The Newhall Land And Farming Company, "Draft Section 2081 Incidental Take Permit Application for Multiple Species - Resource Management and Development Plan - Newhall Ranch Project" (May 9, 2008)

APPLICATION FOR INCIDENTAL TAKE PERMIT

(Pursuant to 14 CCR Section 783.2 and California Public Resources Code Section 2081)

Date: May 9, 2008

Project Title: *Newhall Land Resource Management and Development Plan* (RMDP)

1. NAME AND ADDRESS OF APPLICANT (CCR § 783.2(a)(1))[1]

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2. SPECIES NAME AND CESA[2] STATUS (CCR § 783.2(a)(2))

Table 1
CESA Listed Plant and Wildlife Species Observed in the Project Area

Common Name	Scientific Name	Federal Listing	State Listing	Recovery[3] Plan
Western Yellow-Billed Cuckoo	*Coccyzus americanus occidentalis*	Candidate	Endangered	N/A
Southwestern Willow Flycatcher	*Empidonax traillii extimus*	Endangered	Endangered	Final 2003

[1] Unless otherwise noted, all references refer to Title 14 of the California Code of Regulations (CCR).

[2] California Endangered Species Act (CESA)

[3] Recovery Plans are discussed in Section 4 of the federal Endangered Species Act (16 U.S.C. § 1533 et seq.). Each plan incorporates site-specific management actions necessary for the conservation and survival of the species.

Least Bell's Vireo	*Vireo bellii pusillus*	Endangered	Endangered	Draft 1998

Table 2
Special-Status Plant and Wildlife Species Observed in the Project Area but not CESA Listed as Endangered, Threatened or Candidate

Common Name	Scientific Name	Federal Listing	State Listing	Recovery Plan
Amphibians				
Arroyo Toad	*Bufo californicus*	Endangered	Special Concern	Final 1999
Birds				
Tricolored Blackbird	*Agelaius tricolor*	Bird of Conservation Concern	Special Concern	N/A
Western Burrowing Owl	*Athene cunicularia*	Bird of Conservation Concern	Special Concern	N/A

Table 3
Undescribed Plant and Wildlife Species Observed in the Project Area

Common Name	Scientific Name	Federal Listing	State Listing	Recovery Plan	CNPS Listing
Plants					
Sunflower	*Helianthus sp. nova*	N/L[4]	N/L	N/A	N/A
Everlasting	*Gnaphalium sp. nova*	N/L	N/L	N/A	N/A
Mollusks					

[4] N/L = Not Listed

Spring Snail	*Pyrgulopsis sp. nova*	N/L	N/L	N/A	N/A

3. DESCRIPTION OF PROJECT (CCR § 783.2(a)(3))

The Newhall Ranch Resource Management and Development Plan (RMDP) is a conservation, mitigation, and permitting plan for the long-term management of sensitive biological resources within the 11,999-acre Newhall Ranch Specific Plan (Specific Plan) area, located in unincorporated Los Angeles County, California. The RMDP would facilitate urban development in the Specific Plan area, thus this 2081 Permit application is for all activities within the Specific Plan area that could impact any of the species covered by the proposed 2081 permit. Later sections of the application shall use the term "RMDP area" to denote these development limits. The Specific Plan was approved by Los Angeles County in May 2003 to guide development of a new community composed of a broad range of residential, mixed-use, and non-residential uses within five villages on the Newhall Ranch property site. Subsequent development plans, subdivision maps, and federal and state permitting, consultations, and agreements will be required to implement build-out of the Specific Plan area, which is projected to occur over the next 20 to 25 years. Build-out of the Specific Plan area will occur in phases, through submission of individual tentative subdivision maps for approval by the County of Los Angeles (County). The first such tentative map application, Landmark Village, is currently in the public review process.

The CEQA "project" involving the RMDP also includes the Spineflower Conservation Plan (SCP) for which a separate Section 2081 Incidental Take Permit is being simultaneously submitted and for which the CEQA document for the RMDP also covers. The SCP 2081 Incidental Take Permit application is separate because it covers a larger geographical area than the RMDP, including portions of land within two planning areas adjacent to the RMDP area boundary: Valencia Commerce Center (VCC) and Entrada. The SCP has been prepared to facilitate comprehensive conservation of San Fernando Valley spineflower (*Chorizanthe parryi* var.. *fernandina*) on all of the applicant's land holdings that contain known spineflower populations.

The resource management component of the RMDP will guide future resource conservation, mitigation, and permitting needed for the long-term management of sensitive biological resources within the Specific Plan area. It will be implemented in conjunction with the development plan component of the RMDP.

The development plan component consists of infrastructure improvements in or adjacent to the Santa Clara River and side drainages located in the Specific Plan area, which are needed to implement the approved Specific Plan. The RMDP infrastructure improvements are comprised of various flood control features, bridge/road crossings, stream bank stabilization, drainage facilities, roads, building pads, utility corridors, pipeline and utility river crossings, nature trails, the discharge outfall for the previously approved Newhall Ranch Water Reclamation Plant (WRP), and drainage facility

maintenance activities of the Los Angeles County Department of Public Works (LACDPW).

Proposed infrastructure improvements and required maintenance activities will require permits, agreements, and authorizations from the U.S. Army Corps of Engineers (Corps), the U.S. Fish and Wildlife Service (USFWS), and the California Department of Fish and Game (CDFG). The RMDP infrastructure improvements and maintenance activities involve Corps, USFWS, and CDFG permitting because the activities would affect waters, riverbeds, or banks within the jurisdictional limits of the Corps and CDFG and/or would potentially affect listed threatened or endangered species, thereby requiring USFWS and CDFG approval.

The attached RMDP provides a more detailed Project description in *Section 6.0*.

3.1 Overview of Flood Protection Requirements and Design Criteria

Lands adjacent to the Santa Clara River, Chiquito Canyon Creek, San Martinez Canyon Creek, Potrero Canyon Creek, and Long Canyon Creek are located in the mapped Federal Emergency Management Agency (FEMA) 100-year floodplain, and in the LACDPW Capital Floodplain. According to the County Floodplain ordinance, land development in the Capital Floodplain can only occur if appropriate flood-protective measures are implemented according to LACDPW requirements.

In the Santa Clarita Valley, flood control requirements are typically met by the installation of bank protection along the banks of watercourses. LACDPW requires that: (1) the elevation of the bank protection must be readily accessible for inspection and emergency repair; and (2) it must be constructed of a material resistant to erosive flows. Lining of the natural channel bottom is typically not required.

3.2 Conservation Activities

The Specific Plan area contains significant natural resources, the protection of which is a major objective of both the approved Specific Plan and the proposed RMDP. Specific Plan management plans designed to protect natural resources within the Special Management Areas (SMAs) in the RMDP planning area, are described below.

3.2.1 Long-Term Management Plans

The approved Specific Plan contains long-term management plans that will be implemented for the River Corridor and High Country SMAs located within the Specific Plan area as described below.

3.2.1.1 River Corridor SMA.

The River Corridor SMA long-term management plan will be developed to implement the management, conservation, and enhancement of resources within the River Corridor SMA. All mitigation included as part of the RMDP or as mitigation measures upon any ultimate approval will be compiled into a plan upon final approval. Bank stabilization,

bridges, storm drain outlets, and related drainage and water-quality facilities that would be constructed in or adjacent to the Santa Clara River are included in the River Corridor SMA Long-Term Management Plan to ensure that:

- The continued existence of endangered or threatened species is not jeopardized
- Critical habitat for threatened or endangered species is conserved
- Discharge of dredged or fill material in waters of the United States is avoided and minimized to the maximum extent practicable, in light of cost, logistics, and technology
- Potential cumulative impacts to "waters of the United States and the State" are identified and minimized
- Environmental resources in the area are protected pursuant to state and federal law
- Demographic and economic growth are allowed pursuant to local land use regulations

Ownership of the River Corridor SMA will be transferred to the Center for Natural Lands Management, which will be responsible for implementation of the River Corridor SMA Long-Term Management Plan.

3.2.1.2 High Country SMA

The High Country SMA will be dedicated in fee to a joint powers authority (JPA) that was established through an agreement between the County of Los Angeles, City of Santa Clarita, and Santa Monica Mountains Conservancy. The JPA will be comprised of members from the County of Los Angeles (four members), the City of Santa Clarita (two members), and the Santa Monica Mountain Conservancy (two members). The JPA will have overall responsibility for recreation within and conservation of the High Country SMA. Prior to the dedication, a conservation and public access easement must be offered to Los Angeles County, along with a conservation and management easement to the Center for Natural Lands Management.

3.2.1.3 Open Area

A system of Open Area that encompasses approximately 2,809 acres, including 2,000 acres of natural vegetation, weaves through the central portion of the Specific Plan area. The Open Area includes community parks, prominent ridges, bluffs, slopes, creek beds, and utility and trail system easements, and will function as a transition between development areas and the SMAs. Open Area is configured to protect significant landforms and natural resources, providing an opportunity to integrate the proposed development within its natural context.

3.2.1.4 Transition Areas

Where development lies adjacent to the boundary of the River Corridor SMA, a transition area will be designed to lessen the impact of the development on the conserved area. Transition areas may be comprised of Open Area, natural or revegetated manufactured slopes, other planted areas, bank stabilization areas, and trails. The standards for design of transition areas call for a trail to be built along the edge of the transition area and development where there is no steep-grade separation between them.

Native riparian plants will be used in landscaping the transition areas between the River Corridor SMA and adjacent development areas. Roads and bridges that cross the River Corridor SMA would have adequate barriers at their perimeters to discourage access to the River Corridor SMA adjacent to the structures. Where bank stabilization is required to protect development areas, it will be composed of ungrouted rock or buried bank stabilization, except at bridge crossings and other locations where public health and safety requirements necessitate concrete or other bank protection. A minimum 100-foot wide buffer adjacent to the Santa Clara River will generally be required between the top riverside of bank stabilization and development within the land use designations Residential Low Medium, Residential Medium, Mixed-Use, and Business Park. The buffer area may be used for public infrastructure, such as flood control access; sewer, water, and utility easements; abutments; and trails and parks.

3.2.1.5 Recreation and Access

The quality of the habitat values that are conserved in the River Corridor SMA will benefit from controlled access. Specific Plan guidelines for the control of access to the River Corridor SMA limit access for hiking, equestrian, and biking, to the river trail system only. The river trail system would be designed to avoid impacts to existing native riparian habitat, especially habitat areas known to support sensitive species. Access to the River Corridor SMA would be limited to daytime use of the designated trail system. Signs would be posted along the River Corridor SMA indicating that no pets of any kind would be allowed, with the exception that equestrian use would be permitted on established trails. In addition, no hunting, fishing, or motor or off-trail bike riding would be permitted.

3.3 Regulated Activities and Detailed Design Features

Detailed descriptions of the proposed flood control and drainage structures, and other components of the RMDP that would occur within Corps or CDFG jurisdictional water areas, are provided below.

3.3.1 Proposed Drainage Facilities

The Backbone Drainage Plan prepared by Pacific Advanced Civil Engineering, Inc. (PACE) is the proposed drainage plan for the RMDP. The locations of proposed drainage structures, bank stabilization, and NPDES water-quality and detention basins are shown on *Figures 22 and 23, 12* through *16, and 40 and 41* of the RMDP, respectively.

Because the proposed Project would leave major topographic features on site intact, post-construction sub-watershed boundaries would conform to the existing sub-watershed

boundaries on site. Storm flows through the site would largely follow existing drainage patterns, but in some areas at different elevations and would be channeled through the site in both open and closed drainage systems. Flood control facilities would be designed pursuant to adopted best management practices (BMPs) and National Pollutant Discharge Elimination System (NPDES) permitting requirements.

Drainage structures that would be implemented as a result of the RMDP focus on minimizing the amount of debris that would enter the drainage system, minimizing the amount of sedimentation that would occur, and maintaining the quality of water within the drainage system at a level consistent with the CWA. The proposed drainage structures are shown on *Figures 22 and 23* of the RMDP. This section provides a detailed description of these structures.

3.3.1.1 Building Pads and Buried Storm Drains

Newhall Land proposes that 23 drainages on Newhall Ranch be graded to accommodate pads for residential and commercial buildings and infrastructure, and that these flows be conveyed by buried storm drains varying in diameter from 30 to 144 inches. These drainages include: two drainages in Homestead Canyon, two within Off-Haul Canyon, five in Chiquito Canyon, one within Mid-Martinez Canyon, one within Humble Canyon, three within Lion Canyon, two within Exxon Canyon, two between Long and Humble Canyons, two within Dead-End Canyon, one north of Middle Canyon, one within Middle Canyon, and one within Magic Mountain Canyon. In total, approximately 61,143 feet of existing drainage channel would be converted to buried storm drains. In addition, the upstream, intermittent portion of the Potrero Canyon drainage is proposed for replacement by a buried storm drain.

3.3.1.2 Partially Lined Open Channels on Tributaries

Newhall Land proposes four partially-lined open channels on tributaries to the mainstem of the Santa Clara River. These open channels would have grade control structures constructed within them as described in *Section 3.3.3* of this document. These partially lined open channels are proposed in Chiquito Canyon (RMDP *Figure 25*), Lion Canyon (RMDP *Figure 27*), Long Canyon (RMDP *Figure 28*), Potrero Canyon (RMDP *Figure 29*) and in San Martinez Canyon (RMDP *Figure 30*). In some cases, streams will be relocated from their current locations and soft-bottom channels will be recreated in different locations generally parallel to the current alignments.

3.3.2 Bank Stabilization on the Santa Clara River

Newhall Land proposes to install bank protection along portions of the Santa Clara River over the next 15 to 20 years for bridge abutments, infrastructure, and various development projects, including residential, commercial, and business park projects. The alignment of the proposed bank protection is shown on RMDP *Figure 11*. This alignment was selected so that bank protection along the river would generally be excavated in non-jurisdictional upland areas adjacent to the river. Installing bank protection in non-jurisdictional areas reduces and avoids impacts to the river, creates new

riverbed areas and increases wetland habitat, as shown on *Figure 11* of the RMDP.

The RMDP design incorporates the following types of bank protection: (1) buried soil-cement, (2) ungrouted rock riprap, and (3) gunite slope lining. These types of bank protection can be divided into two different categories, flexible and rigid revetments. Ungrouted rock riprap is the only flexible revetment system proposed and will be used as exposed bank protection in areas that do not have earthen cover and where stream velocities are low enough to ensure that the rock can resist erosive hydraulic forces. Generally, this would be a maximum stream velocity of 12 to 14 feet per second (fps). Rigid revetments are able to resist much higher velocities or erosive forces; however, they will not adjust or move like flexible systems. Rigid revetments can resist velocities in excess of 20 fps. The following guidelines will be applied in selecting the proper revetment system:

Buried soil-cement bank protection will be used in situations where the stream velocities are high or where there is the potential for lateral bank migration based on stream characteristics. Alternatively, buried ungrouted riprap will be used if in situ soils do not meet soil-cement design requirements.

- If there is insufficient space to allow covering of the revetment with the earthen fill because of physical constraints such as topographic features or existing facilities, then exposed ungrouted rock riprap will be used.

- Locations where there are proposed bridge crossings would require that the banks underneath the bridge have exposed concrete gunite slope lining protection.

3.3.2.1 Buried Soil-Cement

The proposed buried soil-cement consists of a mixture of soil, 7% to 12% Portland cement, and water, compacted to form a hardened material. As the cement hydrates, the compacted soil-cement mixture becomes hard, relatively impermeable, and resistant to wetting and drying. On-site soils can usually be used to supply the bulk of the mixture material. However, soils may need to be imported to certain locations if the native soil does not meet specifications. The advantages of buried soil-cement over the other three types of bank stabilization include the following:

- The buried soil-cement may be constructed of native materials so if the revetment is ever exposed it will look similar to native bank slopes.

- The hauling of material and associated truck trips will be minimized from external sources outside of the Project area, since primarily native on-site materials will be used.

- The buried soil-cement can be constructed on a steeper side slope (either 1:1 or 1.5:1) than other types of revetment.

- The buried soil-cement requires a smaller structural footprint, which reduces the

potential for disturbance to adjacent areas.

- A greater height of earthen fill can be placed over the buried soil-cement because of the steeper slope.

- The thickness of the soil-cement revetment requires less maintenance and inspection.

The proposed soil-cement bank protection would consist of soil-cement layers (1 foot thick and 8 feet wide) that are stacked on top of each other. The buried bank stabilization would protect against erosion while maintaining natural vegetation and soft banks. This stabilization method would use buried soil cement placed in a flat-bottom V-ditch to an engineered scour depth during a Capital Flood event. The bottom of the ditch would be equipment-width and the sides would slope outward at a ratio of approximately 1.5:1. *Figure 12* provides a conceptual design of the buried soil cement.

Typically, the bank lining must be buried to a depth equal to the height of the lining to resist scouring. Burying the toe of the lining requires temporary excavation and backfilling. A temporary construction zone width of 85 feet is required during construction of the bank protection. The original channel elevation would be restored after construction, and riverbed habitat areas would be revegetated with native plant species to restore the natural habitat presently found along the river. The buried soil-cement would not be visible, and the land above it would be used for an upland habitat buffer. A service road for inspecting or repairing the buried bank protection would not be required. *Figure 14* depicts the area after completion of soil cement installation and the restored revegetated area.

Excavation depths required for bank protection would be below the river bottom and would frequently encounter groundwater that would need to be removed during the construction period. The dewatering activity would place shallow wells close to the excavation, drawing down the groundwater in the construction zone. Typically, soil composition within the dry streambed is such that the discharged dewatering flows would percolate quickly back into the ground from which they came. However, in some instances, the amount of discharged water may create sufficient flow during dewatering operations to form a continuous wetted channel from the work site to the Santa Clara River or a tributary.

To protect water-quality flows back to the Santa Clara River or a tributary, the water generated would be treated in conformance with Los Angeles Regional Water Quality Control Board (RWQCB) authorizations. The dewatering discharge would be conveyed through an engineered system designed to remove particulates, such as a weir tank, which allows sediment to settle out of suspension before the water is discharged. To minimize impacts to receiving waters from the dewatering discharge, each groundwater well will be connected either to a larger manifold or individually piped to a specific discharge point. Each discharge point would consist of any necessary treatment systems (e.g., a weir tank) and an energy dissipater. Discharged water would be released from the dissipater at a very low velocity, limiting erosion at the discharge point and preventing

sedimentation of down stream waters, or the discharge may be directed to beneficial uses as any or all of the following: construction grading water, dust control water, and water otherwise used within project grading areas; water that has been routed through a sprinkler field and sprayed over a large upland area adjacent to the river/streambed with the intent to percolate; flood irrigation of pasturelands; and/or sprinkler irrigation of pasturelands, as suitable, throughout the Newhall Land and Farming ranching, farming, and orchard operations. Compliance with effluent limitations pursuant to NPDES requirements would include use of BMPs to minimize erosion.

3.3.2.2 Ungrouted Riprap

Along certain reaches of the Santa Clara River, ungrouted riprap would be installed on the existing bank rather than buried bank protection if there is insufficient space to install buried bank protection. Ungrouted rock riprap revetment consists of large rocks with a thickness ranging from 24 to 48 inches placed on a graded earthen bank slope. A gravel filter or geotextile filter would be installed to prevent the migration of smaller soil particles from behind the riprap. *Figure 15* provides a schematic and a photograph depicting typical ungrouted rock riprap as bank stabilization.

At the top of the riprap, a 16-foot-wide paved service road would be installed to allow access for inspection of the lining and emergency repairs by LACDPW. Adjacent to the service road, there would be an upland habitat buffer zone that would range up to 50 feet in width.

3.3.2.3 Gunite Lining

This smooth concrete lining would be limited to locations at the embankments of new or widened bridges. The lining would be designed to include bike trail undercrossings at bridges.

3.3.3 Grade Control Structures

Grade control structures would be installed on four existing tributaries to the mainstem of the Santa Clara River. The various elements of a grade control structure consist of the "crest" located at the upstream end of the structure that protects the invert elevation of the alluvial stream from eroding; a "chute" that drops in vertical elevation to the streambed on the downstream side of the structure; and a "stilling basin" that dissipates the energy from the flow cascading over the drop. The structure will prevent long-term degradation, downcutting, and incision of the drainage.

The construction of a typical soil-cement grade control structure would involve excavating the length of the structure for the crest, chute, and stilling basin within the drainage area.

3.3.4 Storm Drain and Channel Outlets

Each of the primary permanent water quality and storm control features described in Section 3.3.8 may incorporate buried storm drain pipe, open channels and concrete or

riprap outlets into the Santa Clara River Mainstem, main tributaries, and other small tributaries within the limits of the RMDP.

The location of the proposed storm drain and channel outlets that would be constructed along the Santa Clara River are shown on *Figures 22* and *23* of the RMDP. Storm drain outlets into the main tributaries and small tributary drainages will be determined during detail tract map design.

3.3.5 Location and Design of Bridges

A total of 13 new bridges and 3 widened bridges are proposed for the RMDP area over the next 15 to 20 years. The purpose of these new and widened bridges is to accommodate future traffic associated with the development of the region. Two of the 13 bridges are proposed over the main channel of the Santa Clara River, while the other 11 new bridges and the 3 widened bridges would be associated with tributaries in the RMDP area.

Bridges are proposed to be conventional concrete girders placed over concrete filled piers. Construction of this type of bridge usually involves the temporary disturbance of a 60-foot wide corridor on each side of the bridge. Following completion of construction activities, the temporary impact zone would be restored to channel grade and revegetated with native riparian and upland species as appropriate. An alternative construction method would include the use of columns supporting poured in-place decking.

These bridges are discussed below. For a more detailed discussion of the proposed bridges, please see *Section 6.1.2* of the attached RMDP.

3.3.5.1 Tributary Culverts and Bridges

Of the 11 new culverts/bridges and three widened culverts/bridges not on the river, five of these culverts/bridges would cross the Potrero Canyon channel, three would cross the Long Canyon channel, one would cross the Chiquito Canyon channel, and two new culverts/bridges are proposed to cross San Martinez Grand Canyon (see RMDP *Table 6*). *Figure 26* depicts the typical tributary culvert/bridge crossing; both can be found in the attached RMDP.

There are three widened culverts/bridges proposed, which would facilitate traffic flow on SR-126. Widened culverts/bridges are proposed along SR-126 at Castaic Creek (six lanes expanded to eight), Chiquito Canyon (two lanes expanded to four), and San Martinez Grand Canyon (two lanes expanded to four). The SR-126/Castaic Creek Bridge widening from four to six lanes, with an additional with of 50 feet, has already been permitted by CDFG via a Streambed Alteration Agreement (SAA) and 1603 Agreement and 2081 permit. The proposed Project would require further widening of this bridge from six to eight lanes, an additional 50 feet of width, plus a 10-foot-wide pedestrian/bike path located on the south side of the bridge, and utility crossings located on both the north and south sides of the bridge in 100-foot-wide disturbance zones.

3.3.5.2 Mainstem Bridges

The proposed Potrero Canyon Road Bridge and the Long Canyon Road Bridge cross the main channel of the Santa Clara River (see RMDP *Table 5* and *Figure 11*). The Potrero Canyon Bridge would serve the most westerly segment of the Project area. The Long Canyon Bridge would be within the middle segment of the Project area. The Commerce Center Drive Bridge would also cross the main channel and would be within the eastern segment of the Project area. The Commerce Center Bridge has already been permitted by CDFG via a Streambed Alteration Agreement (SAA) and 1603 Agreement and 2081 Permit.

3.3.5.3 Magic Mountain Parkway Extension Culverts

The approved Specific Plan includes an extension of Magic Mountain Parkway to the west into Newhall Ranch (see RMDP *Figure 39*). The purpose of this extension is to accommodate future traffic associated with the continued development of the Specific Plan area and surrounding region. This extension would cross several tributaries of the Santa Clara River using culverts. These tributaries would include Magic Mountain, Middle, Lion (at three locations), and Humble. Each tributary crossing would be approximately 94 to 100 feet in width. Construction of this type of crossing typically results in the temporary disturbance of a 60-foot wide corridor on each side of the crossing. Following completion of construction activities, the temporary impact zone would be restored to channel grade and revegetated with native riparian and upland species as appropriate.

3.3.6 Utility Crossings

Various electrical, sewer, water, gas, and communications lines would be installed across the Santa Clara River, Chiquito Canyon, San Martinez Canyon, Potrero Canyon, and Long Canyon, to serve the Specific Plan area. Typically, the utility lines would be installed in rights-of-way adjacent to bridges where access for installation and maintenance can be easily accommodated. Smaller utility lines serving local planning areas may cross beneath the bed of stabilized, regraded, or preserved channels and drainages.

3.3.7 Water Reclamation Plant (WRP) Outfall Construction

An effluent outfall pipeline would be constructed from the WRP through the bank stabilization to the bed of the Santa Clara River (see RMDP *Figure 21*). The pipe would be approximately 30 inches in diameter, with the ultimate size determined during final design. The outfall pipe would terminate on the side of the bank stabilization, where an energy dissipater would be located. An earthen channel would be excavated and adjacent walkway would be cleared to reach the actual flow path of the river. The walkway would be used to obtain water samples and would be routinely maintained. The channel would be constructed using a concrete lining or compacted soil and may require routine maintenance to restore flow capacity.

3.3.7.1 Activities Associated With WRP Outfall Construction

The WRP would be located on the south side of SR-126, adjacent to the Santa Clara

River and near the Los Angeles County/Ventura County boundary line. It would be constructed completely on agricultural and other previously disturbed land. The WRP was reviewed and approved at the project level in the Los Angeles County Specific Plan EIR (May 2003).

The WRP would have a treatment capacity of about 6.8 million gallons per day (MGD). The WRP will consist of primary, secondary, and tertiary treatment facilities, as well as solids handling and disinfection facilities. A new sanitation district has been formed, and its boundary coincides with that of the Specific Plan. The WRP would be constructed, operated, and maintained by Los Angeles County Sanitation District in accordance with its specifications and requirements, as well as the requirements of other public agencies, including the RWQCB. The RWQCB has issued an NPDES permit for the first phase of the WRP (September 2007).

3.3.8 Water-Quality Control Facilities

The Specific Plan will be subject to Section 402(p) of the CWA, which regulates construction, municipal, and industrial stormwater discharges under the NPDES program. This program requires that all flood control facilities be in compliance with the General Permit for Los Angeles County, or through conditions placed upon individual NPDES permits.

For a more detailed discussion of water-quality control facilities, please see *Section 6.6* of the attached RMDP.

3.3.8.1 NPDES Water-Quality Basins

Thirteen NPDES water-quality basins have been proposed throughout the RMDP area. Eight of the basins would be located on or adjacent to drainages near the points where they enter the Santa Clara River. (See *Figures 40* and *41* of the RMDP).

3.3.8.2 Debris Basins

The Specific Plan area consists of numerous open drainage channels fed by watershed areas above the site, and storm drains and slopes on the site. These channels in turn drain into the Santa Clara River. Debris basins are proposed to be located at the interface between development and undeveloped areas upstream, primarily to trap debris coming from the upper watersheds. The general locations of the proposed debris basins are depicted on *Figure 43* of the RMDP.

3.3.8.3 Detention Basins

Detention basins are typically sized to capture the predicted runoff volume and retain the design volume for a period typically between 24 and 48 hours. Detention basins can be designed with multiple stages to provide both flood control and water-quality benefits. The upper stage is designed to store a large volume of runoff to reduce flood peaks. The lower, smaller volume stage provides slower drainage times to promote water quality by settling of particulates and removal of nutrients, heavy materials, and other pollutants

potentially present in the sediment. (See *Figure 41* of the RMDP).

3.3.8.4 Catch Basin Inserts

Catch basin inserts are screens or filters that are installed in existing or new storm drains to capture pollutants in the stormwater runoff. Catch basin inserts are proposed for use at various locations throughout the planned storm drain system to treat lower flow stormwaters prior to reaching downstream BMPs.

3.3.8.5 Bioretention

Vegetated swales are linear bioretention features often located adjacent to portions of busy roads, next to the frontage or in the medians, as well as in parking lots. They are engineered grass-lined channels that provide water-quality benefits in addition to conveying stormwater runoff. Low slopes and vegetation reduce the velocity of stormwater flow, aiding in sediment removal, and increased adsorption and filtration (see *Figure 42* of the RMDP). Final locations and number of bioretention features will be determined during the final subdivision map design.

3.3.9 Ongoing Maintenance Activity by LACDPW

Maintenance of flood, drainage, and water-quality protection facilities will involve the periodic inspection of the structures to ensure that the structures are intact, and to monitor vegetation growth and sediment buildup at or near the structures. These maintenance activities will ensure the integrity of the structures is maintained and that planned conveyance capacity is present. Vegetation and sediment will be removed when the capacity of facilities has been reduced.

In addition, LACDPW conducts a regular maintenance program to ensure that all flood control structures operate at their design standards. In the RMDP area, this may include activities such as:

- Periodic removal of woody vegetation from riprap to protect its structural integrity
- Periodic clearing of storm drain outlets to ensure proper drainage
- Periodic removal of ponded water that causes odor and/or mosquito problems
- As needed repairs and routine maintenance of bridges
- As needed repairs of bank protection
- As needed cleaning of detention and debris basins and removal of deposits per approved maintenance procedures
- Emergency maintenance activities

3.3.10 Temporary Haul Routes for Grading Equipment

During construction, approximately three temporary haul routes that cross the Santa Clara River would be used to move excavated soil to locations within the Project area where fill is needed. The approximate locations of the proposed crossings are depicted on *Figure 45* of the RMDP. The travel roadway width of a two-way crossing is approximately 60 feet and the width for a one-way crossing is approximately 30 feet. In locations where the riverbank is steep and ramping is required, fill will be placed in the river to create a safe slope ratio for passage of heavy equipment. Extra width for the side slopes of such crossings would be required.

3.3.11 Recreational Facilities

The Specific Plan Master Trails Plan encompasses a comprehensive system of bicycle, pedestrian, and equestrian trails that would facilitate movement throughout the Specific Plan area. The Master Trails Plan also provides potential connections to regional trail systems within the Santa Clarita Valley. Trails are a key component of the recreation element of the Specific Plan and provide public access to open space within the Specific Plan area. Trail crossings would be required in or adjacent to the Santa Clara River and its drainages within the RMDP area to provide continuity.

In addition to the elements adopted in the Master Trails Plan, the RMDP proposes to construct three to five nature viewing platforms that would be located in jurisdictional areas along the Santa Clara River.

3.3.12 Stream Habitat Enhancement and Restoration Activities

The RMDP incorporates a variety of design features that minimize impacts to riparian resources. These features include avoidance, minimization, restoration of riparian habitat, and enhancement activities. The avoidance and minimization features are included as part of the goals of the RMDP. This section highlights the restoration and enhancement activities contemplated by the RMDP.

Restoration Design Features. Riparian resources along the Santa Clara River that are impacted by the RMDP would require restoration. The primary objective of restoration efforts would be to provide habitat quality and values similar to pre-project conditions.

Habitat restoration activities that would be implemented in conjunction with the RMDP include revegetation of native plant communities on candidate sites contiguous to existing riparian habitats. Site restoration also would include the maintenance of revegetation sites, including the control of non-native plants and irrigation system maintenance. Monitoring of the restoration sites would be conducted to evaluate the success of revegetation efforts. Contingency plans and appropriate remedial measures to be implemented should habitat restoration objectives not be achieved would also be included in proposed habitat restoration plans.

Enhancement Design Features. Habitat enhancement associated with the RMDP includes rehabilitation of areas of native habitat that have been disturbed by past

activities (e.g., grazing, roads, and oil and natural gas operations) or have been invaded by non-native plant species, such as giant reed (*Arundo donax*) and tamarisk (*Tamarix* spp.). Without ongoing disturbance from cattle, vegetative conditions in many riparian areas would improve, although weed management would be necessary. Consequently, grazing would be excluded from the River Corridor SMA. However, controlled grazing may be used in areas such as the High Country SMA, Salt Creek Area, and Open Area as a means to manage annual grass growth instead of mowing or applying herbicides.

Not all enhancement areas would require supplemental plantings of native species. Some areas may support conditions conducive for rapid natural re-establishment of native species. The revegetation plan may incorporate means of enhancement to areas of compacted soils or poor soil fertility, locations containing trash or flood debris, and roadways as a way of increasing riparian habitat values. Removal of non-native species, such as giant reed, tamarisk, tree tobacco (*Nicotiana glauca*), and castor bean (*Ricinus communis*), to mitigate impacts shall be subject to the management requirements described in the Specific Plan.

Section 7.0 of the RMDP provides guidelines and methods for implementing riparian restoration and creation within the River Corridor SMA, High Country SMA, Salt Creek Area, and Open Area.

3.3.13 Various Roadway Improvements to SR-126

SR-126 is presently a four-lane highway between the Los Angeles/Ventura County line and its connection to I-5, approximately 1 mile east of the RMDP area. Chiquito Canyon Road/Del Valle Road is an existing two-lane road designated as a Limited Secondary Highway by the Santa Clarita Valley Area Plan. San Martinez Grande Road is an existing local road that provides access to portions of the RMDP area north of SR-126. The RMDP includes improvements to several existing roadways in the Project vicinity, including SR-126, Magic Mountain Parkway, Potrero Valley Road, Commerce Center Drive, Chiquito Canyon Road, San Martinez Grande Road, and Pico Canyon Road. Bridge-widening activities on SR-126 are discussed in *Section 3.3.5*, above.

3.3.14 Upland Development

Urban development in the RMDP area would involve grading on 3,239 acres for 20,885 units of residential and associated schools, libraries, roads, etc.; and grading on 524 acres for 5.5 million square feet of commercial use. [See the Los Angeles County Specific Plan approval documents submitted with this application.]

4. PROJECT LOCATION (CCR § 783.2(a)(4))

The RMDP site is located in an unincorporated portion of the Santa Clara River Valley in northwestern Los Angeles County. The site, approximately 13,651 acres in size, is located one-half mile west of I-5 and largely southwest of the junction of I-5 and SR-126. The site vicinity map (RMDP *Figure 2*, Vicinity Map) illustrates the RMDP site in its geographic context.

As illustrated in *Figure 2*, Vicinity Map, the 13,651-acre RMDP site is an irregularly-shaped site generally located between the Six Flags Magic Mountain Amusement Park on the east and the Los Angeles/Ventura County line and Salt Creek watershed boundary on the west. The City of Santa Clarita is located east of the site, approximately one mile from the RMDP site. SR-126 and the Santa Clara River transect the RMDP site from east to west; a majority of the RMDP area occurs south of SR-126 and the Santa Clara River. Land use types surrounding the site locally include: to the north, relatively sparse rural residential uses (the communities of Val Verde and San Martinez Grande), landfill uses (Chiquita Canyon), oil and natural gas production uses, high intensity business park uses (Valencia Commerce Center), urban single family homes and low intensity commercial uses (Castaic corridor), and undeveloped land; on the east, a water reclamation plant (Valencia WRP), a California Highway Patrol station, high intensity commercial/recreational uses (Six Flags Magic Mountain Amusement Park), hotels, restaurants and service stations adjacent to I-5, urban density residential uses (Stevenson Ranch), agriculture and undeveloped land; on the south, undeveloped land; and on the west, citrus orchards, agriculture, and oil and natural gas production uses and vacant undeveloped land.

5. POTENTIAL FOR TAKE (CCR § 783.2(a)(5))

"Take" is defined relative to the California Endangered Species Act (CESA) as hunting, pursuing, catching, capturing, or killing an individual of a listed species, or to attempt any such act. California Fish & Game Code § 86. "Incidental Take" is take that is incidental to otherwise lawful activities.

There are three CESA-listed species that have been identified as occupying the Project area[5]. They are the western yellow-billed cuckoo, the southwestern willow flycatcher, and the least Bell's vireo (See *Table 1* above). This is in addition to the special-status, but not CESA-listed, arroyo toad, tricolored blackbird and Western burrowing owl observed on the RMDP site (See *Table 2*.) There are also three undescribed species, sunflower, everlasting and spring snail observed on the RMDP site (See *Table 3*).

Disturbances associated with the RMDP will generally occur to riparian and adjacent upland habitats as a result of bridge construction, the placement of buried bank stabilization and grade control structures, drainage facilities and crossings, building pads, the WRP outfall construction, and other construction under the RMDP. The potential for and extent of take prior to mitigation, is significant, as all of these activities have the potential to disturb individuals and important habitat features. Specifically, an estimated 102 acres of riparian habitat and 5,014 acres of upland habitat would be permanently impacted by the development. An additional 59 acres of riparian habitat and 50 acres of upland habitat would be temporarily removed by the RMDP. Applicant would undertake minimization measures to avoid when possible, and fully mitigate when avoidance is not possible, the risk of the RMDP impacting the three CESA-listed species observed, the three special-status species, and the three undescribed species observed on the RMDP site. (See *Tables 1 and 2*). These mitigation measures are discussed in detail in *Section*

[5] Excluding the spineflower, which is the subject of a separate 2081 Incidental Take Permit application.

8, below.

6. IMPACTS OF PROPOSED TAKE ON THE SPECIES (CCR § 783.2(a)(6))

This section discusses the impacts of the proposed take. The mitigation for these impacts is discussed in *Section 8* below.

There will be direct impacts to riparian and adjacent upland habitats and species as a result of bridge construction, the placement of buried bank stabilization and grade control structures, drainage facilities and crossings, building pads, the WRP outfall construction, and other construction that would be authorized by the CDFG under the proposed RMDP. Permanent impacts total 68 riparian acres and 246 acres of upland areas.

For example, for bridge construction, permanent habitat loss would occur at locations for bridge footings in the riverbed as well as abutments on either side of the river, resulting in conversion of both riparian and upland habitat.

The permanent removal of riparian and upland habitats would also occur within and outside the riverbed for installation of various other Project components. This includes loss due to the installation of bank protection, the conversion of jurisdictional drainages to buried storm drains, and the excavation of non-riverbed areas containing existing habitat (i.e., agricultural lands) in order to create new riverbed. The latter impact is unusual because existing habitats outside the riverbed would be removed in certain areas in order to create new riverbed with different habitats. This impact represents a conversion of one habitat (usually upland habitats, but may include riparian habitats outside the riverbed such as cottonwood woodland) to another habitat (characteristics of riverbeds, such as willow scrub or open floodplain).

Due to the size of construction zones necessary to install the various facilities and improvements addressed by the RMDP, temporary impacts would occur in areas where grading or soil disturbance would occur for a short period of time (e.g., along the edges of proposed facilities), but in which no permanent structures or disturbance would occur. Specifically, the installation of bridges and bank stabilization would cause temporary impacts to adjacent habitats. Two bridges are proposed for the Santa Clara River, crossing at Potrero Canyon, and Long Canyon. Bridge construction would necessitate a 100-foot-wide disturbance corridor on each side of the new bridge. Prior to construction, the disturbance corridor would be cleared of vegetation using hand tools, mowers, and loaders for hauling cut material. Native plant material may be chipped and stockpiled for later use in revegetation or sent off-site for beneficial reuse. Non-native plant materials would be handled to ensure they do not spread and would be directed to an appropriate point of disposal. An estimated 59 acres of riparian habitat and 50 acres of upland habitat would be temporarily impacted by the RMDP.

Furthermore, under the RMDP, approximately 38,203 linear feet of buried bank stabilization would be placed along the Santa Clara River corridor and tributaries within the proposed Project area. Buried bank stabilization would utilize soil-cement buried

beneath the existing banks of the drainage. Burying the toe of the lining would require temporary excavation and backfilling, resulting in temporary impacts to adjacent habitats. A 85-foot-wide construction corridor would be established to allow excavation to bury the bank protection. The corridor would also be used to allow equipment access and stockpiling of temporarily excavated material. Prior to construction, the disturbance corridor, in areas involving native vegetation communities, would be cleared of vegetation using hand tools, mowers, and loaders for hauling cut material.

In addition to the direct impacts of the RMDP construction activities, the RMDP would also facilitate the urban development of riparian and upland areas within the RMDP area totaling 33 acres and 4,768 acres, respectively.

CESA-LISTED WILDLIFE SPECIES OBSERVED IN THE PROJECT AREA

Bird Species

6.1 Southwestern Willow Flycatcher (Federal and State Listed Endangered)

Impacts of the Proposed Take:

No southwestern willow flycatchers (*E. t. extimus)* have been observed on site. Willow flycatchers (either *E. t. adastus* or *E. t. brewsteri,* i.e., not southwestern willow flycatchers) have been detected almost every year within the Santa Clara River corridor during focused bird surveys on the RMDP site. All observations of willow flycatchers within the region have been concluded to be migrants that were only detected once or were only detected during the first two survey periods and not during the survey period between June 22 and July 17 when only the southwestern willow flycatcher would be present. No observations of nesting, paired, or territorial southwestern willow flycatchers have been documented within the RMDP site.

Construction activities associated with implementation of the proposed RMDP could have adverse effects on southwestern willow flycatchers in areas adjacent to construction zones. Because it is a relatively mobile species and has not been observed nesting within the Project area, it is unlikely that Project-related construction activities would result in the loss of individual adult southwestern willow flycatchers. However, if southwestern willow flycatchers were to nest on site in the future, implementation of the proposed RMDP could result in mortality of southwestern willow flycatchers due to destruction of nests and loss of young if such construction/grading activities occurred during the nesting season. These impacts include construction-related noise and ground vibration, fugitive dust, nighttime illumination, and contact with polluted runoff, and could be considered significant absent mitigation. In particular, construction-related noise, vibration, and nighttime illumination could adversely affect nesting and breeding behavior, resulting in a decrease in nesting success if this species breeds on site in the future.

Build-out of the RMDP area would convert lands adjacent to the River Corridor SMA to urban uses and could result in adverse edge effects on southwestern willow flycatcher populations within the River Corridor SMA. These long-term potential secondary impacts include harassment by humans, predation and resource competition by pets and

non-native animal species (i.e., brown-headed cowbirds), invasion by exotic plant species such as giant reed and tamarisk, increased trash, increased native and non-native mesopredators (e.g., skunks, raccoons, and opossums) as a result of increased habitat fragmentation, degraded water quality, hydrologic and geomorphic alterations, cattle grazing, noise, and nighttime illumination. Chronic traffic noise and lighting associated with roads and bridges in close proximity to potential breeding habitat in the River Corridor SMA could have adverse effects on the establishment of breeding territories and reproductive success.

The southwestern willow flycatcher could, in the future, occur in riparian habitats (southern cottonwood–willow riparian forest, southern coast live oak riparian forest, and southern willow scrub); a total of 446 acres of such habitat types currently exist in the Project area. Approximately 20 acres of these vegetation communities within the RMDP site would be directly permanently impacted, representing 4.4% of these communities on site and approximately 36 acres of nesting habitat will be directly temporarily impacted. Additionally, approximately 6 acres of these vegetation communities would be indirectly permanently impacted by the build-out of the RMDP area, representing 1.3% of these communities on site.

The impact of the take would be significant prior to mitigation.

6.2 Western Yellow-Billed Cuckoo (State Listed Endangered)

Impacts of the Proposed Take:

This species is endangered and has occasionally been documented within the Santa Clara River corridor during focused bird surveys on the RMDP site. However, all observations of this species on site have been presumed to be migrating individuals using the site for foraging, with foraging sites being generally within and above dense riparian vegetation (Guthrie, 1997a, 1997b; Labinger and Greaves 1999). This species has been observed historically in 1979, 1981, and 1992 (Labinger et al. 1997a), but not in the last 16 years. No observations of nesting, paired, or territorial cuckoos have been documented within the RMDP site.

Construction activities associated with implementation of the proposed RMDP could have adverse effects on cuckoos in areas adjacent to construction zones. Because it is a relatively mobile species and has not been observed nesting within the Project area, it is unlikely that Project-related construction activities would result in the loss of individual adult western yellow-billed cuckoos. However, if western yellow-billed cuckoos were to nest on site in the future, implementation of the proposed RMDP could result in mortality of western yellow-billed cuckoos due to destruction of nests and loss of young if such construction/grading activities occurred during the nesting season. These impacts include construction-related noise and ground vibration, fugitive dust, nighttime illumination, and contact with polluted runoff, resulting in potential harm to individual birds, young, and/or eggs, and could be considered significant absent mitigation. In particular, construction-related noise, vibration, and nighttime illumination could adversely affect nesting and breeding behavior, as well as other activities, resulting in decreased nesting

success if this species breeds on site in the future. Build-out of the RMDP area would convert lands adjacent to the River Corridor SMA to urban uses, and could result in adverse edge effects on western yellow-billed cuckoo within the River Corridor SMA. Potential long-term secondary impacts associated with the RMDP area build-out include noise, nighttime illumination, hydrologic and geomorphic alterations, reduced water quality, cattle grazing, invasion by exotic plant species such as giant reed and tamarisk, increased trash, harassment by humans, predation and resource competition by pets and non-native animal species, and increased native and non-native mesopredators (e.g., skunks, raccoons, and opossums) as a result of increased habitat fragmentation. Chronic traffic noise and lighting associated with roads and bridges in close proximity to potential breeding habitat in the River Corridor SMA could have adverse effects on the establishment of breeding territories and reproductive success.

The western yellow-billed cuckoo could, in the future, occur in riparian habitats (southern cottonwood–willow riparian forest, southern coast live oak riparian forest, and southern willow scrub); a total of 446 acres of such habitat types currently exist in the Project area. Approximately 20 acres of these vegetation communities within the RMDP site would be directly permanently impacted, representing 4.4% of these communities on site and approximately 36 acres of nesting habitat will be directly temporarily impacted. Additionally, approximately 6 acres of these vegetation communities would be indirectly permanently impacted by build-out of the RMDP area, representing 1.3% of these communities on site.

The impact of the take would be significant prior to mitigation.

6.3 Least Bell's Vireo (Federal and State-Listed Endangered)

Impacts of the Proposed Take:

This species regularly uses portions of the Santa Clara River corridor (southern cottonwood–willow riparian forest and southern willow scrub) totaling 457 acres within the Project area for nesting and foraging during the breeding season (typically March through August). It also potentially forages in upland shrubland and woodland habitats (big sagebrush scrub, California sagebrush scrubs, chaparrals, coast live oak woodland, and valley oak woodland) within 100 feet of the southern cottonwood–willow riparian forest and southern willow scrub; a total of approximately 69 acres of such habitat types currently exist in the Project area. The Project area includes federally designated critical habitat for the vireo. Because this species is relatively mobile, it is unlikely that Project-related construction activities would result in loss of individual, adult vireos. However, implementation of the proposed RMDP could result in mortality of vireos due to destruction of nests and loss of eggs or young if such construction/grading activities occurred during the nesting season.

Short-term, construction-related impacts associated with RMDP build-out could affect this species in areas adjacent to construction zones. These secondary impacts include construction-related noise and ground vibration, fugitive dust, nighttime illumination, and contact with polluted runoff, resulting in potential harm to individual birds, young, and/or

eggs. In particular, construction-related noise, vibration, and nighttime illumination could adversely affect nesting and breeding behavior, resulting in a decrease in nesting success.

Build-out of these developments would convert lands adjacent to the River Corridor SMA to urban uses, and could result in adverse edge affects on least Bell's vireo populations within the River Corridor SMA. Long-term potential secondary impacts associated with the RMDP area include harassment by humans, noise, nighttime illumination, predation and resource competition by pets and non-native animal species (i.e., brown-headed cowbirds), invasion by exotic plant species such as giant reed and tamarisk, increased trash, increased native and non-native mesopredators (e.g., skunks, raccoons, and opossums) as a result of increased habitat fragmentation, hydrologic and geomorphic alterations, cattle grazing, and degraded water quality.

Southern cottonwood–willow riparian forest and southern willow scrub vegetation communities and upland shrubland and woodland habitats (big sagebrush scrub, California sagebrush scrubs, chaparrals, coast live oak woodland, and valley oak woodland) within 100 feet of the willow riparian communities are suitable least Bell's vireo habitats that contain the primary constituents for sustaining their populations. Approximately 20 acres (4.4%) of southern cottonwood–willow riparian forest and southern willow scrub and 5 acres (6.5%) of adjacent upland habitats will be permanently lost, and approximately 36 acres of nesting habitat and 0.6 acre of upland foraging habitat will be directly temporarily impacted.

Federally designated critical habitat for the least Bell's vireo extends along the Santa Clara River from the Los Angeles/Ventura County line to I-5, through the Project area. The Santa Clara River critical habitat unit includes all land within a 3,500-foot-wide swath generally along the river channel from a point about 2.3 miles east of the intersection of Main Street and SR-126 in Piru on the west to the intersection of SR-126 with its junction with The Old Road and eastward and southward along The Old Road to its intersection with Rye Canyon Road. The Santa Clara River critical habitat unit totals approximately 4,410 acres, or approximately 12%, of the total of 38,000 acres of least Bell's vireo critical habitat. The Newhall Land portion of the critical habitat unit comprises approximately 4,213 acres: about 95% of the Santa Clara River critical habitat unit and 11% of the total least Bell's vireo critical habitat. Of this, the Project area within least Bell's vireo critical habitat totals 2,252 acres, or 6% of the total acres of least Bell's vireo critical habitat.

For the purpose of this analysis, primary constituent elements are defined as willow riparian habitats (southern willow scrub and southern cottonwood–willow riparian forest) that provide the primary breeding habitat for the least Bell's vireo, other wetland/riparian habitat interspersed with the willow riparian habitats, and native upland shrub (big sagebrush scrub, California sagebrush scrub, chaparral, and coyote brush scrub) and oak woodland (coast live oak and valley oak) habitats within 100 feet of the edge of willow riparian habitats that may be used for foraging. The 100-foot zone is based on the Kus and Miner (1989) study showing that most least Bell's vireo upland foraging occurs within 98 feet of the edge of riparian vegetation, with a mean distance of about 51 feet.

Approximately 810 acres of the 2,252-acre least Bell's vireo critical habitat designation on Newhall Land property within the Project area is made up of riparian/wetland habitats and an additional 44 acres are upland shrublands and woodlands within 100 feet of willow riparian habitat that comprise primary constituent elements of the critical habitat. The majority of the critical habitat designation in the Project area (approximately 1,408 acres) is made up of upland areas, including areas currently used for agriculture, livestock grazing, and oil production that are outside the existing Santa Clara River corridor.

Implementation of the proposed RMDP and build-out of the RMDP area would result in a permanent loss of 38 acres of riparian/wetland critical habitat (inclusive of all riparian vegetation community types, assuming that least Bell's vireos will at least forage in non-willow riparian habitats, including mulefat scrub and southern coast live oak riparian forest). This represents a permanent loss of 4.6% of the 810 acres of riparian/wetland critical habitat as a result of construction of RMDP facilities and build-out of the RMDP area. Of this area, impacts to habitats that provide the most suitable breeding habitat for the least Bell's vireo include 15 acres of southern cottonwood–willow riparian forest and 1 acres of southern willow scrub. Permanent loss of upland habitats containing primary constituent elements would comprise 8 acres, representing 17.5% of the 44 acres of upland primary constituent elements of critical habitat within the proposed Project area as a result of construction of RMDP facilities and build-out of the RMDP area. Overall, the permanent loss of 45 acres of habitat containing primary constituent elements represents a loss of 5.3% of the 854 acres of primary constituent elements of critical habitat as a result of construction of RMDP facilities and build-out of the RMDP area. An additional 48 acres of riparian/wetland critical habitat would be temporarily disturbed by bank stabilization and outfall construction associated with the RMDP.

The impact of the take would be significant prior to mitigation.

SPECIAL-STATUS WILDLIFE SPECIES OBSERVED IN THE PROJECT AREA BUT NOT CESA-LISTED AS ENDANGERED, THREATENED OR CANDIDATE

Amphibian Species

6.4 Arroyo Toad (Federal Endangered and California Species of Special Concern)

Impacts of Proposed Take

This species is primarily aquatic, but utilizes aquatic, riparian, and upland habitats to different degrees depending on an individual's stage of development and the season. Adult arroyo toads have not been detected within the Project area, but a study by Aquatic Consulting Services, Inc. (2002a, 2002b) documented the presence of arroyo toad tadpoles in the Santa Clara River within the eastern portion of the RMDP site. Implementation of the proposed RMDP would require the construction of bridges and bank stabilization within areas of the Santa Clara River corridor containing high-quality arroyo toad habitat. Other construction activities would occur in areas containing moderate- to low-quality habitat. Additionally, build-out of the RMDP area would

include construction in riparian and upland habitats potentially occupied by arroyo toad. It is foreseeable that construction within the RMDP area could result in mortality of individual arroyo toad adults or tadpoles, if they occur within construction zones.

The RMDP includes the construction of bridges and bank stabilization within the Santa Clara River corridor. Build-out of the RMDP area would increase impervious surfaces in the surrounding watershed, which, in the absence of water detention basins and other facilities, would increase surface runoff into the Santa Clara River. The Flood Technical Report (PACE 2006) found that there would be no significant impacts in water flows, velocities, depth, sedimentation, or floodplain and channel conditions downstream of the Project area as a result of the proposed Project improvements. These hydraulic effects were also found to be insufficient to alter the amount, location, and nature of aquatic and riparian habitats within the Project area and downstream into Ventura County over the long term. The technical analysis further determined that the Santa Clara River would still retain sufficient width to allow natural fluvial processes to continue. As a result, the mosaic of habitats in the Santa Clara River that support various special-status species, including arroyo toad, would be maintained, and the populations of the species within and immediately adjacent to the Santa Clara River corridor would not be substantially affected.

Although long-term secondary impacts of the RMDP area build-out would not be substantial, the proposed Project could affect arroyo toads downstream of work areas through short-term hydrologic or water-quality alterations of the River during construction. In addition, RMDP-related work could disperse sediments and pollutants from construction on upland portions of the site into the Santa Clara River. Hydrologic and water-quality-related impacts could include changes to the base flows, changes to the timing and duration of flood flows, discharges of chemical pollutants, increased turbidity and sedimentation, and changes in water temperature due to short-term changes to the active channel morphology. Absent mitigation, these factors could result in harm to or mortality of arroyo toads and degradation of habitat quality.

Further, the occupancy of the RMDP area, over the long term, could result in adverse secondary effects to arroyo toads. Specifically, the proximity of urban development to suitable arroyo toad habitat could result in disruption of nocturnal activities and greater vulnerability to predation by nocturnal predators (such as owls and coyotes) as a result of nighttime lighting; greater vulnerability to predation by pet, stray, and feral cats and dogs as well as other mesopredators (see Crooks and Soulé 1999); collecting by children; degradation of habitat from increased human use (e.g., trampling, trash, and off-road vehicles) and altered fire regimes (likely too frequent fire); invasion by exotic plant (e.g., giant reed, tamarisk, and pampas grass) and wildlife species (e.g., bullfrogs, African clawed frogs, exotic fish, and crayfish); and increased risk of roadkill on roads adjacent to occupied areas.

Alluvial scrub, southern cottonwood–willow riparian forest, herbaceous wetlands, mulefat scrub, southern coast live oak riparian forest, river wash, southern willow scrub, and tamarisk scrub vegetation communities are suitable habitat for the arroyo toad, if located within proximity to the Santa Clara River corridor. The arroyo toad habitat

assessment conducted by Impact Sciences (2002) evaluated 1,476 acres of suitable habitat for the species within the Project area, including 857 acres of high-quality habitat, 65 acres of moderate-quality habitat, and 554 acres of low-quality habitat. Implementation of the RMDP would result in the permanent loss of 89 acres of suitable habitat and temporary impacts to 78 acres of suitable habitat for the species. Suitable habitat subject to temporary impacts would be revegetated with native vegetation following the completion of construction in the area). Build-out of the RMDP area would result in the permanent loss of 351 acres of suitable habitat, representing 23.8% of suitable habitat present. More specifically, of the 857 acres of high-quality habitat, 34 acres (4.0%) would be permanently lost and 48 additional acres (5.6%) would be temporarily disturbed due to implementation of the RMDP, while 4 acres (0.5%) would be permanently lost due to build-out of the RMDP area; of the 65 acres of moderate-quality habitat, 7 acres (10.8%) would be permanently lost and 7 additional acres (10.8%) would be temporarily disturbed due to implementation of the RMDP, while 4 acres (6.2%) would be permanently lost due to build-out of the RMDP area; and of the 554 acres of low-quality habitat, 49 acres (8.8%) would be permanently lost and 23 additional acres (4.2%) would be temporarily disturbed due to implementation of the RMDP, while 343 acres (61.9%) would be permanently lost due to build-out of the RMDP area. See Table 4 for a summary of these impacts.

Table 4
Impacts to Suitable Habitat for Arroyo Toad

		Impacts due to Implementation of the RMDP (Acres)				Impacts due to Build-out of the RMDP Area (Acres)			
Suitable Habitat Type	Total Acres in the Project Area	Perm	Percent of suitable habitat on site	Temp	Percent of suitable habitat on site	Perm	Percent of suitable habitat on site	Total Impacts	Percent of suitable habitat on site
High-quality	857	34	4.0%	48	5.6%	4	0.5%	86	10.0%
Moderate-quality	65	7	10.8%	7	10.8%	4	6.2%	18	27.7%
Low-quality	554	49	8.8%	23	4.2%	343	61.9%	415	74.9%
Total	**1,476**	**90**	**6.1%**	**78**	**5.3%**	**351**	**23.8%**	**519**	**35.2%**

Following build-out of the RMDP, the physical changes to the River Corridor SMA and surrounding watershed could result in permanent hydrologic and biogeochemical changes in the Santa Clara River within and downstream of the Project area. Depending upon the nature and extent of these changes, and absent mitigation, it is conceivable that arroyo toads and, in particular, their breeding habitat, could be affected by alterations in the river's base flow, timing and duration of flood flows, extent of side pools and marginal aquatic habitats, and presence of aquatic and riparian vegetation. In addition, discharges of chemical pollutants, increased turbidity, sedimentation in the river and tributaries, and introduction of non-native species could directly affect individual arroyo toads exposed to these effects as well as degrade breeding, foraging, aestivation, and overwintering habitat.

The impacts of the take would be significant prior to mitigation.

Bird Species

6.5 Western Burrowing Owl (Federal Bird of Conservation Concern and California Species of Special Concern)

Impacts of the Proposed Take:

The western burrowing owl has been observed anecdotally at two locations on site. A single western burrowing owl individual was observed twice at the same location within a four-week period (November and December 2006) in the northern portion of Middle Canyon, east of Airport Mesa, in ruderal habitat. It was perched outside of a ground squirrel burrow it had been occupying and then flew to a fence post (Babcock 2007). Another individual was observed in December 2006 in Middle Canyon, and again on April 11, 2007 (Miller 2007). It was observed on the upslope portion of a hill with relatively bare coverage, adjacent to the road near coastal scrub, utilizing a small mammal burrow, which it appeared to have only recently occupied. Given the timing of the sightings (winter of 2006 and spring of 2007) and the fact that there have been no other observations of the western burrowing, the observed individuals may have been wintering on site or temporarily using the site during migration.

Suitable habitat for this species exists in the upland portions of the RMDP area. Ground squirrels (*Spermophilus beecheyi*), with which burrowing owls are frequently associated and whose burrows are frequently used by western burrowing owls for nesting and shelter, are present in grasslands, oak woodlands, and agricultural areas on site (Impact Sciences 2005). Because only two western burrowing owls have been detected within the Project area over the course of many years of focused surveys within both upland and riparian habitats, as noted above, it is unlikely that resident breeding populations of this species occur on the site or that the site is used extensively for nesting or foraging.

The proposed RMDP would result in a loss of 167 acres (3.3%) of foraging, nesting, and/or wintering habitats and temporary impacts to 42 acres of these habitats; build-out of the RMDP area would result in loss of 3038 acres (59.4%) of these habitats. Because the western burrowing owl is highly mobile, it is unlikely that construction activities within the RMDP area would result in mortality of adult birds of this species. However, should burrowing owls nest within suitable upland areas of the RMDP area in the future, construction and grading activities could destroy active owl burrows (including adults, young and/or eggs) if such activities occurred during the nesting season.

Short-term, construction-related impacts associated with RMDP implementation could affect individuals in upland habitats adjacent to construction zones. These impacts include exposure to fugitive dust, construction-related noise and ground vibration, and disturbance associated with human activity, resulting in potential harm to individuals, abandonment of burrows, or a decrease in nesting success of western burrowing owl. Long-term secondary impacts from the proposed Project include urbanization of lands within and adjacent to suitable western burrowing owl nesting habitat in the Project area.

Such development could result in secondary impacts to western burrowing owl including habitat fragmentation, and reduced nest success due to nighttime lighting, noise disturbance, and harassment/disturbance to nest sites from humans and pets if such disturbance occurs during the nesting season. The use of pesticides to control insects and rodenticides to control small mammals (i.e., mice) within and adjacent to open foraging areas could result in indirect poisoning to the western burrowing owls and a reduction in prey. In addition, the build-out of roads and the increase in vehicular traffic will likely result in an increase in automobile-related deaths of western burrowing owls.

California annual grassland, purple needlegrass, agriculture, and disturbed land constitute suitable habitat for this species. Approximately 167 acres (3.3%) of these vegetation communities and land covers will be directly permanently removed and 42 acres of these vegetation communities and land covers will be directly temporarily impacted. An additional 2,820 acres (55.1%) of these vegetation communities and land covers will be permanently removed due to build-out of the RMDP area.

The impacts of the take would be significant prior to mitigation.

.6.6 Tricolored Blackbird (Federal Bird of Conservation Concern and California Species of Special Concern)

Impacts of the Proposed Take:

This species has been observed within the Project area during focused bird surveys. In 1994, a flock of approximately 200 breeding pairs of tricolored blackbirds was observed in Castaic Junction, just outside of the Project area, in a small marsh with cattails that "appeared to be an old borrow pit left over from work on flood control dikes" (Guthrie 1994). Also in 1994, another flock of approximately 20 breeding pairs of tricolored blackbirds was observed in a small pond with cattails next to Castaic Creek (Guthrie 1994). In 1995 (Guthrie 1995) and 1996 (Guthrie 1996a), small flocks visited the Castaic Creek site again in April and May, but did not breed there. Labinger et al. (1995) observed a small nesting colony within the Project area; however, the specific location is not known and was not mapped. Migrants have also been observed within the RMDP area (Guthrie 1996b, 1999a), VCC development area (Guthrie 1999b, 2006a), and off site in Castaic Junction (Guthrie 2000, 2001, 2006b; Dudek 2006a) during surveys, but no breeding colonies have been observed since 1994, despite annual surveys through 2007 as described above. A flock of 20 tricolored blackbirds was observed in Potrero Canyon in 1994 but not mapped (Guthrie 1994), and a flock of 50 birds was seen on the Newhall Ranch property north of Mayo Crossing but was not mapped (Impact Sciences, Inc. 1999).

The tricolored blackbird nests in marsh habitat (bulrush–cattail wetlands and coastal and valley freshwater marsh) and forages in riparian and upland areas (cismontane alkali marsh, herbaceous wetlands, grasslands, agriculture, and disturbed land). Most foraging occurs within 3.1 miles of colony sites (Beedy and Hamilton 1999). In total, there are 3 acres of nesting habitat and 5,318 acres of foraging habitat within 3.1 miles of the River Corridor SMA. This species has not been observed nesting on site since 1994; however,

because it has been observed periodically on site, there is potential for the species to nest. The tricolored blackbird is a relatively mobile species and it is unlikely that Project-related construction activities would result in the loss of or harm to individual adult birds. However, should this species nest within suitable areas of the Project area in the future, construction and grading activities could destroy active nests (including adults, young and/or eggs) if such activities occurred during the nesting season.

Short term, construction-related impacts associated with RMDP implementation and subsequent build-out of the RMDP area could affect individuals in habitats near the construction zones. These impacts include exposure to fugitive dust, construction-related noise and ground vibration, lighting, water quality, and disturbance associated with human activity, resulting in harm to individuals or a decrease in nesting success of the tricolored blackbird. In addition, due to the itinerant nature of this species, it could occur on site to nest unpredictably within the Santa Clara River corridor. Long-term secondary impacts associated with the proposed Project also could occur. These impacts include habitat fragmentation, nighttime illumination, increased human activity, and potential harassment by humans and pet, stray, and feral cats and dogs. Chronic traffic noise and lighting associated with roads and bridges in close proximity to potential breeding habitat in the River Corridor SMA could also have adverse effects on the establishment of breeding colonies and reproductive success. Tricolored blackbird nesting colonies are particularly vulnerable to human-related disturbance and activity because they nest low to the ground in large numbers and with nests close to each other.

Approximately 0.6 acre of suitable nesting habitat will be directly permanently removed, representing 17.6% of these communities on site. No temporary impacts to these vegetation communities would occur as a result of implementation of the RMDP. Permanent removal of suitable foraging habitat includes approximately 177 acres, representing 3.3% of these communities on site; approximately 44 acres of these vegetation communities and land covers will be directly temporarily impacted within 3.1 miles of the River Corridor SMA. Build-out of the RMDP area would result in the loss of 0.1 acre (2.9%) of nesting habitat and approximately 2,820 acres (53.0%) of suitable foraging habitat within the 3.1-mile buffer

The impacts of the take would be significant prior to mitigation.

UNDESCRIBED PLANT AND WILDLIFE SPECIES OBSERVED IN THE PROJECT AREA

Plant Species

6.7 Sunflower (No Current Status)

Impacts of the Proposed Take:

A population of 10 undescribed sunflowers was found in 2002 at Middle Canyon Spring on the south side of the Santa Clara River between Middle Canyon and San Jose Flats within the RMDP area (Dudek 2002). No undescribed sunflower individuals occur within the RMDP area impact boundaries. Therefore, implementation of the proposed

RMDP, and subsequent build-out of the RMDP area, would not directly impact any *Helianthus* plants within the Project area.

Construction-related secondary impacts associated with the proposed Project could affect the undescribed sunflower. These impacts include exposure to fugitive dust and polluted runoff in proximity to the plants. In addition, the introduction of chemical pollutants and alterations to the hydrologic and/or biogeochemical properties of Middle Canyon Spring could result in adverse impacts to the undescribed sunflower. Specifically, potential changes in hydrologic and/or biogeochemical properties of the spring may occur due to dewatering construction of bridge footings located 60 feet to the east of the spring complex in which this species occurs. Intrusion into the spring by humans and the introduction of non-native, invasive plants and animals could also jeopardize the undescribed sunflower plants.

This species is not considered "special-status" by state or federal regulatory agencies. It nevertheless can be considered "rare" as defined by CEQA due to its status as an undescribed species and because no other populations of this species were found in the Project area.

The impacts of the take would be significant prior to mitigation.

6.8 Everlasting (No Current Status)

Impacts of the Proposed Take:

Two main populations and a number of smaller populations of this undescribed plant species were documented within the Project area during the 2003, 2004, 2005, and 2007 field seasons (Dudek 2004a, 2004b, 2006c, 2007a). These occurrences are primarily on secondary alluvial benches in the Santa Clara River near the mouth of Long Canyon and where Castaic Creek and the Santa Clara River converge, south of SR-126. The vegetation around these plants consists of sparsely vegetated open river wash. The undescribed everlasting is almost always associated with alluvial soils, often being found on the benches along major washes. Sandy alluvial land occurs mostly on floodplains along the Santa Clara River and its tributaries.

No undescribed everlasting individuals occur within the RMDP or Specific Plan construction impact boundaries. Therefore, implementation of the proposed RMDP, and subsequent build-out of the RMDP area, would not directly impact this species within the Project area.

Construction-related secondary impacts associated with the proposed Project could affect the undescribed everlasting. These impacts include exposure to fugitive dust and polluted runoff in proximity to the plants. In addition, the introduction of chemical pollutants and alterations to the hydrologic and/or biogeochemical properties of the Santa Clara River could result in adverse impacts to the undescribed everlasting. Intrusion into the spring by humans and the introduction of non-native, invasive plants and animals could also jeopardize the undescribed everlasting plants on site.

This species is not considered "special-status" by state or federal regulatory agencies. It nevertheless can be considered "rare" as defined by CEQA due to its status as an undescribed species and because no other populations of this species were found in the Project area.

The impacts of the take would be significant prior to mitigation.

Mollusk Species

6.9 Spring Snail (No Current Status)

Impacts of the Proposed Take:

The species was first observed within Middle Canyon Spring by USFWS biologists in 2006. In 2007, Dudek biologists observed over 100 of the undescribed snails in Middle Canyon Spring as well as in the lower reach of Middle Canyon Creek, both below and within the agricultural field, and immediately below the river terrace where the spring discharges into the upper river floodplain (Dudek 2007b). This portion of the creek where the undescribed snails were observed appeared to be maintained perennially by agricultural runoff. Thus, it is expected that, without the artificial input of water from agricultural practices, this habitat would not be available to the snails.

Implementation of the RMDP would not result in permanent or temporary impacts to the undescribed snails in Middle Canyon Spring but would permanently impact Middle Canyon Creek. Impacts to Middle Canyon Creek would result in the loss of known occupied habitat for the species as well as the direct loss of or harm to individuals of the undescribed snail species located in the adjacent lower Middle Canyon Creek. Build-out of the RMDP area would not impact individual undescribed snails.

RMDP facilities (road with bridge abutments and flood control features) would be constructed within Middle Canyon Creek. Construction of these RMDP facilities could adversely affect the undescribed snail species during construction from earthmoving, dewatering, or by impairing water quality by increasing sedimentation or polluted runoff that enters the spring. Such changes to water quality could affect the snails by reducing individual health, reducing the availability of organisms upon which the snail feeds, or reducing reproduction by smothering breeding areas. Most hydrobiid snails are sensitive to oxygen deficits below saturation levels, elevated water temperatures, and sedimentation, and they avoid areas subject to eutrophication or periodic hypoxia (Monthey 1998). Alterations to the hydrologic and/or biogeochemical properties of the spring could result in adverse impacts to populations of the snail. Specifically, potential changes in hydrologic and/or biogeochemical properties may occur due to dewatering and construction of bridge footings located 60 feet to the east of the spring complex in which the species occurs. Intrusion into the spring by humans and domestic animals could also jeopardize the undescribed snail individuals.

Construction activities associated with the Specific Plan as well as the future occupancy of the RMDP area could adversely affect the undescribed snail species. Construction-related secondary impacts that could occur include increased sedimentation, polluted

runoff, and the disruption of water quantity or flow through the spring. Alteration of topography and construction of impermeable surfaces from development within the vicinity of the Middle Canyon Spring could impair subsurface aquifer hydrology that feeds the Middle Canyon Spring by diverting surface water and by reducing infiltration and recharge. Any alteration to the hydrologic and/or biogeochemical properties of the spring could result in adverse impacts to the only known population of the undescribed snail species by altering water levels and flow, smothering breeding areas, decreasing aquatic oxygen levels, degrading water quality, and increasing water temperature. Additionally, long-term development-related impacts to the spring and associated habitat from unauthorized human entry, unleashed pets, feral animals, and the spread of invasive plant species could occur.

The impacts of the take would be significant prior to mitigation.

7. WOULD PERMIT JEOPARDIZE THE CONTINUED EXISTENCE OF A SPECIES (CCR § 783.2(a)(7))

For the reasons discussed in detail below, this Project is considered unlikely to jeopardize the continued existence of any of the species included in this application. While some individuals may be taken and habitat will be permanently and temporarily degraded in certain areas, the Project's effects on the species' capability to survive and reproduce, and any adverse impacts of those abilities, are not significant after the application of minimization and mitigation strategies (see *Section 8* below). What follows is an analysis of how the issuance of the Incidental Take Permit would affect the continued existence of each of the species described above. The conclusion of no jeopardy considers the species' ability to survive and reproduce, and any adverse impacts on those abilities in light of known population trends, known threats to the species, and reasonably foreseeable impacts on the species from other related projects and activities.

For the corresponding mitigation measures please see *Section 8*, below.

CESA-LISTED WILDLIFE SPECIES OBSERVED IN THE PROJECT AREA

Bird Species

7.1 Southwestern Willow Flycatcher (Federal and State Listed Endangered)

Issuance of the Incidental Take Permit would not jeopardize the continued existence of the southwestern willow flycatcher for the following reasons:

7.1.1 Ability to Survive and Reproduce

No observations of nesting, paired, or territorial flycatchers have been documented within the RMDP site. Because it is a relatively mobile species and has not been observed nesting within the Project area, there is little potential for Project-related construction to result in harm to, or mortality of, willow flycatchers. Thus, the species' ability to survive and reproduce would not be affected by the Project.

7.1.2 Adverse Impacts of Taking On Ability to Survive and Reproduce in Light of:

(A) Known Population Trends

Once considered widespread and common breeders in Southern California, the southwestern willow flycatcher has declined precipitously throughout its range during the last 50 years (Unitt 1987). However, a 2004 United States Geological Survey report found that since 1993, extensive survey efforts have greatly increased the number of known breeding sites and breeding territories of the southwestern willow flycatcher (Durst et al. 2006). The report cautions that this should not be interpreted entirely as a population increase.

(B) Known Threats

The major threats to the southwestern willow flycatcher are: the current or future destruction, modification, or curtailment of its habitat and the nest parasitism by the brown-headed cowbird that affects its productivity (USFWS 1995).

Annual bird surveys have not documented any evidence of this species nesting within the Project area, and they are presumed to use the site only for foraging during migration. No observations of nesting, paired, or territorial flycatchers have been documented. Because this species is highly mobile and does not nest within the Project area, and in light of the corresponding mitigation measures presented in *Section 8*, there is little potential for Project-related construction to result in mortality of southwestern willow flycatchers.

(C) Reasonably Foreseeable Impacts from Other Related Projects and Activities

Implementation of the proposed RMDP activities would facilitate build-out of the RMDP area, which would create reasonably foreseeable impacts. Build-out of the RMDP area could result in impacts to southwestern willow flycatchers including construction-related noise and ground vibration, fugitive dust, nighttime illumination, contact with polluted runoff, hydrologic and geomorphic alterations, cattle grazing, invasion by exotic plant species such as giant reed and tamarisk, increased trash, nest parasitism by brown-headed cowbirds, harassment by humans, harassment and predation and resource competition by pets and non-native animal species, increased native and non-native mesopredators (e.g., skunks, raccoons, and opossums) as a result of increased habitat fragmentation, and degraded water quality. Because the design of the approved Specific Plan includes buffers between developed and natural areas, replacement of habitat disturbed by construction, transitions high-intensity land uses away from open areas, and incorporates vertical separation at the interface between development and the river corridor, and because this species does not nest within the Project area, the continued existence of this species would not be jeopardized by the issuance of the Incidental Take Permit.

The corresponding measures that would be used to minimize and fully mitigate the impacts on the southwestern willow flycatcher can be found below in *Section 8* generally, and specifically in Mitigation Measures 1 through 44, 55 through 58, 61, 63, 64, 66, 67,

72, 73, 74, 75, 77, 78, 80, and 81.

With implementation of these measures, issuance of the Incidental Take Permit would not jeopardize the continued existence of the species.

7.2 Western Yellow-Billed Cuckoo (State Listed Endangered)

Issuance of the Incidental Take Permit would not jeopardize the continued existence of the western yellow-billed cuckoo for the following reasons:

7.2.1 Ability to Survive and Reproduce

No observations of nesting, paired, or territorial cuckoos have been documented within the RMDP site. Because it is a relatively mobile species and has not been observed nesting within the Project area, there is little potential for Project-related construction to result in harm to, or mortality of, yellow-billed cuckoos. Thus, the species' ability to survive and reproduce would not be affected by the Project.

7.2.2 Adverse Impacts of Taking On Ability to Survive and Reproduce in Light of:

(A) Known Population Trends

The western yellow-billed cuckoo suffered substantial range reductions in the twentieth century due to loss of riparian habitat through clearing for agriculture, flood control, and urbanization (Laymon and Halterman 1987). The numbers of yellow-billed cuckoos in California and other western areas have declined markedly in recent decades with destruction of riparian habitats (Laymon and Halterman 1987). The historical breeding range in California included the region from the northwest of San Diego County along the coast through San Francisco Bay to Sonoma County, San Joaquin and Sacramento valleys, from Kern County to Shasta County, plus many outlying sites in Siskiyou, Inyo, San Bernardino, and Imperial counties (Gaines 1974). It was considered common to numerous in the Sacramento Valley, along the southern coast of California from Ventura to Los Angeles Counties, and in Kern County in late 1800s, but only fairly common by 1920s (Gaines and Laymon 1984). The western yellow-billed cuckoo was extirpated north of Sacramento Valley by the 1950s (Gaines and Laymon 1984). Breeding of the western yellow-billed cuckoo is now restricted to isolated sites in Sacramento, Amargosa, Kern, Santa Ana, and Colorado river valleys in California (Laymon and Halterman 1987).

(B) Known Threats

The yellow-billed cuckoo is threatened by loss and degradation of its riparian habitat. Adverse impacts to cuckoo habitat are from clearing of land for urban and suburban development and from agriculture, human disturbance, fire in riparian habitat, livestock trampling and grazing on tree saplings, invasion of non-native plants, flood control projects, pumping of groundwater, diversion of surface water, and contact with pesticides.

Annual bird surveys have not documented any evidence of this species nesting within the Project area, and they are presumed to use the site only for foraging during migration. No observations of nesting, paired, or territorial cuckoos have been documented within the RMDP site. Because this species is highly mobile, and does not nest within the Project area, and in light of the corresponding mitigation measures presented in *Section 8*, there is little potential for Project-related construction to result in mortality of yellow-billed cuckoos.

(C) Reasonably Foreseeable Impacts from Other Related Projects and Activities

Implementation of the proposed RMDP would facilitate build-out of the RMDP area, which would create reasonably foreseeable impacts. Build-out of the RMDP area could result in impacts to yellow-billed cuckoos including noise, nighttime illumination, hydrologic and geomorphic alterations, reduced water quality, cattle grazing, invasion by exotic plant species such as giant reed and tamarisk, increased trash, harassment by humans, predation and resource competition by pets and non-native animal species, increased native and non-native mesopredators (e.g., skunks, raccoons, and opossums) as a result of increased habitat fragmentation, and degraded water quality. Because the design of the approved Specific Plan includes buffers between developed and natural areas, replacement of habitat disturbed by construction, transitions high-intensity land uses away from open areas, and incorporates vertical separation at the interface between development and the river corridor, and because this species does not nest within the Project area, the continued existence of this species would not be jeopardized by the issuance of the Incidental Take Permit.

The corresponding measures that would be used to minimize and fully mitigate the impacts on the western yellow-billed cuckoo can be found below in *Section 8* generally, and specifically in Mitigation Measures 1 through 44, 55 through 58, 61, 63, 64, 72, 73, 74, 75, 77, 78, 80, and 81.

With implementation of these measures, issuance of the Incidental Take Permit would not jeopardize the continued existence of the species.

7.3 Least Bell's Vireo (Federal and State Listed Endangered)

Issuance of the Incidental Take Permit would not jeopardize the continued existence of the least Bell's vireo for the following reasons:

7.3.1 Ability to Survive and Reproduce

Because this species is relatively mobile, it is unlikely that Project-related construction activities would result in loss of individual, adult vireos. In addition, construction activities that may affect the species would occur but not to a level that would affect the species' ability to reproduce because construction-related activities would be restricted during the nesting season. Thus, the species' ability to survive and reproduce would not be affected by the Project.

7.3.2 Adverse Impacts of Taking On Ability to Survive and Reproduce in

Light of:

(A) Known Population Trends

Due to intensive habitat protection and restoration and brown-headed cowbird control, the California vireo population increased dramatically from 300 estimated pairs in 1986 (USFWS 1998) to 2,500 in 2004 (Kus and Whitfield 2005). In the decade since it was listed by USFWS in 1986, least Bell's vireo numbers have increased six-fold, and the species is expanding into its historic range (Kus 2002). In 1998, the population size was estimated at 2,000 pairs in the eight counties south of Santa Barbara and nesting vireos have re-colonized the Santa Clara River (Kus 2002). As of 1999, CDFG has listed the status of the least Bell's vireo as stable to increasing (CDFG 2000).

Surveys conducted for USFWS in 1996 showed that the Santa Clara River least Bell's vireo population represented only about 3% of the pairs recorded in Southern California (USFWS 1998).

The USFWS Draft Recovery Plan was issued in 1998 with the objective of reclassifying the least Bell's vireo to threatened, and ultimately, delisting the species through recovery.

(B) Known Threats

The vireo is threatened by loss and degradation of its habitat through human and human-induced activities and by nest parasitism of the brown-headed cowbird. Adverse impacts to vireo habitat result from clearing of land for urban and suburban development and for agriculture, water projects, severe flooding due to water releases from dams, military activities (e.g., troop training), fires, OHVs, livestock activities, invasion of non-native plant species, and long-term camping activities (CDFG 2000).

Because this species is mobile, it is unlikely that Project-related construction activities would result in loss of individual, adult vireos. However, implementation of the proposed RMDP could result in mortality of vireos due to destruction of nests and loss of young if such construction/grading activities occurred during the nesting season. These impacts include construction-related noise and ground vibration, fugitive dust, nighttime illumination, and contact with polluted runoff. Because construction-related activities would be restricted during the nesting season, and in light of the corresponding mitigation measures presented in *Section 8*, these activities may occur but not to a level that would jeopardize the continued existence of the species.

(C) Reasonably Foreseeable Impacts from Other Related Projects and Activities

Implementation of the proposed RMDP would facilitate build-out of the RMDP area, which would create reasonably foreseeable impacts. Build-out of the RMDP area would convert lands adjacent to the river corridor to urban uses, and could result in adverse edge affects on least Bell's vireo populations within the river corridor. These potential impacts include harassment by humans, predation and resource competition by pets and non-native animal species (i.e., brown-headed cowbirds), invasion by exotic plant species such as giant reed and tamarisk, increased trash, and increased native and non-native

mesopredators (e.g., skunks, raccoons, and opossums) as a result of increased habitat fragmentation, hydrologic and geomorphic alterations, cattle grazing, noise, nighttime illumination, and degraded water quality.

The corresponding measures that would be used to minimize and fully mitigate the impacts on least Bell's Vireo can be found below in *Section 8* generally, and specifically in Mitigation Measures 1 through 44, 55 through 58, 61, 63, 64, 66, 67, 72, 73, 74, 75, 77, 78, 80, and 81. In addition to implementation of these measures, the design of the approved Specific Plan includes buffers between developed and natural areas, replacement of habitat disturbed by construction, transitions high-intensity land uses away from open areas, and incorporates vertical separation at the interface between development and the river corridor.

With implementation of these measures, issuance of the Incidental Take Permit would not jeopardize the continued existence of the species.

SPECIAL-STATUS WILDLIFE SPECIES OBSERVED IN THE PROJECT AREA BUT NOT CESA-LISTED AS ENDANGERED, THREATENED OR CANDIDATE

Amphibian Species

7.4 Arroyo Toad (Federal Endangered and California Species of Special Concern)

Issuance of the Incidental Take Permit would not jeopardize the continued existence of the arroyo toad for the following reasons:

7.4.1 Ability to Survive and Reproduce:

Adult arroyo toads have not been detected within the Project area and the presence of arroyo toad tadpoles in the Santa Clara River has only been documented within the eastern portion of the RMDP site. Thus, the species' ability to survive and reproduce would not be affected by the Project.

7.4.2 Adverse Impacts of Taking On Ability to Survive and Reproduce in Light of:

(A) Known Population Trends

According to CDFG, the species has disappeared from 76% of its total historic range in the United States (California) and populations have disappeared entirely from the northern, central, and eastern parts of its range (CDFG 1994).

The extended 5-year drought in Southern California during the late 1980s, when combined with water diversions from streams, created extremely stressful conditions for most aquatic species. The effect of drought and water diversion on arroyo toads was that female toads found insufficient insect prey to acquire enough fat storage for egg production before males cease their courtship behavior of calling, resulting in no

reproduction that year (Sweet 1992).

(B) Known Threats

Known threats to the arroyo toad include development and alteration of streamside flats (particularly by changing the natural hydrologic regime), manipulation of the hydrologic regime, urban development, placer mining (especially by suction dredges), off-road vehicle use, introduction of exotic predators, cattle grazing, and natural disturbances such as forest fires and drought (CDFG 1994). The RMDP activities could impact the arroyo toad during the construction of bridges, utilities outlets, and/or bank stabilization.

(C) Reasonably Foreseeable Impacts from Other Related Projects and Activities

Implementation of the proposed RMDP activities would facilitate build-out of the RMDP area, which would create reasonably foreseeable impacts. Build-out of the RMDP area could affect arroyo toads downstream of work areas through short-term hydrologic or water-quality alterations of the Santa Clara River during construction. Hydrologic and water-quality-related impacts could include changes to the base flows, changes to the timing and duration of flood flows, discharges of chemical pollutants, increased turbidity and sedimentation, and changes in water temperature due to short-term changes to the active channel morphology. Absent mitigation, these factors could result in harm or mortality of arroyo toads and degradation of habitat quality.

Following build-out of RMDP area, the physical changes to the river corridor and surrounding watershed could result in permanent hydrologic and biogeochemical changes in the Santa Clara River within and downstream of these sites. Depending upon the nature and extent of these changes, and absent mitigation, it is conceivable that arroyo toads could be affected by alterations in the river's base flow, timing and duration of flood flows, extent of side pools and marginal aquatic habitats, and presence of aquatic and riparian vegetation. In addition, discharges of chemical pollutants and sedimentation in the river and tributaries and introduction of non-native species could affect individuals exposed to these effects as well as degrade breeding, foraging, aestivation, and overwintering habitat.

Further, the occupancy of the RMDP area, over the long term, could result in adverse secondary effects to arroyo toads. Specifically, the proximity of urban development to suitable arroyo toad habitat could result in disruption of nocturnal activities and greater vulnerability to predation by nocturnal predators (such as owls and coyotes) as a result of nighttime lighting; greater vulnerability to predation by pet, stray, and feral cats and dogs as well as other mesopredators (see Crooks and Soulé 1999); collecting by children; degradation of habitat from increased human use (e.g., trampling, trash, and off-road vehicles) and altered fire regimes (likely too frequent fire); invasion by exotic plant (e.g., giant reed, tamarisk, and pampas grass) and wildlife species (e.g., bullfrogs, African clawed frogs, exotic fish, and crayfish); and increased risk of roadkill on roads adjacent to occupied areas.

The corresponding measures that would be used to minimize and fully mitigate the

impacts on the arroyo toad can be found below in *Section 8* generally, and specifically in Mitigation Measures 1 through 44, 56 through 62, 67, 72, 77, 78, 80, and 81. With implementation of these measures, issuance of the Incidental Take Permit would not jeopardize the continued existence of the species.

Bird Species

7.5 Western Burrowing Owl (Federal Bird of Conservation Concern and California Species of Special Concern)

Issuance of the Incidental Take Permit would not jeopardize the continued existence of the western burrowing owl for the following reasons:

7.5.1 Ability to Survive and Reproduce

As only two burrowing owls have been detected within the Project area despite numerous surveys, it is unlikely that resident populations of this species occur on the site or that the site is used extensively for nesting or foraging. Thus, the species' ability to survive and reproduce would not be affected by the Project.

7.5.2 Adverse Impacts of Taking On Ability to Survive and Reproduce in Light of:

(A) Known Population Trends

The burrowing owl was formerly common in appropriate habitats throughout the state, excluding the humid northwest coastal forests and high mountains. Population numbers have markedly reduced in recent decades (James and Ethier 1989; Zeiner et al. 1990).

The number of western burrowing owl breeding pairs in central, western, and Southern California has drastically declined in the last 50 years; during the 1980s, the decline was probably greater than 70% (DeSante et al. 1997). In the United States, the decline of this species has accelerated as a result of habitat loss caused by increased residential and commercial development (Bates 2006).

(B) Known Threats

The threats to the burrowing owl include conversion of grassland to agriculture, other habitat destruction, predators, collisions with vehicles, and pesticides/poisoning of ground squirrels (Grinnell and Miller 1944; Remsen 1978; Zarn 1974).

California's remaining burrowing owls are threatened primarily by habitat loss to urban development and intensive agricultural practices. The state-approved practice of relocation of owls from development sites is accelerating local extirpations from rapidly urbanizing areas. Other factors contributing to the decline of owls statewide include destruction of burrows through disking and grading, increased predation by non-native or feral species, habitat fragmentation, and other human-caused mortality from electrified fences, collisions with wind turbines, shooting, and vandalism of nesting sites. Because

it is unlikely that resident populations of this species occur on the site or that the site is used extensively for nesting or foraging, and in light of the corresponding mitigation measures presented in *Section 8*, there is little potential for Project-related construction to result in mortality of western burrowing owls.

(C) Reasonably Foreseeable Impacts from Other Related Projects and Activities

Only two burrowing owls have been detected within the Project area despite numerous surveys; therefore it is unlikely that resident populations of this species occur on the site or that the site is used extensively for nesting or foraging. However, implementation of the proposed RMDP would facilitate build-out of the RMDP area, which could create reasonably foreseeable impacts. Therefore, should burrowing owls nest within suitable upland habitats of the RMDP area in the future, construction and grading activities could destroy active owl burrows (including adults, young, and/or eggs) if such activities occurred during the nesting season. In addition, secondary impacts such as exposure to fugitive dust, construction-related noise and ground vibration, nighttime lighting, vandalism/harassment by humans and pets resulting in potential harm to individuals, abandonment of burrows, or a decrease in nesting success of western burrowing owl, and contact with polluted runoff associated with the build-out of the RMDP area could contribute to habitat fragmentation and adversely affect nesting success of this owl species. The use of pesticides to control insects and rodenticides to control small mammals (i.e., mice) within and adjacent to open foraging areas could result in indirect poisoning to the western burrowing owls and a reduction in prey. The corresponding measures that would be used to minimize and fully mitigate the impacts on western burrowing owl can be found below in *Section 8* generally, and specifically in Mitigation Measures 1-28, 30-35, 37-54, 61, 64, 65, 67, and 77-79.

With implementation of these measures, issuance of the Incidental Take Permit would not jeopardize the continued existence of the species.

7.6 Tricolored Blackbird (Federal Bird of Conservation Concern and California Species of Special Concern)

Issuance of the Incidental Take Permit would not jeopardize the continued existence of the tricolored blackbird for the following reasons:

7.6.1 Ability to Survive and Reproduce

This species has been observed within the Project area during focused bird surveys, but the sightings have been exceedingly rare. This species has not been observed nesting on site, and the infrequent sightings suggest that this species only use the Project area as occasional foraging habitat. Thus, the species' ability to survive and reproduce would not be affected by the Project.

7.6.2 Adverse Impacts of Taking On Ability to Survive and Reproduce in Light of:

(A) Known Population Trends

Between 1994 and 1997, the total tricolor population in California declined by about 37%. In 1994, the coastal tricolor populations in Southern California were reported to be less than 20,000 breeding adults, but in 1997, an estimated 35,000 breeding adults were observed at a colony in Riverside County (Beedy and Hamilton 1997).

(B) Known Threats

Major known threats to the tricolored blackbird include habitat loss and alteration (particularly loss of wetland habitat), poisoning by farmers, poisoning and contamination and human disturbance of active nesting colonies (Beedy and Hamilton 1997).

A principal factor implicated in the population decline and the loss of individual colonies is elimination of wetland habitat, which has drastically reduced available nesting and foraging habitat (Beedy, et al. 1991). The smaller colonies that have resulted from this reduced nesting and foraging habitat may be more vulnerable to disturbance by natural predators and also less able to compete with other species for the limited wetland nesting habitat. Higher rates of nesting failures and lower reproductive success have been observed in small colonies compared to large colonies (Orians 1961; Payne 1969).

This species has not been observed nesting on site, and the infrequent sightings suggest that this species only use the Project area as occasional foraging habitat. Because of these factors, and in light of the corresponding mitigation measures presented in *Section 8,* there is little potential for Project-related construction to result in mortality of tricolored blackbirds.

(C) Reasonably Foreseeable Impacts from Other Related Projects and Activities

Implementation of the proposed RMDP would facilitate build-out of the RMDP area which could create reasonably foreseeable impacts. As the presence of this species on site is infrequent, the build-out of the related RMDP area is not likely to result in adverse impacts to individual tricolored blackbirds including young or eggs. In addition, potential secondary effects such as construction noise and disturbance, and harassment by humans and/or pets, are not expected to adversely affect this species.

However, should this species ever occur within the Project area, construction activities associated with the RMDP and build-out of the RMDP area could destroy active nests (including young and/or eggs) if such activities occurred during nesting season. Secondary impacts such as exposure to fugitive dust, construction-related noise and ground vibration, habitat fragmentation, nighttime illumination, degraded water quality, vandalism/harassment by humans and pets, and contact with polluted runoff associated with build-out of the RMDP area could adversely affect nesting success of this species. Chronic traffic noise and lighting associated with roads and bridges in close proximity to potential breeding habitat in the River Corridor SMA could also have adverse effects on the establishment of breeding colonies and reproductive success. Tricolored blackbird nesting colonies are particularly vulnerable to human-related disturbance and activity because they nest low to the ground in large numbers and with nests close to each other.

The corresponding measures that would be used to minimize and fully mitigate the impacts on tricolored blackbird can be found below in *Section 8* generally, and specifically in Mitigation Measures 1-28, 30-44, 58, 61, 64, 67, 75, 77, 78, and 80.

With implementation of these measures, issuance of the Incidental Take Permit would not jeopardize the continued existence of the species.

UNDESCRIBED PLANT AND WILDLIFE SPECIES OBSERVED IN THE PROJECT AREA

Plant Species

7.7 Sunflower (No Current Status)

Issuance of the Incidental Take Permit would not jeopardize the continued existence of the sunflower for the following reasons:

7.7.1 Ability to Survive and Reproduce

There has been only a single occurrence of this taxon within the Project area and it would not be directly impacted by construction of any RMDP permitted facilities. Thus, the species' ability to survive and reproduce would not be affected by the Project.

7.7.2 Adverse Impacts of Taking On Ability to Survive and Reproduce in Light of:

(A) Known Population Trends

A population of undescribed sunflower (*Helianthus* sp. *nova*) was found in 2002 at Castaic Spring, on the south side of the Santa Clara River between Middle Canyon and San Jose Flats within the RMDP area. Based on pollen electron microscopy and chromosome counts, it is likely that the undescribed sunflower species in question is a hybrid between *H. nuttallii* and California sunflower (*H. californicus*) or an intermediate evolutionary step between the two species (Porter and Fraga 2004). Work is currently ongoing to describe these plants. Information regarding population trends is not available for this undescribed species.

(B) Known Threats

The major threat to the undescribed sunflower is the potential for alterations to the hydrologic and biogeochemical properties of the Middle Canyon Spring. After implementation of the corresponding mitigation measures presented in *Section 8*, there is little potential for Project-related construction to result in mortality of undescribed sunflowers.

The single occurrence of this taxon within the Project area would not be directly impacted by construction of any RMDP permitted facilities.

(C) Reasonably Foreseeable Impacts from Other Related Projects and Activities

Build-out of the related RMDP area would not result in the removal or the direct loss of occupied habitat or individual sunflower plants. However, construction-related secondary impacts associated with build-out of the RMDP area could affect the undescribed sunflower. These impacts include exposure to fugitive dust and polluted runoff in proximity to the plants. In addition, the introduction of chemical pollutants and alterations to the hydrologic and/or biogeochemical properties of Middle Canyon Spring could result in adverse impacts to the undescribed sunflower. Specifically, potential changes in hydrologic and/or biogeochemical properties of the spring may occur due to dewatering construction of bridge footings located 60 feet to the east of the spring complex in which this species occurs. Intrusion into the spring by humans and the introduction of non-native, invasive plants and animals could also jeopardize the undescribed sunflower plants.

The corresponding measures that would be used to minimize and fully mitigate the impacts on the undescribed sunflower can be found below in *Section 8* generally, and specifically in Mitigation Measures 57, 58, 68, 74 through 76, and 80.

With implementation of these measures, issuance of the Incidental Take Permit would not jeopardize the continued existence of the species.

7.8 Everlasting (No Current Status)

Issuance of the Incidental Take Permit would not jeopardize the continued existence of the everlasting for the following reasons:

7.8.1 Ability to Survive and Reproduce

This species would not be directly impacted by construction of any RMDP permitted facilities. Thus, the species' ability to survive and reproduce would not be affected by the Project.

7.8.2 Adverse Impacts of Taking On Ability to Survive and Reproduce in Light of:

(A) Known Population Trends

Plants of this undescribed everlasting (*Gnaphalium* sp. *nova*) were previously assigned to the species *Gnaphalium leucocephalum*, which is not thought to occur west of the Peninsular and Transverse Ranges in California. Based on further examination, these specimens are considered by UC Riverside (UCR) and Rancho Santa Ana Botanic Garden (RSA) botanists to be an undescribed everlasting. A search of three herbaria (UCR, RSA, and the San Diego Natural History Museum) revealed that 14 collections of this plant have been made in Ventura, Orange, Riverside, Los Angeles, and San Diego counties. Eight collections date from 1901 to 1987 (1901, 1918, 1922, 1928, 1931, 1959, 1985, and 1987). There are six more recent collections dating from 1994 to 2003 (1994, two from 1995, 1997, and two from 2003). In addition to the herbaria specimens, the

Gnaphaliuim sp. *nova* has been observed in 2003, 2004, 2005, and 2007 along Castaic Creek and the Santa Clara River (Dudek 2004a, 2004b, 2006b, 2007a; FL*x*, 2004). Information regarding population trends is not available for this undescribed species.

(B) Known Threats

The major threat to the undescribed everlasting is the potential for changes in surface and subsurface hydrologic conditions within the Santa Clara River and its tributaries. After implementation of the corresponding mitigation measures presented in *Section 8*, there is little potential for Project-related construction to result in mortality of undescribed sunflowers.

There have been only a few occurrences of this taxon within the Project area and they would not be directly impacted by construction of any RMDP permitted facilities.

(C) Reasonably Foreseeable Impacts from Other Related Projects and Activities

Build-out of the related RMDP area would not result in the removal or the direct loss of occupied habitat or individual everlasting plants. However, construction-related secondary impacts associated with build-out of the RMDP area could affect the undescribed everlasting. These impacts include exposure to fugitive dust or polluted runoff in proximity to the plants and the introduction of chemical pollutants. In addition, alterations to the hydrologic or biogeochemical properties of the river could result in adverse impacts to documented populations of the plants. Intrusion into the riverbed by humans could also jeopardize the everlasting plants.

The corresponding measures that would be used to minimize and fully mitigate the impacts on the undescribed everlasting can be found below in *Section 8* generally, and specifically in Mitigation Measures 19 through 28, 30 through 44, 55, 58, 61, 70, 71, 74, 75, 77, 78, and 80.

With implementation of these measures, issuance of the Incidental Take Permit would not jeopardize the continued existence of the species.

Mollusk Species

7.9 Spring Snail (No Current Status)

Issuance of the Incidental Take Permit would not jeopardize the continued existence of the spring snail (*Pyrgulopsis sp. nova)* for the following reasons:

7.9.1 Ability to Survive and Reproduce

Implementation of the RMDP would not result in permanent or temporary impacts to the undescribed snails in Middle Canyon Spring but would permanently impact Middle Canyon Creek. Impacts to Middle Canyon Creek would result in the loss of known occupied habitat for the species as well as the direct loss of, or harm to, individuals of the undescribed snail species located in the adjacent lower Middle Canyon Creek. After

implementation of the corresponding mitigation measures presented in *Section 8*, the species' ability to survive and reproduce would not be affected by the Project.

7.9.2 Adverse Impacts of Taking On Ability to Survive and Reproduce in Light of:

(A) Known Population Trends

In 2006, an undescribed snail (*Pyrgulopsis* sp. *nova*) was observed on the Project area within portions of the Middle Canyon Spring. A specimen was collected and sent to the Smithsonian Institute in Washington, D.C. for identification and was determined to be an unidentified spring snail. In 2007, the snail was also observed in the lower reach of the adjacent Middle Canyon Creek, where surface water is present due to agricultural operations (Dudek 2007d). Information regarding population trends is not available for this undescribed species.

(B) Known Threats

Other than direct harm, the major threat to the undescribed snail is the potential for alterations to the hydrologic and biogeochemical properties of the Middle Canyon spring. After implementation of the corresponding mitigation measures presented in *Section 8*, there is little potential for Project-related construction to result in mortality of undescribed snails.

(C) Reasonably Foreseeable Impacts from Other Related Projects and Activities

Build-out of the related RMDP area would not result in the removal or the direct loss of occupied habitat or individual snails.

However, construction-related secondary impacts associated with build-out of the RMDP area as well as the future occupancy of the RMDP area could affect the undescribed snail. These impacts include increased sedimentation, polluted runoff, and the disruption of water quantity or flow through the spring. Alteration of topography and construction of impermeable surfaces from development within the vicinity of the Middle Canyon Spring could impair subsurface aquifer hydrology that feeds the Middle Canyon Spring by diverting surface water and by reducing infiltration and recharge. Any alteration to the hydrologic and/or biogeochemical properties of the spring could result in adverse impacts to this species by altering water levels and flow, smothering breeding areas, decreasing aquatic oxygen levels, degrading water quality, and increasing water temperature. Additionally, long-term development-related impacts to the spring and associated habitat from unauthorized human entry, unleashed pets, feral animals, and the spread of invasive plant species could occur.

The corresponding measures that would be used to minimize and fully mitigate the impacts on the undescribed snail can be found below in *Section 8* generally, and specifically in Mitigation Measures 56 through 58, 61, 68, 69, 74 through 76, and 80.

With implementation of these measures, issuance of the Incidental Take Permit would not jeopardize the continued existence of the species.

8. MEASURES TO MINIMIZE AND FULLY MITIGATE THE IMPACTS (14 CCR § 783.2(a)(8))

This minimization and mitigation program is built around conceptual issues for the species found in *Tables 1, 2* and *3* as well as a conservation-oriented approach. Every attempt will be made to minimize both habitat degradation and population impacts to the listed species. For example, large areas (e.g., the High Country SMA and Salt Creek area which total 5,723 acres) within the RMDP area are not being developed, and therefore not impacted by the Project in order to minimize the impacts.

For areas that are impacted, mitigation measures area proposed as discussed below.

Mitigation measures include measures adopted for the Specific Plan (County of Los Angeles, 2003) and new measures that are in addition to, and supplement these previously incorporated measures. These new measures are to reduce potential impacts to species further and are consistent with the previously incorporated measures included in the Newhall Ranch Specific Plan Program EIR and Resource Monitoring Plan (RMP) These new measures are also referred parenthetically herein as (BIO) mitigation measures to maintain consistency with RMDP conventions.

The "Previously Incorporated Measures" are those measures that were adopted by the County of Los Angeles in 2003 for potential impacts to biological resources as part of the Newhall Ranch Specific Plan. These mitigation measures, referred parenthetically herein as (SP-4.6) mitigation measures, are found in the certified Newhall Ranch Specific Plan Program EIR and the adopted RMP for the Specific Plan (May 2003).

The mitigation measures are also found in *Section 7.0* of the attached RMDP.

A. Mitigation Measures Applying to Riparian Plant Communities and Associated Wildlife Habitat

1. Mitigation For Permanent Riparian Habitat Impacts

MIT-1 (BIO-1): Mitigation measures MIT-19 through MIT-28 (SP-4.6-1 through SP-4.6-16) and MIT-29 (SP-4.6-63) specify requirements for riparian mitigation conducted in the High Country SMA, Salt Creek area, and Open Area. The RMDP includes requirements for mitigation of both riparian and upland habitats (such as riparian adjacent big sagebrush scrub), and incorporates these Mitigation Measures (MIT-19 through MIT-28 and MIT-29). A Comprehensive Mitigation Implementation Plan (Plan) has been developed by Newhall Land that provides an outline of mitigation to offset impacts described in the RMDP. The Plan demonstrates the feasibility of creating the required mitigation acreage from RMDP project impacts (see MIT-2 (BIO-2)). Detailed wetlands mitigation plans, in accordance with the Plan, shall be submitted to, and are subject to the approval of, the Corps and CDFG as part of the sub-notification letters for individual

projects. Individual project submittals shall include applicable Plan elements, complying with the requirements outlined below. The plan shall specify, at a minimum, the following: (1) the location of mitigation sites; (2) the quantity and species of plants to be planted; (3) procedures for creating additional vegetation communities; (4) methods for the removal of non-native plants; (5) a schedule and action plan to maintain and monitor the enhancement/restoration area; (6) a list of criteria by which to measure success of the mitigation sites (*e.g.*, percent cover of native species, survivorship/establishment of plantings, wildlife use); (7) measures to exclude unauthorized entry into the creation/enhancement areas; and (8) contingency measures in the event that mitigation efforts are not successful. Individual project plans shall also classify the biological value (as "high," "moderate," or "low") of the vegetation communities to be disturbed as defined in these conditions, or may be based on an agency-approved method (*e.g.*, Hybrid Assessment of Riparian Communities (HARC)). The biological value shall be used to determine mitigation replacement ratios required under MIT-2 (BIO-2) and MIT-11 (BIO-11). The detailed wetlands mitigation plans shall provide for the 1:1 replacement of any Southern California black walnut to be removed from the riparian corridor for individual projects. The detailed wetlands mitigation plans shall provide for the mitigation of jurisdictional big sagebrush scrub along the riparian corridor. The plan shall be subject to the approval of the CDFG and the Corps and approved prior to the impact to riparian resources. MIT-4 (BIO-4) describes that the functions and values will be assessed for the riparian areas that will be removed, and MIT-2 (BIO-2) and MIT-11 (BIO-11) describe the replacement ratios for the habitats that will be impacted.

MIT-2 (BIO-2): The permanent removal of riparian vegetation communities (including arrow weed scrub, cismontane alkali marsh, cottonwood-willow riparian forest, Mexican elderberry scrub, coastal and valley freshwater marsh, big sagebrush scrub, mulefat scrub, southern coast live oak riparian forest, southern willow scrub, and river wash) shall be replaced by creating riparian vegetation communities of similar functions and values on the Project site. Riparian/wetland restoration shall be in-kind and at a 1:1 replacement ratio (except as indicated below) for new vegetation communities installed two years in advance of the removal of vegetation communities at the construction site. If replacement vegetation communities cannot be installed two years in advance of the Project, the ratios listed below will apply. As described, lower replacement ratios may be appropriate if an agency-approved HARC or other approved method indicates lower ratios would ensure replacement of habitat values and functions.

- Vegetation community installation completed two years or more prior to construction impact: for all vegetation communities = 1:1 ratio.

- Vegetation community installation completed less than two years in advance of impact: low value vegetation communities = 1:1 ratio; moderate value vegetation communities = 2:1 ratio; high value vegetation communities = 3:1 ratio.

MIT-3 (BIO-3): Creation of new riparian vegetation communities shall occur on the Project site at suitable sites in or adjacent to the watercourses or in areas where bank stabilization would occur. The highest-priority vegetation community restoration sites are to be new riverbed areas created during the excavation of uplands for bank

protection/stabilization activities on the Project site. Restoration sites may also occur at locations outside the riverbed where there are appropriate hydrologic conditions to create a self-sustaining riparian vegetation community and where upland and riparian vegetation community values are absent or very low. All sites shall contain suitable hydrological conditions and surrounding land uses to ensure a self-sustaining functioning riparian vegetation community. Candidate restoration sites shall be selected by Newhall Land and may be described in the annual mitigation status report (MIT-14 (BIO-14)). Sites will be approved when restoration plans are submitted to the Corps and CDFG as part of the sub-notification request letters submitted for individual projects or as part of the annual mitigation status report and mitigation accounting form agency review.

MIT-4 (BIO-4): Replacement vegetation communities shall be designed to replace the functions and values of the vegetation communities being removed. The replacement vegetation communities shall have similar dominant trees and understory shrubs and herbs (excluding exotic species) to those of the affected vegetation communities. In addition, the replacement vegetation communities shall be designed to replicate the density and structure of the affected vegetation communities once the replacement vegetation communities have met the wetlands mitigation plan success criteria.

MIT-5 (BIO-5): Average plant spacing shall be determined based on an analysis of vegetation communities to be replaced. Newhall Land or its designee shall develop plant spacing specifications for all riparian vegetation communities to be restored. Plant spacing specifications shall be reviewed and approved by the Corps and CDFG when restoration plans are submitted to the agencies as part of the sub-notification letters submitted to the Corps and CDFG for individual projects or as part of the annual mitigation status report and mitigation accounting form.

MIT-6 (BIO-6): Each tree and shrub species used in restoration shall have a minimum of 80% survivorship after three years and 70% survivorship after five years. Natural recruitment of native species may be used to offset percent survivorship of planted trees and shrubs to achieve native vegetation cover standards. Performance standards for cover shall be developed by Newhall Land or its designee for each individual vegetation community type being created, based on the observed natural cover in undisturbed land in the Project area. Performance standards shall be established by Newhall Land or its designee for each vegetation community type to be replaced and shall require approval by the Corps and CDFG as part of the sub-notification letter authorization or as part of the review of the annual mitigation status report and mitigation accounting form. Minimum growth, survivorship, and cover performance at the mitigation sites shall be measured based on random samples taken during years three and five at each individual mitigation site, or at other sampling intervals if the agencies' HARC methodology is used by Newhall Land or its designee.

MIT-7 (BIO-7): If the minimum growth, survivorship, and/or cover are not achieved at the time of the three- and five-year evaluations, then Newhall Land or its designee shall be responsible for taking the appropriate corrective measures to achieve the specified growth, survivorship, and/or cover criteria. Newhall Land or its designee shall be responsible for any costs incurred during the revegetation or in subsequent corrective

measures. If acts of God (flood, fires, or drought) occur after the vegetation has met the three-year criteria for growth, survival, and cover, Newhall Land or its designee will not be responsible for replanting damaged areas. If these events occur prior to the plants meeting the three-year criteria, Newhall Land or its designee shall be responsible for replanting the area one time only.

MIT-8 (BIO-8): Newhall Land or its designee shall be responsible for weeding all restoration/creation sites to prevent an infestation of perennial non-native invasive weeds. All perennial, non-native invasive weed species (*e.g.*, giant reed, pampas grass, fennel, perennial pepperweed, castor bean, and tamarisk) shall be controlled for a period of five years after the initial vegetation community restoration, or until the five-year success criteria described in the wetlands mitigation plan are met. The cover of annual, non-native plant species at the mitigation sites shall not exceed 10% at any time during the period of documenting successful restoration.

MIT-9 (BIO-9): Temporary irrigation shall be installed as necessary for plant establishment. Irrigation shall continue as needed to meet the three-year performance criteria regarding survivorship and growth. Irrigation shall be terminated in the fall to provide the least stress to plants.

MIT-10 (BIO-10): As an alternative to the creation/restoration of vegetation communities to compensate for permanent removal of riparian vegetation communities, Newhall Land or its designee (at the discretion of the Corps and CDFG on a project-by-project basis) may control invasive exotic plant species within the Upper Santa Clara River Sub-Watershed. Newhall Land may perform this work or contribute "in-lieu fees" to the Upper Santa Clara River Arundo/Tamarisk Removal Program to perform this work. The weed control sites shall be selected in a coordinated, logical manner to ensure that giant reed and other invasive weeds are controlled to improve and expand wildlife and endangered species habitat; reduce flooding, erosion, and fire hazards; improve water quality; and potentially increase stream flow/water quantity in the RMDP watercourses. Removal areas shall be kept free of exotic plant species for five years after initial treatment. In areas where extensive exotic removal occurs, revegetation with native plants or natural recruitment must be documented.

MIT-11 (BIO-11): The exotics control program may utilize methods and procedures in accordance with the provisions in the Upper Santa Clara River Watershed Arundo/Tamarisk Removal Plan Final EIR, dated February 2006, or the applicant may propose alternative methods and procedures for Corps and CDFG review and approval pursuant to a sub-notification letter or annual mitigation status report submittal. Exotic plant species control credit will be given as shown below (except when weed control is used to mitigate for loss of habitat for sensitive riparian bird species, where the Corps and CDFG may require higher ratios). If Newhall Land performs the weed control program, the exotic weed control location will be documented on the annual mitigation status report and mitigation accounting form. If "in-lieu fees" are paid, it will be documented on the annual mitigation status report and mitigation accounting form.

MIT-12 (BIO-12): To provide an accurate and reliable accounting system for mitigation,

Newhall Land, its designee, or any other applicant utilizing the RMDP shall file a mitigation accounting form annually with the Corps and CDFG by April 1. This form shall document the amount of vegetation planted during the past year, any "in-lieu fees" paid for exotic invasive plant species control, the status of all mitigation credits to date, and any credits subtracted by projects implemented during the past year. Newhall Land, its designee, or any other applicant utilizing the RMDP shall keep detailed records and provide the mitigation accounting form to the Corps and CDFG annually for review for the life of the permit, or until all credits have been used up for individual projects. The Corps and CDFG shall provide concurrence within 60 days, including written verification for all restoration and weed removal sites that meet the specified performance criteria. In the absence of an agency response, Newhall Land may consider the mitigation deemed successful for surety release purposes. Adequate proof of delivery of applicable reports would be required as well as subsequent notice to the agencies requesting surety release. If there are any questions regarding the accounting, a meeting will be scheduled between Newhall Land, the Corps, and the CDFG.

MIT-13 (BIO-13): If the applicant does not have sufficient mitigation credits for an upcoming project, and, therefore, is planning to restore vegetation communities or control exotics concurrent with project implementation, project-specific plans for restoring riparian vegetation communities or for controlling exotics from existing vegetation communities shall be submitted to the Corps and CDFG as part of the sub-notification letters for individual project approvals or as part of the annual mitigation status report and mitigation accounting form Corps and CDFG review.

MIT-14 (BIO-14): An annual mitigation status report shall be submitted to the Corps and CDFG by April 1 of each year for the life of the permit or until five years after all mitigation has been completed. This report shall include any required plans for plant spacing, locations of candidate restoration and weed control sites or proposed "in-lieu fees," restoration methods, and vegetation community restoration performance standards. For active vegetation community creation sites, the report shall include the survival, percent cover, and height of planted species; the number by species of plants replaced; an overview of the revegetation effort and its success in meeting performance criteria; the method used to assess these parameters; and photographs. For active exotics control sites, the report shall include an assessment of weed control; a description of the relative cover of native vegetation, bare areas, and exotic vegetation; an accounting of colonization by native plants; and photographs. The report shall also include the mitigation accounting form (see MIT-12 (BIO-12)), which outlines accounting information related to species planted or exotics control and mitigation credit remaining.

MIT-15 (BIO-15): Nothing in the Section 404 or Section 2081 permit or Section 1605 agreement shall preclude Newhall Land or its designee from selling mitigation credits to other parties wishing to use those permits or that agreement for a project and/or maintenance activity included in the permits/agreement. The mitigation program shall incorporate applicable principles in the interagency Federal Guidance for the Establishment, Use, and Operation of Mitigation Banks (FR 60 58605–58614) to the extent feasible and appropriate, particularly the guidance on administration and accounting.

2. *Mitigation for Temporarily Disturbed Riparian Habitat Impacts*

MIT-16 (BIO-16): Construction activities in the riverbed shall be restricted to the following areas of temporary disturbance: (1) an 85-foot-wide zone that extends into the river from the base of the rip-rap or gunite bank protection where it intercepts the river bottom; (2) 100 feet on either side of the outer edge of a new bridge or bridge to be modified; (3) a 60-foot-wide corridor for utility lines; (4) 20-foot-wide temporary access ramps; and (5) 60-foot roadway width temporary construction haul routes. The locations of these temporary construction sites and the routes of all access roads shall be shown on maps submitted with the sub-notification letter submitted to the Corps and CDFG for individual project approval. Any variation from these limits shall be noted, with a justification for a variation. The construction plans should indicate what type of vegetation, if any, would be temporarily disturbed and the post-construction activities to facilitate natural revegetation of the temporarily disturbed areas.

MIT-17 (BIO-17): All native riparian trees with a four-inch diameter at breast height (dbh) or greater in temporary construction areas shall be replaced using one- or five-gallon container plants in the temporary construction areas in the winter following the construction disturbance. The growth and survival of the replacement trees shall meet the performance standards specified in MIT-6 (BIO-6). In addition, the growth and survival of the planted trees shall be monitored for five years in accordance with the methods and reporting procedures specified in MIT-6 (BIO-6), MIT-12 (BIO-12), and MIT-14 (BIO-14).

MIT-18 (BIO-18): Vegetation communities temporarily impacted by the proposed Project may be restored through a passive restoration approach. Native vegetation within temporary construction areas shall be mulched and considered for beneficial reuse on site or at other native plant restoration areas. Large trunks of removed trees may also remain on site to provide habitat for invertebrates, reptiles, and small mammals or may be anchored within the Project site for erosion control. If the timing of the mulching and application is appropriate, the native mulch will be spread over the temporary impact areas in order to facilitate revegetation. After the completion of year one, the Project biologist will evaluate the progress of any passive restoration approaches in the temporary impact areas to determine if natural recruitment has been sufficient for the site to eventually reach performance goals. In the event that native plant recruitment is determined by the Project biologist to be inadequate for successful habitat establishment, Newhall Land, its designee or any other applicant utilizing the RMDP shall revegetate the temporary construction areas in accordance with the methods designed for permanent impacts (*i.e.*, seeding, container plants, and/or a temporary irrigation system may be recommended). This will help ensure the success of temporary mitigation areas. Areas temporarily disturbed by construction activities shall also be weeded annually, as needed, for up to five years following construction. Weeds shall be removed by hand, an approved herbicide application, and/or by mechanical equipment. These areas shall be annually monitored for five years after construction to document vegetation community establishment. In the event that native plant cover does not reach 50% of the pre-construction native plant cover within three years, Newhall Land or its designee shall revegetate the temporary construction area (see MIT-1 (BIO-1), MIT-2 (BIO-2), and

MIT-10 (BIO-10)). Annual monitoring reports on the status of the natural recovery of temporarily disturbed areas shall be submitted to the Corps and CDFG as part of the annual mitigation status report (MIT-12 (BIO-12) and MIT-14 (BIO-14)).

3. Previously Incorporated Measures Applying to Riparian Habitat

a. Mitigation Through Restoration

MIT-19 (SP-4.6-1): The restoration mitigation areas located within the River Corridor SMA/SEA 23 shall be in areas that have been disturbed by previous uses or activities. Mitigation shall be conducted only on sites where soils, hydrology, and microclimate conditions are suitable for riparian vegetation communities. First priority will be given to those restorable areas that occur adjacent to existing patches (areas) of native vegetation community that support special-status species, particularly Endangered or Threatened species. The goal is to increase vegetation community patch size and connectivity with other existing vegetation community patches while restoring vegetation community values that will benefit special-status species.

MIT-20 (SP-4.6-2): A qualified biologist shall prepare or review revegetation plans. The biologist shall also monitor the restoration effort from its inception through the establishment phase.

MIT-21 (SP-4.6-3): Revegetation Plans may be prepared as part of a CDFG 1603 Streambed Alteration Agreement and/or an U.S. Army Corps of Engineers Section 404 Permit, and shall include:

- Input from both the Project proponent and resource agencies to assure that the project objectives applicable to the River Corridor SMA/SEA 23 and the criteria of this RMP are met.

- The identification of restoration/mitigation sites to be used. This effort shall involve an analysis of the suitability of potential sites to support the desired vegetation community, including a description of the existing conditions at the site(s) and such baseline data information deemed necessary by the permitting agency.

MIT-22 (SP-4.6-4): The revegetation effort shall involve an analysis of the site conditions such as soils and hydrology so that site preparation needs can be evaluated. The revegetation plan shall include the details and procedures required to prepare the restoration site for planting (*i.e.*, grading, soil preparation, soil stockpiling, soil amendments, *etc.*), including the need for a supplemental irrigation system, if any.

MIT-23 (SP-4.6-5): Restoration of riparian vegetation communities within the River Corridor SMA/SEA 23 shall use plant species native to the Santa Clara River. Cuttings or seeds of native plants shall be gathered within the River Corridor SMA/SEA 23 or purchased from nurseries with local supplies to provide good genetic stock for the replacement vegetation communities. Plant species used in the restoration of riparian vegetation communities shall be listed on the approved project plant palette (Specific

Plan Table 2.6-1, Recommended Plant Species for Habitat Restoration in the River Corridor SMA/SEA 23) or as approved by the permitting state and federal agencies.

MIT-24 (SP-4.6-6): The final revegetation plans shall include notes that outline the methods and procedures for the installation of the plant materials. Plant protection measures identified by the project biologist shall be incorporated into the planting design/layout.

MIT-25 (SP-4.6-7): The revegetation plan shall include guidelines for the maintenance of the mitigation site during the establishment phase of the plantings. The maintenance program shall contain guidelines for the control of non-native plant species, the maintenance of the irrigation system, and the replacement of plant species.

MIT-26 (SP-4.6-8): The revegetation plan shall provide for monitoring to evaluate the growth of the developing vegetation communities. Specific performance goals for the restored vegetation communities shall be defined by qualitative and quantitative characteristics of similar vegetation communities on the river (*e.g.*, density, cover, species composition, structural development). The monitoring effort shall include an evaluation of not only the plant material installed, but the use of the site by wildlife.

MIT-27 (SP-4.6-9): Monitoring reports for the mitigation site shall be submitted to the permitting state and/or federal agency.

MIT-28 (SP-4.6-10): Contingency plans and appropriate remedial measures shall also be outlined in the revegetation plan.

MIT-29 (SP-4.6-63): Riparian resources that are impacted by build-out of the Specific Plan shall be restored with similar vegetation communities at the rate of 1 acre replaced for each 1 acre lost.

b. Mitigation Through Enhancement

MIT-30 (SP-4.6-11): Vegetation community enhancement as referred to in this document means the rehabilitation of areas of native vegetation communities that have been moderately disturbed by past activities (*e.g.*, grazing, roads, oil and natural gas operations, *etc.*) or have been invaded by non-native plant species such as giant reed (*Arundo donax*) and salt-cedar (*Tamarix* sp.).

MIT-31 (SP-4.6-12): Removal of grazing is an important means of enhancement of vegetation communities values. Without ongoing disturbance from cattle, many riparian areas will recover naturally. Grazing except as permitted as a long-term resource management activity will be removed from the River Corridor SMA/SEA 23 pursuant to the Long-Term Management Plan set forth in Section 4.6 of the Specific Plan Program EIR.

MIT-32 (SP-4.6-13): In order to provide guidelines for the installation of supplemental plantings of native species within enhancement areas, a revegetation plan shall be prepared prior to implementation of mitigation (see guidelines for revegetation plans

above). These supplemental plantings will be composed of plant species (other than exotics) similar to those growing in the existing vegetation communities patch (see Specific Plan Table 2.6-1).

MIT-33 (SP-4.6-14): Not all enhancement areas will necessarily require supplemental plantings of native species. Some areas may support conditions conducive for rapid "natural" reestablishment of native species. The revegetation plan may incorporate means of enhancement to areas of compacted soils, poor soil fertility, trash or flood debris, and roads as a way of enhancing riparian vegetation community values.

MIT-34 (SP-4.6-15): Removal of non-native species such as giant reed (*Arundo donax*), salt cedar (*Tamarix* sp.), tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), if included in a revegetation plan to mitigate impacts, shall be subject to the following standards:

- First priority shall be given to those vegetation community patches that support or have a high potential for supporting special-status species, particularly endangered or threatened species.
- All non-native species removals shall be conducted according to a resource agency-approved exotics removal program.
- Removal of non-native species in patches of native vegetation communities shall be conducted in such a way as to minimize impacts to the existing native riparian plant species.

c. Mitigation Banking

MIT-35 (SP-4.6-16): Mitigation banking activities for riparian habitats will be subject to State and Federal regulations and permits. Mitigation banking for oak resources shall be conducted pursuant to the Oak Resources Replacement Program. Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester.

d. Recreation and Access

MIT-36 (SP-4.6-17): Access to the River Corridor SMA for hiking and biking shall be limited to the River trail system (including the Regional River Trail and various Local Trails) as set forth in this Specific Plan.

- The River trail system shall be designed to avoid impacts to existing native riparian habitat, especially habitat areas known to support sensitive species. Where impacts to riparian habitat are unavoidable, disturbance shall be minimized and mitigated as outlined above under Mitigation Measures MIT-19 through MIT-26 (SP-4.6-1 through SP-4.6-8).
- Access to the River Corridor SMA will be limited to day time use of the designated trail system.

- Signs indicating that no pets of any kind will be allowed within the River Corridor SMA, with the exception that equestrian use is permitted on established trails, shall be posted along the River Corridor SMA.
- No hunting, fishing, or motor or off-trail bike riding shall be permitted.
- The trail system shall be designed and constructed to minimize impacts on native habitats.

e. Transition Areas

MIT-37 (SP-4.6-18): Where development lies adjacent to the boundary of the River Corridor SMA/SEA 23 a transition area shall be designed to lessen the impact of the development on the conserved area. Transition areas may be comprised of Open Area, natural or revegetated manufactured slopes, other planted areas, bank areas, and trails. Exhibits 2.6-4, 2.6-5, and 2.6-6 indicate the relationship between the River Corridor SMA/SEA 23 and the development (disturbed) areas of the Specific Plan. The SMAs and the Open Area as well as the undisturbed portions of the development areas are shown in green. As indicated on the exhibits, on the south side of the river the River Corridor SMA/SEA 23 is separated from development by the river bluffs, except in one location. The Regional River Trail will serve as transition area on the north side of the river where development areas adjoin the River Corridor SMA/SEA 23 (excluding Travel Village).

MIT-38 (SP-4.6-19): The following are the standards for design of transition areas:

- In all locations where there is no steep grade separation between the River Corridor SMA and development, a trail shall be provided along this edge.

- Native riparian plants shall be incorporated into the landscaping of the transition areas between the River Corridor SMA and adjacent development areas where feasible for their long-term survival. Plants used in these areas shall be those listed on the approved plant palette (Specific Plan *Table 2.6-2* of the Resource Management Plan [Recommended Plants for Transition Areas Adjacent to the River Corridor SMA]).

- Roads and bridges that cross the River Corridor SMA shall have adequate barriers at their perimeters to discourage access to the River Corridor SMA adjacent to the structures.

- Where bank stabilization is required to protect development areas, it shall be composed of ungrouted rock, or buried bank stabilization, except at bridge crossings and other locations where public health and safety requirements necessitate concrete or other bank protection.

- A minimum 100 foot wide buffer adjacent to the Santa Clara River should be required between the top river-side of bank stabilization and development within the Land Use Designations Residential Low Medium, Residential Medium, Mixed-Use and Business Park unless, through Planning Director

review in consultation with the staff biologist, it is determined that a lesser buffer would adequately protect the riparian resources within the River Corridor or that a 100 foot wide buffer is infeasible for physical infrastructure planning. The buffer area may be used for public infrastructure, such as: flood control access; sewer, water and utility easements; abutments; trails and parks, subject to findings of consistency with the Specific Plan and applicable County policies.

f. Grading Activities Long-Term Management Plan (Conservation Easement)

MIT-39 (SP-4.6-21): Upon final approval of the Specific Plan, the Special Management Area designation for the River Corridor SMA/SEA 23 shall become effective. The permitted uses and development standards for the SMA are governed by the Development Regulations, Chapter 3 of the Specific Plan.

MIT-40 (SP-4.6-22): Upon completion of development of all land uses, utilities, roads, flood control improvements, bridges, trails, and other improvements necessary for implementation of the Specific Plan within the River Corridor in each subdivision allowing construction within or adjacent to the River Corridor, a permanent, non-revocable conservation and public access easement shall be offered to the County of Los Angeles pursuant to Mitigation Measure 41 (SP-4.6-23), below, over the portion of the River Corridor SMA/SEA 23 within that subdivision.

MIT-41 (SP-4.6-23): The River Corridor SMA/SEA 23 Conservation and Public Access Easement shall be offered to the County of Los Angeles prior to the transfer of the River Corridor SMA/SEA 23 ownership, or portion thereof, to the management entity described in Mitigation Measure 44 **(SP-4.6-26)**, below.

MIT-42 (SP-4.6-24): The River Corridor SMA/SEA 23 Conservation and Public Access Easement shall prohibit grazing, except as a long-term resource management activity, and agriculture within the River Corridor and shall restrict recreation use to the established trail system.

MIT-43 (SP-4.6-25): The River Corridor SMA/SEA 23 conservation and public access easement shall be consistent in its provisions with any other on-site conservation easements to state or federal resource agencies which may have been granted as part of mitigation or mitigation banking activities.

MIT-44 (SP-4.6-26): Prior to the recordation of the River Corridor SMA/SEA 23 Conservation and Public Access Easement as specified in Mitigation Measure 41 (SP-4.6-23), above, the land owner shall provide a plan to the County for the permanent ownership and management of the River Corridor SMA/SEA 23, including any necessary financing. This plan shall include the transfer of ownership of the River Corridor SMA/SEA 23 to the Center for Natural Lands Management, or if the Center for Natural Lands Management is declared bankrupt or dissolved, ownership will transfer or revert to

a joint powers authority consisting of Los Angeles County (4 members), the City of Santa Clarita (2 members), and the Santa Monica Mountains Conservancy (2 members).

B. Mitigation Measures Applying to California/Coastal Sagebrush Scrub Wildlife Habitat

MIT-45 (BIO-19): The 1,518-acre Salt Creek area shall be offered for dedication to the public pursuant to Condition 42 of the approved Specific Plan using a "rough step" land dedication approach. Irrevocable offers of dedication will be provided to CDFG for identified impact offsets in accordance with the Plan (MIT-1 (BIO-1)). The Salt Creek area includes approximately 629 acres of coastal scrub communities within both Ventura and Los Angeles Counties. This land dedication shall be managed in conjunction with the 4,205-acre High Country SMA (containing 1,314 acres of coastal scrub communities).

MIT-46 (BIO-20): Approximately 1,900 acres of coastal scrub shall be preserved on the Project site. The preservation of this vegetation type shall occur on site within the High Country SMA, the Salt Creek area, and the River Corridor SMA within the Specific Plan site. Irrevocable offers of dedication will be provided to CDFG for identified impact offsets in accordance with the Plan (MIT-1 (BIO-1)) using a "rough step" land dedication approach.

MIT-47 (BIO-21): Coastal scrub may be restored/enhanced in the High Country SMA, Salt Creek area, and River Corridor SMA. Eight suitable areas were identified in the Draft Newhall Ranch Mitigation Feasibility Report (Dudek 2007a) and were ranked with a priority of 1, 2, or 3, which is to be used to prioritize the target sites for coastal scrub restoration. As necessary for mitigation of Project impacts, a revegetation plan may be developed for these areas and any other proposed coastal scrub restoration areas. The plan shall be subject to the approval of the CDFG. The plan shall specify, at a minimum, the following: (1) the location of restoration sites; (2) site preparation procedures; (3) a schedule and action plan to maintain and monitor the restoration sites; (4) a list of criteria and performance standards by which to measure success of the restoration; and (5) contingency measures in the event that restoration efforts are not successful.

1. Previously Incorporated Measures Applying to California Sagebrush Scrub Wildlife Habitat

MIT-48 (SP-4.6-36): Upon final approval of the Newhall Ranch Specific Plan, the Special Management Area designation for the High Country SMA shall become effective. The permitted uses and development standards for the SMA are governed by the Development Regulations, *Chapter 3*.

MIT-49 (SP-4.6-37): The High Country SMA/SEA 20 shall be offered for dedication in three approximately equal phases of approximately 1,400 acres each proceeding from north to south, as follows:

1. The first offer of dedication will take place with the issuance of the 2,000th residential building permit of Newhall Ranch;

2. The second offer of dedication will take place with the issuance of the 6,000th residential building permit of Newhall Ranch;

3. The remaining offer of dedication will be completed by the 11,000th residential building permit of Newhall Ranch; and

4. The Specific Plan applicant shall provide a quarterly report to the Departments of Public Works and Regional Planning which indicates the number of residential building permits issued in the Specific Plan area by subdivision map number.

MIT-50 (SP-4.6-38): Prior to dedication of the High Country SMA/SEA 20, a conservation and public access easement shall be offered to the County of Los Angeles and a conservation and management easement offered to the Center for Natural Lands Management. The High Country SMA/SEA 20 Conservation and Public Access Easement shall be consistent in its provisions with any other conservation easements to State or Federal resource agencies which may have been granted as part of mitigation or mitigation banking activities.

MIT-51 (SP-4.6-39): The High Country SMA/SEA 20 conservation and public access easement shall prohibit grazing within the High Country, except for those grazing activities associated with the long-term resource management programs, and shall restrict recreation to the established trail system.

MIT-52 (SP-4.6-40): The High Country SMA conservation and public access easement shall be consistent in its provisions with any other conservation easements to State or Federal resource agencies which may have been granted as part of mitigation or mitigation banking activities.

MIT-53 (SP-4.6-41): The High Country SMA/SEA 20 shall be offered for dedication in fee to a joint powers authority consisting of Los Angeles County (4 members), the City of Santa Clarita (2 members), and the Santa Monica Mountains Conservancy (2 members). The joint powers authority will have overall responsibility for recreation within and conservation of the High Country SMA.

MIT-54 (SP-4.6-42): An appropriate type of service or assessment district shall be formed under the authority of the Los Angeles County Board of Supervisors for the collection of up to $24 per single family detached dwelling unit per year and $15 per single family attached dwelling unit per year, excluding any units designated as Low and Very Low affordable housing units pursuant to Section 3.10, Affordable Housing Program of the Specific Plan. This revenue would be assessed to the homeowner beginning with the occupancy of each dwelling unit and distributed to the joint powers authority for the purposes of recreation, maintenance, construction, conservation and related activities within the High Country SMA.

C. Mitigation Measures Applying to Common Plant Communities and Wildlife Habitat

1. Previously Incorporated Measures Applying to Common Plant Communities Wildlife Habitat

See MIT-39 through MIT-44 (SP-4.6-21 through SP-4.6-26) and MIT-48 through MIT-54 (SP-4.6-36 through SP-4.6-42)

D. Mitigation Measures Applying to Riparian Habitat During Construction

MIT-55 (SP-4.6-20): The following guidelines shall be followed during any grading activities that take place within the River Corridor SMA:

- Grading perimeters shall be clearly marked and inspected by the project biologist prior to grading occurring within or immediately adjacent to the River Corridor SMA.

- The project biologist shall work with the grading contractor to avoid inadvertent impacts to riparian resources.

MIT-56 (BIO-47): Equipment shall not be operated in areas of ponded or flowing water unless there are no practicable alternative methods to accomplish the construction work, and only after prior approval by the CDFG and the Corps. Approval shall be acquired by submitting a request to the CDFG and Corps no later than 30 days prior to work within areas of ponded or flowing water. The request must contain a biological evaluation demonstrating that no special-status fish are currently present or likely to be present during construction at the construction site or along access roads. This request may be included in the sub-notification letters for individual projects that are submitted to the CDFG and Corps.

MIT-57 (BIO-49): Water containing mud, silt, or other pollutants from construction activities shall not be allowed to enter a flowing stream or be placed in locations that may be subject to normal storm flows during periods when storm flows can reasonably be expected to occur.

MIT-58 (SP-4.6-58): In order to limit impacts to water quality, the Specific Plan shall conform to all provisions of required National Pollutant Discharge Elimination System (NPDES) permits and water quality permits that would be required by the State of California Regional Water Quality Control Board.

E. Mitigation Measures Applying to Arroyo Toad During Construction

See MIT-56 (BIO-47) and MIT-57 (BIO-49)

MIT-59 (BIO-50): Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 300 feet of construction sites and access roads shall be surveyed at the appropriate

season, as determined in consultation with the Corps, USFWS, and CDFG, by a qualified biologist for the presence of arroyo toad, California red-legged frog, two-striped garter snake, and southwestern pond turtle. The Corps and the CDFG shall be notified of the survey and shall have the option of attending. The biologist shall file a written report of the survey with any agency not in attendance within 14 days of the survey and no sooner than 30 days prior to any construction work in the riverbed.

MIT-60 (BIO-51): Construction work areas and access roads shall be cleared of any of the species listed in MIT-59 (BIO-50) immediately before the prescribed work is to be carried out, immediately before any equipment is moved into or through the stream or vegetation communities, and immediately before diverting any stream water. The removal of such species shall be conducted by a qualified biologist using procedures approved by the Corps, USFWS, and CDFG, and with the appropriate collection and handling permits. Species shall be relocated to suitable nearby habitat. A plan to relocate these species shall be submitted to the Corps and CDFG for review and approval no later than 30 days prior to construction and need to remove these species. This plan can also be included in the sub-notification letters submitted to the Corps and CDFG for individual project approvals.

MIT-61 (BIO-52): Prior to grading and construction activities, a qualified biologist shall be retained to perform the following:

- Attend the pre-construction meeting to ensure that timing/location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds);
- Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas;
- Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction;
- Review/designate the construction area in the field with the contractor in accordance with the final grading plan;
- Ensure that haul roads, access roads, and on-site staging and storage areas are sited within grading areas to minimize degradation of vegetation communities adjacent to these areas (if activities outside these limits are necessary, they shall be evaluated by the biologist to ensure that no special-status species habitats will be affected);
- Conduct a field review of the staking (to be set by the surveyor) designating the limits of all construction activity;
- Flag or temporarily fence any construction activity areas immediately adjacent to riparian areas;
- Be present during initial vegetation clearing and grading; and
- Submit to the CDFG an immediate report (within 72 hours) of any conflicts or errors resulting in impacts to special-status biological resources.

MIT-62 (BIO-48): Installation of bridges, culverts, or other structures shall not impair movement of fish and aquatic life. Bottoms of temporary culverts shall be placed at or below channel grade. Bottoms of permanent culverts shall be placed below channel grade.

1. Previously Incorporated Measures Applying to Arroyo Toad

See MIT-58 (SP-4.6-58)

F. Mitigation Measures Applying to Special-Status Bird Species, including least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, western burrowing owl and tricolored blackbird

See MIT-61 (BIO-52)

MIT-63 (BIO-55): Existing maps of suitable riparian habitat for the least Bell's vireo, southern willow flycatcher, and western yellow-billed cuckoo shall be updated every five years for 50 years and submitted to the Corps and CDFG. The removal of any riparian habitat suitable for breeding, nesting, foraging, and temporary usage during migration by these species from the Project footprint (*i.e.*, boundaries of temporary and permanent impacts) shall be mitigated through the creation or enhancement of similar riparian habitat at an approved mitigation site or by the removal of exotic species from an area of existing similar habitat. The requirement for replacing suitable habitat by either creating new habitat or removing exotic species from existing habitat shall follow the procedures outlined in MIT-1 through MIT-15 (BIO-1 through BIO-15).

MIT-64 (BIO-56): Within 30 days of ground-disturbing activities associated with construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically March through August in the Project region, or as determined by a qualified biologist), the applicant shall have weekly surveys conducted by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the disturbance zone or within 300 feet (500 feet for raptors) of the disturbance zone. The surveys shall continue on a weekly basis, with the last survey being conducted no more than seven days prior to initiation of disturbance work. If ground-disturbing activities are delayed, then additional pre-disturbance surveys shall be conducted such that no more than seven days will have elapsed between the survey and ground-disturbing activities. If active nests are found, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts to these nests occur. Results of the surveys shall be provided to CDFG in the annual mitigation status report. In the event a nest becomes active subsequent to construction activities already

occurring within 300 feet (500 feet for raptors) of the nest, then the setbacks will not apply.

MIT-65 (BIO-57): Thirty days prior to construction activities, a qualified biologist shall conduct a survey to determine whether the burrowing owl is present at the site and determine the nesting status of the individuals at the site. If the burrowing owl is detected but nesting is not occurring, construction work can proceed after any owls have been evacuated from the site using CDFG-approved burrow closure procedures and after alternative nest sites have been provided in accordance with the CDFG Staff Report on Burrowing Owl Mitigation (10-17-95). If nesting is occurring, construction work within 500 feet shall be delayed until fledglings have left the nest (as described in MIT-64 (BIO-56)). Pre-construction surveys shall only be conducted in areas dominated by field crops and grassland or if such habitats occur within 500 feet of a construction zone. Results of the surveys and relocation efforts shall be provided to CDFG in the annual mitigation status report. In the event a nest becomes active subsequent to construction activities already occurring within 500 feet of the nest, then the setbacks will not apply.

MIT-66 (BIO-78): In order to establish whether a brown-headed cowbird trapping program is necessary, focused surveys will be conducted along the River Corridor SMA. A qualified biologist will survey during February, April, and May of each year following initiation of construction within 200 feet of the River. During the survey, no single biologist may cover more than 300 acres of riparian habitat. If ten or more males or five or more females or juveniles are observed on any single survey day, then a brown-headed cowbird management plan will be written and submitted to the CDFG and USFWS for approval. Surveys and any cowbird trapping shall continue for 10 years after initial year survey. After 10 years, no further surveys or trapping will be required.

1. Previously Incorporated Measures Applying to Special-Status Bird Species

See MIT-58 (SP-4.6-58)

MIT-67 (SP-4.6-56): All lighting along the perimeter of natural areas shall be downcast luminaries with light patterns directed away from natural areas.

G. Mitigation Measures Applying to the Undescribed Snail and Sunflower

MIT-68 (BIO-77): A Draft Middle Canyon Spring Habitat Management Plan (Dudek 2007b) has been developed that details the measures to be implemented to maintain the populations of the undescribed snail and sunflower species. The Plan specifies the following: (1) a framework to collect baseline data on existing site conditions; (2) guidelines for the development of a construction monitoring program and a post-development monitoring program; (3) a framework to develop threshold parameters that activate adaptive management measures across a series of potential future scenarios, including water quality and water quantity scenarios; (4) measures to exclude unauthorized entry into the Spring; and (5) contingency measures in the event that

management efforts are not successful. The plan shall be subject to the approval of CDFG prior to disturbance within 100 feet of flowing water in Middle Canyon Creek and/or 200 feet of Middle Canyon Spring.

MIT-69 (BIO-86): Focused surveys for the undescribed snail species shall be conducted by a qualified biologist prior to the commencement of grading/construction activities within flowing water within Middle Canyon Creek. Any individuals of the undescribed snail species found within the Project footprint shall be relocated to appropriate habitat within Middle Canyon Spring.

H. Mitigation Measures Applying to the Undescribed Everlasting

MIT-70 (BIO-75): Focused surveys for the undescribed species of everlasting (a special-status plant species) shall be conducted by a qualified botanist prior to the commencement of grading/construction activities within suitable habitat (primarily river terraces) of the species. The surveys shall be conducted up to one year prior to commencement of construction activities within suitable habitat. Should the species be documented within the Project boundary, avoidance measures shall be implemented to minimize impacts to individual plants. These measures shall include minor adjustments to the boundaries/location of haul routes and other Project features. If, due to Project design constraints, avoidance of all plants is not possible, then available methods for salvaging seeds and/or transplantation of individual plants to be impacted will be evaluated and implemented. All seed collection and/or transplantation methods, as well as the location of the receptor site for seeds/plants (assumed to be within preserved open space areas of Newhall Ranch along the Santa Clara River), shall be coordinated with CDFG prior to impacting known occurrences of the undescribed everlasting.

MIT-71 (BIO-76): An undescribed everlasting mitigation and monitoring plan will be developed prior to the issuance of grading permits for individual projects and implemented by the applicant if surveys conducted in accordance with MIT-70 (BIO-75) are positive. The plan shall demonstrate the feasibility of replacing the number of individual plants to be removed at a 1:1 ratio. The plan shall specify the following: (1) the location of mitigation sites in protected/preserved areas within the Specific Plan site; (2) methods for harvesting seeds and salvaging and transplantation of individual plants to be impacted; (3) site preparation procedures for the mitigation site; (4) a schedule and action plan to maintain and monitor the mitigation area; (5) a list of criteria and performance standards by which to measure the success of the mitigation site; (6) measures to exclude unauthorized entry into the mitigation areas; and (7) contingency measures in the event that mitigation efforts are not successful.

I. Mitigation Measures Applying to Plant Communities and Wildlife Habitat During Construction

MIT-72 (BIO-70): Construction plans shall include necessary design features and construction notes to ensure protection of vegetation communities and special-status plant and aquatic wildlife species adjacent to construction. In addition to applicable erosion control plans and performance under SCAQMD Rule 403d dust control, the Project

stormwater pollution prevention plan (SWPPP) shall include the following minimum BMPs. Together, the implementation of these requirements shall ensure protection of adjacent habitats and wildlife species during construction. At a minimum, the following measures/restrictions shall be incorporated into the SWPPP, and noted on construction plans where appropriate, to avoid impacting special-status species during construction:

- Avoid planting or seeding invasive species in development areas within 200 feet of native vegetation communities.
- Provide location and details for any dust control fencing along Project boundaries (MIT-73 (BIO-71)).
- Vehicles shall not be driven or equipment operated in areas of ponded or flowing water, or where wetland vegetation, riparian vegetation, or aquatic organisms may be destroyed, except as otherwise provided for in the 404 permit or 1603 Agreement.
- Silt settling basins installed during the construction process shall be located away from areas of ponded or flowing water to prevent discolored, silt-bearing water from reaching areas of ponded or flowing water during normal flow regimes.
- If a stream channel has been altered during the construction and/or maintenance operations, its low flow channel shall be returned as nearly as practical to pre-Project topographic conditions without creating a possible future bank erosion problem or a flat, wide channel or sluice-like area. The gradient of the streambed shall be returned to pre-Project grade, to the extent practical, unless it represents a wetland restoration area.
- Temporary structures and associated materials not designed to withstand high seasonal flows shall be removed to areas above the high water mark before such flows occur.
- Staging/storage areas for construction equipment and materials shall be located outside of the ordinary high water mark.
- Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily, to prevent leaks of materials that could be deleterious to aquatic life if introduced to water.
- Stationary equipment such as motors, pumps, generators, and welders which may be located within the riverbed construction zone shall be positioned over drip pans. No fuel storage tanks shall be allowed in the riverbed.
- No debris, bark, slash sawdust, rubbish, cement or concrete or washing thereof, oil, petroleum products, or other organic material from any construction, or associated activity of whatever nature, shall be allowed to enter into, or be placed where it may be washed by rainfall or runoff into, watercourses included in the permit. When construction operations are completed, any excess materials or debris shall be removed from the work area.

- No equipment maintenance shall be done within or near any stream where petroleum products or other pollutants from the equipment may enter these areas with stream flow.
- The operator shall install and use fully covered trash receptacles to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash.
- The operator shall not permit pets on or adjacent to the construction site.
- No guns or other weapons are allowed on the construction site during construction, with the exception of the security personnel and only for security functions. No hunting shall be authorized/permitted during construction.

MIT-73 (BIO-71): Development areas shall have dust control measures implemented and maintained to prevent dust from impacting vegetation communities and special-status plant and aquatic wildlife species. Dust control shall comply with SCAQMD Rule 403d. Where construction activities occur within 100 feet of known special-status plant species locations, chemical dust suppression shall not be utilized. Where determined necessary by a qualified biologist, a screening fence (*i.e.*, a six-foot-high chain link fence with green fabric up to a height of five feet) shall be installed to protect special-status species locations.

J. Mitigation Measures Applying to Plant Communities and Wildlife Habitat Post-Construction

MIT-74 (BIO-72): Plant palettes proposed for use on landscaped slopes, street medians, park sites, and other public landscaped and FMZ areas within 100 feet of native vegetation communities shall be reviewed by a qualified restoration specialist to ensure that the proposed landscape plants will not naturalize and require maintenance or cause vegetation community degradation in the open space areas (River Corridor SMA, High Country SMA, Salt Creek area, and natural portions of the Open Areas). Container plants to be installed within public areas within 100 feet of the open space areas shall be inspected by a qualified restoration specialist for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases shall be rejected. In addition, landscape plants within 100 feet of native vegetation communities shall not be on the Cal-IPC California Invasive Plant Inventory (most recent version) or on the list of Invasive Ornamental Plants listed in Appendix B of the SCP. The current Cal-IPC list can be obtained from the Cal-IPC website (http://www.cal-ipc.org/ip/inventory/index.php). Landscape plans will include a plant palette composed of native or non-native, non-invasive species that do not require high irrigation rates. Except as required for fuel modification, irrigation of perimeter landscaping shall be limited to temporary irrigation (*i.e.*, until plants become established).

MIT-75 (BIO-73): Permanent fencing shall be installed along all trails that pass through the River Corridor SMA in order to minimize impacts associated with increased human presence on protected vegetation communities and special-status plant and wildlife species.

MIT-76 (BIO-74): To protect Middle Canyon Spring and to reduce potential direct impacts to any sensitive species that may be located within the Spring (*e.g.*, the undescribed snail and the undescribed sunflower) due to unrestricted access, the Project applicant or its designee shall erect and maintain temporary orange fencing and prohibitive signage around the Middle Canyon Spring prior to and during all phases of construction within 200 feet of the Spring and, if applicable, around Middle Canyon Creek within 100 feet of flowing water. The areas behind the temporary fencing shall not be used for the storage of any equipment, materials, construction debris, or anything associated with construction activities.

Following the final phase of construction of any Newhall Ranch subdivision tract adjacent to Middle Canyon Spring, the Project applicant or its designee shall install and maintain permanent fencing along the subdivision tract bordering the Spring. Permanent signage shall be installed on the fencing along the Spring boundary to indicate that the fenced area is a biological preserve that contains protected species and habitat, and that access is restricted. The permanent fencing shall be designed to allow wildlife movement.

MIT-77 (SP-4.6-53): If, at the time any subdivisions map proposing construction is submitted, the County determines through an Initial Study, or otherwise, that there may be rare, threatened or endangered, plant or animal species on the property to be subdivided, then, in addition to the prior surveys conducted on the Specific Plan site to define the presence or absence of sensitive habitat and associated species, current, updated site-specific surveys for all such animal or plant species shall be conducted in accordance with the consultation requirements set forth in Mitigation Measure MIT-78 (SP-4.6-59) within those areas of the Specific Plan where such animal or plant species occur or are likely to occur.

The site-specific surveys shall include the unarmored three-spine stickleback, the arroyo toad, the Southwestern pond turtle, the California red-legged frog, the southwestern willow flycatcher, the least Bell's vireo, the San Fernando Valley spineflower and any other rare, sensitive, threatened, or endangered plant or animal species occurring, or likely to occur, on the property to be subdivided. All site-specific surveys shall be conducted during appropriate seasons by qualified botanists or qualified wildlife biologists in a manner that will locate any rare, sensitive, threatened, or endangered animal or plant species that may be present. To the extent there are applicable protocols published by either USFWS or CDFG, all such protocols shall be followed in preparing the updated site-specific surveys.

All site-specific survey work shall be documented in a separate report containing at least the following information: (a) project description, including a detailed map of the project location and study area; (b) a description of the biological setting, including references to the nomenclature used and updated vegetation mapping; (c) detailed description of survey methodologies; (d) dates of field surveys and total person-hours spent on the field surveys; (e) results of field surveys, including detailed maps and location data; (f) an assessment of potential impacts; (g) discussion of the significance of the rare, threatened or endangered animal or plant populations found in the project area, with consideration given to nearby populations and species distribution; (h) mitigation measures, including

avoiding impacts altogether, minimizing or reducing impacts, rectifying or reducing impacts through habitat restoration, replacement or enhancement, or compensating for impacts by replacing or providing substitute resources or environments, consistent with CEQA (Guidelines §15370); (i) references cited and persons contacted; and (j) other pertinent information, which is designed to disclose impacts and mitigate for such impacts.

MIT-78 (SP-4.6-59): Consultation shall occur with the County of Los Angeles ("County") and CDFG at each of the following milestones:

1) Before Surveys. Prior to conducting sensitive plant or animal surveys at the Newhall Ranch subdivision map level, the applicant, or its designee, shall consult with the County and CDFG for purposes of establishing and/or confirming the appropriate survey methodology to be used.

2) After Surveys. After completion of sensitive plant or animal surveys at the subdivision map level, draft survey results shall be made available to the County and CDFG within sixty (60) calendar days after completion of the field survey work.

3) Subdivision Map Submittal. Within thirty (30) calendar days after the applicant, or its designee, submits its application to the County for processing of a subdivision map in the Mesas Village or Riverwood Village, a copy of the submittal shall be provided to CDFG. In addition, the applicant, or its designee, shall schedule a consultation meeting with the County and CDFG for purposes of obtaining comments and input on the proposed subdivision map submittal. The consultation meeting shall take place at least thirty (30) days prior to the submittal of the proposed subdivision map to the County.

4) Development/Disturbance and Further Mitigation. Prior to any development within, or disturbance to, habitat occupied by rare, threatened, or endangered plant or animal species, or to any portion of the Spineflower Mitigation Area Overlay, as defined below, all required permits shall be obtained from both USFWS and CDFG, as applicable. It is further anticipated that the federal and state permits will impose conditions and mitigation measures required by federal and state law that are beyond those identified in the Newhall Ranch Final EIR (March 1999), the Newhall Ranch DAA (April 2001) and the Newhall Ranch Revised DAA (2002). It is also anticipated that conditions and mitigation measures required by federal and state law for project-related impacts on endangered, rare or threatened species and their habitat will likely require changes and revisions to Specific Plan development footprints, roadway alignments, and the limits, patterns and techniques associated with project-specific grading at the subdivision map level.

MIT-79 (BIO-64): An integrated pest management (IPM) plan that controls the use of rodenticides on site will be prepared prior to the issuance of building permits for the initial tract map. Preparation of the CC&Rs for each tract map shall include language that prohibits the use of anticoagulants in the Project site.

MIT-80 (BIO-63): Each tract map Home Owners' Association shall supply educational information to future residents regarding pets, wildlife, and open space areas. The material shall discuss the presence of native animals (*e.g.*, coyote, bobcat, and mountain lion), indicate that those native animals could prey on pets, indicate that no actions shall be taken against native animals should they prey on pets allowed outdoors, and indicate that pets must be leashed while using the designated trail system and/or in any areas within or adjacent to open space. Control of stray and feral cats and dogs will be conducted in open space areas on an as-needed basis by the NLMO(s) or the Newhall Ranch JPA managing the River Corridor SMA, High Country SMA, or Salt Creek area or by the HOAs managing the Open Areas. Feral cats and dogs may be trapped and deposited with the local Society for the Prevention of Cruelty to Animals or the Los Angeles County Department of Animal Control.

MIT-81 (SP-4.6-55): Prior to development or disturbance within wetlands or other sensitive habitats, permits shall be obtained from pertinent Federal and State agencies and the Specific Plan shall conform to the specific provisions of said permits. Performance criteria shall include that described in Mitigation Measures MIT-19 through MIT-35 (SP-4.6-1 through SP-4.6-16), MIT-54, and SP-4.6-43 through 4.6-47 for wetlands, and Mitigation Measures 4.6-27, 4.6-28, and 4.6-42 through 4.6-48 for other sensitive habitats.

9. MONITORING PLAN (CCR § 783.2(a)(9))

A monitoring plan to monitor compliance with the above mitigation measures and to monitor the effectiveness of the mitigation measures is discussed below. In addition, the CEQA-required Mitigation Monitoring and Reporting Program (MMRP) as required by California Public Resources Code Section 21081.6 will, as part of approval of the Project, require monitoring the compliance of all Project mitigation measures, including the biological mitigation discussed in this application. Monitoring and management measures are found in *Section 8.0* of the attached RMDP.

The following monitoring actions are proposed. Noe that many of the proposed monitoring activities have been integrated into the mitigation conditions above. In the interest of clarity, and to limit duplication, applicable MIT conditions are referenced below. Monitoring requirements under MIT-61, MON-1, MON-2, and MON-3 address mitigation compliance issues, while requirements MIT-18, MIT-6, MIT-14, MIT-20, MIT-26, and MIT-27 address mitigation effectiveness issues. MIT-63, MIT-64, and MIT-17 address both mitigation compliance and effectiveness issues.

A. Monitoring Measure Applying to All Construction Activities in the Project Area

See MIT-61 (BIO-52)

B. Monitoring Measures to Address Impacts to Special-Status Aquatic Species

MON-1 (BIO-43): Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 300 feet of construction sites and access roads shall be surveyed at the appropriate season by a qualified biologist for the presence of the unarmored threespine stickleback, arroyo chub, and Santa Ana sucker. The Corps and the CDFG shall be notified of the survey and shall have the option of attending. The biologist shall file a written report of the survey with any agency not in attendance within 14 days of the survey and no sooner than 30 days prior to any construction work in the riverbed.

MON-2 (BIO-46): A qualified biologist shall be present when any stream diversion takes place, and shall patrol the areas within, upstream, and downstream of the work area. A special-status aquatic species protection and relocation plan shall be submitted for approval by CDFG. The plan shall include the following steps.

- A survey shall be conducted immediately before the prescribed work is to be carried out. Nets used for surveys shall be 1/8-inch maximum stretch mesh.
- Any individuals found will be moved out of the area and held until work is completed. If necessary, individuals will be held in insulated boxes with aerators to assure their survival.
- Blocking nets similar to those used in the survey shall be placed upstream of the work area to ensure that no individuals swim downstream into the area. Nets will also be placed downstream, if necessary.
- Qualified biologists will patrol the areas upstream and downstream of the work area to rescue any individuals stranded by diversion of the stream water. If stream diversion is intended in the work area, more people shall be used for downstream patrol.
- When work is completed, individuals shall be replaced into the stream in a manner and place to assure their survival. Individuals that are collected shall be relocated to suitable habitat downstream of the work area.
- A report of all activities and findings, along with all field notes, will be submitted to CDFG.
- Under no circumstances shall the unarmored threespine stickleback be collected or relocated, unless USFWS personnel or their agents implement this measure.

MON-3 (BIO-80): The Project applicant will retain a qualified biologist to conduct monitoring for bullfrog, African clawed frog, crayfish, and non-native fishes to determine

if control is necessary. Monitoring will be conducted within any suitable habitat created in RMDP constructed structures. If the qualified biologist determines that control is necessary, an eradication plan using appropriate methods will be developed and implemented. These efforts will be implemented by the NLMO(s) managing the River Corridor SMA, High Country SMA, or Salt Creek area, or by the HOAs managing the Open Areas. Monitoring and control of bullfrog, African clawed frog, and crayfish would occur no more than 50 years.

C. **Monitoring Measures to Address Impacts to Special-Status Bird Species**

See MIT-63 (BIO-55)

See MIT-64 (BIO-56)

D. **Monitoring Measures to Address Impacts to Temporarily Disturbed Riparian Habitats**

See MIT-17 (BIO-17)

See MIT-18 (BIO-18)

E. **Monitoring Measures to Address Impacts to Riparian Habitat**

See MIT-6 (BIO-6)

See MIT-14 (BIO-14)

See MIT-20 (SP-4.6-2)

See MIT-26 (SP-4.6-8)

See MIT-27 (SP-4.6-9)

10. FUNDING (CCR § 783.2(a)(10))

Applicant will provide funding for the implementation of the minimization and mitigation activities described herein. In the case of the conservation easement areas, Newhall Land owns the subject land, thus this major minimization measure does not require subsequent funding for property purchase. Applicant will ensure the funding for all other agreed upon mitigation measures posting bonds (or other CDFG-approved financial assurance mechanisms) on a phased basis relative to the development area under construction, as further discussed below.

To ensure adequate funding to carry out all mitigation, monitoring and reporting obligations, any RMDP Subnotification project submitted by an Applicant pursuant to the Incidental Take Permit application shall post security prior to disturbance of Project areas described in said RMDP Subnotification Letters. The amount of security posted for each

Subnotification project shall be based on the estimated cost of carrying out the mitigation measures and monitoring activities for that Subnotification project as set forth as conditions of approval of this permit. Applicant shall submit a detailed estimate of these costs to CDFG for review and approval in advance of each Subnotification project. The security may be a pledged savings or trust account, certificate of deposit, irrevocable letter of credit, surety bond or other form approved by CDFG. Nothing shall prevent Applicant from requesting, and obtaining, partial or final release of any established security upon demonstrating to CDFG that mitigation, monitoring and reporting obligations have been satisfied for a Subnotification project, or portion thereof. Updated security cost estimates and a replacement security may be submitted as necessary to carry out those activities yet to be fully satisfied. The Annual Mitigation Monitoring Report submittal shall be used for such requests.

CDFG will, within 30 days of receiving a security proposal, a replacement instrument, or a request for partial or full release of an individual project security: 1) review the cost estimates and adjust those estimates as needed to reflect the probable costs of carrying out, or completing, the required mitigation and monitoring measures, 2) review the request for partial or final security release, 3) approve or deny the request for security replacement or release, and 4) approve or deny the form and terms of any new form of security. Any denial of a security shall be in writing from CDFG to Applicant, with a reason for the decision. If CDFG fails to respond to Applicant within the 30 day time frame the request shall be deemed approved. This clause shall be suitable for inclusion as a term for any security. To obtain release of the financial obligation from the holder of the security (bank, bond company, CDFG, etc.), Applicant shall present proper documentation to the holder of the security that the request to CDFG was made, and that 30 days has passed. Proof of submittal shall be written documentation of receipt by CDFG's General Counsel Office via hand delivery, "Return Receipt" via US Post Office, or Overnight Carrier. Proof of receipt, with inclusion of this clause as a term of the security, shall constitute CDFG authorization to the holder of the security for release of the security back to Applicant, if CDFG has not responded within 30 days.

11. CERTIFICATION (CCR § 783.2(a)(11))

I certify that the information submitted in this application is complete and accurate to the best of my knowledge and belief. I understand that any false statement herein may subject me to suspension or revocation of this permit and to civil and criminal penalties under the laws of the State of California.

Mark Subbotin
Senior Vice President
The Newhall Land and Farming Company

12. COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (14 CCR § 783.3(b))

Section 783.3 of Title 14 of the California Code of Regulations lays out CEQA-compliance requirements where CDFG is the responsible or lead agency for purposes of issuing an Incidental Take Permit. Subsection 783.3(a) does not apply here because CDFG is the lead agency and not the responsible agency. Subsection 783.3(b) applies here because CDFG is the CEQA lead agency here.

Section 783.3(b) requires submittal of information by the project applicant showing compliance with CEQA requirements. The submission of compliance information does not need to be concurrent with the submission of the Incidental Take Permit application: "[t]he analysis and information required by this section shall be provided to the Department [CDFG] as soon as reasonably practicable following the submission of a permit application." (14 CCR § 783.3(b)).

Pursuant to § 783.3(b), an applicant must submit the following information in addition to that information required by 14 CCR § 783.2. First, the applicant must provide information to CDFG regarding whether the Project may result in significant adverse environmental effects in addition to those impacts of taking analyzed in the Incidental Take Permit. Second, if additional significant adverse environmental effects are found to exist, the applicant must state whether feasible alternatives or mitigation measures would avoid or lessen those significant adverse effects. Third, the applicant must analyze all potentially significant adverse environmental effects resulting from the Project and include a discussion of the feasible alternatives and mitigation measures that will be used to avoid or substantially lessen those significant adverse environmental effects with documentation to support that analysis. Fourth, if the analysis identifies significant adverse environmental effects for which feasible mitigation measures are not available, the applicant must also include a statement describing specific environmental, economic, legal, social, technological, or other benefits which might justify the significant environmental effects created by the Project.

There is currently underway an Administrative Draft EIS/EIR jointly prepared by the Corps and CDFG with Newhall Land's continued involvement, including Newhall Land supplying all of the information required by 14 CCR § 783.3(b). Numerous technical studies, including biological surveys, have been prepared regarding the species proposed to be covered by the Incidental Take Permit, as well as regarding all other environmental issues triggered by the overall RMDP Project.

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