of the river and tributary channels. Although no precise measurements of post flood vegetation coverage are available, while reduced from historic levels, overall vegetative coverage appears to remain substantially greater than 50 percent. While the more open nature of the bed of the river and its tributaries is likely to persist for some time, site vegetation would be expected to return to long term equilibrium and recover much of its historic cover over the coming months and years.

Site vegetation was mapped using the Sawyer Keeler-Wolf (SKW) system of vegetative classifications. This system provides a structured and highly detailed approach to aggregating vegetation into typical associations, more refined than other broad habitat mapping approaches. This mapping effort has identified 20 distinct vegetative associations on the site. These are depicted on Figure 5, with acreages displayed in Table 1. The dominant associations are described in more detail below.

5.3.5 Vegetative Communities

Fremont Cottonwood: The fremont cottonwood (*Populus fremontii*) is the dominant plant in the Fremont Cottonwood Series in the study area. This vegetation series is native. The associated plant species in this series are various willows (*Salix lasiolepis*, *S. exigua*, and *S. laevigata*). The Fremont Cottonwood Series is dominant within the project area, occupying approximately 114 acres, almost 40 percent of the project site. The Fremont Cottonwood series occurs throughout the site, but exhibits the greatest cover upstream of McBean Parkway, and within and at the confluences of San Francisquito, South Fork, and Bouquet Canyon.

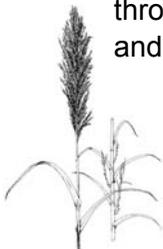


Table 1.
Vegetation Communities within Site Specific Project Boundary

Vegetation Series	Acres
Tree-of-Heaven	0.18
Arundo	2.37
Big Sagebrush	4.42
California Buckwheat	1.24
Cattail	0.54
Disturbed	20.25
Eucalyptus	0.26
Fremont Cottonwood	114.73
Landscaped with Tamarisk	1.62
Perennial Pepperweed	1.26
Mixed Sage	3.94
Mixed Willow	46.50
Mule fat	24.99
Narrowleaf Willow	4.59
Nonnative Grassland	4.25
Open Water	0.48
Red Willow	16.53
Scale-broom	18.40
Tamarisk	0.49
Total	267.04

Notes: River channels, and developed areas are not included.
 Total acreage of vegetation does not equal to total acreage of project area.

Mixed Willow: Red willow (*Salix laevigata*) is the dominant plant in the Mixed Willow Series in the study area. This vegetation series is native. The primary associated plant species is Fremont cottonwood. The Mixed Willow Series exhibits the second highest cover in the area, with about 46 acres (15 percent) of the site. Mixed willow is scattered in the site’s upstream areas, east of McBean Parkway, but is the dominant plant cover at the west end of the site, particularly downstream from San Francisquito Canyon.

Mule Fat: Mule fat (*Baccharis salicifolia*) is the dominant plant in the Mule Fat Series in the study area. This vegetation series is native. The primary associated plant species is narrowleaf willow (*Salix exigua*). The Mule Fat Series occupies about 24 acres (8 percent) of the project site, primarily along the channel margins of the river and its tributaries, at the toe of the slope or on the channel bank.

Scalebroom: Scalebroom (*Lepidospartum squamatum*) is the dominant plant in the Scalebroom Series in the study area. This vegetation series is native. Associated plant species are big sagebrush (*Artemisia tridentata*), California buckwheat (*Eriogonum fasciculatum*), California



juniper (*Juniperus californicus*), California sagebrush (*Artemisia californica*), deer weed (*Lotus scoparius*), hairy yerba santa (*Eriodictyon crassifolium*), Mexican elderberry (*Sambucus mexicana*), and prickly pear (*Opuntia* sp.). The Scalebroom Series occupies about 18 acres (7 percent) of the site, and occurs almost exclusively upstream (east) of McBean Parkway, particularly adjacent to Valencia Blvd.

Red Willow: Red willow (*Salix laevigata*) is the dominant plant in the Red Willow Series in the study area. This vegetation series is native. The associated plant species are various willow species, Fremont cottonwood, and mule fat. The Red Willow Series occupies about 16 acres (6 percent) of the site, and is scattered throughout the site, with the greatest concentrations immediately up and downstream of the McBean Parkway Bridge.

While various riparian habitats dominate the channel bottom, along with heavy infestations of arundo and tamarisk, the banks and top of bank areas are a mix of non-native grasslands, native sage associations and disturbed areas. The most disturbed of these areas have been selected as staging areas for equipment storage and service.

Arundo and Tamarisk: The site's historic vegetative cover was and is dominated by native species with only a few areas of dominance by invasive plants. Pure stands where arundo or tamarisk dominate the vegetative composition total only about three acres. However, infestation by arundo and to a lesser extent tamarisk is pervasive, extending throughout the site, including extensive areas with dominant native vegetation cover (see Figure 3). Arundo infestations are particularly dense in the site's western (downstream) and central reaches, where large areas of the main stem exhibit historic infestation levels of 51 percent to 75 percent cover. While arundo historically tends to exhibit lower density infestation levels in the site's upstream areas east of McBean Parkway, large areas are still infested, with significant areas of 26 percent to 50 percent arundo cover. Tamarisk infestations are concentrated in the east (upstream) portions of the site, north of Valencia Blvd, just downstream from the confluence with Bouquet Canyon. These infestations typically range from 1 percent to 50 percent cover.

5.3.6 Wildlife Issues and Protective Measures

The 297-acre project site supports a variety of vegetation associations that provide habitat for a wide range of native wildlife, including several sensitive, threatened and endangered species (Table 2). Appendix A contains a complete list of sensitive, threatened, and endangered wildlife with potential to occur in the Santa Clara River. In particular, the site's more than 200 acres of riparian habitat, although degraded by heavy invasion of arundo and to a lesser extent tamarisk, provide important habitat to both common and rare native wildlife species.



Table 2.
Listed Species Which May Occur Within the Santa Clarita Site Specific Project Area

Common Name	Scientific Name	Federal Status	State Status
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	Endangered	Endangered
Least Bell's Vireo	<i>Vireo bellii pusillus</i>	Endangered	Endangered
Arroyo toad	<i>Bufo californicus</i>	Endangered	Not listed
Unarmored threespine stickleback	<i>Gasterosteus aculeatus williamsoni</i>	Endangered	Endangered; Fully Protected

Note: DFG Fully Protected: The Fish and Game Codes sections dealing with Fully Protected species state that these species "...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected" species, although take may be authorized for necessary scientific research. This language arguably makes the "Fully Protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with fully protected species were amended to allow the Department to authorize take resulting from recovery activities for state-listed species. More information on Fully Protected species and the take provisions can be found in the Fish and Game Code (birds at §3511, mammals at §4700, reptiles and amphibians at §5050, and fish at §5515). Additional information on Fully Protected fish can be found in the California Code of Regulations, Title 14, Division 1, Subdivision 1, Chapter 2, Article 4, §5.93. The category of Protected Amphibians and Reptiles in Title 14 has been repeated. The Fish and Game Code is available online at: <http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=fgc>. Title 14 of the California Code of Regulations is available at <http://ccr.oal.ca.gov>.

Sources: USFWS 2004; CDFG 2005.

The proposed project would involve an initial two to three month effort by crews using hand tools supported by light rubber tired equipment to cut and apply herbicide to arundo and tamarisk primarily within the riverbed and its tributaries. These efforts would create noise of short duration but high intensity, remove substantial amounts of current vegetative cover, and create light soil disturbance and compaction. The project would also involve application of herbicides under regulated circumstances. To ensure eradication, these measures would be repeated at least annually for several years into the future, although likely affecting smaller areas for shorter durations with each subsequent application. All these techniques, which are described in detail in Part II of this document, would create short-term disturbances to native wildlife.

To minimize disturbance or harm to area habitats and wildlife, the project incorporates a wide range of BMPs. Critical BMPs protecting the site's plants and wildlife include:

Timing: All project activities may start as early as August 1 if no breeding birds are present and generally continue up until November 1, although work may continue past this date as long as no activity occurs during a rain event with USFWS and CDFG concurrence. This period is toward the end or outside of the primary breeding season for most native wildlife species, and outside the period where water would be present over most of the project site.

- Hand Tools Only: Crews would employ targeted removal of invasive vegetation using only hand tools such as loppers and chainsaws to minimize impacts to native vegetation.
- Herbicides: EPA and California Department of Pesticide Regulations (DPR) approved herbicides will be applied by licensed or certified personnel, with cut and daub generally used where heavy intermixing of native with invasive plants occurs, and foliar broadcast



spraying used only for mostly pure stands of invasive plants where native wildlife density is low.

- Surveys and Monitoring: Surveys for threatened, endangered, and other sensitive species are being conducted prior to beginning work. This includes extended surveys for least Bell's vireo, southwestern willow flycatcher, unarmored threespine stickleback and arroyo toad as necessary to meet the requirements of USFWS. Information gathered in these surveys will be used to prepare a Biological Assessment (BA) as required under Section 7 of the Endangered Species Act.
- Strict avoidance of impacts to these species will be implemented by measures appropriate for each species. Avoidance measures will be chosen in consultation with the USFWS and the CDFG as requested. Least Bell's vireo and southwestern willow flycatcher nest sites would be mapped, protected by a 500-foot buffer, and avoided until vacated. Biological monitors will also be present on the site to oversee work and ensure impacts to wildlife are avoided. Rubber tired vehicles will be permitted as deemed acceptable by USFWS during the Section 7 consultation and operated consistent with any usage guidelines and/ or travel corridor restrictions identified during that consultation.
- In addition to surveys for and requirements to avoid impacts to these endangered species under the project's approved Streambed Alteration Agreement, CDFG has required more extensive preconstruction surveys for the range of sensitive plant and wildlife species which may occur on the project site, including but not limited to those listed in appendix A. These include the southwestern pond turtle, arroyo chub, white tailed kite, tri-colored blackbird and a number of other species. In the event that any such species are identified, CDFG will require the preparation of plans for their protection.
- Hand crews and equipment will avoid any contact with open water.
- Natural recruitment of native vegetation will be monitored. Active revegetation may be employed where natural processes appear unlikely to successfully restore the area (e.g., channel banks) in subsequent years.

In spite of short to mid-term disturbances to site habitats, the project can be expected to have direct and relatively rapid positive effects on native plant and animal populations, including those of sensitive, threatened, and endangered species. By removing extensive stands of aggressive and invasive plants, available habitat for native plants will expand and subsequently provide substantial improvement in habitat quality for wildlife. Elimination of arundo and tamarisk from the site may increase water availability for native plants and wildlife, and permit expansion of native plant species such as willows, mule fat, and cottonwoods. Within four to five years, the expansion of native habitat should directly benefit endangered bird species such as least Bell's vireo and southwestern willow flycatcher. As closed canopy areas increase (10 to 20 years), bird species such as yellow-billed cuckoo, warbling vireo and Cooper's hawk may also be able to use the habitat (Bell 1997; Dudley 2000). A closed native canopy will also benefit aquatic species such as arroyo toad, California red-legged frog, western pond turtle and arroyo chub, which are sensitive to temperature (Dudley 2000).



5.3.7 Overview of Threatened and Endangered Species

The four endangered species discussed below are known to occur historically within the project area or have potential to occur onsite during project implementation. The general BMPs discussed above combined with the specific BMPs detailed below are designed to avoid impacts to all threatened or endangered species.

Arroyo Toad: The arroyo toad is a small toad typically associated with gravelly or sandy washes, streams, rivers and adjacent habitats of California. The toad was formerly common in Southern California drainages, including the Santa Clara River. It generally requires shallow pools that persist into summer long enough to allow for tadpole metamorphosis. The species spends the majority of the year burrowed in the benches along the floodplain and in the adjacent upland habitats, emerging to forage or breed under suitable conditions.

There are known records of the arroyo toad occurring on the project site at the confluences of San Francisquito Creek and the Santa Clara River South Fork. Impacts to the arroyo toad will be avoided by delineation of toad populations by a qualified biologist and biological monitoring during implementation. If toads are observed, implementation activities will be moved to another area until the biologist advises returning.

Unarmored Threespine Stickleback: This small, native fish of about eight cm in length typically inhabits quiet, cool, and clear water with heavy growth of aquatic plants and feeds on small invertebrates. This species was formerly relatively widespread in the Santa Clara River Basin, but is now primarily restricted to Soledad Canyon and upper San Francisquito Canyon (USFWS 1985). This species is sensitive to aquatic disturbance and habitat impacts such as increased turbidity, water quality degradation, and introduced predators.

The site supports known populations of unarmored threespine stickleback, although it is not within this species' designated critical habitat. Known areas of unarmored threespine stickleback habitat extend from upstream of McBean Parkway west to Interstate 5 and beyond. Although areas of available habitat exist on the site, all contact with water will be avoided. If water becomes present, work will stop in that area until water is no longer flowing or surveys confirm the unarmored threespine stickleback is not present.

Least Bell's Vireo: The least Bell's vireo is a small bird that is restricted to riparian woodland and frequents areas that combine an understory of dense young willows or mule fat with a canopy of tall willows. The least Bell's vireo arrives in late March to early April and leaves for its wintering ground in September. Since the vireos build their nests in dense shrubbery three to four feet above the ground, they require young successional riparian habitat or older habitat with a dense understory (Salata 1984). Nests are also often placed along internal or external edges of riparian thickets (USFWS 1986). Historically, this species was a common summer visitor to riparian habitat throughout much of the State of California.

The site supports low to moderate quality least Bell's vireo habitat due to presence of areas of riparian woodland. However, there are no known records of breeding least Bell's vireos for the site or in the immediate project vicinity, although substantial field surveys have been performed in association with past development projects. Only occasional transients have been recorded



within the project site boundaries and the nearest breeding record is more than one mile downstream, west of Interstate 5, near the Castaic Creek confluence. While areas of potential habitat may exist on the site, impacts to least Bell's vireo would be avoided. Protocol level surveys will be conducted by a qualified biologist to determine presence or absence of nesting. If any nesting activity is found, the site will be mapped and a 500-foot buffer will be established around the nest to restrict any project activity within the buffer until the young have fledged and have left the area.

Southwestern Willow Flycatcher: This subspecies of willow flycatcher is a summer breeding resident in riparian habitats in Southern California. It is restricted to dense riparian woodlands of willow, cottonwood, and other deciduous shrubs and trees. In general, the riparian habitat of this species tends to be rare, isolated, small and/or linear patches, separated by vast expanses of arid lands. Spring migration of the endangered subspecies is relatively late, beginning in early May and extending through June (Unitt 1984). Egg laying occurs in Los Angeles County from the end of May through the end of June. Dense willow thickets are required for nesting, and nests are often near standing water (Zeiner et al. 1990).

The site supports low to moderate quality southwestern willow flycatcher habitat due to presence of areas of riparian woodland and some flowing water. However, there are no known records of this species of flycatcher breeding on the site or in the project vicinity, although field surveys have been performed in association with past development projects. Only occasional transients have been recorded within the project site boundaries and no breeding records exist for this species in the project vicinity. While areas of potential habitat may exist on the site, the potential for any impact to the flycatcher would be avoided by the BMPs described previously.

5.4 Regulatory Coordination

The VCRCD has held multiple meetings with various regulatory agencies regarding the Site Specific Project. Early coordination with the U.S. Army Corps of Engineers determined that a Section 404 permit would not be required. The VCRCD is currently in the process of coordinating with the RWQCB to determine if the Porter Cologne Act will be invoked. The VCRCD has obtained a Streambed Alteration Agreement from the California Department of Fish and Game. They have also issued a certified Notice of Exemption to comply with CEQA. In addition to all state and federal regulators, the VCRCD is in contact with city and county officials and will comply with all local ordinances. Table 3 summarizes the regulatory coordination involved in this effort.



**Table 3.
 Matrix of Applicable Regulations**

Regulatory Agency	Jurisdiction	Trigger Action	Regulation	Project Status
U.S. Army Corps of Engineers	Waters of the U.S. and adjacent wetlands	Discharge of dredged or fill material into waters of the U.S.	Clean Water Act Section 404	Project is not jurisdictional.
Regional Water Quality Control Board	Waters of the State	Impacts to Waters of the State.	Clean Water Act, Section 401; Porter-Cologne Act	No 401 Certification due to no jurisdiction for a 404 permit. No response regarding Porter Cologne Act.
U.S. Fish and Wildlife Service (USFWS)	Federally Threatened and Endangered species	The potential take of any threatened or endangered species or potential adverse modification of critical habitat.	Endangered Species Act Section 7	Compliance through Section 7 consultation.
USFWS	Migratory birds	The take of any native migratory birds.	Migratory Bird Treaty Act	Compliance will be achieved through surveys and nest avoidance.
California Department of Fish and Game (CDFG)	State Waters and Wetlands State Threatened and Endangered Species	Alteration of natural flow or substantially change the bed, channel, or bank of Waters of the State.	CDFG Code Sections 1600-1606 Section 670	Streambed Alteration Agreement issued. Avoidance of threatened and endangered species.
State Historic Preservation Office	Significant Cultural Resources	Impact to any significant archaeological or cultural resources.	National Historic Preservation Act, Section 106	Compliance through NEPA.
VCRC Board of Directors	VCRC Actions	If the action is defined as a project under the law and may have significant environmental impacts.	California Environmental Quality Act	Project exempted – Categorical Exemption 15304.
City of Santa Clarita	Santa Clarita Area Plan Noise Element	If the project will create noise levels above 65 dB in residential areas or above 80 dB in commercial areas during the day.	Noise Ordinance, Chapter 11.44	Compliance will be achieved through BMPs and avoidance of sensitive groups.



**Upper Santa Clara River Watershed
Arundo/Tamarisk Removal Plan –
Santa Clarita Site Specific Plan**

**Part II
Work Plan**



Part II. WORK PLAN

This section of this document describes the specific eradication plan for the Site Specific Project, including eradication methods, staging areas, access routes, timing, post-eradication monitoring, and other project elements. The 297-acre project site is described in Section 5.0 and shown in Figure 2. Eradication of arundo and tamarisk is scheduled between August and October 2005. The eradication efforts will consist of crews who will start upstream and work downstream. Two eradication methods will be used; both will involve the use of hand tools for cutting and the application of herbicides to kill the target species. All herbicide application will comply with recommendations by a licensed pesticide application. Work crews will follow all safety measures outlined on herbicide packages and will follow all federal, state, and local regulations regarding herbicide use. The particular method for each stand will be decided on a case-by-case basis. Factors that will affect the methodology decision include: density of invasive plants, presence of native plant species, access to the stands, size of the stand, and accessibility of the staging area. Both methods typically take three to five years to achieve complete arundo eradication and require follow-up monitoring and treatment (Sonoma Ecology Center 1999).

1.0 OVERVIEW OF CUT AND DAUB

The cut-and-daub method, also known as the cut-and-paint method or cut stump method, will be one method used to remove the invasive plants from the project site. This method combines the removal of most above ground biomass and the application of herbicide to the remaining stem surface. The cut-and-daub method involves the careful application of herbicide to targeted plants, so it is a useful method when invasive plants are closely mixed with native species.

1.1 Cutting

Work crews will use hand-held gas-powered chainsaws, weed-whips with triangular/saw blade attachments, loppers, and or similar hand equipment to cut standing arundo canes and tamarisk stems. Dead stands of arundo or tamarisk that have been washed down the river by winter storms will be left in place. The arundo stalks and tamarisk stems will be cut to less than twelve inches of the substrate. Cut arundo stalks will be hauled out of the site on-foot or via single-bed pick-up trucks or similar rubber tread vehicles to the nearest chipper for disposal. Tamarisk stems will be hauled to a single-bed dump truck for disposal at a landfill.



1.2 Daubing

Daubing entails work crews using a hand-held sponge painter or a hand pump sprayer to apply herbicide to the stems of the cut plants. Since translocation ceases within minutes after cutting, a full strength herbicide solution will immediately be applied to the freshly cut stems of arundo or the trunks of tamarisk.

BMPs:

- If herbicide accidentally comes into contact with desirable plants, trim affected portions before moving to the next stand.
- If water becomes present, work will stop in that area until water is no longer flowing.
- No cut canes or stems will be left on site to prevent advantageous propagation.
- All cut material will be immediately disposed of after cutting.

2.0 OVERVIEW OF FOLIAR SPRAY



Backpack sprayer used for foliar spraying

Foliar spraying involves spraying a diluted herbicide on the stems and leaves of the plant without any cutting or cut to an accessible height if foliage is available for herbicide contact. This method is best suited for small dense stands where there is a reduced likelihood of spraying non-target vegetation with the herbicide. Using this method, the leaves and stems need to be thoroughly sprayed, and care must be taken to avoid spraying non-target



Mobile boom used for foliar spraying

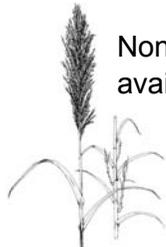
vegetation. Tall stands may need to be accessed with ladders or booms or cut to an accessible height (between three to five feet tall). Work crews will also use backpack sprayers or a rubber-tired, four-by-four mobile boom applicator to spray herbicide on the target species.

Plants treated with foliar spray will be left in place to decompose naturally unless they present an immediate flood or fire hazard or occur in an area where aesthetics are a concern (e.g., adjacent to residential areas and parks). Plants should be left in place for three to six months after spraying, otherwise the herbicide may not completely kill the plant and resprouting may occur.

3.0 TYPE OF HERBICIDES

Aquatic habitat herbicide formulations approved by the U.S. Environmental Protection Agency (EPA) and DPR will be used where it may come into contact with water during application. An aquatic formulation of glyphosate or triclopyr will be used on arundo and tamarisk, respectively, and on other invasive plants found within the project area as appropriate. An aquatic formation of imazapyr is currently under review by the DPR and may be used during maintenance activities if approved at a later date.

Non-aquatic herbicide formulations of glyphosate, triclopyr, and imazapyr are also currently available for use outside of the active stream channel. These formulations may be used on



stands of tamarisk located on the high banks of the river, where there is no danger of the herbicide affecting water quality.

A DPR and EPA approved non-ionic surfactant will be used with all herbicide applications. A non-toxic colorant will also be added to enable crews to see where they have applied herbicide after initial evaporation of the solution and to make the project and presence of herbicide visible to the general public.

3.1 Concentration of Herbicides

Cut and Daub. A full-strength herbicide will be used for the cut-and-daub method of any target species. A surfactant will be added to the herbicide as necessary to reduce water surface tension to allow penetration of the plant tissues.

A full strength solution of triclopyr or imazapyr will be applied to tamarisk stems and other incidental invasive species located on the high banks, outside of the riverbed.

Foliar Spray. A low concentration solution of herbicide will be used to foliar spray dense stands arundo and tamarisk.

4.0 DISPOSAL

4.1 Chipping

Cut arundo, even if green, will be chipped immediately using suitable chipper equipment of the contractor's choice. Material will be chipped to a size less than 4 inches. Where possible, the arundo canes will be chipped within the riverbed directly into single bed pick-up dump trucks and transported off-site to be used as mulch. All chipped material will be hauled off-site at the end of each workday. Tamarisk will not be used as mulch due to the potential of viable seed contamination and salinity in the foliage.



Large drum chipper

Large chippers will be located at the staging areas and at wide areas along the riverbank where they can be towed in by a bobcat. The chippers will be located away from residential areas adjacent to the project site in order to maintain residential noise levels below 65 decibels (dB) as specified by the City of Santa Clarita Noise Ordinance. In areas where it is not feasible to tow the chipper into the riverbed and the staging area is too

close to residential areas to maintain proper noise levels, the cut material will be hauled to a more remote location prior to chipping (potentially staging area E or G). The chippers will be equipped with all available noise management equipment, such as mufflers, to reduce noise as much as possible. The chippers will be used only during daylight (7 a.m. to 3 p.m. Monday through Friday) to reduce noise disturbance. The chipper will not be used within 500 feet of any school or park.



4.2 Beneficial Re-Use

The chipped arundo will be hauled to landscaping areas designated by the Santa Clarita Parks and Trails Department to be beneficially re-used as mulch. Coordination with the Santa Clarita Parks and Trails Department will be required immediately prior to eradication activities to determine the exact location where the chipped material is to be placed. The chipped material may have a slight potential to resprout; however, chipped arundo quickly dries when spread out in the sun, and the potential to resprout decreases significantly. Maintenance and monitoring of the chipped material after it has been transported to the designated location will be the responsibility of the City of Santa Clarita Parks and Trails Department.



4.3 Landfill Disposal

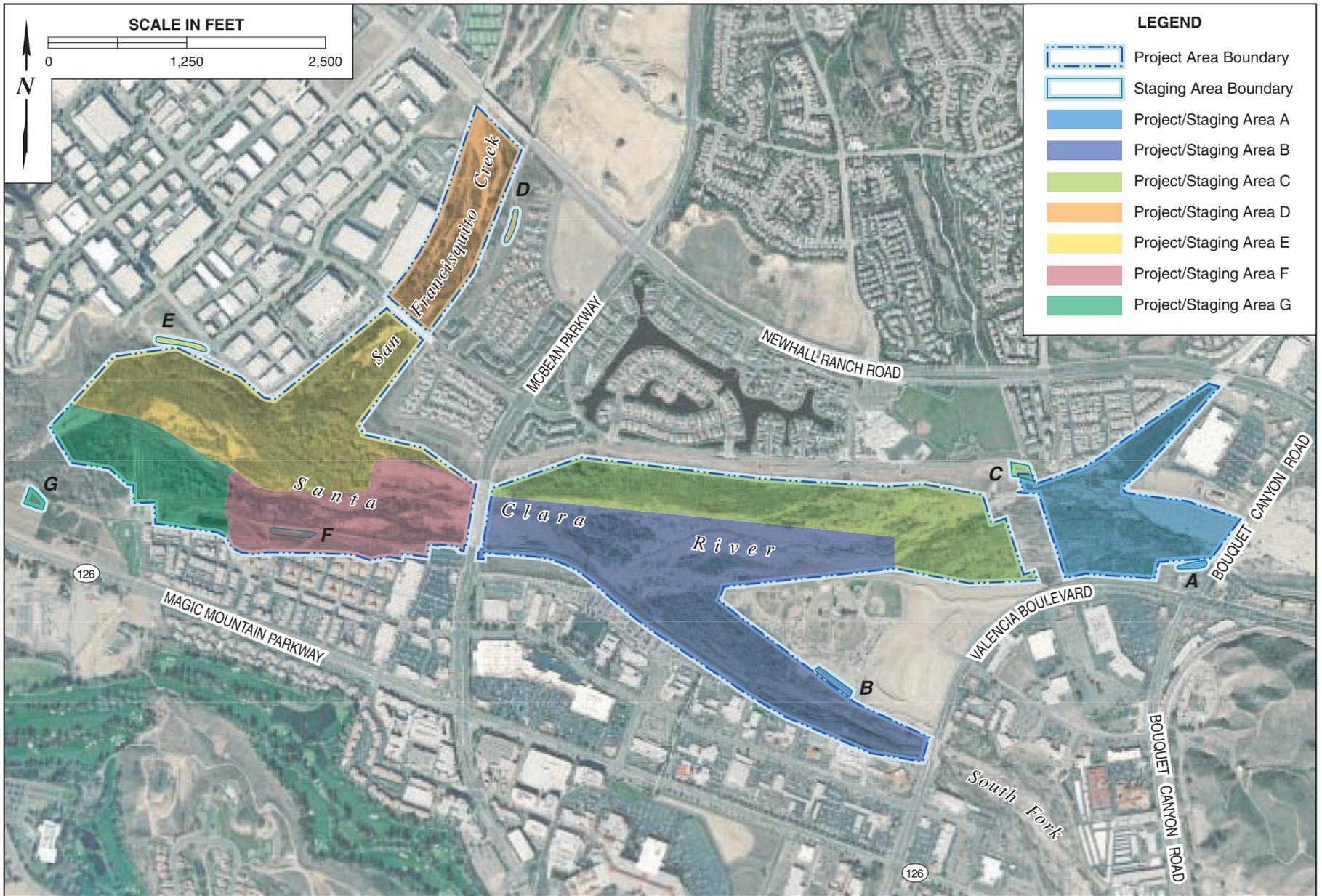
The cut tamarisk stems will be chipped or stacked in single-bed dump trucks for transportation to the Chiquita Canyon landfill. Tamarisk stems will be hauled to the designated landfill at the end of each workday. An account regarding payment of the landfill for each load of material will be set up prior to project implementation.

5.0 STAGING AREAS

Multiple staging areas along both sides of the river will be maintained adjacent to the project site (see Figure 6). The selection of each staging area is based on available space, ease of access to the staging area, ease of access between eradication site and the staging area, distance from residences, minimal potential to conflict with adjacent land uses, and avoidance of impacts to any sensitive species. Permission for use of each staging area has been coordinated with the appropriate landowner (Table 4). Each staging area will be taped off with bright orange crowd control fencing or will be enclosed by a six-foot-tall chain link fence to prevent unauthorized access and ensure public safety.

The staging areas are approximately $\frac{1}{4}$ to $\frac{1}{2}$ acre in size, and will be used for temporary arundo and tamarisk storage, chipping arundo canes, and subsequent loading of chipped or raw arundo from pick-ups or staging piles by bobcat into dump trucks. In staging areas where chipping is not compatible with surrounding land uses (i.e., near residences, schools, and parks), chipping will occur outside of the designated staging area and instead at the nearest staging area appropriate for chipping. Each staging area may be used to accommodate equipment storage and maintenance, portable sanitation facilities, emergency decontamination kits, and handheld equipment when not in use.





SCARP

Project Area Locations and Associated Staging Areas

FIGURE

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**Table 4.
 Staging Areas**

Staging Area	Owner	Contact	Distance to Nearest Sensitive Receptor (residence, park, school)	Size (in acres)	Special Considerations
A	Santa Clarita Parks and Trails	Roland LeClair	No sensitive groups nearby	0.46	None
B	William S. Hart Ponyball Fields and Newhall Land and Farm Company	Terry Haggin Mark Subbotin	165 feet	0.50	Located near youth recreational facility.
C	Santa Clarita Parks and Trails	Roland LeClair	135 feet from school; 47 feet from park	0.50	Located near Bridgeport Elementary School and park area.
D	Santa Clarita Parks and Trails	Roland LeClair	75 feet	0.50	Located near residences.
E	Newhall Land and Farm Company	Mark Subbotin	No sensitive groups nearby	0.50	None
F	Santa Clarita Parks and Trails	Roland LeClair	135 feet	0.50	Located under powerlines and near residences.
G	Newhall Land and Farm Company	Mark Subbotin	No sensitive groups nearby	0.50	None

In some areas, access routes may be too steep to allow for unassisted carrying of equipment or cut stems between the staging area and the eradication site. In these areas, equipment such as a crane may be necessary to transport vehicles and a chipper onto the riverbanks and a conveyor system may be used to haul cut stems of arundo and tamarisk up to the staging area.

6.0 ACCESS

General access to the project site and staging areas will be by way of the following roads: McBean Parkway, Scott Avenue, State Highway 126 (Magic Mountain Parkway), Newhall Ranch Road, Valencia Boulevard, Bridgeport Lane, and Bouquet Canyon Road. One trip both in and out of each staging area will be required by the following equipment: bobcat, chipper, and crane. Daily trips will be made to each staging area by personal vehicles, pick-up trucks, and dump trucks.

A city-owned parkway and recreational trail borders nearly the entire project area on both the north and south sides of the Santa Clara River. Access to staging areas A, C, D, and F will be by way of this trail. Crews will access staging area B via the William S. Hart Ponyball Field



parking lot, staging area E via Tibbitts Avenue, and staging area G by Highway 126 (Magic Mountain Parkway). Signage will be posted on the recreational trail to warn bicyclists of equipment crossings. The signs shall be posted approximately 100 feet north and south of the access pathways. All signs shall be posted at least one week prior to use for crossing and shall be maintained for the entire period during which crossings will occur. Any vehicles needing to enter staging areas via the recreational trail will do so only when no pedestrians or bikers are on the path within the project area and will enter and leave the staging area once a day. Vehicles using the recreational trail for entrance into the staging area will do so one at a time to prevent any damage to the recreational trail. Use of the staging area by the crew will not impede traffic along the City of Santa Clarita recreational trail. Some of these access areas are closed off to the public by locked gates. Before leaving each day, the crew will ensure that the gate is locked and completely secure.

BMPs:

- Post signs on recreational trail to warn users of equipment crossing.
- Post signs 100 feet north and south of active access pathways.
- Post signs at least one week before work begins and maintain signs during entire phase.
- Enter recreational trail one vehicle at a time.
- Make sure any gates are secure and locked each day before leaving the work area.

6.1 Signs

Informational signs describing the project's goals and listing collaborators will be posted by the contractor at each staging area. Additionally, signs will be posted along all access points to the project site and staging area to minimize the public's potential exposure during herbicide spraying and/or painting activities. Signs shall discourage plant gathering and other unauthorized use of the project site for a minimum of two weeks after any herbicide application.

7.0 TIMING

Project activity may commence as early as August 1, depending upon survey results and will continue through November 1, although work may continue past this date as discussed below: Project timing is based on the following:

- The herbicide is most effective during post-flowering and pre-dormancy, usually late August to early November when plants are translocating nutrients into root and rhizomes.
- The selected time is at the end of the typical breeding bird season, to comply with the Migratory Bird Treaty Act and avoid listed species such as the least Bell's vireo. Surveys for nesting birds, including least Bell's vireos, will indicate if activities can begin mid-August. In areas where no nesting birds will be disturbed, or where no nests are found, project activities can begin earlier than August 15, with concurrence from USFWS and CDFG. The bird breeding season can extend through September 15.



- The selected time is before the rainy season, which typically begins November 1, although work may continue past this date as long as no activity occurs during a rain event and USFWS and CDFG concur.

Work at each project site will take place during typical working hours, Monday through Friday from 7 a.m. to 3 p.m., when residents in adjacent apartments and housing areas are most likely to be at school and work and not disturbed by work activity. Work will not occur on weekends.

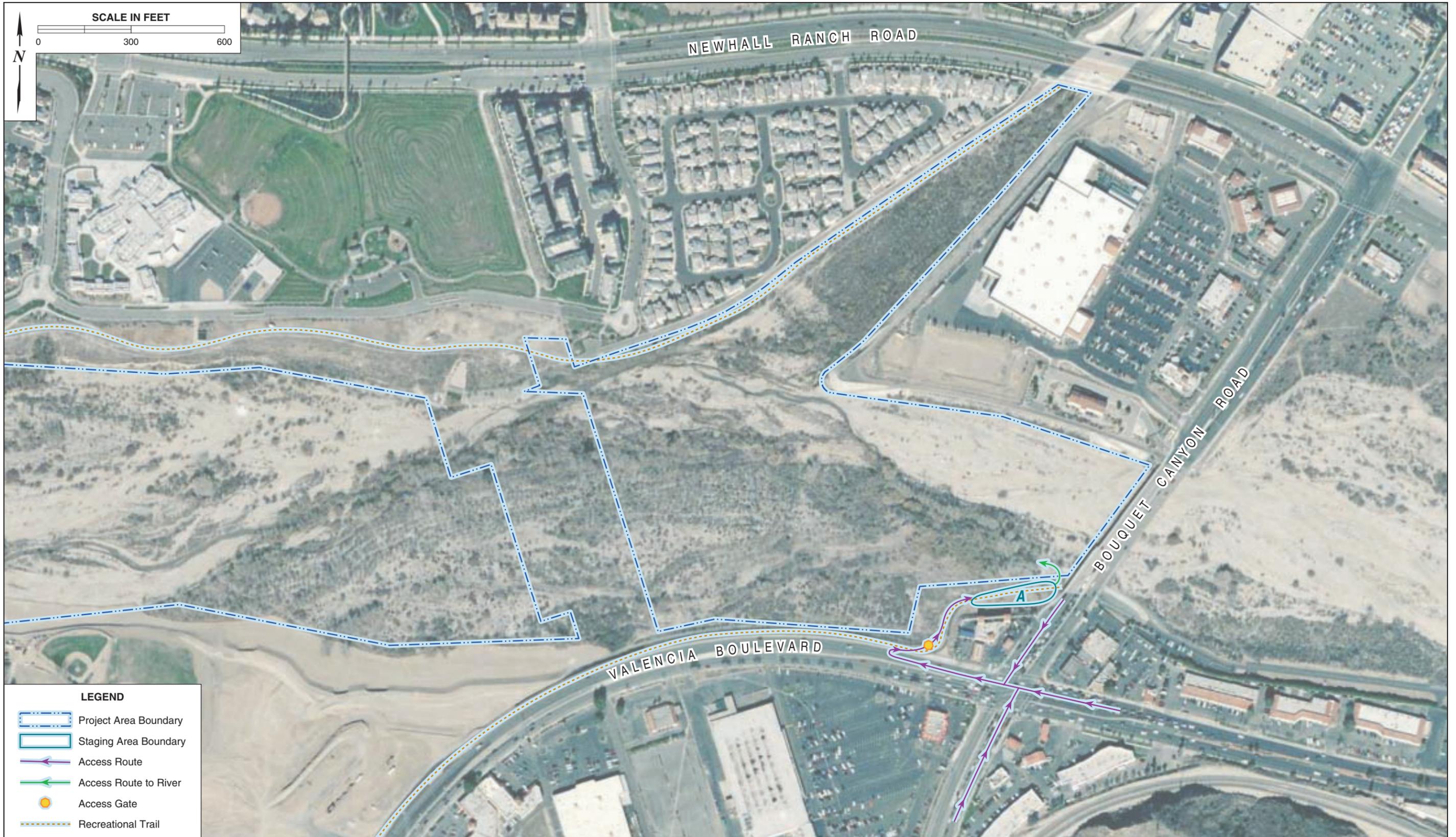
7.1 Project Phasing

The project is expected to begin in early August, beginning at staging area A, behind the ARCO station at the project's upstream end, and working down river. Crews will work to eliminate target species in four phases. Each phase, described in Tables 5 through 8, will be associated with one or more staging areas. The implementation of the project phases may occur toward the end of the active nesting season for least Bell's vireo and southwestern willow flycatchers (April – September 15), provided that detailed surveys demonstrate that nesting and potential nesting activities by these species would not be disrupted.

**Table 5.
Phase 1**

Phase 1
Staging Area: A
Timing/Duration: First project. May last two weeks.
Access to Staging Area: Access to recreational trail via Soledad Canyon Road just west of Bouquet Canyon Road. Access to staging area from recreational trail will be through City of Santa Clarita Parks and Trails access gate just east of the ARCO station.
Access to Eradication Site: Via recreational trail.
Target Species Coverage: 1-50% arundo infestation with patches of 100% infestation; 1-25% tamarisk infestation.
Description of Staging Area: Located adjacent to recreational trail, behind ARCO fueling station.
Distance to Sensitive Receptor: N/A
Special BMPs: None
See Figure 7





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Phase 1: Staging Areas and Access Routes

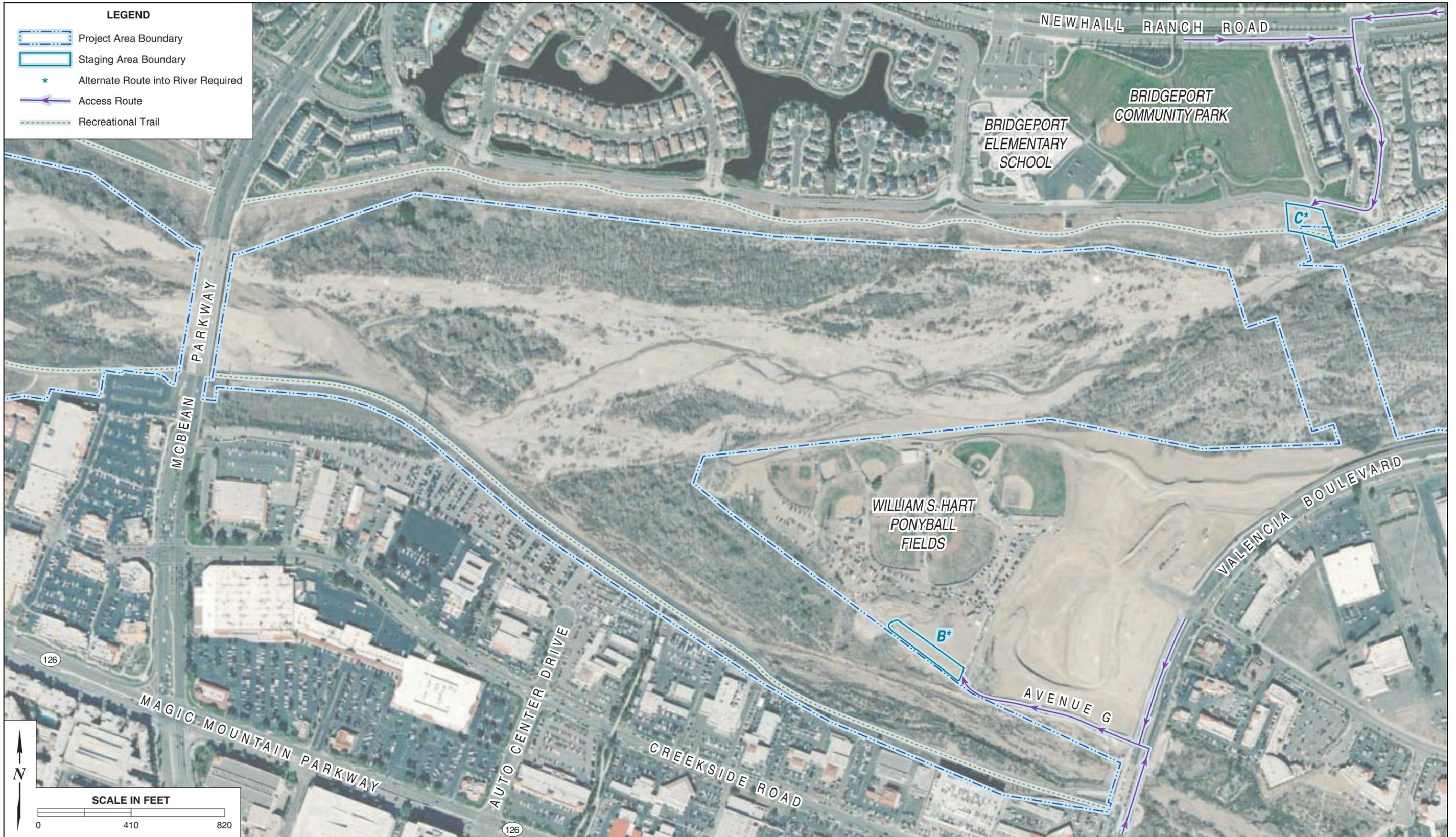
FIGURE

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**Table 6.
 Phase 2**

Phase 2
Staging Areas: B and C
Timing/Duration: Second project. May last two weeks.
Access to Staging Area: B – Access to the Hart Pony Baseball Complex from Valencia Blvd, north of Magic Mountain Parkway on G Street. No locked gates. C – Access to recreational trail via Bridgeport Lane. No locked gates.
Access to Eradication Site: B – From staging area, access will be determined prior to implementation to reach and transport materials to the eradication site. C – From staging area, access will be determined prior to implementation to reach and transport materials to and from the eradication site.
Target Species Coverage: B – 1-25% infested with arundo; no tamarisk infestation C – 26-50% infested with arundo; 26-50% infested with tamarisk
Description of Staging Area: B – Flat area with little to no vegetation. Located adjacent to Hart Pony Baseball Complex. C – Flat area located between the recreational trail and the eradication site. Located across Bridgeport Lane from Bridgeport Elementary School and Bridgeport Community Park.
Distance to Sensitive Receptor: B – 165 feet; C – 135 feet from school, 47 feet from park
Special BMPs: Due to the close proximity to sensitive groups, the chipper may not be used at staging area C. The staging area will be enclosed with a chain link fence to prevent unauthorized access. The chipper may be used at staging area B from 7 a.m. to 3 p.m. before the fields become active. The staging area will be enclosed with a chain link fence to prevent unauthorized access. No equipment or vehicles from staging area B will be placed in the area planned for a new vehicle dealership or in the adjacent mitigation/restoration area.
See Figure 8





**Table 7.
Phase 3**

Phase 3
Staging Areas: D and E
Timing/Duration: Third project. May last two weeks.
Access to Staging Area: D – Recreational trail behind Creekside Residential community, accessed via access gate off Newhall Ranch Road west of McBean Parkway. E – Access to area owned by Newhall via Tibbits Road.
Access to Eradication Site: D – From staging area, vehicles will access eradication site through access gate at Avenue Scott and drive along riverbank. E – From staging area, access will be determined prior to implementation to and from the eradication site. Access may also be provided through Los Angeles County Department of Public Works (LACDPW) PD 2029 or PD 2278.
Target Species Coverage: D – 26-50% infested with arundo; no tamarisk infestation. E – 50-75% infested with arundo; no tamarisk infestation.
Description of Staging Area: D – Small outcrop area along recreational trail behind Creekside residential neighborhood. E – Large (>1/2 acre), fenced area. Is suitable for chipping and large equipment storage.
Distance to Sensitive Receptor: D – 73 feet from residences. E – N/A.
Special BMPs: D – Any chipping will occur on bank of river, not in staging area. This staging area will only be used for daily equipment storage (no overnight equipment storage) and for the portable toilet. E – None. Chipping may occur on staging area.
See Figure 9





SCARP

Phase 3: Staging Areas and Access Routes

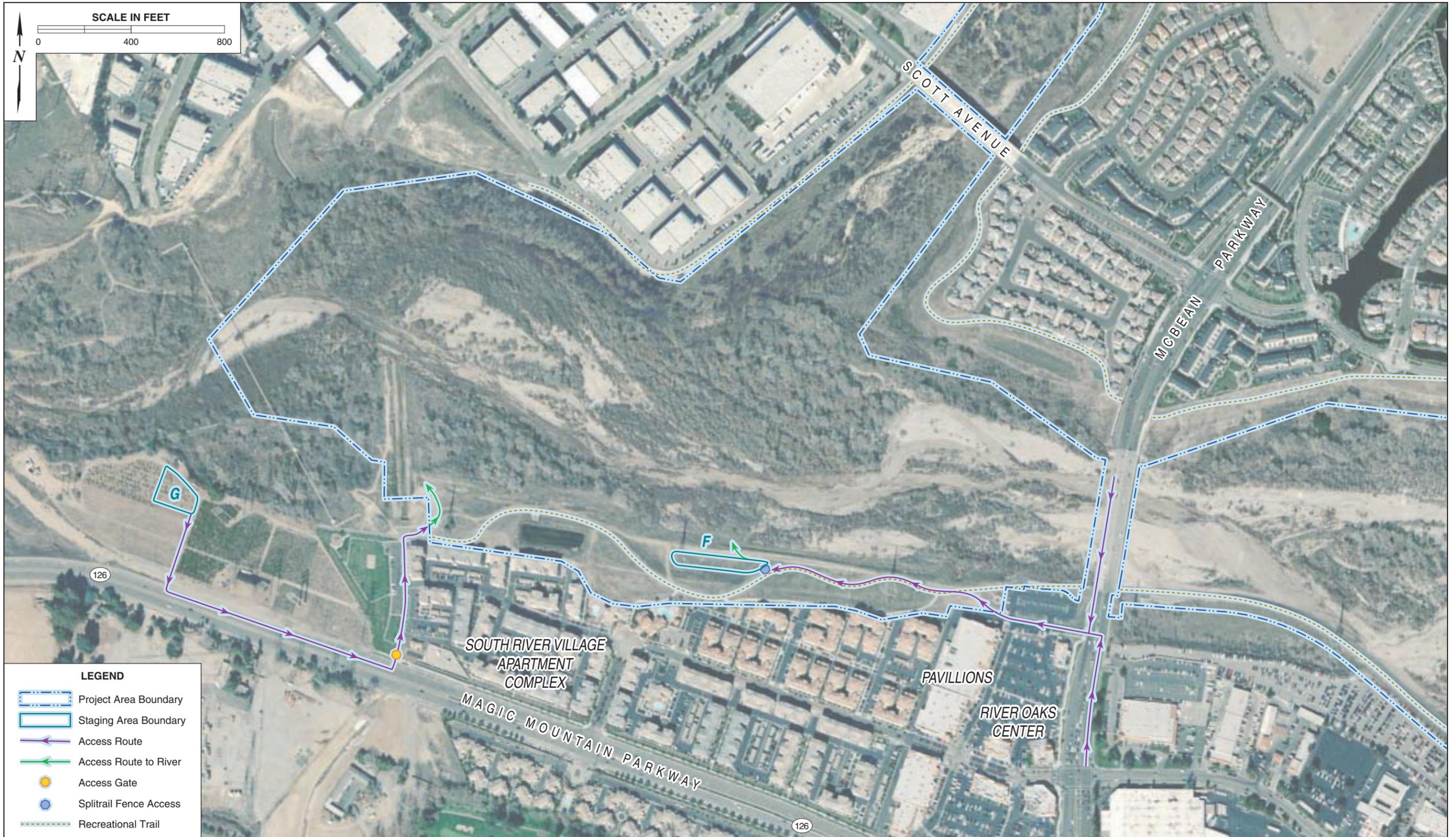
FIGURE

9

**Table 8.
Phase 4**

Phase 4
Staging Areas: F and G
Timing/Duration: Fourth project. May last two weeks.
Access to Staging Area: F – Recreational trail via River Oaks Center parking lot behind Pavilions grocery store. G – Access to area owned by Newhall via Magic Mountain Parkway.
Access to Eradication Site: F – From staging area, access through recreational trail split rail fence into riverbank and bed. The split rails removed will be replaced with a temporary gate that will be locked at the end of each workday. G – The crew will access the site via a LACDPW access road located at the end of the parking lot of South River Village Apartments. The access road will be used by the crew to drive single bed dump trucks for hauling material, a bobcat, and a large chipper into the project site near where the arundo and tamarisk is being cut.
Target Species Coverage: F – 51-75% infested with arundo with some patches of 100% infestation; 26-50% infested with tamarisk. G – 1-50% infested with arundo; no tamarisk infestation.
Description of Staging Area: F – Small area located on between recreational trail and South River Village Apartment complex. G – Large (>1/2 acre). Is suitable for chipping and large equipment storage.
Distance to Sensitive Receptor: F –135 feet from residences. G – N/A.
Special BMPs: F – Chipping will occur on the bank of the river, not in the staging area. G – Personal vehicles will enter the staging area through Magic Mountain Parkway and will not enter residential areas.
See Figure 10





SCARP

Phase 4: Staging Areas and Access Routes

FIGURE

10

8.0 FOLLOW-UP MAINTENANCE AND MONITORING

Both the cut-and-daub and foliar spray methods require follow-up monitoring and maintenance. As resprouting may occur from treated/removed patches of arundo and tamarisk and new patches may begin to form from vegetation moved downstream. Using cut-and-daub and foliar spray methods typically take three to five years to achieve complete eradication. Annual monitoring and treatment will be required for at least three and as many as five years after the initial removal.

8.1 Monitoring

Monitoring will be done to document and evaluate the success and costs of control and any revegetation efforts, and to allow a comparison of the methods employed. Monitoring information will be collected several times over a period of three to five years. Global positioning system (GPS) points from the original survey are used to navigate to the treated arundo stands, and monitoring observations are associated with the original stands by identification numbers. Repeated observations of site environmental quality and arundo health and infestation size will allow for evaluation of the success of the treatment. Photos of the site and treated arundo will be taken from established photo-points for before and after comparisons. The project site will be monitored for arundo and tamarisk resprouts biannually for three to five years after the initial eradication work is completed by the VCRCDCD.

8.2 Maintenance

Maintenance will occur between August and March. Any resprouts will be treated by foliar spray using the same BMPs as employed in the original removal effort. Resprouts will be treated by foliar spray using a low concentration of herbicide solution. Maintenance would occur during the late summer, fall and early spring when herbicide application is most successful. Maintenance would initially occur once in the spring following the initial activity and then once every two months beginning in August and continuing through March for a three to five year period. Herbicide will be applied by a licensed applicator, using hand-held sprayers, backpack sprayers and boom sprayers.

9.0 RESTORATION

Areas where arundo and tamarisk are removed from the riverbed will probably be revegetated through passive means, whereby natural succession and flooding will bring in appropriate plant material. Areas where arundo or tamarisk is removed from the upper banks will be actively replanted.

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APPENDIX A
Sensitive Species Potentially Located in
Site Specific Project Area



CALIFORNIA NATURAL DIVERSITY DATABASE

LIST OF POTENTIAL SENSITIVE BIOLOGICAL RECEPTORS SITE-SPECIFIC REMOVAL SITE (CITY OF SANTA CLARITA)

Scientific Name	Common Name	Federal Status	State Status
<i>Berberis nevinii</i>	Nevin's Barberry	Federally Listed as Endangered	State Endangered
<i>Bufo californicus</i>	Arroyo Toad	Federal Listed as Endangered	No State Status
<i>Dodecahema leptoceras</i>	Slender-Horned Spineflower	Federal Listed as Endangered	State Endangered
<i>Gasterosteus aculeatus williamsoni</i>	Unarmored Threespine Stickleback	Federal Listed as Endangered	State Endangered
<i>Orcuttia californica</i>	California Orcutt Grass	Federal Listed as Endangered	State Endangered
<i>Vireo bellii pusillus</i>	Least Bell's Vireo	Federal Listed as Endangered	State Endangered
<i>Catostomus santaanae</i>	Santa Ana Sucker	Federal Listed as Threatened	No State Status
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley Spineflower	Candidate for Federal Listing	State Endangered
<i>Calochortus clavatus</i> var. <i>gracilis</i>	Slender Mariposa Lily	No Federal Status	No State Status
<i>Calochortus plummerae</i>	Plummer's Mariposa Lily	No Federal Status	No State Status
<i>Clemmys marmorata pallida</i>	Southwestern Pond Turtle	No Federal Status	No State Status
<i>Gila orcutti</i>	Arroyo Chub	No Federal Status	No State Status
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	Short-Joint Beavertail	No Federal Status	No State Status
<i>Phrynosoma coronatum blainvillei</i>	San Diego Horned Lizard	No Federal Status	No State Status
<i>Scaphiopus hammondi</i>	Western Spadefoot	No Federal Status	No State Status
<i>Senecio aphanactis</i>	Rayless Ragwort	No Federal Status	No State Status

Habitat	Federal	State
California Walnut Woodland	No Federal Status	No State Status
Mainland Cherry Forest	No Federal Status	No State Status
Riversidian Alluvial Fan Sage Scrub	No Federal Status	No State Status
Southern California Threespine Stickleback Stream	No Federal Status	No State Status
Southern Coast Live Oak Riparian Forest	No Federal Status	No State Status
Southern Cottonwood Willow Riparian Forest	No Federal Status	No State Status
Southern Riparian Scrub	No Federal Status	No State Status
Southern Sycamore Alder Riparian Woodland	No Federal Status	No State Status
Southern Willow Scrub	No Federal Status	No State Status
Valley Oak Woodland	No Federal Status	No State Status

Source: California Natural Diversity Database (CNDDDB).

Sensitive Species Potentially Located in the Project Area

Note: This list is for informational purposes only. This list of species was taken from surveys that were inclusive of the Site Specific Project area. However, the original survey area was much larger than the Site Specific Project area. Therefore, the probabilities that listed species may occur in the project area may be overstated in the tables below.

Common Name	Scientific Name	Status Federal/State/CNPS	Local Distribution	Likelihood of Occurrence
Plants				
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	FE/SE/1B	Historic occurrence in area, but presumed extinct in Los Angeles County.	Very unlikely
Nevin's barberry	<i>Mahonia nevinii</i>	FC1/SE/1B	Two populations in upper San Francisquito Canyon. No known populations downstream.	Very unlikely
Perison's morning glory	<i>Calystegia peirsonii</i>	FSC/--/4	Occasional to common in region. Patchy distribution along the Santa Clara River and San Francisquito Creek	Known to occur
San Fernando Valley spineflower	<i>Chorizanthe parryi</i> var. <i>Fernandina</i>	FSC/--/1A	Historic occurrence in the project area. Presumed extinct.	Very unlikely
Santa Susana tarplant	<i>Hemizonia minthornii</i>	FSC/SR/1B	Santa Susana Mountains and Santa Monica Mountains	Unlikely
Short-joint beavertail cactus	<i>Opuntia basilaris</i> var. <i>brachyclada</i>	FSC/--/1B	San Gabriel and San Bernardino Mountains	Very unlikely
Davidson's bush mallow	<i>Malacothamnus davidsonii</i>	FSC/--/1B	Known in Los Angeles County	Unlikely

Key to Status

FE = Federal Endangered	SE = State Endangered
FT = Federal Threatened	SR = State Rare
FSC = Federal species of concern	ST = State Threatened
FC1 = Federal candidate (sufficient data to support listing)	

CNPS (California Native Plant Society) designations: (Non-regulatory, compilation by a non-profit organization which tracks rare plants)

- 1A: Plants presumed extinct in California.
- 1B: Plants rare, threatened, or endangered in California but common elsewhere.
- 3: plants for which more information is needed.
- 4: Plants of limited distribution.

Sources: Henrickson et al. (1988), Henrickson (1993a,b), RECON (1995) and Impact Sciences (1995a,b).

Common Name	Scientific Name	Status Federal/State	Local Distribution	Likelihood of Occurrence
Fish				
Arroyo chub	<i>Gila orcutti</i>	FSC/CSC	Santa Clara River from Castaic Creek to McBean Parkway Bridge and in suitable portions of San Francisquito Creek.	Known to occur
Santa Ana sucker	<i>Catostomus santaanae</i>	FSC/CSC	Patchy distribution; low numbers; observed between McBean Pkwy and the Old Road.	Known to occur
Unarmored three-spine stickleback	<i>Gasterosteus aculeatus williamsoni</i>	FE/SE, SFP	Santa Clara River from Castaic Creek to McBean Parkway Bridge and in suitable portions of San Francisquito Creek.	Known to occur
Amphibians and Reptiles				
California red-legged frog	<i>Rana aurora draytonii</i>	FE/CSC	No sightings since 1980s. None observed during numerous surveys in 1990s.	Not likely
Southwestern arroyo toad	<i>Bufo microscaphus californicus</i>	FE/CSC	No sightings in project area; general absent of suitable habitat. Nearest population on Castaic Creek.	Very unlikely
Southwestern pond turtle	<i>Clemmys marmorata pallida</i>	FSC/CSC	Santa Clara River from Castaic Creek to Interstate 5.	Known to occur
Coast horned lizard	<i>Phrynosoma coronatum</i>	FSC/CSC	No recent observations, but suitable habitat on stream terraces with scrub vegetation; likely in low numbers.	Possible
Coastal western whiptail	<i>Cnemidophorus tigris multiscutatus</i>	FSC/--	No recent observations, but suitable habitat on stream terraces with scrub vegetation; likely in low numbers.	Possible
California rosy boa	<i>Lichanura trivirgata</i>	FSC/--	Historic records in the Santa Clarita region, but no observations.	Not likely
Coast patch-nosed snake	<i>Salvadora hexalepis virgultea</i>	FSC/CSC	Historically recorded in the Santa Clara Region, but no recent observations.	Not likely
Two-striped garter snake	<i>Thamnophis hammondi</i>	FSC/--	Santa Clara River from Castaic Creek to the Interstate 5 Bridge.	Known to occur
Birds				
Cooper's hawk	<i>Accipiter cooperi</i>	--/CSC	Roosts in tall cottonwoods in the Santa Clara River system. One or two pairs observed along the Santa Clara River.	Known to occur
Sharp-shinned hawk	<i>Accipiter striatus</i>	--/CSC	Expected along the river system in winter.	Known to occur
White-tailed kite	<i>Elanus caeruleus</i>	--/CSC	Kites nest in trees along the Santa Clara River and hunt widely over grasslands.	Known to occur

Common Name	Scientific Name	Status Federal/State	Local Distribution	Likelihood of Occurrence
Prairie falcon	<i>Falco mexicanus</i>	--/CSC	Rare winter migrant. No known nest sites.	Very unlikely
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	--/SE	Observed along the Santa Clara River near Castaic Junction in 1970s. No recent sightings.	Not likely
Burrowing owl	<i>Athene cunicularia</i>	FSC/CSC	Suitable habitat present in adjacent fields and grasslands, but no observations along the river; low number, if present.	Possible to unlikely
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE/SE	Observations in 1988, 1990, 1993, 1994 of single individuals along the river downstream of McBean Parkway Bridge.	Occasional as a migrant
California horned lark	<i>Eremophila alpestris actia</i>	FSC/CSC	Observed in fields and grasslands near river and San Fransisquito Creek.	Known to occur
Black-tailed gnatcatcher	<i>Polioptila melanura</i>	--/CSC	No known observations.	Very unlikely
Loggerhead shrike	<i>Lanius ludovicianus</i>	FSC/CSC	No observations in project area; possible in low numbers along river in scrub habitat.	Likely
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE/SE	Very rare in project area; migrants have been observed downstream of McBean Parkway.	Known to occur
Southern California rufous-crowned sparrow	<i>Aimophila ruciceps canescens</i>	FSC/CSC	Observed in upland areas downstream of Castaic Creek; not known to occur in the project area.	Not likely
Tricolored blackbird	<i>Agelaius tricolor</i>	FSC/CSC	200 breeding pair along the river at Castaic Junction and non-nesting individuals beside Castaic Creek.	Known to occur
Bell's sage sparrow	<i>Amphispiza belli belli</i>	FSC/CSC	Occurs in the region, but not expected in the river systems due to lack of suitable and large areas of scrub habitat.	Very unlikely
Yellow warbler	<i>Dendroica petechia brewsteri</i>	--/CSC	Fairly common along cottonwoods and wet riparian areas of the Santa Clara River.	Known to occur
Yellow-breasted chat	<i>Icteria virens</i>	--/CSC	Common along the permanent stream section of the Santa Clara River.	Known to occur
Summer tanager	<i>Piranga rubra</i>	--/CSC	Few historical records along the Santa Clara River, although not in project site.	Very unlikely
Mammals				
California leaf-nosed bat	<i>Macrotus californicus</i>	FSC/CSC	No habitat occurs on site	Not likely
Greater western mastiff bat	<i>Eumops perotis californicus</i>	FSC/--	No suitable roosting locations at the project site; status unknown in the areas.	Very unlikely

Common Name	Scientific Name	Status Federal/State	Local Distribution	Likelihood of Occurrence
Pallid bat	<i>Antrozous pallidus pacificus</i>	--/CSC	May be transitory of Santa Clara River system	Unlikely
Townsend's Western big-eared bat	<i>Plecotus townsendi townsendi</i>	FSC/CSC	No known occurrences	Unlikely
Pale Townsend's big-eared bat	<i>Plecotus townsendi pallenscens</i>	FSC/CSC	Status unknown in project area. No known nesting or roosting habitat in area.	Unlikely
San Diego black-tailed jackrabbit	<i>Lepus californicus bennetti</i>	FSC/CSC	Common in the sandy terraces along the project river systems	Known to occur
Southern grasshopper mouse	<i>Onychomys torridus raona</i>	FSC/CSC	No known occurrences	Unlikely
American badger	<i>Taxidea taxus</i>	--/CSC	Known in oak woodland habitat adjacent to Santa Clara River	Likely

Key to Status

FE = Federal Endangered

FT = Federal Threatened

FPE = Federal proposed endangered

FSC = Federal species of concern

SE = State Endangered

ST = State Threatened

SFP = State fully protected species

CSC = California species of special concern

Sources: Henrickson et al. (1988), Henrickson (1993a,b), RECON (1995) and Impact Sciences (1995a,b).

APPENDIX B

Regulatory Coordination





DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
VENTURA FIELD OFFICE
2151 ALESSANDRO DRIVE, SUITE 110
VENTURA, CALIFORNIA 93001

REPLY TO
ATTENTION OF:

November 16, 2004

Office of the Chief
Regulatory Branch

Ventura County Resource Conservation District
Attention: Noreen Cabanting
P.O. Box 147
Somis, California 93066

Dear Ms. Cabanting:

Reference is made to your letter (No. 2004-01540-AOA) dated November 11, 2004 for a Department of the Army Permit to remove giant reed and salt cedar using hand tools in the Santa Clara River near McBean Parkway in the City of Santa Clarita, Los Angeles County, California.

Based on the information furnished in your letter, we have determined that your proposed removal of exotic plant species using hand tools does not discharge dredged or fill material into a water of the United States or an adjacent wetland. Therefore, the project is not subject to our jurisdiction under Section 404 of the Clean Water Act and a Section 404 permit is not required from our office.

Furthermore, you are hereby advised that the Corps of Engineers has established an Administrative Appeal Process for jurisdictional determinations which is fully described at 33 CFR Part 331. The Administrative Appeal Process for jurisdictional determinations is diagrammed on the enclosed Appendix C. If you decide not to accept this approved jurisdictional determination and wish to provide new information, please send the information to this office. If you do not supply additional information you may appeal this approved jurisdictional determination by completing the attached "Notification of Administrative Appeal Options and Process and Request for Appeal" form and submitting it directly to the Appeal Review Officer at the address provided on the form.

Please be aware that our determination does not preclude the need to comply with Section 13260 of the California Water Code (Porter/Cologne) and we recommend that you contact the California Regional Water Quality Control Board to insure compliance with the above regulations. Furthermore, our determination does not obviate the need to obtain other Federal, state, or local authorizations required by law.

If you have any questions, please contact Aaron O. Allen of my staff at (805) 585-2148.

Sincerely,

A handwritten signature in black ink, appearing to read 'Antal Szijj', with a stylized flourish at the end.

Antal Szijj
Acting Chief, North Coast Section

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: <i>Ventura County Resource Conservation District</i>		File Number: <i>2004-01540-ADA</i>	Date: <i>11-16-2004</i>
Attached is:			See Section below
<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
<input type="checkbox"/>	PERMIT DENIAL	C	
<input checked="" type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D	
<input type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

- A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.
- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the DISTRICT engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
 - **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the DISTRICT engineer. Your objections must be received by the DISTRICT engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the DISTRICT engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the DISTRICT engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.
- B: PROFFERED PERMIT:** You may accept or appeal the permit
- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the DISTRICT engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
 - **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the DIVISION (not district) engineer (address on reverse). This form must be received by the DIVISION engineer within 60 days of the date of this notice.
- C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the DIVISION (not district) engineer (address on reverse). This form must be received by the DIVISION (not district) engineer within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.
- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
 - **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the DIVISION (not district) engineer (address on reverse). This form must be received by the DIVISION engineer within 60 days of the date of this notice.
 - **EXCEPTION:** Appeals of Approved Jurisdictional Determinations based on new information must be submitted to the DISTRICT engineer within 60 days of the date of this notice.
- E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL OF PROFFERED PERMIT, DENIAL OR APPROVED ID TO DIVISION ENGINEER or SUBMITTAL OF OBJECTIONS TO AN INITIAL PROFFERED PERMIT OR NEW INFORMATION FOR APPEAL OF APPROVED JURISDICTION DETERMINATION TO DISTRICT ENGINEER

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:
DISTRICT ENGINEER
 _____ District, Corps of Engineers
 Attn: _____, Regulatory Branch

If you only have questions regarding the appeal process you may also contact:
DIVISION ENGINEER
 Army Engineer Division, South Pacific, CESPD-CM-O
 Attn: Doug Pomeroy, Administrative Appeal Review Officer
 333 Market Street, San Francisco, CA 94105 (415-977-8035)
 (Use this address for submittals to the **DIVISION ENGINEER**)

(Use this address for submittals to the **DISTRICT ENGINEER**)

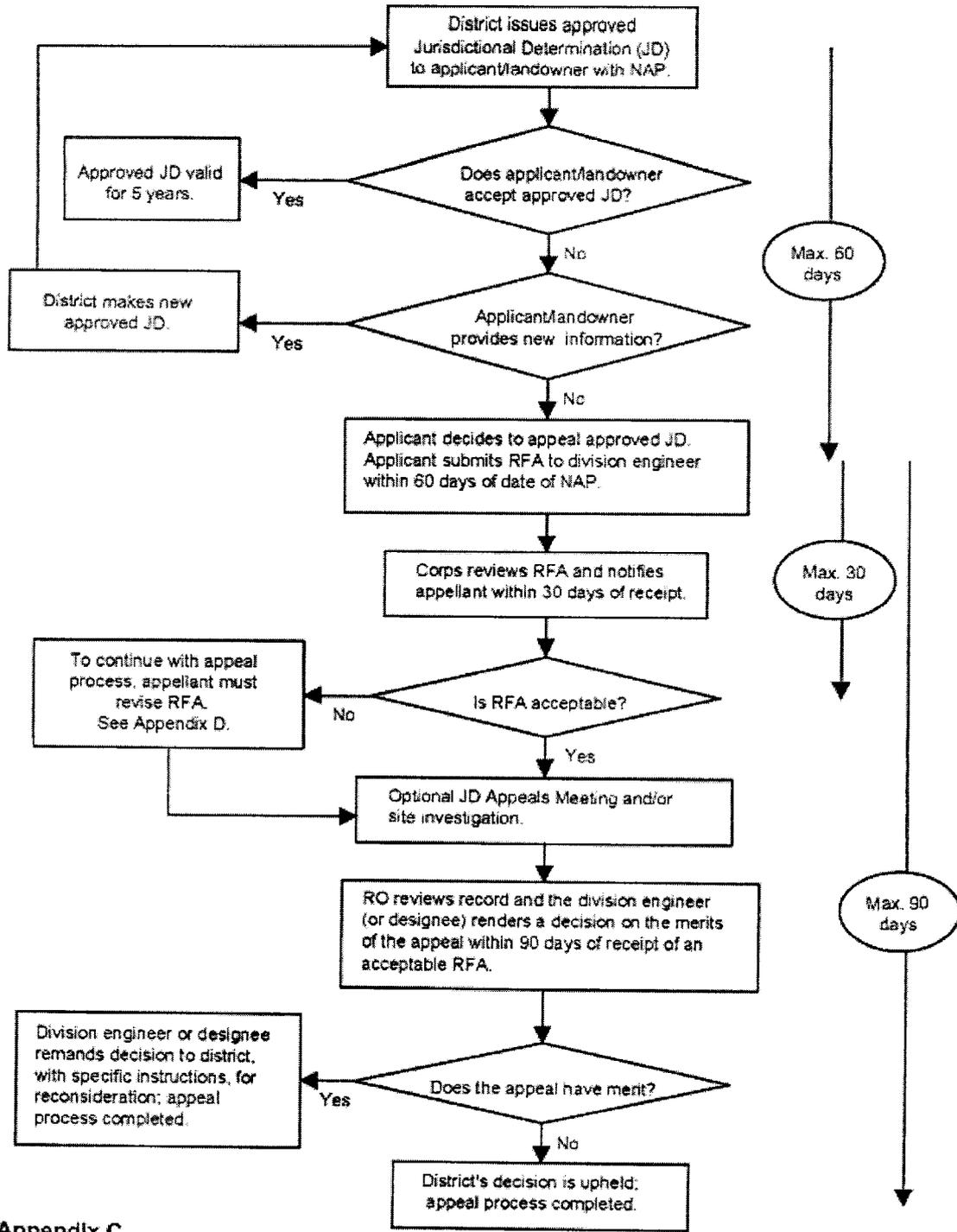
RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

 Signature of appellant or agent.

Date: _____

Telephone number: _____

Administrative Appeal Process for Approved Jurisdictional Determinations



Appendix C



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

IN REPLY REFER TO:
PAS 1735.2084.2788

November 15, 2004

Manjunath Venkat
Senior Resource Biologist
AMEC Earth and Environmental, Inc.
1 East Anapamu Street
Santa Barbara, California 93101

Subject: Species list for the Santa Clara River Arundo Removal Plan (SCARP),
Los Angeles County, California

Dear Mr. Venkat:

We are responding to your request, dated October 5, 2004, and received in our office on October 6, 2004, for information on listed threatened or endangered species which may be present in the SCARP project areas: 1) within the city of Santa Clarita, and 2) within the 500-year floodplain of the upper Santa Clara River hydrological area. The proposed project by the Ventura Resource Conservation District is to develop a long-term invasive plant species removal plan, which entails a programmatic California Environmental Quality Act/National Environmental Policy Act assessment for the project areas. Specifically, the invasive plant species planned for removal are giant reed (*Arundo donax*) and saltcedar (*Tamarix* spp.). We have enclosed two lists of federally listed species that may occur in SCARP project areas.

The U.S. Fish and Wildlife Service's (Service) responsibilities include administering the Endangered Species Act of 1973, as amended (Act), including sections 7, 9, and 10. Section 9 of the Act prohibits the taking of any federally listed endangered or threatened species. Section 3(18) of the Act defines take to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Service regulations (50 CFR 17.3) define harm to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harassment is defined by the Service as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. The Act provides for civil and criminal penalties for the unlawful taking of listed species.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate

species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Exemptions to the prohibitions against take may be obtained through coordination with the Service through interagency consultation for projects with Federal involvement pursuant to section 7 or through the issuance of an incidental take permit under section 10(a)(1)(B) of the Act. If the subject project is to be funded, authorized, or carried out by a Federal agency and may affect a listed species, the Federal agency must consult with the Service, pursuant to section 7(a)(2) of the Act. If a proposed project does not involve a Federal agency but may result in the take of a listed animal species, the project proponent should apply for an incidental take permit, pursuant to section 10(a)(1)(B) of the Act. Once you have determined if the proposed project will have a lead Federal agency, we can provide you with more detailed information regarding the section 7 or 10(a)(1)(B) processes.

Only listed species receive protection under the Act; however, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. If you have any questions, please contact Eric Morrissette of my staff at (805) 644-1766.

Sincerely,

A handwritten signature in cursive script that reads "Rick E Farris".

Rick Farris
Division Chief
Santa Barbara/Ventura/ Los Angeles

Enclosures

**LISTED SPECIES WHICH MAY OCCUR WITHIN
THE SANTA CLARA RIVER IN THE CITY OF SANTA CLARITA,
LOS ANGELES COUNTY, CALIFORNIA**

Birds

Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	E
Least Bell's vireo	<i>Vireo bellii pusillus</i>	E

Amphibians

Arroyo toad	<i>Bufo californicus</i>	E
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Fish

Unarmored threespine stickleback	<i>Gasterosteus aculeatus williamsoni</i>	E
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Key:

E - Endangered

**LISTED AND CANDIDATE SPECIES WHICH MAY OCCUR
IN THE SANTA CLARA RIVER HYDROLOGIC AREA,
LOS ANGELES COUNTY, CALIFORNIA**

Birds

Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	E
Least Bell's vireo	<i>Vireo bellii pusillus</i>	E
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	T

Amphibians

Arroyo toad	<i>Bufo californicus</i>	E
California red-legged frog	<i>Rana aurora draytonii</i>	T

Fish

Unarmored threespine stickleback	<i>Gasterosteus aculeatus williamsoni</i>	E
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Plants

Slender-horned spineflower	<i>Dodecahema leptoceras</i>	E
California orcutt grass	<i>Orcuttia californica</i>	E
San Fernando Valley spineflower	<i>Chorizanthe parryi</i> var. <i>fernandina</i>	C
Nevin's barberry	<i>Berberis nevinii</i>	E
Spreading navarretia	<i>Navarreti fossalis</i>	T

Key:

E - Endangered T - Threatened

C - Candidate species for which the Fish and Wildlife Service has on file sufficient information on the biological vulnerability and threats to support proposals to list as endangered or threatened.



**ATTACHMENT A
 LIST OF POTENTIAL SENSITIVE BIOLOGICAL RECEPTORS
 SITE-SPECIFIC REMOVAL SITE (CITY OF SANTA CLARITA)**

Scientific Name	Common Name	Federal Status	State Status
<i>Berberis nevini</i>	Nevin's Barberry	Federally Listed as Endangered	State Endangered
<i>Bufo californicus</i>	Arroyo Toad	Federal Listed as Endangered	No State Status
<i>Dodecahema leptoceras</i>	Slender-Horned Spineflower	Federal Listed as Endangered	State Endangered
<i>Gasterosteus aculeatus williamsoni</i>	Unarmored Threespine Stickleback	Federal Listed as Endangered	State Endangered
<i>Orcuttia californica</i>	California Orcutt Grass	Federal Listed as Endangered	State Endangered
<i>Vireo bellii pusillus</i>	Least Bell's Vireo	Federal Listed as Endangered	State Endangered
<i>Catostomus santaanae</i>	Santa Ana Sucker	Federal Listed as Threatened	No State Status
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley Spineflower	Candidate for Federal Listing	State Endangered
<i>Calochortus clavatus</i> var. <i>gracilis</i>	Slender Mariposa Lily	No Federal Status	No State Status
<i>Calochortus plummerae</i>	Plummer's Mariposa Lily	No Federal Status	No State Status
<i>Clemmys marmorata pallida</i>	Southwestern Pond Turtle	No Federal Status	No State Status
<i>Gila orcutti</i>	Arroyo Chub	No Federal Status	No State Status
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	Short-Joint Beavertail	No Federal Status	No State Status
<i>Phrynosoma coronatum blainvillei</i>	San Diego Horned Lizard	No Federal Status	No State Status
<i>Scaphiopus hammondii</i>	Western Spadefoot	No Federal Status	No State Status
<i>Senecio aphanactis</i>	Rayless Ragwort	No Federal Status	No State Status

Habitat	Federal	State
California Walnut Woodland	No Federal Status	No State Status
Mainland Cherry Forest	No Federal Status	No State Status
Riversidian Alluvial Fan Sage Scrub	No Federal Status	No State Status
Southern California Threespine Stickleback Stream	No Federal Status	No State Status
Southern Coast Live Oak Riparian Forest	No Federal Status	No State Status
Southern Cottonwood Willow Riparian Forest	No Federal Status	No State Status
Southern Riparian Scrub	No Federal Status	No State Status
Southern Sycamore Alder Riparian Woodland	No Federal Status	No State Status
Southern Willow Scrub	No Federal Status	No State Status
Valley Oak Woodland	No Federal Status	No State Status

Source: California Natural Diversity Database (CNDDB).