This section has been revised in response to comments received on the Draft EIS/EIR (April 2009), and based on additional independent review by the lead agencies (U.S. Army Corps of Engineers and California Department of Fish and Game) The revised or additional text is shown in double-underline; deleted text is shown in ~~strikeout~~. Revised or new figures or tables (if applicable) are indicated by the addition of the following text to the figure or table title: **(Revised)** or **(New)**. The primary change made to **Section 3.0** was to add a description of the Draft Least Environmentally Damaging Practicable Alternative (LEDPA), which is found at the end of this section.

3.1 INTRODUCTION

This section identifies and describes on-site and off-site alternatives pursuant to NEPA and CEQA requirements. **Subsection 3.2** discusses the regulatory setting for the alternatives analysis presented herein. **Subsection 3.3** presents alternatives that were considered, but rejected from further analysis in the EIS/EIR, and explains the reasons for the exclusion of such alternatives. **Subsection 3.4** describes the proposed on-site Project alternatives analyzed in this EIS/EIR.

The environmental impacts of the proposed Project (Alternative 2) and the on-site alternatives are discussed by environmental issue in **Section 4.0** of this EIS/EIR. A comparative impact assessment of the alternatives is provided in **Section 5.0** of this EIS/EIR.

3.2 REGULATORY SETTING

3.2.1 NEPA and CWA Section 404(b)(1) Guidelines

Under NEPA, the range of alternatives required in an EIS is governed by the rule of reason, which provides that an EIS is required to set forth ~~only~~ those alternatives necessary to permit a reasoned choice. An EIS must consider a reasonable range of alternatives as defined by the specific facts and circumstances of the proposed action. Alternatives must be feasible and consistent with ~~fulfill the basic requirements of a project's~~ the statement of purpose and need. ~~NEPA also requires that alternatives be feasibly carried out in the context of technical, economic, environmental, and other factors.~~ If alternatives have been eliminated from detailed study, the EIS must briefly discuss the reasons for their elimination. Under NEPA, feasible alternatives must be addressed at the same level of detail as a proposed project. In addition, under NEPA, the alternatives analysis should present the environmental impacts of the proposed project and the alternatives "in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public." (40 C.F.R. § 1502.14.) Under NEPA, the focus is on considering alternatives and the proposed action "so that reviewers may evaluate their comparative merits." (40 C.F.R. § 1502.14.) The "No Action" alternative, which maintains existing conditions and practices on a project site, must be included among the alternatives analyzed. The federal lead agency also should identify its preferred alternative. In short, action alternatives should be feasible and consistent with ~~meet~~ the ~~basic project~~ purpose and need statement.

In addition to the NEPA alternatives analysis, the Corps is required to analyze alternatives pursuant to the section 404(b)(1) ~~g~~Guidelines (Guidelines; 40 C.F.R. Part 230). Under that analysis, the Corps determines the Least Environmentally Damaging Practicable Alternative (LEDPA). ~~The section 404(b)(1) alternatives analysis is to be completed concurrently with the EIS/EIR and provided as an appendix in the~~

~~Final EIS/EIR.~~ Requirements of the section 404(b)(1) Guidelines ~~alternatives analysis~~ are discussed in greater detail in revised **Section 4.6**, Jurisdictional Waters and Streams, of ~~this~~ the Final EIS/EIR. **Appendix F1.0** of the Final EIS/EIR contains the "Draft Section 404(b)(1) Alternatives Analysis for the RMDP.

~~Federal Executive Order No. 11988 also requires the Corps to consider alternatives that would avoid, if practicable, adverse effects and incompatible development in a 100-year floodplain. If avoidance is not practicable, the agency should design the action to minimize such effects~~

3.2.2 CEQA

The range of alternatives under CEQA is similarly governed by the rule of reason. The State CEQA Guidelines section 15126.6 states that an EIR must describe a "range of reasonable alternatives" to the project or its location, which would feasibly attain most of the project objectives while avoiding or substantially lessening the significant effects of a proposed project, and evaluate the comparative merits of each alternative. An EIR must consider a reasonable range of alternatives that will foster informed decision making and public participation. The EIR also should identify any alternatives that were considered but rejected as infeasible and briefly explain the reasons underlying the lead agency's determination. Among the factors that may be used to eliminate alternatives from further detailed consideration in an EIR are: (a) failure to meet most of the basic project objectives; (b) infeasibility; or (c) inability to avoid significant environmental impacts. CEQA also makes clear that an EIR must include "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." (Cal. Code Regs., tit. 14, § 15126.6, subd. (d).)

An EIR must include a "No Project" alternative, similar to the "No Action" alternative required under NEPA. The description of each alternative must be sufficient to allow meaningful evaluation and comparison with a proposed project. The lead agency also must identify the environmentally superior alternative.

3.3 ALTERNATIVES CONSIDERED BUT REJECTED

This EIS/EIR evaluates potential off-site alternatives in order to comply with NEPA and CEQA requirements. While the Los Angeles County Board of Supervisors approved the Specific Plan and considered off-site alternatives under CEQA in the associated environmental documentation, off-site alternatives were not considered under NEPA. To satisfy NEPA requirements, off-site alternatives are presented in this section. There were initially 23 potential off-site alternatives, which were narrowed to three off-site alternative locations; however, after further analysis, all of the off-site alternatives that were considered have been eliminated from further consideration in this EIS/EIR for the reasons described below.

In addition, as discussed below, a "Total Avoidance" alternative was considered. This alternative would arise if the Corps did not ~~approve~~ issue a ~~the~~ long-term CWA section 404 permit to allow implementation of the regulated activities ~~and infrastructure addressed~~ associated with ~~in~~ the RMDP component of the proposed Project. Under this alternative, the only development facilitated by the RMDP component is the Specific Plan, and the alternative assesses those portions of the Specific Plan within the Project area that

could be accessed and constructed while still avoiding areas within the Corps' jurisdiction. This alternative also was eliminated from further consideration in this EIS/EIR for the reasons described below.

3.3.1 Alternative Off-Site Locations Considered

The proposed RMDP would provide habitat conservation and management, and infrastructure improvements to facilitate development of the previously approved Specific Plan. The proposed SCP would implement a conservation and management plan for the applicant's land holdings in Los Angeles County that contain known spineflower populations, and facilitate development in the Specific Plan, VCC, and a portion of the Entrada planning area. Implementation of the RMDP and SCP at an off-site alternative location without also implementing the same or similar development projects as the Specific Plan, VCC, and Entrada would not meet any of the ~~applicant's~~ project objectives/purpose and need. Therefore, this assessment of potential off-site alternatives focuses on locations that are potentially capable of meeting most of the objectives/purpose and need under the RMDP and SCP components of the proposed Project, plus the applicant's objectives associated with the Specific Plan, VCC, and Entrada developments.

The Specific Plan, VCC, and Entrada are intended to meet the expected demands for increased housing and employment opportunities in northern Los Angeles County.

In *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 572-573, the court stated that it is reasonable to compare the impacts of a project located on an alternative site if an alternative site offers substantial environmental advantages over the project site; if developing the alternative site is feasible, considering economic, environmental, social, technological, and other factors; and if the size of the alternative site can accommodate the proposed project. The court decision also suggested that it is not reasonable to compare the impacts that a project would have on an alternative site if that site is under multiple ownerships; if the site is outside the lead agency's jurisdiction; if the site has General Plan land use designations that are inconsistent with the proposed project; or if the site has poor access to urban services.

In an effort to consider the regional context for purposes of a CWA section 404 permit and not limit too narrowly the area where alternative sites might be located, a regional search for alternative sites was undertaken as part of this EIS/EIR. While the criteria that are suggested in the *Goleta* decision could have been used to narrow the analysis, most of those criteria were not used in order to ensure that a broad list of possible sites was considered and reviewed under NEPA. Potential sites were identified with the only parameters being that the sites had to be reasonably available for purchase, and they had to be located within the very broad geographic region of Ventura, southern Kern, and central to northern Los Angeles counties. This search identified a total of 23 alternative site locations, which are listed in **Table 3.0-1** and are illustrated on **Figure 3.0-1**. A majority of these 23 sites were rejected from further consideration based on the following screening criteria:

- Some sites were too small to accommodate the amount of development proposed in the Specific Plan, VCC planning area, and a portion of the Entrada planning area.

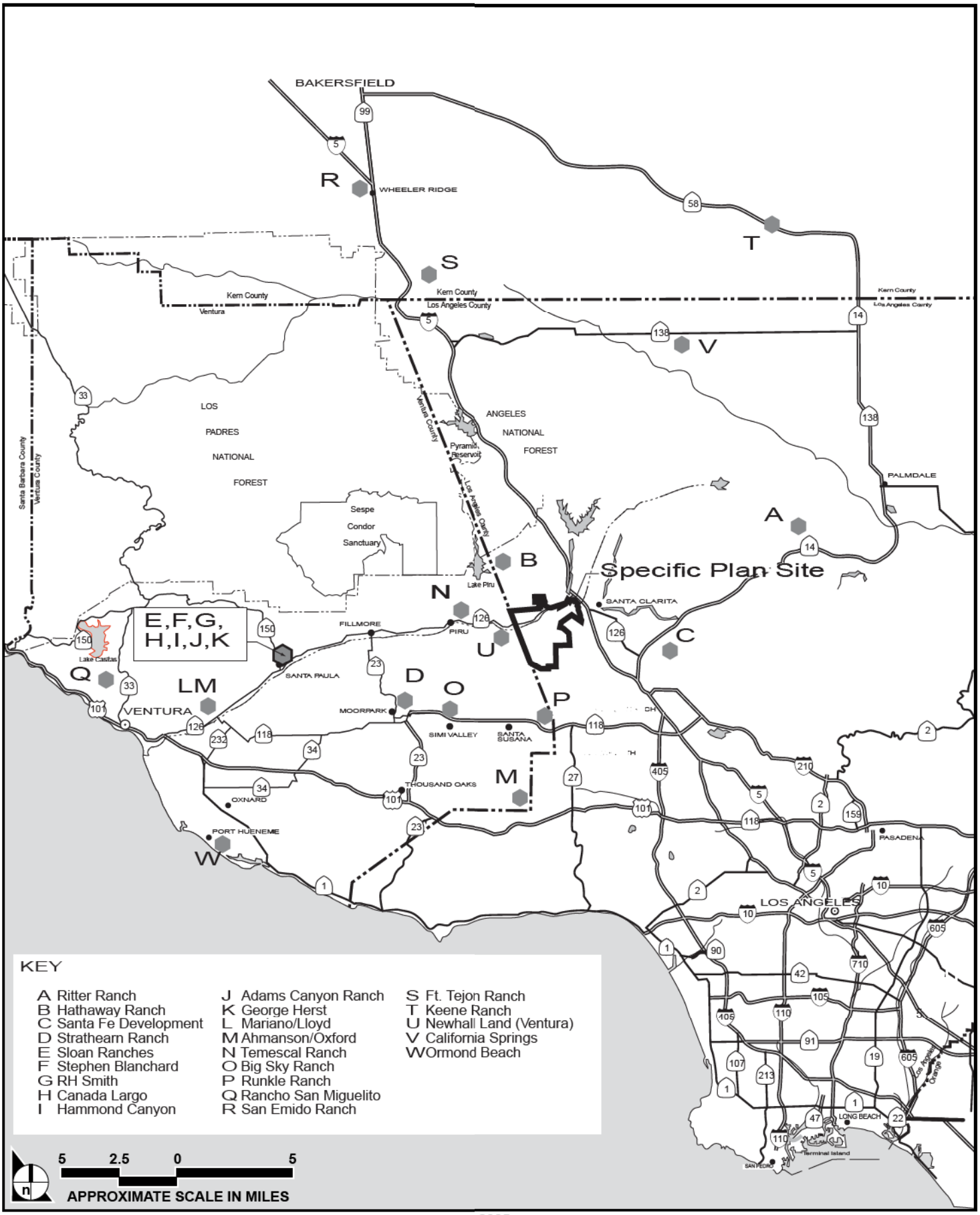
Table 3.0-1
Alternative Sites Considered

Site	Site Name or Owner	Size (Acres)
A	Ritter Ranch	11,000
B	Hathaway Ranch	6,195
C	Santa Fe Development	1,296
D	Strathearn Ranch	3,165
E	Sloan Ranches	4,326
F	Stephen Blanchard	1,907
G	RH Smith	3,691
H	Canada Largo	5,374
I	Hammond Canyon	1,896
J	Adams Canyon Ranch	5,000
K	George Herst	1,520
Subtotal (Sites E through K) [1]		**23,714**
L	Mariano/Lloyd	5,419
M	Ahmanson/Oxford	5,495
N	Temescal Ranch	7,580
O	Big Sky Ranch	6,200
P	Runkle Ranch	3,580
Q	Rancho San Miguelito	8,030
R	San Emido Ranch	119,000
S	Ft. Tejon Ranch	250,000
T	Keene Ranch	6,000
U	Newhall Land (Ventura)	15,000
V	California Springs	8,000
W	Ormond Beach	1,200

Note:

[1] Sites E through K are being considered together as one parcel due to their location and size. Individually, none of the sites are large enough to accommodate the development proposed in the Specific Plan, VCC, and Entrada planning areas. However, because they are all very near to one another, it is conceivable that they could be developed in a coordinated fashion.

Source: Impact Sciences, Inc., 2007.



SOURCE: Newhall Ranch Specific Plan - 1999, URS Corporation – August 2005

FIGURE 3.0-1

Alternative Site Locations

- Some sites were located outside the Santa Clarita Valley market and planning area, which is where the Specific Plan, VCC, and Entrada areas are located. The Project area's market and planning area has been determined to be bound on the north by Pyramid Lake, on the west by eastern Ventura County (including areas generally east of the cities of Fillmore, Moorpark, and Camarillo), on the south by the central and northern portions of the city of Los Angeles, and on the east by the southwestern Antelope Valley.

- Some sites were in isolated locations that cannot be efficiently connected with existing urban infrastructure.

- Some sites have been entitled for urban development and are being actively planned for development by the present owner, or are under construction.

As shown in **Table 3.0-2**, all but three of the 23 potential alternative sites were rejected from consideration based on the above screening criteria.[1] The three remaining potentially viable alternative sites, Hathaway Ranch, Temescal Ranch, and the applicant's land holdings in Ventura County (Newhall-Ventura), have been carried forward for additional analysis in **Subsection 3.3.2**, below. Locations and boundaries of these three alternative sites are shown on **Figure 3.0-2**.

Subsection 3.3.3, below, describes one additional on-site alternative that was ultimately rejected from further consideration in this EIS/EIR. This alternative is referred to as the "Total Avoidance" alternative, because it would allow the proposed Project to proceed to the extent possible, but any facilitated development would be extremely limited in order to avoid all areas within Corps jurisdiction.

The following two **Subsections**, **3.3.2** and **3.3.3**, describe the remaining three potentially viable off-site alternatives and the one additional on-site "avoidance" alternative. The subsections also explain the reasons for rejecting or otherwise eliminating these four alternatives from further analysis in this EIS/EIR.

3.3.2 Analysis of Three Potentially Viable Off-Site Alternatives

This subsection describes existing environmental conditions and the likely impacts occurring from developing Hathaway Ranch, Temescal Ranch, or Newhall-Ventura as compared to the proposed Project, which, if approved, would facilitate development on the Specific Plan, VCC, and portions of the Entrada planning area. Refer to **Figure 3.0-2** for the location of these alternative sites relative to the Project area. (Revised) **Table 3.0-3** provides a summary analysis of relative impacts for each of the three alternative sites as compared to the proposed Project. The table indicates whether or not each alternative site could result in less impacts when compared to approving the proposed Project, including the development facilitated on the Specific Plan, VCC, and portions of the Entrada planning area in the Santa Clarita Valley. In addition, the table includes an assessment of each site's ability to substantially meet the ~~applicant's~~ objectives/purpose and need as well as the Project area's development feasibility given the existing zoning within the Project area. It also should be noted that the Corps is required to analyze off-site alternatives pursuant to the section 404(b)(1) gGuidelines. Therefore, the Draft Section 404(b)(1)

[1] A description of the reasons for rejecting all but three of the 23 potential alternative sites is found in the Revised Draft Specific Plan EIR (SCH No. 1995011015, March 1999).

Alternatives Analysis further evaluated the above three off-site alternative locations. For further information regarding that analysis, please refer to the Corps' draft 404(b)(1) alternatives analysis, which is found in **Appendix F1.0** of the Final EIS/EIR.

Table 3.0-2
Off-Site Alternative Locations Considered and Rejected from Further Consideration

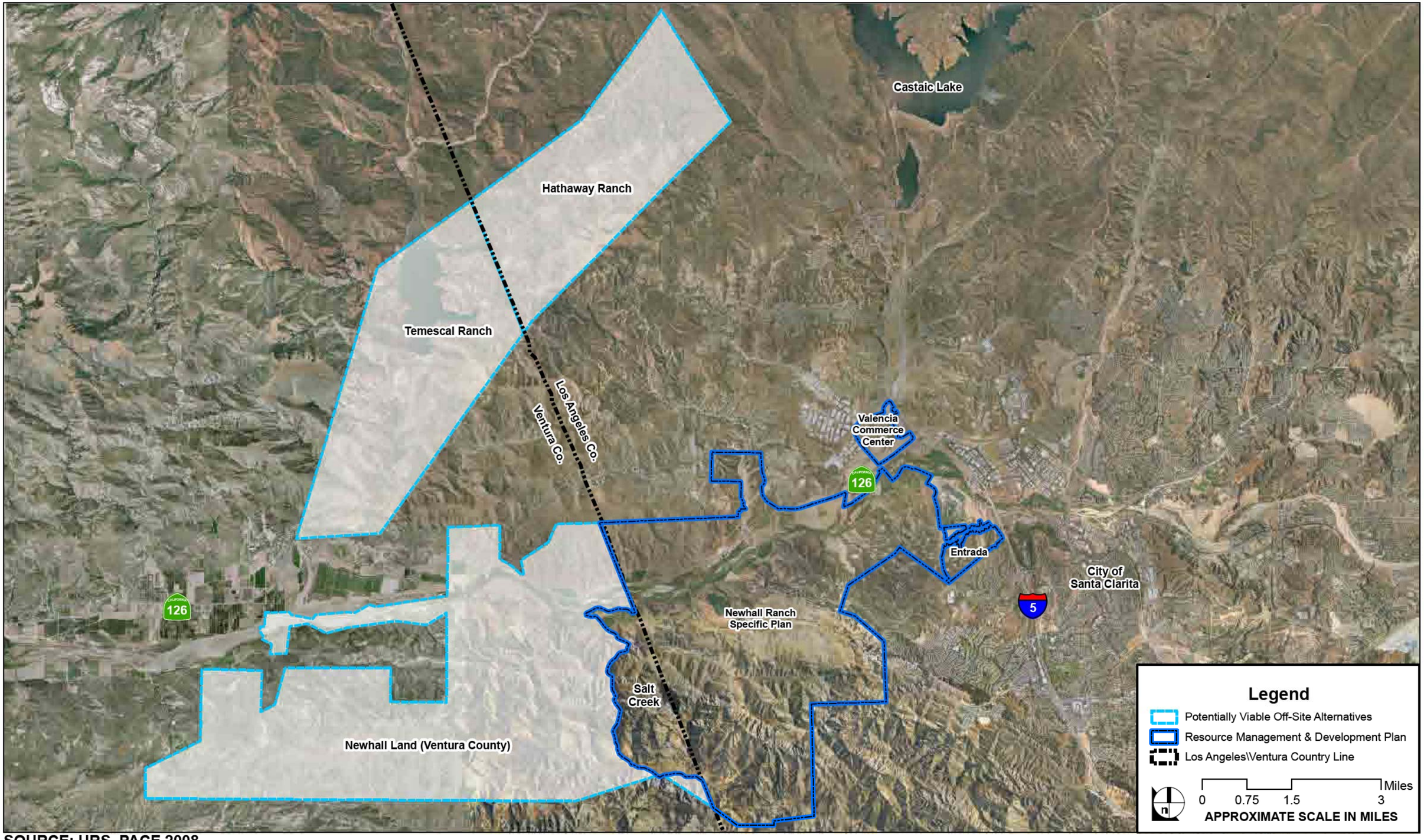
Site[1]	Site Name or Owner	Site Already Entitled or Currently Under Urban Development	Site too Small to Accommodate Development Facilitated in Project Area	Site Outside of Santa Clarita Valley Market and Planning Area	Site Unavailable for Development Due to Land Trust Status
A	Ritter Ranch	X			
B	Hathaway Ranch				
C	Santa Fe Development		X		
D	Strathern Ranch	X	X		
E	Sloan Ranches			X	
F	Stephen Blanchard			X	
G	RH Smith			X	
H	Canada Largo			X	
I	Hammond Canyon			X	
J	Adams Canyon Ranch			X	
K	George Herst			X	
Subtotal (Sites E through K)[2]					
L	Mariano/Lloyd			X	
M	Ahmanson/Oxford				X
N	Temescal Ranch				
O	Big Sky Ranch	X			
P	Runkle Ranch		X		
Q	Rancho San Miguelito			X	
R	San Emidio Ranch			X	
S	Ft. Tejon Ranch			X	
T	Keene Ranch			X	
U	Newhall Land (Ventura)				
V	California Springs			X	
W	Ormond Beach		X	X	

Notes:

[1] Refer to **Figure 3.0-1** for the general location of the 23 alternative sites considered.

[2] Sites E through K are being considered together as one parcel due to their location and size. Individually, none of the sites are large enough to accommodate the development proposed in the Specific Plan, and VCC and Entrada planning areas. However, because they are all very near to one another, it is conceivable that they could be developed in a coordinated fashion.

Source: URS, 2007.



SOURCE: URS, PACE 2008

FIGURE 3.0-2

LOCATION OF POTENTIALLY VIABLE OFF-SITE ALTERNATIVES SELECTED FOR ANALYSIS

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-2_LocationOfPotentiallyViableOffsiteAlterntivesSelectedforAnalysisPC1_071808.mxd

(Revised) Table 3.0-3
Comparison of Impacts and Issues for the Three Off-Site Alternatives
(Hathaway Ranch, Temescal Ranch, and Newhall-Ventura)

Environmental Issue/Consideration	Alternative Sites[1]		
	Hathaway Ranch	Temescal Ranch	Newhall-Ventura
Likely to Lessen Impacts Relative to Proposed Project?[2]			
Surface Water Hydrology and Water Quality	No	No	No
Flood Control	Yes	No	No
Geomorphic and Riparian Resources	Yes	Yes	No
Groundwater	No	No	No
Biological Resources	Yes	Yes	No
Jurisdictional Streams and Wetlands	Yes	Yes	Yes
Air Quality	No	No	No
Traffic	No	No	No
Noise	No	No	No
Cultural Resources	No	No	No
Paleontological Resources	No	No	No
Agriculture and Soils	Yes	Yes	No
Geology and Geologic Hazards	No	No	No
Land Use	No	No	No
Visual Resources	Yes	Yes	No
Parks, Recreation, and Trails	No	No	No
Public Safety	Yes	No	No
Public Services	No	No	No
Hazards and Hazardous Materials	Yes	No	No
Socioeconomics/Environmental Justice	No	No	No
Able to Substantially Meet Objectives/ Purpose and Need?	No	No	No
Feasible to Develop Project Area Based on Existing Zoning?	No	No	No

Notes:

[1] Refer to **Figure 3.0-2** for location of these three alternative sites relative to the proposed Newhall Ranch site.

[2] Findings assume mitigation measures commensurate with the proposed Specific Plan, VCC, and Entrada developments would be implemented for the three specified off-site alternatives.

Source: URS, 2007.

3.3.2.1 Hathaway Ranch Alternative

Hathaway Ranch is approximately 5,988 acres in size, and is located in unincorporated Los Angeles County, generally between the Ventura County line on the west and I-5 on the east, and Hasley Canyon on the south and the Angeles National Forest on the north (see **Figure 3.0-2**). Hathaway Ranch is located approximately five miles north of the Project area. Topography on the Hathaway Ranch site is highly variable, with elevations ranging from approximately 1,100 feet above mean sea level to in excess of 2,500 above mean sea level; very little flat land exists on this site. Historic uses of the site include cattle grazing, oil and natural gas operations, and mineral resource mining. As the Hathaway Ranch site is undeveloped, no vehicular access is available via improved roadways and no water or wastewater lines serve the site. The eastern portion of the site is within the CLWA service area.

The impact of developing the land uses facilitated by the proposed Project on the Hathaway Ranch site is described below. (Revised) **Table 3.0-3**, above, provides a matrix that compares, from a relative impact standpoint, development facilitated by the proposed Project with a similar level of development on the three off-site locations that were considered to be potentially viable prior to their removal from further consideration.

3.3.2.1.1 *Meeting ~~Basic~~ Project Objectives/Purpose and Need*

An off-site location alternative such as Hathaway Ranch has the potential to result in new urban development that may implement the proposed Project's NEPA purpose and need and CEQA project objectives. ~~objectives of the development facilitated by the proposed Project (*i.e.*, Specific Plan, VCC, and Entrada).~~ However, as discussed below, Hathaway Ranch does not meet, or it impedes, the proposed Project's purpose and need/objectives. ~~many of the primary objectives identified for the Specific Plan, VCC, and portions of Entrada would not be achieved with implementation of this alternative.~~

~~Specific objectives not fully met or impeded with the Hathaway Ranch alternative site are listed below:~~

RMDP/SCP Purpose and Need and CEQA Project Objectives Summary

- The purpose and need of the RMDP component of the proposed Project is to practicably and feasibly achieve the basic objectives of the approved Specific Plan and thereby help meet the regional demand for housing and jobs in northern Los Angeles County. The following basic objectives of the Specific Plan would not be achieved if the proposed Project were to be developed on the Hathaway Ranch alternative site:
    - Avoid leapfrog development and accommodate projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers.
    - Arrange land uses to reduce vehicle miles traveled and energy consumption.~~; and~~
- The purpose and need of the SCP component of the proposed Project is to implement a practicable and feasible spineflower conservation plan that provides for the long-term persistence

of spineflower within the applicant's land containing known spineflower populations, and to authorize the take of spineflower in areas located outside of designated preserves, in order to facilitate development in portions of the Specific Plan, and the VCC and Entrada planning areas.

This purpose and need/objective would not be achieved if the proposed Project were to be developed on the Hathaway Ranch alternative site because the spineflower is known to exist in two locations, namely within the proposed Project's boundary and on the former Ahmanson Ranch site in Ventura County. If the proposed Project's development is constructed on Hathaway Ranch, there would be no Project spineflower preserve design and open space connectivity, and no management, monitoring, and funding for the spineflower as set forth in the Revised SCP. There also would be no assurance that the spineflower located within the Project site would be practicably and feasibly preserved as outlined in the Revised SCP. (The Revised SCP is found in **Appendix F1.0** of the Final EIS/EIR.)

In addition, if the proposed Project's development is constructed on Hathaway Ranch, then the Revised SCP's purpose and need/objectives of: (a) providing for the long-term persistence of spineflower within the Entrada planning area, and, at the same time, facilitating development within a portion of Entrada would not be met.; and (b) facilitating completion of the Valencia industrial/business park/office center by authorizing take of spineflower in the VCC planning area would be impeded.

~~**Specific Plan Objectives Summary**~~

- ~~Avoid leapfrog development and accommodate projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers;~~
- ~~Arrange land uses to reduce vehicle miles traveled and energy consumption;~~
- ~~Provide a safe, efficient, and aesthetically attractive street system with convenient connections to adjoining regional transportation routes;~~
- ~~Facilitate public transit by reserving right-of-way for future Metrolink line, space for a park and ride and/or Metrolink station, and by providing bus pull ins along highways;~~
- ~~Establish a diverse system of pedestrian and bicycle trails, segregated from vehicle traffic, to serve as an alternative to the automobile because the development would be too far removed from existing infrastructure to allow for commuting by walking or biking;~~
- ~~Retain a major open area, which could act as a regional recreational park and an ecological preserve;~~
- ~~Preserve the site of the historical Asistencia (San Fernando Mission Annex);~~
- ~~Preserve or minimally impact the most significant ridgelines and other major topographical landforms; and~~

- ~~Implement the spineflower mitigation program, which is part of the approved Specific Plan.~~

~~VCC Objectives Summary~~

- ~~The VCC site is considered a major expansion area for the existing Valencia industrial/business park/office center, which serves the growing business and employment needs of the Santa Clarita Valley and surrounding communities;~~

- ~~The VCC is designed to accommodate a broad range of employment uses, including light manufacturing, research and development, warehousing, distribution uses, office uses, and service-orientated businesses in close proximity to the Santa Clarita Valley and surrounding communities;~~

- ~~Proximity to two major transportation facilities, the I-5 and SR-126, and the existing industrial center in Valencia, combine to make the VCC a logical site for industrial/business park/office uses to serve the Santa Clarita Valley and surrounding communities; and~~

- ~~Facilitate completion of the Valencia industrial/business park/office center, and authorize the take of spineflower in the VCC planning area.~~

~~Entrada Objectives Summary~~

- ~~A portion of the Entrada planning area would include a mix of residential, commercial, non-residential, open space, and public services in close proximity to the I-5 corridor and surrounding existing uses within the Santa Clarita Valley;~~

- ~~Similar to the Specific Plan site, Entrada avoids leap-frog development and accommodates projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers;~~

- ~~Similar to the Specific Plan site, Entrada land uses are arranged to reduce vehicle miles traveled and energy consumption; and~~

- ~~A portion of Entrada would allow for implementation of a practicable and feasible spineflower conservation plan that would provide for the long-term persistence of spineflower within the Entrada planning area, and, at the same time, facilitate development within a portion of Entrada.~~

3.3.2.1.2 *Potential for the Alternative to Avoid or Lessen Impacts*

This section provides a general comparison of the likely environmental impacts of the Hathaway Ranch alternative site, and includes conclusions as to whether this alternative would have the potential to avoid or substantially lessen the environmental impacts of the proposed Project, including facilitated development (*i.e.*, Specific Plan, VCC, and portions of Entrada). A general comparison of relative impact levels associated with development of the Hathaway Ranch alternative and the Project area is included in (Revised) **Table 3.0-3**, above.

Surface Water Hydrology and Water Quality. The Hathaway Ranch site generally drains in a south-southwest fashion and several drainages on the site (*e.g.*, Devil Canyon and Santa Felicia Canyon) drain to Lake Piru in Ventura County. The United Water Conservation District (UWCD) operates Lake Piru which provides water conservation, flood control, groundwater recharge, recreation, irrigation, and municipal and industrial water supplies. Development of the Hathaway Ranch site would have the potential to result in urban runoff water quality and sedimentation impacts to Lake Piru, an important water resource in this region. From a water quality perspective, development of the Hathaway Ranch alternative site would not be expected to avoid or substantially lessen impacts compared to development facilitated by the proposed Project.

For each alternative site, it is assumed that, if development were to occur on it, each would need to construct its own water reclamation plant. It is also assumed that each site would create a reclaimed water system where reclaimed water would be used on the site to reduce its potable water demands. Based on the above, the amount of wastewater generated by development on the Hathaway Ranch alternative site would be the same as that generated by development facilitated by the proposed Project; and, therefore, wastewater impacts would be expected to be the same. Consequently, the Hathaway Ranch alternative site would not be expected to avoid or substantially lessen wastewater disposal impacts compared to development facilitated by the proposed Project.

Flood Control. The Hathaway Ranch alternative site is not located on the Santa Clara River. Consequently, fewer stormwater protection facilities would be needed if the development facilitated by the proposed Project were moved to the Hathaway Ranch site. However, both alternatives would convert open land to an urban condition with surfaces impervious to water. It is expected that development of the Hathaway Ranch alternative site also would require similar types of drainage structures in upland areas in order to reduce downstream impacts. It is expected that the Hathaway Ranch alternative site would be less prone to flooding than the Project area. On balance, the Hathaway Ranch alternative site would be expected to have fewer flood-related impacts than the proposed Project.

Geomorphic and Riparian Resources. The Hathaway Ranch site includes several on-site tributary drainages to Lake Piru, but there are no river watercourses like the Santa Clara River flowing through the Project area. As a result, development facilitated by the proposed Project is expected to have greater geomorphic and riparian resource impacts when compared to the Hathaway Ranch alternative site. The river geomorphic changes (natural or otherwise) may include changes to the existing hydraulics of the river course, increased scouring, increased water depths, and associated impacts on erosion, sedimentation, water quality, and aquatic and riparian river habitats.

Groundwater. The southeastern quadrant of the Hathaway Ranch alternative site encompasses a portion of the northwest extent of the Santa Clara River Valley East Groundwater Subbasin. The northern portion of the proposed Project area also encompasses a portion of the west-central portion of the Santa Clara River Valley East Groundwater Subbasin. Development of the Hathaway Ranch site would potentially impact recharge and/or groundwater quality in the upper portion of the overall groundwater basin area, whereas the proposed Project area would draw water from the lower, alluvial portion of the basin where groundwater wells are located in the vicinity of the Santa Clara River. The use (*i.e.*, groundwater pumping) of this groundwater basin occurs in the deeper Alluvium in the vicinity of the Santa Clara River

where groundwater levels are their most stable. In addition, as to the Specific Plan site within the Project area, the applicant's groundwater supplies from the Alluvial aquifer, which are presently used for agricultural purposes, would be converted to potable supply uses, resulting in no net increase in groundwater usage. Consequently, the Hathaway Ranch alternative site is not likely to lessen impacts to groundwater when compared to the Project area.

Biological Resources. A search of the California Natural Diversity Database (CNDDB, April 2005 edition) was conducted to identify known occurrences of sensitive species or habitats on the Hathaway Ranch site. The database did not contain any records of sensitive plants or animals on the site, but indicated that limited patches of a sensitive habitat, Southern Coast Live Oak Riparian Forest, were present. No on-site biological surveys were conducted, thus sensitive species may exist on the Hathaway Ranch site but have not been detected. Biological impacts related to the general loss of habitat would be similar to those associated with the development facilitated by the proposed Project. However, because Hathaway Ranch is not located within a County-designated Significant Ecological Area (SEA), does not contain known occurrences of listed species, is not within the critical habitat of the endangered least Bell's vireo, and does not have habitat suitable for the unarmored threespine stickleback or other sensitive aquatic species, development of the Hathaway Ranch alternative site would be expected to involve lesser impacts to biological resources than the development facilitated by the proposed Project.

Jurisdictional Waters and Streams. The Hathaway Ranch site is located in the mountains on the north side of the Santa Clara River Valley, and does not contain any major rivers or impoundments. There are a total of approximately 25.5 linear miles of intermittent and ephemeral drainages on site, encompassing a total jurisdictional area of approximately 101 acres. In comparison, the RMDP component of the proposed Project contains approximately 49 linear miles of drainages with a total CDFG jurisdictional area of 946 acres. Although available information was not sufficient to allow the mapping of wetlands on the Hathaway Ranch site, it is unlikely that palustrine wetlands exist due to the lack of perennial water sources. Depressional wetlands may occur on site, but are likely limited in extent due to the relatively steep topography and arid conditions.

The total area of the Hathaway Ranch alternative site is 6,195 acres, which is approximately one-half the size of the 11,999-acre Specific Plan site. The approved Specific Plan site also would retain approximately 8,236 acres in open space. Providing an urban development project on Hathaway Ranch that provides a similar number of residential units and amount of commercial area as would be facilitated by the proposed Project would require the use of virtually all of the Hathaway Ranch alternative site, which would substantially limit the ability to avoid or protect sensitive habitat areas located on the site, as applicable.

The total size of the Hathaway Ranch alternative site is 6,195 acres, and build-out of a development facilitated by the proposed Project would require virtually all of the Hathaway Ranch site. Although this development would affect nearly the entire site, jurisdictional waters on site are so limited in extent and quality that even complete elimination of these drainages would constitute a lesser impact on waters and wetlands than the proposed Specific Plan development facilitated by the proposed Project. Therefore, with respect to jurisdictional waters and streams, the Hathaway Ranch site could foreseeably lessen the impacts of the proposed Project.

Air Quality. Long-term air pollutant emissions from residential and commercial land uses are typically a result of the vehicle-miles traveled (VMT) generated by a project. The use of construction equipment to develop a project also would result in a short-term source of air emissions. The Hathaway Ranch alternative would be expected to generate more VMT than a similarly sized project located on the Project area (see traffic discussion below). Therefore, the Hathaway Ranch site would be expected to result in increased long-term air emissions when compared to the Project area. The short-term construction-related emissions that would result from the development facilitated by the proposed Project would be generally similar to construction emissions that would occur at the Hathaway Ranch site. Therefore, due to an increase in VMT, the Hathaway Ranch project site would not be expected to result in less air quality impacts than development of the Project area.

Traffic. It is assumed that internal traffic patterns on Hathaway Ranch would operate in a manner similar to the Project area after build-out. This presumes that it is possible to create the same development concept in approximately the same spatial arrangement being proposed for the Project area. Given this overall assumption, the primary difference between developing on the Hathaway Ranch site and developing on the Project area is how vehicular traffic would move to and from the two sites. In the case of the Hathaway Ranch site, it is located at a greater distance from existing traffic infrastructure than the Project area; and, therefore, suffers from a lack of vehicular access; Hathaway Ranch is not served directly by a major State highway and is much farther removed from one of the State's major north-south freeway corridors (I-5) than the Project area. Consequently, the amount of transportation infrastructure required to serve the Hathaway Ranch site would be substantially greater than that needed to serve the Project area. If a connection with I-5 were to occur with the Hathaway Ranch alternative, it would occur north of SR-126. Consequently, potential impacts to the I-5 interchanges at Magic Mountain Parkway and Valencia Boulevard could be avoided by being transferred to northern locations. However, Hathaway Ranch would not likely offer the future potential of direct commuter rail service that developing the Project area could offer. Travel distances and VMT between Hathaway Ranch and the surrounding employment centers found in the Santa Clarita Valley also would be greater with development on the Hathaway Ranch site. In conclusion, development of the Hathaway Ranch alternative would not be expected to lessen traffic impacts compared to the development facilitated by the proposed Project.

Noise. Vehicle noise impacts associated with the Hathaway Ranch site would be dispersed over a wider area than by the Project area due to the greater distances traveled. The adverse long-term noise impact to the Travel Village RV Park by developing the Project area would, however, be avoided. This is because the traffic generated on Hathaway Ranch would not travel past Travel Village RV Park (on SR-126 west of Commerce Center Drive) to the same degree as it would with the development facilitated by the proposed Project. It is expected that most of the Hathaway Ranch traffic would travel more directly to I-5. As a result, adverse noise impacts could be created in other noise sensitive areas located to the north where connections to I-5 might occur with the Hathaway Ranch alternative (*e.g.*, in Hasley Canyon and in the residential areas located in Castaic). In conclusion, while the adverse noise impact to the Travel Village RV Park with the development facilitated by the proposed Project would be avoided by the Hathaway Ranch alternative, it is likely that other adverse noise impacts would be created in the noise sensitive residential areas located to the north. The Project and Hathaway Ranch sites would both result in construction activities that have the potential to result in short-term noise impacts adjacent to the two

project sites. Therefore, the potential for noise impacts resulting from the development of both sites is similar, and the alternative location would not substantially lessen Project-related noise impacts.

Cultural/Paleontological Resources. Bibliographic references, previous survey reports, and archaeological site records were obtained from a records search of the California Historical Resources Information System (CHRIS) in order to identify prior archaeological studies and known cultural resources within or adjacent to the Hathaway Ranch alternative site. The records search was conducted on August 23 and 24, 2005, at the South Central Coastal Information Center (SCCIC), at the California State University, Fullerton. The study area contained the Hathaway Ranch site and 0.25-mile search radius surrounding the site.

The CHRIS records search revealed that there are 33 archaeological sites and seven isolated artifacts within the Hathaway Ranch site. Additionally, there are two sites and four isolates recorded within the 0.25-mile search radius. One survey has been conducted within the study area. In addition, there are 12 "unmappable" surveys, which could potentially have included portions of the site, but which contained no locational data. The Hathaway Ranch site is considered to be highly sensitive for cultural resources.

Archaeological surveys of the 11,999-acre Specific Plan site identified eight prehistoric resources sites, one isolate location, and one historical site. Most of the identified sites have experienced minor to extensive disturbance, and known artifacts were collected from several sites during field investigations. As a result, the Specific Plan site is considered to have a very low density of archaeological remains. The VCC site is partially built-out and the environmental documents to date have identified cultural resource sites, along with appropriate archeological assessment mitigation measures. Archeological resources are known to exist in the vicinity of the Entrada site; however, the Entrada cultural resources report summarized information provided from a records search and from field surveys but concluded that there were no known archeological or historical resources on site. As to paleontological resources, the Entrada report found there was no potential to directly or indirectly impact any paleontological resources or unique geologic features because no such resources or features exist on or near the Entrada site.

Due to the smaller size (6,195 acres) of the Hathaway Ranch site, and the sensitive nature of the cultural resources known to exist on the site, it is considered unlikely that development of the Hathaway Ranch site would lessen impacts to cultural resources compared to the development facilitated by the proposed Project. In addition, build-out of the development facilitated by the proposed Project would require nearly the entire Hathaway Ranch site, making avoidance of sensitive cultural resources extremely difficult and limiting mitigation opportunities.

The Project area is underlain by several geological formations that have the potential to contain paleontological resources. Potential impacts to sensitive paleontological resources would be reduced to a less-than-significant level through implementation of previously adopted and proposed mitigation measures. It is anticipated that if fossil-bearing geological formations were located on the Hathaway Ranch site, implementation of similar mitigation measures also would reduce potential impacts to a less-than-significant level. Therefore, potential paleontological resource impacts that may be associated with the Hathaway Ranch and Project sites would be expected to be similar.

Agriculture and Soils. Due mainly to its distance from the Santa Clara River Valley, the Hathaway Ranch site does not support the same quality of agricultural soil conditions as the Project area. Specifically, this site contains no Prime Farmlands, no Farmland of Statewide or Local Importance, and no Unique Farmlands (soils are suitable for livestock grazing). Consequently, the impact on agricultural resources from developing the Hathaway site would be less than that associated with the development facilitated by the proposed Project.

Geology and Geologic Hazards. From an exposure to seismic events standpoint, the impact of developing the Hathaway Ranch site would be similar to the development facilitated by the proposed Project. Both sites are affected by faulting and would require mitigation for potential landslide hazards. However, from a grading standpoint, impacts on the Hathaway Ranch alternative site would be greater than in the Project area because more earthwork would be required to create land level enough to accommodate urban development. The terrain on the Hathaway Ranch is steeper and more varied than on the portions of the Project area that are proposed for development. Thus, it is concluded that development of the Hathaway Ranch alternative site would not lessen geologic-related impacts associated with grading and modification of topography compared to the Project area.

Land Use. Development of either the Hathaway or Project sites would result in permanent changes from existing land uses (*i.e.*, oil production, grazing, agriculture, and open area/wildlife habitat) to urban uses. The Hathaway site also includes the Hathaway Ranch "dude ranch" tourist attraction. The Hathaway site is currently zoned A-2, Heavy Agriculture, which would not allow the proposed residential density/urban uses in the Project area, unless the Hathaway Ranch site could be successfully rezoned to allow such uses. Development of the Specific Plan and VCC sites would be consistent with the Los Angeles County General Plan, but the Entrada planning area would require general and local plan amendments and rezoning. On balance, the Project area (*i.e.*, consisting of the Specific Plan, the VCC planning area, and portions of the Entrada planning area) is superior to the Hathaway site with regard to land use consistency, and implementation of that alternative would not reduce project impacts.

Visual Resources. Due to intervening topography, the fact that a state highway (SR-126) does not run through this site, and with a greater distance from potential viewers, development on Hathaway Ranch would be less visible from either I-5 or SR-126 and the existing population center in the Santa Clarita Valley. Due to these factors, the significant visual impacts to the rural appearance of the Santa Clara River Valley and Chiquito Canyon that would occur on the Project area would not occur on the Hathaway Ranch alternative site. However, developing Hathaway Ranch would still be converting an open area to urban uses, which would be considered visually significant. Nonetheless, development of the Hathaway Ranch site would be expected to lessen visual impacts compared to the Project area.

Parks, Recreation, and Trails. The Hathaway Ranch alternative site and the Project area would be required to meet ~~local~~ the Quimby Act requirements for the provision of park space. (Gov. Code § 66477.) However, at only approximately 6,195 acres, it would not be possible to develop the land uses within the Project area on the Hathaway Ranch alternative site and still preserve in perpetuity the substantial amount of land that would be dedicated to public uses within the Project area. Development of the Hathaway Ranch site would provide much less parks and recreation benefits than that associated with development within the Project area.

Public Safety. Past and present uses of the Hathaway Ranch alternative site (oil production, grazing, and agriculture) are similar in nature to those within the Project area. Consequently, potential environmental safety impacts relating to these uses would be similar to those within the Project area. However, given its more remote location, it is expected that the Hathaway Ranch site would not be as impacted by natural gas lines and electrical transmission lines, nor is it within the inundation area of the Castaic Dam. For these reasons, public safety impacts would be potentially less on the Hathaway Ranch site than within the Project area.

Public Services

Fire and Police Protection. It is assumed that the Hathaway Ranch alternative site would be required to fund an adequate level of fire protection and law enforcement to ensure adequate on-site protection. However, Hathaway Ranch is farther from a response time standpoint from existing fire and police stations located within the Santa Clarita Valley; and, therefore, would not be as well served as the Project area. Consequently, impacts related to fire and police protection would be incrementally worse with development on Hathaway Ranch as compared to the Project area.

Schools and Libraries. From an education and library standpoint, it is assumed that the Hathaway Ranch alternative site would need to meet similar requirements for funding in order to provide education and library services for its residents. Based on the above information, impacts to schools and libraries under the Hathaway Ranch alternative would be expected to be similar to those that would occur with the development facilitated by the proposed Project.

Water Availability. The potable water demands of development on the Hathaway Ranch site would be generally the same as the water demands for the Project area. The Hathaway Ranch site is only partially within the service area boundary of CLWA (a water wholesaler) and is not served by a water retailer. Groundwater supplies are likely not of sufficient quantity or quality to serve the development facilitated by the proposed Project. Consequently, the Hathaway Ranch site would need to be annexed into the CLWA service area, and would have to either annex to the nearest water retailer service area (likely either Newhall County Water District or Los Angeles Water District No. 36) or create a new water retail agency. CLWA has the present policy of allowing annexations into its service area only if enough water is simultaneously brought into the district to serve the development proposed on the annexed land. It is considered likely that development on Hathaway Ranch could be heavily dependent on imported water. Additionally, Hathaway Ranch does not have the rights to groundwater as does the applicant in the Santa Clarita Valley. Due to the steeper topography, the Hathaway Ranch site would require an increased amount of water pumping infrastructure. Due to the problematic prospects of delivering enough potable water to the Hathaway Ranch, water impacts would likely be greater with development of Hathaway Ranch than the development facilitated by the proposed Project. In summary, development of the alternative Hathaway Ranch site would not be expected to lessen water supply impacts compared to the Project area.

Energy Use and Solid Waste Disposal. On the Hathaway Ranch site, the same amount of energy (natural gas and electricity) would be required, and the same amount of solid waste generation would occur, as for the development facilitated by the proposed Project. Access to energy (electricity and natural gas) sources would be more costly because existing infrastructure is not present in the immediate area at a

capacity sufficient to meet the needs of the proposed development. Solid waste generation would be similar for the Hathaway Ranch and Project sites, but disposal would be more costly for the Hathaway Ranch site as access to disposal sites would require longer truck trips. Therefore, these impacts would be somewhat greater than those associated with the development facilitated by the proposed Project. In addition, the Hathaway Ranch alternative would generate more vehicle miles traveled resulting in greater demand for petroleum products than within the Project area. Consequently, the Hathaway Ranch alternative site would not lessen impacts compared to the Project area with respect to the cost of energy, solid waste disposal, and consumption of petroleum products.

Hazards and Hazardous Materials. The Hathaway Ranch site is considered to have fewer man-made hazards and less potential for the presence of hazardous materials relative to the Project area. The development facilitated by the proposed Project has a remote potential for being flooded due to a catastrophic dam failure at Castaic Lake. Additionally, the Project area is comprised of more historical and ongoing oil and gas related facilities that may operate in the future in the general vicinity of developed areas within the Project area. It is expected that any decommissioned oil and gas facilities would be remediated to applicable regulatory standards, thereby removing any potential health and safety related hazards. In addition, the applicant's past and present agricultural crop activities, including the use of agricultural-related chemicals, have the potential to pose a slight residual health hazard during site development in affected areas. In addition, the Project area is traversed by several high voltage transmission lines that emit electromagnetic fields and can ignite wildfires in rare instances during high wind events. The Hathaway Ranch site is considered to have a lower impact potential than the Project area from a relative overall hazard perspective.

Socioeconomics/Environmental Justice. Los Angeles County population, housing, and employment projections for the Hathaway Ranch site do not call for the urban level of development that would result if the development facilitated by the proposed Project were relocated to Hathaway Ranch. Consequently, such development on the Hathaway Ranch site would not be consistent with the County's 2000 growth projections per U.S. Census data and Southern California Association of Governments (SCAG) projections. This site is within Census Tract 9201.4 (which has a projected population of 4,160 people for 2020). Because planning for many of the infrastructure requirements of the region is based on the SCAG projections, this census tract would have significantly more people within it than is planned, which is considered to be a significant infrastructure/utility impact (if this same development were to occur within the Project area, the population would be accounted for in SCAG regional projections except for the Entrada planning area).

SCAG projects that this census tract will have 1,172 housing units by 2020. However, by constructing the 20,885 residential units on the Specific Plan site, and the 1,725 residential units facilitated in the Entrada planning area, this census tract would have significantly more units than accounted for by SCAG projections and current regional plans (*2004 Regional Transportation Plan/Growth Vision: Socio-economic Forecast Report*). By comparison, all of the units proposed on the Specific Plan site are accounted for in SCAG's regional plans, and plans to amend SCAG's regional plans for Entrada are in the planning process.

Regarding employment, SCAG projects that this census tract will have 395 jobs by the year 2020. Adding the approximately 20,000 jobs created by the Specific Plan alone, this census tract would have more jobs available than accounted for by SCAG in its current regional plans.

Using Hathaway Ranch for urban development facilitated by the proposed Project would provide housing and employment opportunities to accommodate regional population growth. However, the 6,195-acre Hathaway Ranch site is approximately one-half the size of the 11,999-acre Specific Plan site alone. Therefore, it is unlikely that the Hathaway Ranch site would be able to support full build-out of the housing and commercial development facilitated by the proposed Project. Therefore, the Hathaway Ranch site would not provide the full housing- and jobs-related benefits that would result from the use of the Project area. Also, the Hathaway Ranch site would be inconsistent with the regional population, housing, and employment conditions that are planned for by SCAG in its 2004 Regional Transportation Plan/Growth Vision, nor would it be consistent with the County's 2000 projections for the Santa Clarita Valley. Therefore, development of the Hathaway Ranch site would not lessen socioeconomic impacts/ issues when compared to the development facilitated by the proposed Project.

Executive Order No. 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, signed by President Clinton on February 11, 1994, requires federal agencies to identify and address disproportionately high and adverse effects of federal actions on the health or environment of minority and low-income populations. According to the federal guidelines, the environmental justice screening analysis assesses whether "the potentially affected community includes minority and/or low income populations." The guidelines indicate that a minority population exists when the minority population is 50 percent of an affected area's total population. The 50 percent threshold also is used to determine the presence of low-income populations in the study area.

The population in the Hathaway Ranch study area (Census Block 9201.4) is not composed of 50 percent or more minorities and the economic status of the residents in the study area is not 50 percent or more low income. The same is true for the Project area. Therefore, development of either the Hathaway Ranch site or the Project area would not result in disproportionate impacts on minority or low income populations.

3.3.2.2 Temescal Ranch Alternative

The Temescal Ranch alternative site is approximately 7,580 acres in size, and is located in unincorporated Ventura County, northeast of the community of Piru (see **Figure 3.0-2**, above). Lake Piru, owned by UWCD, extends through the northern one-third of the property. The Piru recreational area with lake access is located on the western side of the lake. The Santa Felicia Dam extends across the southern extent of the lake. Piru Canyon and Piru Creek traverse the central portion of the property, extending from the dam to the property's southern boundary. The valley floor portion of the Temescal Ranch site predominantly consists of rangeland. It is approximately two miles northwest of the Project area. Topography on the Temescal Ranch site is highly variable, with elevations ranging from approximately 780 feet above mean sea level to approximately 3,000 above mean sea level. Within the overall Temescal Ranch site, lands along the eastern side of Piru Canyon consist of steep, hilly terrain, while the western side offers gentler slopes and features plateaus overlooking the canyon. Historic uses of the Temescal Ranch site include cattle grazing, agriculture, and oil production. Other than Lake Piru, the Temescal Ranch site is undeveloped. Vehicular access is available to the Temescal Ranch site from SR-126, via

Piru Canyon Road, and no water or wastewater lines serve the site. A portion of the Temescal Ranch site is within the UWCD service area.

3.3.2.2.1 *Meeting ~~Basic~~ Project Objectives/Purpose and Need*

An off-site location alternative such as Temescal Ranch has the potential to result in new urban development that may implement the proposed Project's NEPA purpose and need and CEQA project objectives. ~~objectives of the development facilitated by the proposed Project.~~ However, as discussed below, Temescal Ranch does not meet, or it impedes, the proposed Project's purpose and need/objectives. ~~many of the primary objectives identified for the Specific Plan, VCC, and portion of Entrada would not be achieved with implementation of this alternative. Specific objectives not fully met or impeded with the Temescal Ranch alternative are listed below:~~

RMDP/SCP Purpose and Need and CEQA Project Objectives Summary

- The purpose and need of the RMDP component of the proposed Project is to practicably and feasibly achieve the basic objectives of the approved Specific Plan and thereby help meet the regional demand for housing and jobs in northern Los Angeles County. The following basic objectives of the Specific Plan would not be achieved if the proposed Project were to be developed on the Hathaway Ranch alternative site:

  - Avoid leapfrog development and accommodate projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers.

  - Arrange land uses to reduce vehicle miles traveled and energy consumption. ~~; and~~

- The purpose and need of the SCP component of the proposed Project is to implement a practicable and feasible spineflower conservation plan that provides for the long-term persistence of spineflower within the applicant's land containing known spineflower populations, and to authorize the take of spineflower in areas located outside of designated preserves, in order to facilitate development in portions of the Specific Plan, and the VCC and Entrada planning areas.

  This purpose and need/objective would not be achieved if the proposed Project were to be developed on the Temescal Ranch alternative site because the spineflower is known to exist in two locations, namely within the proposed Project's boundary and on the former Ahmanson Ranch site in Ventura County. If the proposed Project's development is constructed on Temescal Ranch, there would be no Project spineflower preserve design and open space connectivity, and no management, monitoring, and funding for the spineflower as set forth in the Revised SCP. There also would be no assurance that the spineflower located within the Project site would be practicably and feasibly preserved as outlined in the Revised SCP. (The Revised SCP is found in **Appendix F1.0** of the Final EIS/EIR.)

  In addition, if the proposed Project's development is constructed on Temescal Ranch, then the Revised SCP's purpose and need/objectives of: (a) providing for the long-term persistence of

spineflower within the Entrada planning area, and, at the same time, facilitating development within a portion of Entrada would not be met.; and (b) facilitating completion of the Valencia industrial/business park/office center by authorizing take of spineflower in the VCC planning area would be impeded.

~~**Specific Plan Objectives Summary**~~

- ~~Avoid leapfrog development and accommodate projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers;~~
- ~~Arrange land uses to reduce vehicle miles traveled and energy consumption;~~
- ~~Provide a safe, efficient, and aesthetically attractive street system with convenient connections to adjoining regional transportation routes;~~
- ~~Facilitate public transit by reserving right-of-way for future Metrolink line, space for a park and ride and/or Metrolink station, and by providing bus pull-ins along highways;~~
- ~~Establish a diverse system of pedestrian and bicycle trails, segregated from vehicle traffic, to serve as an alternative to the automobile because the development would be too far removed from existing infrastructure to allow for commuting by walking or biking;~~
- ~~Retain a major open area, which could act as a regional recreational park and an ecological preserve;~~
- ~~Preserve the site of the historical Asistencia (San Fernando Mission Annex);~~
- ~~Preserve or minimally impact the most significant ridgelines and other major topographical landforms; and~~
- ~~Implement the spineflower mitigation program, which is part of the approved Specific Plan.~~

~~**VCC Objectives Summary**~~

- ~~The VCC site is considered a major expansion area for the existing Valencia industrial/business park/office center, which serves the growing business and employment needs of the Santa Clarita Valley and surrounding communities;~~
- ~~The VCC is designed to accommodate a broad range of employment uses, including light manufacturing, research and development, warehousing, distribution uses, office uses, and service-orientated businesses in close proximity to the Santa Clarita Valley and surrounding communities; and~~

- ~~Proximity to two major transportation facilities, the I-5 and SR-126, and the existing industrial center in Valencia, combine to make the VCC a logical site for industrial/business park/office uses to serve the Santa Clarita Valley and surrounding communities.~~

- ~~Facilitate completion of the Valencia industrial/business park/office center, and authorize the take of spineflower in the VCC planning area.~~

~~Entrada Objectives Summary~~

- ~~A portion of the Entrada planning area would include a mix of residential, commercial, non-residential, open space, and public services in close proximity to the I-5 corridor and surrounding existing uses within the Santa Clarita Valley;~~

- ~~Similar to the Specific Plan site, Entrada avoids leap-frog development and accommodates projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers;~~

- ~~Similar to the Specific Plan site, Entrada land uses are arranged to reduce vehicle miles traveled and energy consumption; and~~

- ~~A portion of Entrada would allow for implementation of a practicable and feasible spineflower conservation plan that would provide for the long-term persistence of spineflower within the Entrada planning area, and, at the same time, facilitate development within a portion of Entrada.~~

3.3.2.2.2 *Potential for the Alternative to Avoid or Lessen Impacts*

This section provides a general comparison of the likely environmental impacts of the Temescal Ranch alternative site, and includes conclusions as to whether this alternative would have the potential to avoid or substantially lessen the environmental impacts of the proposed Project, including the facilitated development (Specific Plan, VCC, and a portion of Entrada). A general comparison of relative impact levels associated with development of the Temescal Ranch alternative and the Project area is included in (Revised) **Table 3.0-3**, above.

Surface Water Hydrology and Water Quality. The Temescal Ranch site generally drains in south-southwest fashion and several drainages on the site (*e.g.*, Deer Canyon, Reasoner Canyon, Santa Felicia Canyon/Lechler Canyon) drain to Lake Piru in the north-central portion of the site. Lake Piru was formed when Santa Felicia Dam was constructed by UWCD in 1955. A multi-use facility serving Ventura County, Lake Piru provides water conservation, flood control, seawater intrusion abatement, groundwater recharge, irrigation, and municipal and industrial water supplies. Santa Felicia Dam is 200 feet high and stores 88,340 acre-feet of water in the 1,200-acre expanse of Lake Piru. Lake Piru receives rainfall runoff from a 432 square mile watershed in the Los Padres and Angeles National Forests. Lake Piru is hydrologically connected to Pyramid Lake to the north and to the Santa Clara River to the south via Piru Creek. Piru Creek below Lake Piru traverses approximately four miles of the central and southern portions of the Temescal Ranch site. Development of the Temescal Ranch site would have the potential to result in urban runoff water quality and sedimentation impacts to Lake Piru and Piru Creek. From a water

quality perspective, development of the Temescal Ranch alternative site would not be expected to avoid or substantially lessen impacts compared to development facilitated by the proposed Project.

For each alternative site, it is assumed that if development were to occur on it, each would need to construct its own water reclamation plant. It is also assumed that each site would create a reclaimed water system where reclaimed water would be used on the sites to reduce their potable water demands. Based on the above, the amount of wastewater generated by development on the Temescal Ranch alternative site would be the same as that generated by development facilitated by the proposed Project; and, therefore, wastewater impacts would be expected to be the same. Consequently, the Temescal Ranch alternative site would not be expected to avoid or substantially lessen wastewater disposal impacts compared to development facilitated by the proposed Project.

Flood Control. The Temescal Ranch site is not located on the Santa Clara River. Consequently, fewer stormwater protection facilities would be needed if the development facilitated by the proposed Project were moved to the Temescal Ranch site. However, Piru Creek traverses the Temescal Ranch site below Lake Piru. In addition, both the Temescal Ranch alternative and the Project area would convert open land to an urban condition with surfaces impervious to water, and it is expected that development of the Temescal Ranch alternative site would require similar types of drainage structures in upland areas in order to preclude downstream impacts. Potential flood-related impacts are generally the same for Temescal Ranch and the Project area. Consequently, the Temescal Ranch alternative site would not be expected to avoid or substantially lessen flood-related impacts when compared to the proposed Project.

Geomorphic and Riparian Resources. The Temescal Ranch site includes several on-site tributary drainages to Lake Piru, but there are no river watercourses like the Santa Clara River flowing through the Project area. However, Piru Creek is located below Lake Piru and traverses approximately four miles of the central and southern portions of the Temescal Ranch site. Development of Temescal Ranch would result in potential erosion, sedimentation, and water quality impacts to Lake Piru and Piru Creek. Nonetheless, on balance, development on the Temescal Ranch alternative site is expected to result in lesser geomorphic and riparian resource impacts when compared to the development facilitated by the proposed Project. The river geomorphic changes (natural or otherwise) may include changes to the existing hydraulics of the river course, increased scouring, increased water depths, and associated impacts on erosion, sedimentation, water quality, and aquatic and riparian river habitats.

Groundwater. The Temescal Ranch site encompasses a portion of the Piru Groundwater Basin below Lake Piru. The Piru Groundwater Basin extends from approximately five miles northeast of the town of Piru downstream to between Piru and Fillmore in Ventura County. The basin includes unconfined shallow alluvial aquifers underlain by unconfined San Pedro aquifers. The Temescal Ranch site is located on, and above, the upper portion of the Piru Groundwater Basin north of the confluence of Piru Creek and the Santa Clara River. The alluvial thickness varies from 20 feet on the upstream end, to approximately 160 feet near Piru, and to 60 feet near the downstream extent of the aquifer. The water-bearing San Pedro Formation is composed of permeable sands and gravels that extend thousands of feet below ground surface. Groundwater gradient direction is generally to the west in the basin. Recharge of the basin is primarily from percolation of surface waters, and the depth to water is highly variable ranging from 0 to 110 feet below ground surface. Development of the Temescal Ranch site would have the potential to

impact percolation and potentially water quality in the upper portions of the Piru Groundwater Basin below Lake Piru. The proposed Project area would draw water from the lower, alluvial portion of the basin where groundwater wells are located in the vicinity of the Santa Clara River. The use (*i.e.*, groundwater pumping) of this groundwater basin occurs in the deeper Alluvium in the vicinity of the Santa Clara River where groundwater levels are their most stable. In addition, as to the Specific Plan site within the Project area, the applicant's groundwater supplies from the Alluvial aquifer, which are presently used for agricultural purposes, would be converted to potable supply uses, resulting in no net increase in groundwater usage. Consequently, the Temescal Ranch alternative site is not likely to lessen impacts to groundwater when compared to the Project area.

Biological Resources. A search of the CNDDB, April 2005 edition, was conducted to identify known occurrences of sensitive species or habitats on the Temescal Ranch site. The database indicated one record of a sensitive species on the site (Santa Ana sucker) and indicated that sensitive habitats, including Southern Coast Live Oak Riparian Forest, Southern Cottonwood-Willow Riparian Woodland, Southern Sycamore-Alder Riparian Woodland, and California Walnut Woodland, were present. No on-site biological surveys were conducted, thus sensitive species may exist on the site but have not been detected. While the Temescal Ranch site does contain habitat types considered sensitive (including habitats listed above and wetlands within and near such locations as Piru Creek), biological impacts related to development would be expected to be less than those associated with the development facilitated by the proposed Project. This is because Temescal Ranch is not within a County-designated SEA, is not within the critical habitat of the endangered least Bell's vireo, and does not have habitat suitable for the unarmored threespine stickleback, which is also an endangered species. However, biological impacts related to the general loss of habitat would be similar to those associated with the Project area, and would not be lessened by adoption of the Temescal Ranch alternative site.

Jurisdictional Streams and Wetlands. The Temescal Ranch alternative site is located adjacent to the Hathaway Ranch site, and receives flows from the drainages on Hathaway Ranch. These flows and others entering the site are impounded in Lake Piru. Approximately 75 percent of Lake Piru, or 995 acres, is within the boundaries of Temescal Ranch. The largest stream on the Temescal Ranch site is Piru Creek, which is fed perennially by releases from Santa Felicia Dam at the downstream end of Lake Piru. The on-site jurisdictional area of Piru Creek is approximately 250 acres. In addition to Piru Creek and Lake Piru, the Temescal Ranch site contains approximately 11.7 miles of intermittent and ephemeral tributaries to these waters, constituting 47 acres of jurisdiction (excluding Lake Piru and Piru Creek). The RMDP component of the proposed Project (Alternative 2) contains approximately 946 acres of jurisdictional area of which 99.8 acres would be permanently impacted .

The total area of the Temescal Ranch alternative site is 7,580 acres, which is substantially smaller than the 11,999-acre Specific Plan/RMDP site. Site development constraints also exist on the Temescal Ranch, including Lake Piru and Piru Creek, which would further limit the area available for new urban development. The approved Specific Plan/RMDP site also would retain approximately 10,220 acres in open space. Providing an urban development project on Temescal Ranch that provides a similar number of residential units and amount of commercial area as would be facilitated by the proposed Project would require the use of virtually all of the Temescal Ranch alternative site, which would substantially limit the ability to avoid or protect sensitive habitat areas located on the site. Development of this alternative site

instead of the Project area would result in potentially smaller effects on jurisdictional waters (*i.e.*, 99.8 acres for the proposed Project versus 47 acres for Temescal Ranch). Therefore, development of the Temescal Ranch alternative site would be expected to lessen impacts compared to the Project area with respect to impacts on jurisdictional streams and wetlands.

Air Quality. Long-term air emissions from residential and commercial land uses are typically a result of the VMT generated by a project. The amount of long-term vehicular-related air emissions generated by developing the Temescal Ranch site would be greater than the amount that would occur from the development facilitated by the proposed Project. Short-term construction-related activities at the Temescal Ranch and Project sites would generally be similar. As a result, construction-related emissions also would be similar. Therefore, overall impacts associated with development of the Temescal ranch site would not be expected to be less than those associated with the Project area with respect to impacts upon local and regional air quality.

Traffic. The primary road that currently exists on the Temescal Ranch site (Piru Canyon Road) is designated as a Local Scenic Road as is SR-126 to the south of the site. It is assumed that internal traffic patterns on the Temescal Ranch site would operate in a manner similar to the Project area after build-out. This presumes that it is possible to create the same development concept in approximately the same spatial arrangement being proposed for the Project area. Given this overall assumption, the primary difference between developing on the Temescal Ranch site and developing the Project area is how vehicular traffic would move to and from the two Project sites. Temescal Ranch is located at a greater distance from existing traffic infrastructure than is the Project area; the Temescal Ranch site is not served directly by a major state highway (SR-126), and is much further removed from one of the state's major north-south freeway corridors (I-5). Consequently, the amount of transportation infrastructure needed to reach the Temescal Ranch site would be substantially greater than that needed for the Project area.

Because SR-126 would serve as the primary means of connection between Temescal Ranch and the employment centers in the Santa Clarita Valley, SR-126 and its interchange at I-5 would be more heavily impacted by the Temescal Ranch alternative than by the development facilitated by the proposed Project. However, traffic generated on the Temescal Ranch site would only access I-5 at SR-126, and potential impacts to the I-5 interchanges at Magic Mountain Parkway and Valencia Boulevard would likely be avoided. The Temescal Ranch site would not offer the future potential of direct commuter rail service offered by developing the Project area. Travel distances and VMT between Temescal Ranch and the surrounding employment centers found in the Santa Clarita Valley also would be greater with development on the Temescal Ranch site. In conclusion, development of the Temescal Ranch alternative site would not be expected to lessen traffic impacts compared to development facilitated by the proposed Project.

Noise. Vehicle noise impacts associated with the Temescal Ranch site would be dispersed over a wider area than by the Project area due to the greater distances traveled. The adverse long-term noise impact to the Travel Village RV Park near the intersection of SR-126 and I-5 would likely be increased with development at Temescal Ranch, because more traffic would be expected to travel past this location. Development of the Temescal Ranch and Project sites would both involve construction activities that would have the potential to result in short-term noise impacts to noise sensitive uses located adjacent to

the Project sites, including recreational users at Lake Piru and Piru Creek for the Temescal Ranch site. Noise impacts resulting from the development of both Project sites would be expected to be similar although somewhat greater for the Temescal Ranch site. Therefore, development of the Temescal Ranch alternative site would not be expected to lessen impacts compared to the proposed Project area with respect to noise impacts.

Cultural/Paleontological Resources. Bibliographic references, previous survey reports, and archaeological site records were obtained from a records search of CHRIS in order to identify prior archaeological studies and known cultural resources within or adjacent to the Temescal Ranch site. The records search was conducted on August 23 and 24, 2005, at SCCIC, at California State University, Fullerton. The study area contained the Temescal Ranch alternative site and 0.25-mile search radius surrounding the site.

The CHRIS records search revealed that there are three known archaeological sites within the Temescal Ranch alternative site. An additional seven isolated artifacts were recorded within the 0.25-mile search radius. Fifteen surveys have been conducted within the study area, and an additional six "unmappable" surveys, lacking locational data, could potentially have included portions of the site. The Temescal Ranch alternative site is considered to be sensitive for cultural resources.

Due to the smaller size (7,580 acres) of the Temescal Ranch site and the nature of the cultural resources known to exist on the site, build-out of the development facilitated by the proposed Project would require nearly the entire Temescal Ranch site, making avoidance of cultural resources extremely difficult. Therefore, development of the Temescal Ranch site would not be expected to lessen impacts to cultural resources compared to the Project Area.

The Project area is underlain by several geological formations that have the potential to contain paleontological resources. Potential impacts on paleontological resources can be reduced to a less-than-significant level through implementation of previously adopted and proposed mitigation measures. It is anticipated that if fossil-bearing geological formations are located on the Temescal Ranch site, implementation of similar mitigation measures also would reduce potential impacts to a less-than-significant level. Therefore, potential paleontological resource impacts that may be associated with the Temescal Ranch and Project sites would be expected to be similar.

Agriculture and Soils. Portions of the Temescal Ranch site contain soils similar to those found on the lowland portions of the Project area. Specifically, both sites contain Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. Much of the Temescal Ranch site is in uplands where the agricultural productivity is diminished due to poorer soil types; this is true on the Project area as well. However, the Temescal Ranch alternative site contains less important farmland than does the Project area; and, therefore, this alternative site might foreseeably lessen Project impacts on agricultural resources.

Geology and Geologic Hazards. From an exposure to seismic events and a grading impact standpoint, developing the Temescal Ranch alternative site would be similar to the development facilitated by the proposed Project. Both sites are affected by faulting and would require mitigation for potential landslide hazards. Also, given that the terrain found on the Temescal Ranch site is similar to that found in the Project area, a similar amount of earthwork would be required to create land level enough to

accommodate urban development. Hence, the Temescal Ranch alternative would not be expected to result in less impact than the Project area with respect to impacts related to geology and geologic hazards.

Land Use. Development of either Temescal Ranch or the Project sites would result in permanent changes to existing land uses (*i.e.*, cattle grazing, agriculture, oil production). It is assumed that existing water supply and recreation uses located on Temescal Ranch that are provided by Lake Piru and Piru Creek would be avoided by new development. The entire Temescal Ranch site is designated as "Open Space" (80-acre minimum lot size), which is incompatible with development of the site for urban uses similar to the development facilitated by the proposed Project. The Temescal Ranch site also would be inconsistent with Ventura County goals and policies regarding conversion of land from agricultural production (*e.g.*, in Piru Canyon) to urban land uses. A General Plan Amendment to change the site's Open Space land use designation to urban land uses would require voter approval under the requirements of the Ventura County Save Open-Space and Agricultural Resources (SOAR) initiative. Development of the Project area would be consistent with the Los Angeles County General Plan, as amended, except as it relates to a portion of the Entrada planning area. Therefore, development of the Temescal Ranch site would not reduce impacts compared to the Project area from a land use consistency standpoint.

Visual Resources. The Temescal Ranch alternative site does not have a major east-west highway (SR-126) that traverses through the site like the proposed Project. It also is located farther away from potential viewers from highways and other roads due to intervening topography. As a result, development on the Temescal Ranch alternative site would be less visible from I-5, SR-126, and existing population centers when compared to the proposed Project. Due to these factors, the significant visual impacts resulting from the Temescal Ranch alternative site would be expected to be less than the proposed Project. However, the Temescal Ranch alternative site would still convert open area to urban uses, which would be considered a significant and potentially unavoidable visual impact, which is similar to the visual impacts associated with the proposed Project. On balance, development of the Temescal Ranch alternative site would be expected to result in fewer significant visual impacts when compared to the proposed Project.

Parks, Recreation, and Trails. The Temescal Ranch alternative site and the Project area would be required to meet local Quimby Act requirements for the provision of park space. However, at only 7,580 acres, it would not be possible to develop the land uses within the Project area on the Temescal Ranch site and still preserve in perpetuity the substantial amount of land that would be dedicated to public uses as would be provided in the Project area. In addition, Lake Piru and Piru Creek below Lake Piru are currently used extensively for recreational purposes on the Temescal Ranch site. Urban development on Temescal Ranch would be expected to adversely impact existing recreational uses on the Temescal Ranch site, whereas the proposed Project would facilitate recreation resources on the Project area. Based on the above information, development of the Temescal Ranch site would not result in less impact than the Project area relative to impacts on parks and recreation.

Public Safety. Past and present uses of the Temescal Ranch alternative site (namely, recreation, oil production, grazing, and some agriculture) are similar in nature within the Project area. Given its location, it is expected that Temescal Ranch does not contain the number of natural gas and electric transmission lines as exist on the Project area. However, a portion of Temescal Ranch is within the potential inundation zone of Santa Felicia Dam, which presents a potential public safety hazard in the unlikely event of

catastrophic dam failure. Overall, the Temescal Ranch and the Project area are considered to be similar from a public safety standpoint.

Public Services

Fire and Police Services. It is assumed that the Temescal Ranch alternative site would be required to fund an adequate level of fire protection and law enforcement to ensure adequate on-site protection. However, Temescal Ranch is located in eastern Ventura County along SR-126, an area that is not urbanizing to any substantial degree. As a result, assistance from Ventura County agencies would need to travel much further distances to the Temescal Ranch site than would Los Angeles County agencies if development were to occur on the Project area. In the event of an emergency, it is likely that Los Angeles County would need to assist Ventura County agencies if the Temescal Ranch alternative site was developed instead of the Project area. The Project area is closer to an existing urban area, and is much more able to handle large-scale emergencies. Consequently, impacts relative to fire and police services would be increased with development on the Temescal Ranch site when compared to development on the Project area. Hence, development of the Temescal Ranch alternative site would not result in fewer impacts than the Project area with regard to fire and law enforcement services.

Schools and Libraries. From an education and library standpoint, it is assumed that the Temescal Ranch alternative site would need to meet similar requirements for funding in order to educate and provide library services for its residents. Accordingly, development of the Temescal Ranch alternative site would not be expected to result in fewer impacts to schools and libraries than the development facilitated by the proposed Project.

Water Availability. The potable water demands of developing the Temescal Ranch site would be generally the same as the water demands for the Project area. Temescal Ranch is only partially within the service area boundary of UWCD (a water wholesaler) and is not served by a water retailer. Also, groundwater supplies are likely not of sufficient quantity or quality to serve the development facilitated by the proposed Project. Consequently, the Temescal Ranch site would need to be annexed into the UWCD service area, and would have to either annex to the nearest water retailer service area (in the community of Piru) or create a new water retail agency. Like CLWA, UWCD has the present policy of allowing annexations into its service area only if enough water is concurrently brought into the district to serve the development proposed on the annexed land. It is likely that development on the Temescal Ranch site would be dependent on imported water while the Project area's potable water supplies are primarily from the local groundwater basin. Due to the problematic prospects of delivering sufficient potable water to the Temescal Ranch, water availability impacts would likely be greater with the Temescal Ranch alternative than with development occurring on the Project area. Therefore, impacts of developing the Temescal Ranch alternative site would not be expected to be less than the Project area with regard to water availability.

Energy Use and Solid Waste Disposal. Energy use (on-site) and solid waste generation and disposal would be similar for the Temescal Ranch alternative site and the Project area. Access to energy (electricity and natural gas) sources and to solid waste disposal sites is approximately the same for both sites and these impacts would be similar. However, because the Temescal Ranch alternative would generate a larger amount of vehicle miles traveled, its demand for petroleum products is expected to be

greater than the demands of the Project area. Development of the Temescal Ranch alternative site would not be expected to result in less impact than the development facilitated by the proposed Project relative to the cost of energy, solid waste disposal, and consumption of petroleum products.

Hazards and Hazardous Materials. With the exception of Lake Piru, the Temescal Ranch site is considered to have fewer man-made hazards and less potential for the presence of hazardous materials as compared to the Project area. The Project area has a remote potential for being flooded due to a catastrophic dam failure at Castaic Lake. Similarly, the Temescal Ranch site has a remote potential for being flooded due to a catastrophic dam failure at Lake Piru, which would theoretically inundate the entire Piru Valley. There are more historical and ongoing oil and gas related facilities that may operate in the future in the general vicinity of developed areas on the Project area. It is expected that any decommissioned oil and gas facilities would be remediated to applicable regulatory standards, thereby removing any potential health and safety related hazards. Temescal Ranch's and the Project area's past and present agricultural crop activities, including the use of agricultural related chemicals, have the potential to pose a slight residual health hazard during site development in affected areas. The Project area is traversed by several high voltage transmission lines that emit electromagnetic fields and have the potential to ignite wildfires in rare instances during high wind events. Neither of these potential transmission line-related hazards is considered to be significant. A higher percentage of the overall Temescal Ranch site could be impacted by flooding from a catastrophic dam failure than the Project area, thus, development of the Temescal Ranch site would not be expected to lessen impacts relative to hazards when compared to the Project area.

Socioeconomics and Environmental Justice. The Temescal Ranch site is in a rural location that is not projected for urban development in any regional planning horizon. Temescal Ranch falls into Census Tract 200 in southern Ventura County. SCAG projects that the population within this Census Tract will reach approximately 2,725 by 2020. This projection predicts a much slower growth rate than projections for Los Angeles County and significantly lower population, housing, and employment numbers than proposed for the Project area. Therefore, because this area is not planned for this level of development, developing the Temescal Ranch site rather than the Project area would result in potentially significant socioeconomic impacts.

Using the Temescal Ranch for urban development facilitated by the proposed Project would provide housing and employment opportunities to accommodate regional population growth. However, the 7,500-acre Temescal Ranch site is substantially smaller than the 11,999-acre Specific Plan site alone. Therefore, it is unlikely that the Temescal Ranch site would be able to support full build-out of the housing and commercial development facilitated by the proposed Project. In addition, the Temescal Ranch site would not be expected to be able to provide the full housing- and jobs-related benefits that would result from development facilitated by the proposed Project. Therefore, development of the Temescal Ranch alternative site would not be expected to result in less impact than the development facilitated by the proposed Project with respect to socioeconomic issues.

Executive Order No. 12898, *Federal Actions to Address Environmental Justice In Minority and Low-Income Populations*, signed by President Clinton on February 11, 1994, requires federal agencies to identify and address disproportionately high and adverse effects of federal actions on the health and

environment of minority and low-income populations. According to federal guidelines, the environmental justice screening analysis assesses whether "the potentially affected community includes minority and/or low-income populations." The guidelines indicate that a minority population exists when the minority population is 50 percent of affected area's total population. The 50 percent threshold also is used to determine the presence of low-income populations in the study area.

The population in the Temescal Ranch study area (Census Tract 200) is not composed of 50 percent or more minorities and the economic status of the residents in the study area is not 50 percent or more low income. Therefore, development of either the Temescal Ranch or the Project sites would not result in disproportionate impacts on minority or low-income populations.

3.3.2.3 Newhall-Ventura Alternative

The Newhall-Ventura alternative site is located in unincorporated Ventura County, adjacent to the western boundary of the Project area. The alternative site is approximately 15,000 acres in size. This irregularly shaped site is generally bound by SR-126 on the north, the Santa Susana Mountains on the south, Los Angeles County on the east, and extends approximately two miles west of the community of Piru (refer to **Figure 3.0-2**, above). The northwest portion of the Newhall-Ventura alternative site encompasses a portion of the Santa Clara River floodplain and extends north of SR-126. Topography on the site is highly variable, with elevations ranging from approximately 630 feet above mean sea level in the Santa Clara River Valley to approximately of 3,000 feet above mean sea level in the Santa Susana Mountains. Lands in the river valley are generally level, with elevations rising to the south in the mountains. Historic uses of the site include cattle grazing, agriculture and oil production. The site is heavily developed with agricultural uses (row crops, citrus, *etc*.) and also maintains a number of rural-type residences and structures. Vehicular access is available to this site from SR-126, and no wastewater lines serve the site. The site is within both the UWCD and CLWA service areas.

3.3.2.3.1 *Meeting ~~Basic~~ Project Objectives/~~Purpose and Need~~*

An off-site location alternative such as the Newhall-Ventura site has the potential to result in new urban development that may implement the proposed Project's NEPA purpose and need and CEQA project objectives. ~~objectives of the development facilitated by the proposed Project.~~ However, as discussed below, the Newhall-Ventura alternative does not meet, or it impedes, the proposed Project's purpose and need/objectives. ~~many of the primary objectives for the Specific Plan, VCC, and Entrada would not be achieved with implementation of this alternative. Specific objectives not fully met or impeded with the Newhall-Ventura alternative site are listed below:~~

RMDP/SCP Purpose and Need and CEQA Project Objectives Summary

- The purpose and need of the RMDP component of the proposed Project is to practicably and feasibly achieve the basic objectives of the approved Specific Plan and thereby help meet the regional demand for housing and jobs in northern Los Angeles County. The following basic objectives of the Specific Plan would not be achieved if the proposed Project were to be developed on the Newhall-Ventura alternative site:

- Avoid leapfrog development and accommodate projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers.

- Arrange land uses to reduce vehicle miles traveled and energy consumption. ~~; and~~

- The purpose and need of the SCP component of the proposed Project is to implement a practicable and feasible spineflower conservation plan that provides for the long-term persistence of spineflower within the applicant's land containing known spineflower populations, and to authorize the take of spineflower in areas located outside of designated preserves, in order to facilitate development in portions of the Specific Plan, and the VCC and Entrada planning areas.

  This purpose and need/objective would not be achieved if the proposed Project were to be developed on the Newhall-Ventura alternative site because the spineflower is known to exist in two locations, namely within the proposed Project's boundary and on the former Ahmanson Ranch site in Ventura County. If the proposed Project's development is constructed on Newhall-Ventura alternative site, there would be no Project spineflower preserve design and open space connectivity, and no management, monitoring, and funding for the spineflower as set forth in the Revised SCP. There also would be no assurance that the spineflower located within the Project site would be practicably and feasibly preserved as outlined in the Revised SCP. (The Revised SCP is found in **Appendix F1.0** of the Final EIS/EIR.)

  In addition, if the proposed Project's development is constructed on Newhall-Ventura alternative site, then the Revised SCP's purpose and need/objectives of: (a) providing for the long-term persistence of spineflower within the Entrada planning area, and, at the same time, facilitating development within a portion of Entrada would not be met.; and (b) facilitating completion of the Valencia industrial/business park/office center by authorizing take of spineflower in the VCC planning area would be impeded.

~~**Specific Plan Objectives Summary**~~

- ~~Avoid leapfrog development and accommodate projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers;~~

- ~~Arrange land uses to reduce vehicle miles traveled and energy consumption;~~

- ~~Provide a safe, efficient, and aesthetically attractive street system with convenient connections to adjoining regional transportation routes;~~

- ~~Facilitate public transit by reserving right-of-way for future Metrolink line, space for a park and ride and/or Metrolink station, and by providing bus pull-ins along highways;~~

- ~~Establish a diverse system of pedestrian and bicycle trails, segregated from vehicle traffic, to serve as an alternative to the automobile because the development would be too far removed from existing infrastructure to allow for commuting by walking or biking;~~

- Retain a major open area, which could act as a regional recreational park and an ecological preserve;

- Preserve the site of the historical Asistencia (San Fernando Mission Annex);

- Preserve or minimally impact the most significant ridgelines and other major topographical landforms; and

- Implement the spineflower mitigation program, which is part of the approved Specific Plan.

VCC Objectives Summary

- The VCC site is considered a major expansion area for the existing Valencia industrial/business park/office center, which serves the growing business and employment needs of the Santa Clarita Valley and surrounding communities;

- The VCC is designed to accommodate a broad range of employment uses, including light manufacturing, research and development, warehousing, distribution uses, office uses, and service-orientated businesses in close proximity to the Santa Clarita Valley and surrounding communities; and

- Proximity to two major transportation facilities, the I-5 and SR-126, and the existing industrial center in Valencia, combine to make the VCC a logical site for industrial/business park/office uses to serve the Santa Clarita Valley and surrounding communities.

- Facilitate completion of the Valencia industrial/business park/office center, and authorize the take of spineflower in the VCC planning area.

Entrada Objectives Summary

- A portion of the Entrada planning area would include a mix of residential, commercial, non-residential, open space, and public services in close proximity to the I-5 corridor and surrounding existing uses within the Santa Clarita Valley;

- Similar to the Specific Plan site, Entrada avoids leap-frog development and accommodates projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers;

- Similar to the Specific Plan site, Entrada land uses are arranged to reduce vehicle miles traveled and energy consumption; and

- A portion of Entrada would allow for implementation of a practicable and feasible spineflower conservation plan that would provide for the long-term persistence of spineflower within the Entrada planning area, and, at the same time, facilitate development within a portion of Entrada.

3.3.2.3.2 *Potential for the Alternative to Avoid or Lessen Impacts*

This section provides a general comparison of the likely environmental impacts of the Newhall-Ventura alternative site, and includes conclusions as to whether this alternative would have the potential to avoid or substantially lessen the environmental impacts of the proposed Project, including the development facilitated by the proposed Project. A general comparison of relative impact levels associated with development of the Newhall-Ventura alternative site and the Project area is included in (Revised) **Table 3.0-3**, above.

Surface Water Hydrology and Water Quality. The majority of the Newhall-Ventura site drains in a northerly direction to the Santa Clara River. Exceptions include the portion of the site south of Oak Ridge; drainage flows in this area are in a generally southern direction. In addition, the northeast portion of the site drains in a generally southern direction to the Santa Clara River. Intermittent drainages on the site include those in Tapo Canyon, Eureka Canyon, Smith Canyon, the mouth of Salt Creek, and the headwaters of Tripas Canyon. From a water quality perspective, the development facilitated by the proposed Project and development at the Newhall-Ventura alternative site are considered similar.

It is assumed that the Newhall-Ventura site would need to construct its own water reclamation plant. It is also assumed that the site would create a reclaimed water system where reclaimed water would be used on the site to reduce its potable water demands. Based on the above, the amount of wastewater generated by development on the Newhall-Ventura alternative site would be the same as that generated by the development facilitated by the proposed Project; and, therefore, wastewater impacts would be the same. Consequently, the Newhall-Ventura alternative site would not be expected to result in less impact than the Project area from a wastewater disposal perspective.

Flood Control. The potential impacts of flooding due to development on the Newhall-Ventura alternative site would be similar to those within the Project area. The Santa Clara River runs through both sites (approximately five miles in the Project area and about six miles in the Newhall-Ventura site), and both scenarios would involve the conversion of open land to an urban condition with impervious surfaces. It is expected that development on both sites would necessitate similar types of drainage improvements in order to preclude downstream impacts. Thus, the Newhall-Ventura alternative site would not result in less impacts than the Project area with regard to flood impacts.

Geomorphic and Riparian Resources. Like the Project area, the Santa Clara River runs through the Newhall-Ventura property site. There also are several intermittent drainages throughout the Newhall-Ventura site. Because of the Santa Clara River and associated tributary drainages, the geomorphic and riparian resource impacts are expected to be the same or similar with respect to the Newhall-Ventura site and the Project area. The river geomorphic changes (natural or otherwise) may include changes to the existing hydraulics of the river course, increased scouring, increased water depths, and associated impacts on erosion, sedimentation, water quality, and aquatic and riparian river habitats.

Groundwater. The northern portions of the Newhall-Ventura site encompass a portion of the Piru Groundwater Basin along the Santa Clara River floodplain (refer to previous discussion of the Piru Groundwater Basin in **Subsection 3.3.2.2.2** [Temescal Ranch]). Development of the Newhall-Ventura site would be expected to impact percolation and potentially water quality in the Piru Groundwater Basin.

As to the Specific Plan site within the Project area, the applicant's groundwater supplies from the Alluvial aquifer, which are presently used for agricultural purposes, would be converted to potable supply uses, resulting in no net increase in groundwater usage. Consequently, the Newhall-Ventura alternative site is not likely to lessen impacts to groundwater when compared to the Project area.

Biological Resources. A search of the CNDDB, April 2005 edition, was conducted to identify known occurrences of sensitive species or habitats on the Newhall-Ventura alternative site. The database indicated that the site includes sensitive species, including the endangered least Bell's vireo, Western yellow-billed cuckoo, and the Santa Ana sucker, among others. In addition, CNDDB indicated that the site contains sensitive habitats, including Southern Coast Live Oak Riparian Forest, Valley Oak Woodland, and California Walnut Woodland. Biological impacts related to development of the Newhall-Ventura alternative site would be similar to those associated with the development facilitated by the proposed Project. This is because both sites are within the critical habitat of the endangered least Bell's vireo, and have habitat suitable for the unarmored threespine stickleback and other riparian species. Potential biological impacts related to the general loss of habitat also would be similar on both sites. Given the above, the Newhall-Ventura alternative site would not result in fewer impacts than the development facilitated by the proposed Project with regard to impacts upon biological resources.

Jurisdictional Streams and Wetlands. The applicant's property in Ventura County is adjacent to the Project area, immediately downstream along the Santa Clara River. An approximately 787-acre portion of the Santa Clara River lies within the Project area, accounting for the majority of the area's jurisdictional waters. This compares to approximately 946 acres and 49 linear miles on the Newhall-Ventura alternative site In addition, the Newhall-Ventura alternative site contains 53.8 miles of intermittent and ephemeral drainages that ultimately convey flows to the Santa Clara River. In total, the Newhall-Ventura property is comprised of approximately 990 acres of jurisdictional waters. Although available information was not sufficient to allow the mapping of wetlands on the site, it is assumed that jurisdictional riparian areas and palustrine fringe wetlands are present along the edges of the Santa Clara River. Depressional wetlands also may occur on site, but are likely limited in extent due to relatively steep topography and arid climate conditions.

As the total size of the Newhall-Ventura site is approximately 15,000 acres, the development facilitated by the proposed Project could be accommodated on the site. This alternative site is larger than the Project area, and both sites contain reaches of the Santa Clara River. Although the quantity and quality of jurisdictional streams and wetlands on these two sites are approximately similar, development on the Newhall-Ventura site would result in greater preservation of these resources because development could be designed to affect a smaller percentage of jurisdictional streams and wetlands due to the larger size of the Newhall-Ventura site. Therefore, the Newhall-Ventura alternative site could potentially be developed so as to reduce impacts to jurisdictional streams and wetlands compared to the proposed Project area.

Air Quality. Long-term air emissions from residential and commercial land uses are typically a result of the VMT generated by a project. The amount of vehicular-related air emissions generated by developing the Newhall-Ventura site would be expected to be greater than would occur from the development facilitated by the proposed Project due to the relative distances from I-5. Short-term construction-related activities and emissions at the two sites would generally be similar. Long-term air quality impacts

generated by the development facilitated by the proposed Project would be expected to be greater if development were relocated to the Newhall-Ventura alternative site. Therefore, development of the Newhall-Ventura alternative site would not be expected to result in fewer impacts than the Project area with regard to air quality impacts.

Traffic. It is assumed that internal traffic patterns on the Newhall-Ventura alternative site would operate in a manner similar to the Project area after build-out. This presumes that it is possible to create the proposed development concept in approximately the same spatial arrangement on both sites. Given this overall assumption, the primary difference between developing on the Newhall-Ventura site and developing the Project area is how vehicular traffic would move to and from the two sites. The alternative site is located a greater distance from existing traffic infrastructure than is the Project area; and the Newhall-Ventura site is further removed from a major north-south freeway corridor (I-5). Consequently, the amount of transportation infrastructure required to serve the Newhall-Ventura site would be greater than that needed to serve the Project area. No secondary connection with I-5 would be possible with the Newhall-Ventura alternative; SR-126 would serve as the primary means of connection with the employment centers in the Santa Clarita Valley. Under this condition, SR-126 and its interchange at I-5 would be more heavily impacted with the Newhall-Ventura alternative. However, it also would be true that, because no connection with I-5 at Magic Mountain Parkway and Valencia Boulevard would occur, impacts to the I-5 interchanges at Magic Mountain Parkway and Valencia Boulevard could be reduced. Travel distances and VMT between the Newhall-Ventura site and the surrounding employment centers found in the Santa Clarita Valley would be greater with development on the alternative site. In conclusion, development of the Newhall-Ventura site would be expected to increase impacts compared to the Project area with regard to traffic and circulation impacts. The increase in impacts is primarily due to: (a) the lack of a secondary connection with I-5, in which to distribute projected vehicle trips; (b) increased vehicle miles traveled between the alternative site and the employment centers found in the Santa Clarita Valley; and (c) a greater need to extend traffic infrastructure to the alternative site.

Noise. If development were relocated to the Newhall-Ventura alternative site, vehicular noise emissions would occur over a wider area due to the greater distances traveled between the site and employment centers in the Santa Clarita Valley. Also, the adverse noise impact generated by vehicular travel at the Travel Village RV Park by the development facilitated by the proposed Project would likely be worsened because more traffic would travel past this location. However, the adverse short-term impacts caused by construction-related activities would not affect Travel Village if development were to occur on the Newhall-Ventura alternative site. Consequently, potential long-term noise impacts would be expected to be of a greater magnitude if the Newhall-Ventura alternative site were developed. On balance, development of the Newhall-Ventura alternative site would not be expected to result in less noise impacts when compared to the Project area.

Cultural/Paleontological Resources. Bibliographic references, previous survey reports, and archaeological site records were obtained from a CHRIS records search in order to identify prior archaeological studies and known cultural resources within or adjacent to the Newhall-Ventura alternative site. The records search was conducted on August 23 and 24, 2005, at SCCIC, at California State University, Fullerton. The study area contained the Newhall-Ventura alternative site and 0.25-mile search radius surrounding the site.

The CHRIS records search revealed that there are two known archaeological sites within the Newhall-Ventura alternative site. In addition, there is one isolated artifact recorded within the 0.25-mile search radius. Twenty-three surveys have been conducted within the study area, and an additional 16 "unmappable" surveys, lacking locational data, could potentially have included portions of the site. The Newhall-Ventura alternative site is considered sensitive for cultural resources.

Archaeological surveys of the 11,999-acre Specific Plan site identified eight prehistoric resources sites, one isolate location, and one historical site. Most of the identified sites have experienced minor to extensive disturbance, and known artifacts were collected from several sites during field investigations. As a result, the Project area is considered to have a very low density of archaeological remains.

Given the relatively large size of the Newhall-Ventura alternative site (approximately 15,000 acres), and the limited amount of cultural resources known to occur on the site, the impacts to cultural resources on the Newhall-Ventura alternative site would be similar to impacts on the Project area. Build-out of the development facilitated by the proposed Project would require less than one-half of the site, and development could likely be configured to avoid significant cultural resource impacts. On balance, development of the Newhall-Ventura alternative site instead of the Project area would not be expected to result in fewer impacts to cultural resources.

The Project area is underlain by several geological formations that have the potential to contain paleontological resources. Potential impacts to sensitive paleontological resources would be reduced to a less-than-significant level through the implementation of proposed mitigation measures. It is anticipated that if fossil-bearing geological formations were located on the Newhall-Ventura alternative site, implementation of similar mitigation measures also would reduce potential impacts to a less-than-significant level. Therefore, potential paleontological resource impacts that may be associated with the Newhall-Ventura alternative site and the Project area would be similar, and development of the Newhall-Ventura site instead of the Project area would not be expected to result in fewer impacts to paleontological resources.

Agriculture and Soils. The soils in the upland portions of the Newhall-Ventura alternative site are similar to those present on the Project area with respect to surface textures, depths, and erosion susceptibility. For agricultural purposes, the there is a greater amount of prime, unique, and other important farmland on the Newhall-Ventura alternative site when compared to the Project area, and the blocks of agricultural land are generally larger in size thereby making them more viable farming than the land found on the Project area. Both sites contain Prime and Unique Farmland, and Farmland of Statewide Importance. The Newhall-Ventura site has a greater amount of soils conducive to citrus production than does the Project area. In addition, Ventura County policies promote preservation of agricultural lands in lieu of urban development and development of the Newhall-Ventura site would be inconsistent with these policies. Consequently, development of the Newhall-Ventura site would not result in less impacts than the Project area with regard to impacts to agricultural resources.

Geology and Geologic Hazards. With respect to seismic hazards, the impact of developing the Newhall-Ventura alternative site would be similar to that on the Project area. Both sites are affected by faulting and would require mitigation of potential landslide hazards. However, from a grading standpoint, impacts on

the Newhall-Ventura alternative site would be greater than those on the Project area. The terrain on the Newhall-Ventura site is steeper and more varied than on the Project area; thus more earthwork would be required to create land level enough to accommodate the same amount of development. Therefore, development of the Newhall-Ventura alternative site would not result in fewer impacts than the Project area with regard to geologic resources.

Land Use. Development of the Newhall-Ventura alternative site would convert existing agriculture, grazing, oil production, open space/ wildlife habitat land uses to urban uses. The Newhall-Ventura site is currently designated Agriculture (40-acre minimum lot size) and Open Space (80-acre minimum lot size). A General Plan Amendment to change the Newhall-Ventura site's Open Space and Agriculture land use designation to an urban land use would require voter approval under the requirements of the Ventura County SOAR initiative. Thus, development of the Newhall-Ventura alternative site would not be consistent with Ventura County policies. As a result, development of the Newhall-Ventura alternative site would not result in fewer impacts than the Project area from a land use policy consistency perspective.

Visual Resources. A major state highway (SR-126) runs through both the Newhall-Ventura alternative site and the Project area, and both sites are visible to a large, mobile viewing audience. The portion of SR-126 that traverses the Newhall-Ventura site is designated a Local Scenic Highway by Ventura County. Both sites would also involve the conversion of a largely rural area to an urban condition if they were to be developed. However, portions of the Project area are hidden from viewers along SR-126 by intervening topography. The Newhall-Ventura site is not nearly as hidden from view, and topographic conditions indicate that most, if not all, development on this site would be visible to travelers on SR-126 and would significantly impact the visually rural character of the Santa Clara River Valley (probably more so than the development facilitated by the proposed Project, due to its greater visibility). Therefore, the significant visual impact that the Project area would have on the Valley would be transferred to the west from Los Angeles County into Ventura County, and would be intensified. On the other hand, the Newhall-Ventura site is not visible to existing residents in Chiquito Canyon, and the significant impact resulting from the development at this location would be avoided if the Newhall-Ventura site were developed instead of the Project area. Due to this environmental trade-off of impacts (*i.e.*, greater impact in Ventura County but less impact in Chiquito Canyon), the visual impact of developing the Newhall-Ventura site is more or less similar to the impact created by the development facilitated by the proposed Project. On balance, the Newhall-Ventura alternative site would result in similar impacts to the Project area with regard to visual impacts. Development of the Newhall-Ventura alternative site would not be expected to reduce impacts to visual resources when compared to the Project area.

Parks, Recreation, and Trails. The Newhall-Ventura alternative site and the Project area would be required to meet local Quimby Act requirements for the provision of park space. At over 15,000 acres, the Newhall-Ventura alternative site could accommodate a project the size of the Project area and still preserve in perpetuity a similar amount of land that would be dedicated to the public for open space purposes. Based on the above information, impacts to parks and recreation would be similar to the Project area. Development of the Newhall-Ventura alternative site would not be expected to reduce impacts compared to the Project area with respect to parks, recreation, and trails.

Public Safety. Past and present uses of the Newhall-Ventura alternative site (namely oil and natural gas operations, grazing and some agriculture) are similar in nature to those on the Project area. The Newhall-Ventura site has some of the same natural gas and electrical transmission lines traversing it as are found on the Project area and both sites are within the inundation area of Castaic Dam. Consequently, potential public safety impacts relating to these uses would be similar on both sites. Given the above, development of the Newhall-Ventura alternative site would not reduce impacts compared to the Project area with respect to environmental safety issues.

Public Services

Fire and Police Services. It is assumed that the Newhall-Ventura alternative site would be required to fund an adequate level of fire protection and law enforcement to ensure sufficient on-site protection. However, the Newhall-Ventura site is located in eastern Ventura County, an area that is not urbanizing to any substantive degree. As a result, in the event of an emergency on the site, Ventura County agencies would need to travel much farther distances to this site than would Los Angeles County agencies if development were to occur on the Project area. In the event of an emergency, it is likely that Los Angeles County would need to assist Ventura County agencies if the Newhall-Ventura alternative site were developed instead of the Project area. The Project area is much closer to an existing urban area, which is able to handle large-scale emergencies. Consequently, impacts related to fire and law enforcement protection would be worse if development were relocated to the Newhall-Ventura alternative site. Thus, development of the Newhall-Ventura alternative site would not result in fewer impacts than the Project area with regard to impacts on fire and law enforcement services.

Schools and Libraries. From an education and library standpoint, it is assumed that the Newhall-Ventura alternative site would need to meet similar requirements for funding in order to educate and provide library services for its residents. Based on the above information, impacts to schools and libraries under the Newhall-Ventura alternative would be expected to be similar to those on the Project area. Thus, development of the Newhall-Ventura alternative site would not be expected to result in fewer impacts than on the Project area with respect to impacts upon education or libraries.

Water Availability. The potable water demands of development on the Newhall-Ventura alternative site are expected to be similar to the water for the Project area. The Newhall-Ventura alternative site is partially within the service area boundaries of CLWA and UWCD (water wholesalers) and is not served by a water retailer. The Newhall-Ventura alternative site would not need to annex any additional land into CLWA's or UWCD's service area, but would need to either annex to an existing water retailer service area or create a new water retail agency. Because the Newhall-Ventura alternative site is adjacent to the Project area, and because the applicant owns both sites, it is likely that the conditions of water availability are similar. Therefore, development of the Newhall-Ventura alternative site would not be expected to reduce impacts compared to the Project area with regard to water availability.

Energy Use and Solid Waste Disposal. Regarding energy use and solid waste disposal, the same amount of energy (natural gas and electricity) demand and solid waste generation would occur regardless of which site were developed. Access to energy (electricity and natural gas) sources and to solid waste disposal sites also are approximately the same for both sites. However, because the Newhall-Ventura alternative would generate a larger amount of vehicular traffic miles traveled, an increased demand for

petroleum products would be expected. Consequently, development of the Newhall-Ventura alternative would not be expected to result in fewer impacts than the Project area with respect to the impacts on petroleum products.

Hazards and Hazardous Materials. Man-made and natural hazards are similar on the Project area and the Newhall-Ventura alternative sites. Therefore, development of the Newhall-Ventura site would not be expected to result in less impacts than the Project area with regard to hazards and hazardous materials.

Socioeconomics and Environmental Justice. The Newhall-Ventura alternative site is in a rural location, one that is not projected for urban development in any regional planning horizon. The Newhall-Ventura site falls into Census Tract 200 in southern Ventura County. SCAG projects that the population within this Census Tract will reach approximately 2,725 by 2020. This projection predicts a much slower growth rate than projections for Los Angeles County and significantly lower population, housing, and employment numbers than the Project area. Because the Newhall-Ventura alternative site is not planned for this level of development, developing this site rather than the Project area would result in significant unplanned population, housing, and employment impacts. The 15,000-acre size of the Newhall-Ventura site could physically accommodate the urban development facilitated by the proposed Project, which would provide housing and employment opportunities to accommodate regional population growth. However, it is unlikely that urban development could be accommodated from a regulatory standpoint on the Newhall-Ventura site due to existing land use designation constraints and Ventura County's SOAR requirements (refer to **Subsection 3.3.2.3**, Land Use). Although the Newhall-Ventura site is adequate in terms of size, it is unlikely that it could be used to provide the housing and jobs-related benefits that would result from the use of the Project area. Development of the Newhall-Ventura alternative site would not result in less impacts than the Project area with respect to socioeconomic issues.

Executive Order No. 12898 *Federal Actions to Address Environmental Justice I Minority and Low-Income Populations*, signed by President Clinton on February 11, 1994, requires federal agencies to identify and address disproportionately high and adverse effects of federal actions on the health and environment of minority and low-income populations. According to federal guidelines, the environmental justice screening analysis assesses whether "the potentially affected communities includes minority and/or low-income populations." The guidelines indicate that a minority population exists when the minority population is 50 percent of affected area's total population. The 50 percent threshold also is used to determine the presence of low-income populations in the study area.

The population in the Newhall-Ventura study area (Census Block 200) is not composed of 50 percent or more minorities and the economic status of the residents in the study area is not 50 percent or more low income. Therefore, development of either the Newhall-Ventura alternative site or the Project area would not result in disproportionate impacts on minority or low-income populations.

3.3.3 Total Avoidance of Jurisdictional Waters Alternative

In order to construct the land uses approved by the Specific Plan[2] ~~The Specific Plan site~~ within the Project area, ~~requires~~ a CWA section 404 permit is required. ~~in order to construct the land uses approved by the Specific Plan.[3]~~ The Total Avoidance alternative assumes that the Corps does not approve a long-term CWA section 404 permit, which would allow implementation of the RMDP conservation and infrastructure components for the Specific Plan within the Corps' jurisdiction. Under this alternative, development of Specific Plan land uses could theoretically occur, but only in those areas of the Specific Plan that could be accessed and constructed while still avoiding all areas within the Corps' jurisdiction. However, as discussed below, this alternative is not considered ~~reasonable or~~ feasible because, while it would lessen significant environmental impacts relative to implementation of the approved Specific Plan, it would not meet the Project ~~applicant's~~ objectives/purpose and need, and would not allow feasible development to occur consistent with the approved Specific Plan (see (Revised) **Table 3.0-4**).

(Revised) Table 3.0-4
Comparison of Impacts and Issues for the Total Avoidance Alternative

Environmental Issue/Consideration	Total Avoidance Alternative
Likely to Lessen Impacts Relative to Approved Specific Plan?[1]	Yes
Able to Substantially Meet Objectives/Purpose and Need?	No[2]
Feasible to Develop Site?	No[2]

Notes:

[1] This is because most of the Project area cannot feasibly be developed to facilitate the County-approved Specific Plan because of the need to avoid all areas within Corps jurisdiction. Without development of the County-approved Specific Plan, none of the open space to be dedicated within the Specific Plan area would occur.

[2] Implementation of the total avoidance alternative does not meet the objectives/purpose and need of the proposed Project, as well as the applicant's objectives in implementing the County-approved Specific Plan, because the Specific Plan site could not feasibly be developed as approved and, at the same time, avoid all areas within the Corps' jurisdiction.

Source: URS, 2008.

For purposes of NEPA and CEQA analysis of alternatives, the Total Avoidance alternative is *different* from the "No Action/No Project" alternative evaluated in detail in this EIS/EIR. Under the "No Action/No Project" alternative, *neither* the Corps nor CDFG would issue any of the requested permits, agreements, and authorizations required to implement both the RMDP and SCP components of the proposed Project. Accordingly, under the "No Action/No Project" alternative, none of the development facilitated by approval of the RMDP would occur, none of the open space within the Project area would be dedicated or managed, and none of the spineflower preserves and associated management would be implemented.

[2] Under the proposed Project, a CWA section 404 permit is not requested for the VCC or Entrada planning areas.

~~[3] Under the proposed Project, a section 404 permit is not requested for the VCC or Entrada planning areas.~~

3.3.3.1 Meeting ~~Proposed~~ Project Objectives/Purpose and Need

The proposed Project's objectives/purpose and need are described in detail in **Section 2.0**, Project Description, of this EIS/EIR. Summarized below is the statement of the Project objectives and purpose~~/~~ and need that would not be met if the Total Avoidance alternative were implemented.~~,~~ ~~including the objectives associated with development of the Specific Plan, and the VCC and Entrada planning areas.~~

RMDP/SCP Purpose and Need and CEQA Project Objectives Summary

- The purpose and need of the RMDP component of the proposed Project is to practicably and feasibly achieve the basic objectives of the approved Specific Plan and thereby help meet the regional demand for housing and jobs in northern Los Angeles County. The following basic objectives of the Specific Plan would not be achieved if the proposed Project were to be developed under the Total Avoidance Alternative:

    - Create a major new community with inter-related Villages that allows for residential, commercial, and industrial development, while preserving significant natural resources, important landforms, and open areas.

    - Avoid leapfrog development and accommodate projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers.

    - Arrange land uses to reduce vehicle miles traveled and energy consumption.~~; and~~

    - Provide a complementary and supportive array of land uses, which will enable development of a community with homes, shopping, employment, schools, recreation, cultural and worship facilities, public services, and open areas.

    - Organize development into Villages to create a unique identity and sense of community for each.

    - Design Villages where a variety of higher-intensity residential and non-residential land uses are located in proximity to each other and to major road corridors and transit stops.

    - Establish land uses and development regulations, which permit a wide-range of housing densities, types, styles, prices, and tenancy (for sale and rental).

    - Designate sites for needed public facilities such as schools, fire stations, libraries, water reclamation plant, and parks.

- The purpose and need of the SCP component of the proposed Project is to implement a practicable and feasible spineflower conservation plan that provides for the long-term persistence of spineflower within the applicant's land containing known spineflower populations, and to

authorize the take of spineflower in areas located outside of designated preserves, in order to facilitate development in portions of the Specific Plan, and the VCC and Entrada planning areas.

As to the SCP component of the proposed Project, the Total Avoidance alternative also would not satisfy the objective/purpose and need set forth in the SCP, because the alternative would not allow a comprehensive approach to preserving and protecting the spineflower populations not only on the Specific Plan site, but also in a portion of the Entrada planning area. The majority of the proposed spineflower preserves are located in upland areas outside of the Corps' jurisdiction. However, by restricting all Specific Plan development to non-jurisdictional areas under the Total Avoidance alternative, the alternative would have the effect of reducing the spineflower preserve acreage within the Specific Plan site in order to accommodate Specific Plan infrastructure and development that could not be constructed in the Corps' jurisdictional areas. In addition, by excluding Specific Plan development in the Corps' jurisdiction, the Total Avoidance alternative would not allow for development of spineflower preserves connected to open space areas within the entire Project area; thus, impeding the basic objectives/purpose and need of the SCP component of the proposed Project.

~~**Specific Plan Objectives Summary**~~

- ~~Create a major new community with inter-related Villages that allows for residential, commercial, and industrial development, while preserving significant natural resources, important landforms, and open areas;~~
- ~~Avoid leapfrog development and accommodate projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers;~~
- ~~Arrange land uses to reduce vehicle miles traveled and energy consumption;~~
- ~~Provide a complementary and supportive array of land uses, which will enable development of a community with homes, shopping, employment, schools, recreation, cultural and worship facilities, public services, and open areas;~~
- ~~Organize development into Villages to create a unique identity and sense of community for each;~~
- ~~Design Villages in which a variety of higher-intensity residential and non-residential land uses are located in proximity to each other and to major road corridors and transit stops;~~
- ~~Establish land uses and development regulations, which permit a wide-range of housing densities, types, styles, prices, and tenancy (for sale and rental);~~
- ~~Designate sites for needed public facilities such as schools, fire stations, libraries, water reclamation plant, and parks;~~
- ~~Provide a tax base to support public services;~~

- ~~Design a mobility system, which includes alternatives to automobile use;~~
- ~~Provide a safe, efficient, and aesthetically attractive street system with convenient connections to adjoining regional transportation routes;~~
- ~~Facilitate public transit by reserving right-of-way for future Metrolink line, space for a park and ride and/or Metrolink station, and by providing bus pull-ins along highways;~~
- ~~Establish a diverse system of pedestrian and bicycle trails, segregated from vehicle traffic, to serve as an alternative to the automobile because the development would be too far removed from existing infrastructure to allow for commuting by walking or biking;~~
- ~~Retain a major Open Area, which could act as a regional recreational park and an ecological preserve;~~
- ~~Provide Neighborhood and Community Parks and improvements, which satisfy park dedication requirements and meet the recreational needs of local residents;~~
- ~~Locate Neighborhood Parks adjacent to schools and establish joint-use agreements between park and school districts;~~
- ~~Provide a range of recreational opportunities, including active and passive parks, an 18-hole golf course; and a recreational lake;~~
- ~~Provide an extensive system of pedestrian, bicycle, and hiking trails within the Villages, and hiking trails within the Special Management Areas and Open Area;~~
- ~~Preserve the site of the historical Asistencia (San Fernando Mission Annex);~~
- ~~Provide a 6.8 mgd water reclamation plant and supplementary distribution system to use recycled water; and~~
- ~~Implement the spineflower mitigation program, which is part of the approved Specific Plan.~~

~~As to the SCP component of the proposed Project, the Total Avoidance alternative also would not satisfy the objective/purpose and need set forth in the SCP, because the alternative would not allow a comprehensive approach to preserving and protecting the spineflower populations not only on the Specific Plan site, but also in a portion of the Entrada planning area. The majority of the proposed spineflower preserves are located in upland areas outside of the Corps' jurisdiction. However, by restricting all Specific Plan development to non-jurisdictional areas under the Total Avoidance alternative, the alternative may have the effect of reducing the spineflower preserve acreage within the Specific Plan site in order to accommodate Specific Plan infrastructure and development that could not be constructed in the Corps' jurisdictional areas. In addition, by excluding Specific Plan development in the Corps' jurisdiction, the Total Avoidance alternative would not allow for development of spineflower~~

~~preserves connected to open space areas within the entire Project area; thus, impeding the basic objectives/purpose and need of the SCP component of the proposed Project.~~

~~**VCC Objectives Summary**~~

- ~~The VCC site is considered a major expansion area for the existing Valencia industrial/business park/office center, which serves the growing business and employment needs of the Santa Clarita Valley and surrounding communities;~~

- ~~The VCC is designed to accommodate a broad range of employment uses, including light manufacturing, research and development, warehousing, distribution uses, office uses, and service-orientated businesses in close proximity to the Santa Clarita Valley and surrounding communities;~~

- ~~Proximity to two major transportation facilities, the I-5 and SR-126, and the existing industrial center in Valencia, combine to make the VCC a logical site for industrial/business park/office uses to serve the Santa Clarita Valley and surrounding communities; and~~

- ~~Facilitate completion of the Valencia industrial/business park/office center, and authorize the take of spineflower in the VCC planning area.~~

~~**Entrada Objectives Summary**~~

- ~~A portion of the Entrada planning area would include a mix of residential, commercial, non-residential, open space, and public services in close proximity to the I-5 corridor and surrounding existing uses within the Santa Clarita Valley;~~

- ~~Similar to the Specific Plan site, Entrada avoids leap-frog development and accommodates projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers;~~

- ~~Similar to the Specific Plan site, Entrada land uses are arranged to reduce vehicle miles traveled and energy consumption; and~~

- ~~A portion of Entrada would include the implementation of a practicable and feasible spineflower conservation plan that would provide for the long-term persistence of spineflower within the Entrada planning area, while facilitating development within a portion of Entrada.~~

3.3.3.2 Planning/Economic Infeasibility

Under the Total Avoidance alternative, the following RMDP/SCP infrastructure associated with the Santa Clara River could not be implemented because such infrastructure is within the Corps' jurisdiction:

- Three bridges crossing over the Santa Clara River to facilitate the Specific Plan's approved traffic circulation plan and associated land uses;

- Bank stabilization features along portions of the north and south banks of the Santa Clara River, which provide flood protection and facilitate development of residential, non-residential, and commercial uses approved by the Specific Plan;

- Installation of the proposed utility corridor along a portion of the north bank of the Santa Clara River, which would facilitate residential, non-residential, and commercial development approved by the Specific Plan;

- Installation of storm drain outlets along portions of the north and south banks of the River, which facilitate approved Specific Plan development; and

- SR-126 road widening~~, which is a part of Caltrans' local and regional effort~~ necessary to accommodate existing and approved development in the Santa Clarita Valley, including the approved Specific Plan, VCC, and other properties west of I-5, including Entrada.

As to the Santa Clara River bridge crossings, the analysis in the Newhall Ranch Revised Additional Analysis (Vol. VIII, May 2003) found that the bridge crossings were essential for the safe and adequate circulation of traffic for the Specific Plan and the region. The bridge crossings also furthered numerous Los Angeles County General Plan transportation, land use, noise, safety, energy conservation, and air quality goals and policies. In addition, the bridges connect the development areas south of Santa Clara River to SR-126, a major east-west state highway that serves local and regional traffic. Each bridge crossing also connects to, and is a continuation of, existing arterial roads (*e.g.*, Commerce Center Drive, Chiquito Canyon Road), creating a functional regional circulation system. The bridges, therefore, improve traffic flow, efficiency, and reduce automobile vehicle~~s~~ miles traveled. Further, the bridge crossings were found to provide an opportunity for utilities to serve the Specific Plan without additional disturbance to riparian resources. The bridges also ensure multiple access routes in the event of fire or other unforeseen events, and they ensure that response times in and around the Specific Plan site are not impaired (*e.g.*, police, fire, and emergency medical).[4]

Conversely, if the Specific Plan were implemented without the bridge crossings (and thereby avoiding impacts to Corps' jurisdiction) an efficient and functional circulation system for the Specific Plan and the region would be significantly impaired. Los Angeles General Plan goals and policies related to transportation, land use, noise, safety, energy conservation, and air quality would be hindered, as the Specific Plan site and the surrounding roadway system (without the bridges) would be subjected to additional vehicle~~s~~ miles traveled and transportation-related noise, fuel consumption, safety hazards, and air emissions. From a land use perspective, implementation of the Specific Plan without the bridge crossings also would trigger the need for amendments to the General Plan, Area Plan, and Specific Plan because the changes would conflict with the approved General Plan and Specific Plan.

[4] See, Newhall Ranch Specific Plan Revised Additional Analysis (Vol. VIII, May 2003), Section 2.4, pp. 2.4-39 - 2.4-52, and "Newhall Ranch Engineering Design Summary and Report for Bridge Crossings of the Santa Clara River," Sikand Engineering Associates (Revised August 7, 2000), found in the Newhall Ranch Draft Additional Analysis (Vol. III, April 2001).

As to the bank stabilization features along portions of the north and south banks of the Santa Clara River, including storm drain installation, the infrastructure provides necessary flood/drainage protection and facilitates development of residential, non-residential, and mixed-use/commercial uses approved by the Specific Plan. In addition, while the bank stabilization would encroach into the existing River channel in some areas, in most areas, it would be placed outside of the Corps' jurisdiction. Elimination of the bank stabilization would render infeasible the County-approved Specific Plan development in the vicinity of the Santa Clara River. If the bank stabilization and drainage outlets were moved into upland areas, it would further reduce developable areas within the County-approved Specific Plan, and trigger the need for General Plan, Area Plan, and Specific Plan amendments.

Finally, ~~as to Caltrans' SR-126 road widening project,~~ total avoidance of the Corps' jurisdiction would not accommodate widening of SR-126, an element ~~impede this essential local and regional project that is planned~~ to ~~accommodate~~ support existing and approved development in the Santa Clarita Valley, including portions of the approved Specific Plan, VCC, and other properties west of I-5, including Entrada.

3.3.3.3 Logistical Infeasibility

The Total Avoidance alternative also would limit grading to areas between the tributary drainages located within the Specific Plan, and create numerous grading pockets as compared to the Specific Plan's approved Conceptual Grading Plan (see, **Figure 2.0-19**). In addition, if the Total Avoidance alternative was implemented, it would cause an imbalance in on-site grading, in that the cut needed would far exceed the available locations for fill; and, thus, result in a need for a net off-site export of over 19.9 million cubic yards. This, in turn, would greatly increase truck trips (approximately 1.5 million truck trips or approximately 3,320 days of truck traffic) to and from the Specific Plan site, increasing air emissions, noise impacts, and traffic impacts from the increased truck trips, all of which is inconsistent with the approved Specific Plan's provisions calling for a balanced on-site cut and fill grading operation.

~~For all the above planning/economic and logistical reasons, the Total Avoidance alternative is considered infeasible and not analyzed further in this EIS/EIR.~~

3.3.4 Off-Site Alternative Locations Conclusion

~~As shown on **Table 3.0-3**, above, implementation of the proposed Project is the preferred option, when compared to development of any of the three off-site alternative locations (Hathaway Ranch, Temescal Ranch, and Newhall Ventura). Specifically, d~~Development on the Hathaway Ranch alternative site would be expected to result in potentially equal or greater impacts in 13 environmental categories (hydrology and water quality, flood control, groundwater, air quality, traffic, noise, cultural resources, paleontological resources, geology and geologic hazards, land use, parks/recreation/trails, public services, socioeconomics/environmental justice). Conversely, when compared to the proposed Project, the Hathaway Ranch site would result in fewer impacts in only seven environmental categories (geomorphic and riparian resources, biological resources, jurisdictional streams and wetlands, agriculture and soils, visual resources, public safety, and hazards and hazardous materials).

As to the Temescal Ranch site, development would be expected to result in equal or greater impacts in 17 environmental categories (hydrology and water quality, flood control, groundwater, jurisdictional streams and wetlands, air quality, traffic, noise, cultural resources, paleontological resources, geology and geologic hazards, land use, visual, parks/recreation/trails, public safety, public services, hazards and hazardous materials, and socioeconomics/environmental justice). Conversely, when compared to the proposed Project, the Temescal Ranch site would result in fewer impacts in only three environmental categories (geomorphic and riparian resources, biological resources, agriculture and soils).

As to the Newhall-Ventura site, equal or greater impacts would be expected to occur in 19 environmental categories (hydrology and water quality, flood control, geomorphic and riparian resources, groundwater, biological resources, air quality, traffic, noise, cultural resources, paleontological resources, agriculture and soils, geology and geologic hazards, land use, visual, parks/recreation/trails, public safety, public services, hazards and hazardous materials, and socioeconomics/environmental justice). Conversely, when compared to the proposed Project, the Newhall-Ventura site would result in fewer impacts in only one environmental category (jurisdictional streams and wetlands) when compared with the proposed Project.

The above analysis also indicates that the three off-site alternatives (Hathaway Ranch, Temescal Ranch, Newhall-Ventura) have a greater potential to result in growth-inducing impacts because none of the sites currently support infrastructure like that required to facilitate development under the proposed Project. Once that infrastructure was developed, it is likely that additional commercial and residential development would arise along new roads and utility corridors. As a result, it is anticipated that areas that are currently quite rural in nature would be incrementally urbanized when compared to the planned development facilitated by the proposed Project.

None of the alternative sites are considered to be capable of meeting the objectives/purpose and need associated with the proposed Project. In addition, ~~B~~based on the above analysis, none of the three off-site alternatives would clearly result in fewer overall impacts than the proposed Project. ~~In addition, none of the alternative sites are considered to be capable of meeting the applicant's primary objectives/purpose and need associated with the proposed Project.~~ Therefore, the three off-site alternatives have been eliminated from further consideration in this EIS/EIR.

The Corps' draft 404(b)(1) alternatives analysis further evaluated the above three off-site alternative locations pursuant to the 404(b)(1) Guidelines. The draft 404(b)(1) alternative analysis provides further data supporting the rejection of these three off-site alternative locations as impracticable. For further information regarding that analysis, please refer to the Corps' draft 404(b)(1) alternatives analysis, which is found in **Appendix F1.0** of the Final EIS/EIR.

3.3.5 Total Avoidance Conclusion

As to the Total Avoidance alternative, it is likely to result in fewer environmental impacts relative to the proposed Project; however, the alternative does not meet a number of the ~~applicant's primary~~ objectives/purpose and need associated with the proposed Project. In addition, under this alternative, development of the Specific Plan site is rendered infeasible. For all these reasons, the Total Avoidance alternative has been eliminated from further consideration in this EIS/EIR.

3.4 OVERVIEW OF ON-SITE ALTERNATIVES ANALYZED

There are ~~seven~~ eight on-site alternatives described and analyzed in this EIS/EIR, including the No Action/No Project Alternative (Alternative 1), the applicant's proposed Project (Alternative 2), and ~~five~~ six other "build" alternatives (Alternatives 3-7 and Draft LEDPA). Land use plans for ~~six~~ seven of the ~~seven~~ eight alternatives are shown graphically in the discussion of each alternative (there is no land use plan for the No Action/No Project Alternative). These alternatives are further evaluated and compared in ~~**Section 4.0**, Environmental Impact Analysis of Alternatives and Mitigation, and~~ **Section 5.0**, Comparison of Alternatives, of this EIS/EIR.

In general, the No-Action/No Project Alternative (Alternative 1) is a description of what would occur should the lead agencies (*i.e.*, the Corps and CDFG) decide not to approve the permits and other approvals ~~associated with the~~ to implement both the RMDP and SCP components of the proposed Project. Thus, the No Action/No Project Alternative would result in the inability to develop any of the RMDP infrastructure or facilitated development, none of the proposed spineflower preserves would be established, and none of the open space within the Project area would be dedicated and managed as contemplated by the proposed Project.[5]

Alternative 2 (referred to as the proposed Project and/or Alternative 2) would implement the RMDP and SCP components of the proposed Project and facilitate development of the approved Specific Plan, the approved development in the VCC planning area, and the planned development in a portion of the Entrada planning area.

The ~~five~~ six build alternatives (Alternatives 3-7 and Draft LEDPA) address a broad range of different configurations for the major RMDP infrastructure in or adjacent to waters of the U.S. (Santa Clara River and tributary drainages), which are necessary to facilitate development of the Specific Plan. These alternatives also focus on different configurations for the spineflower preserves, which, in turn, affects the conservation of sensitive biotic and aquatic resources within a managed open space/preserve system.

Combined, the ~~five~~ six build alternatives focus on avoiding or minimizing impacts to jurisdictional waters and spineflower. As impacts to jurisdictional waters are primarily associated with construction of bridges, bank stabilization, the grading and realigning of tributary drainages to facilitate Specific Plan development, and the conversion of minor tributary drainages to buried storm drains, alternative configurations for the major RMDP infrastructure are reflected in each build alternative. Similarly, because the proposed Project could impact spineflower outside of designated preserves, a broad range of spineflower preserve design options and their connectivity to open space were evaluated. Each of the build alternatives (Alternatives 3-7 and Draft LEDPA) reduce the RMDP infrastructure and increase the size of spineflower preserves, resulting in reduced development facilitated in the Specific Plan and the VCC and Entrada planning areas, and, correspondingly, minimize or avoid jurisdictional waters and

[5] If implemented, the Specific Plan would provide approximately 10,200 acres of open space (including the 1,517-acre Salt Creek area), the VCC planning area would provide 143.6 acres, and the Entrada portion would provide 129.5 acres, for a combined total of approximately 10,473 acres of open space (see **Table 3.0-5**).

spineflower impacts. The build alternatives also have been designed so that the impact reduction characteristics of the preceding alternative are generally incorporated into the subsequent alternatives.

For example, Alternative 3 would modify the proposed RMDP and SCP, respectively, by eliminating the planned Potrero Canyon Road bridge and increasing spineflower preserve acreage in the Specific Plan's Airport Mesa preserve and on Entrada. Alternative 4 would eliminate Potrero Canyon Road bridge, but retain the preserve acreage added by Alternative 3, and increase further the preserve acreage in the Specific Plan's Airport Mesa, Potrero, and Grapevine Mesa preserves and on Entrada. Alternative 4 also would add a spineflower preserve in the VCC planning area. Alternative 5 would widen tributary drainages, add a spineflower preserve within the VCC planning area, and would include the same three bridge crossings over the Santa Clara River as the proposed Project Alternative 6 would eliminate the planned Commerce Center Drive bridge and maximize spineflower preserve buffers and open space connectivity. Alternative 7 would incorporate a two-prong approach: (i) preservation of all spineflower occurrences along with 300-foot buffers; and (ii) elimination of two planned bridges (Commerce Center and Potrero Canyon Road bridges), and the avoidance of the 100-year floodplain along the Santa Clara River and nearly all of the tributary drainages. The Draft LEDPA would eliminate the planned Potrero Canyon Road bridge, increase spineflower preserve acreage, and include wider tributary drainage areas when compared to the proposed Project.

Table 3.0-5
Development Facilitated by RMDP Component of Proposed Project (Alternative 1)

Land Use Category[1]	Acres	Res.[3] DU	Comm.[4] MSF[2]	Percent Res. Reduction (DU)	Percent Comm. Reduction (MSF)	Total Res. Reduction (DU)	Total Comm. Reduction (MSF)
Specific Plan							
Single-Family Residential	-	-	-	100	100	9,081	0
Multi-Family Residential	-	-	-	100	100	11,804	0
Commercial	-	-	-	100	100	0	5.55
Public Facilities[5]	-	-	-	100	100	-	-
Open Space[6]	*Total Open Space of 10,200 acres not dedicated and managed under Alternative 1*						
Subtotal Specific Plan	**0**	**0**	**0**	**100**	**100**	**20,885**	**5.55**
Total Specific Plan Reduction Compared to Proposed Project							
Entrada Development							
Single-Family Residential	-	-	-	100	100	428	
Multi-Family Residential	-	-	-	100	100	1,297	
Commercial	-	-	-	100	100	0	0.45
Public Facilities	-	-	-	100	100		-
Open Space	*Total Open Space of 129.5 acres not dedicated and managed under Alternative 1*						
Subtotal Entrada	**0**	**0**	**0**	**100**	**100**		
Total Entrada Reduction Compared to Proposed Project						**1,725**	**0.45**
Valencia Commerce Center							
Commercial	-	-	-	100	100		1.10
Industrial Park	-	-	-	100	100		2.30
Public Facilities	-	-	-	100	100		-
Open Space	*Total Open Space of 143.6 acres not dedicated and managed under Alternative 1*						
Subtotal VCC	**0**	**0**	**0**	**100**	**100**		
Total VCC Percentage Reduction Compared to Proposed Project						**0**	**3.40**
Grand Total Project Percentage Reduction Compared to Proposed Project						**22,610**	**9.40**

Notes:

1 In some instances, the land use categories for the Specific Plan, Entrada, and VCC have been consolidated to simplify presentation of the land use data.

2 MSF means million square feet.

3 Residential includes single-family (detached homes) and multi-family (condo/townhomes).

4 Commercial includes business park, office, retail, *etc*.

5 Public Facilities includes parks, schools, libraries, *etc*.

6 Open Space means natural (preserved) and manufactured open space, and includes the Specific Plan's High Country SMA/SEA 20, River Corridor SMA/SEA 23, Open Areas, spineflower preservations areas, and other specified open areas, primarily located within the Specific Plan's Estate Residential designation. Open Space does not include the Salt Creek area, adjacent to the Specific Plan boundary, comprised of about 1,517 acres. If the Salt Creek area is included (as proposed in Alternative 2), the total Open Space is approximately 10,200 acres (8,683 + 1,517 = 10,200).

Source: The Newhall Land and Farming Company, 2008.

Each of the alternatives are summarized further below so that reviewers may evaluate the comparative merits of the proposed Project (Alternative 2) and the other identified alternatives.

Alternative 1 (No Action/No Project):

- The proposed RMDP and SCP could not be implemented~~would not be approved~~, and the requested federal and state permits and authorizations would not be granted.
- Existing land use practices, including oil and gas, grazing, and cultivated agriculture, would continue on the Specific Plan and Entrada sites.
- No spineflower preserves or natural open space/conservation areas would be dedicated and managed without Specific Plan, VCC, and Entrada approvals.
- The approved Specific Plan and remaining portion of the VCC would not be developed.
- The planned development within a portion of the Entrada project area would not occur.

Alternative 2 (Proposed Project):

- The RMDP and SCP would be implemented ~~would be approved~~ as proposed by the applicant, and the requested federal and state permits and authorizations would be granted.
- Three major bridges across the Santa Clara River and associated bank stabilization would be constructed, including the Commerce Center Driver bridge (already ~~approved~~ permitted by the Corps and CDFG in 1999), the Potrero Canyon Road bridge, and the Long Canyon Road bridge.
- Major tributary drainages would be regraded and realigned to facilitate and protect Specific Plan development.
- Several minor tributary drainages would be graded and converted to buried storm drain systems.
- Five spineflower preserves would be established within the Specific Plan site and the Entrada planning area, totaling 167.6 acres and preserving 68.6 percent of the cumulative area occupied by spineflower in the Project area;[6] and no spineflower preserve would occur within the VCC planning area.
- The alternative would facilitate Specific Plan, VCC, and Entrada development, including 22,610 residential units and 9.40 million square feet (msf) of commercial/industrial/business park floor area.

[6] The phrase "cumulative area occupied" is used in the SCP to mean the total area of mapped spineflower within the preserve between 2002 and 2007.

Alternative 3 (Elimination of Planned Potrero Bridge and Additional Spineflower Preserves):

- The RMDP and SCP would be modified from the plans proposed by the applicant, and the requested federal and state permits and authorizations would be granted consistent with those modifications.

- Two bridges across the Santa Clara River and the associated bank stabilization would be constructed, including the Commerce Center Driver bridge (already approved by the Corps and CDFG in 1999) and the Long Canyon Road bridge. The Potrero Canyon Road bridge would not be constructed under this alternative.

- Major tributary drainages would be regraded and realigned under this alternative; however, the channels would be wider than those of the proposed Project. The cismontane alkali marsh in lower Potrero Canyon would be preserved.

- Additional spineflower preserve acreage would be established in the Specific Plan's Airport Mesa area and on Entrada. This alternative would provide a total of 221.8 acres of spineflower preserves and protect 77.5 percent of the cumulative area occupied by spineflower in the Project area.

- This alternative would facilitate development within the Specific Plan, VCC, and Entrada, including 21,558 residential units and 9.33 msf of commercial/industrial/ business park floor area.

Alternative 4 (Elimination of Planned Potrero Bridge and Addition of VCC Spineflower Preserve):

- The RMDP and SCP would be modified from the plans proposed by the applicant, and the requested federal and state permits and authorizations would be granted consistent with those modifications.

- Two bridges across the Santa Clara River and the associated bank stabilization would be constructed, including the Commerce Center Driver bridge (already approved by the Corps and CDFG in 1999) and the Long Canyon Road bridge. The Potrero Canyon Road bridge would not be constructed under this alternative.

- Major tributary drainages would be regraded and realigned under this alternative, but cismontane alkali marsh in lower Potrero Canyon would be preserved.

- Additional spineflower preserve acreage would be established in the Specific Plan's Airport Mesa, Potrero Canyon, and Grapevine Mesa areas and on Entrada. A preserve also would be established within the VCC planning area. Alternative 4 would provide a total of 259.9 acres of spineflower preserves, and protect 82.5 percent of the cumulative area occupied by spineflower in the Project area.

- This alternative would facilitate development within the Specific Plan and the Entrada planning area, including 21,846 residential units and 5.93 msf of commercial/industrial/business park floor area. No development would be facilitated within the VCC planning area.

Alternative 5 (Widen Tributary Drainages and Addition of VCC Spineflower Preserve):

- The RMDP and SCP would be modified from the plans proposed by the applicant, and the requested federal and state permits and authorizations would be granted consistent with those modifications.

- The three bridges across the Santa Clara River and the associated bank stabilization would be constructed as under the proposed Project (Alternative 2).

- Major tributary drainages would be regraded and realigned under this alternative, but would result in impact reductions in the Chiquito Canyon, San Martinez Grande Canyon, and Potrero Canyon drainages compared to the proposed Project (Alternative 2).

- Additional spineflower preserve acreage would be established in the Specific Plan's Airport Mesa, Potrero Canyon, and Grapevine Mesa areas and on Entrada. A preserve also would be established within the VCC planning area. Alternative 5 would provide a total of 338.6 acres of spineflower preserves, and protect 84.2 percent of the cumulative area occupied by spineflower in the Project area.

- This alternative would facilitate development within the Specific Plan and the Entrada planning area, including 21,155 residential units and 5.87 msf of commercial/industrial/business park floor area. No development would be facilitated within the VCC planning area.

Alternative 6 (Elimination of Planned Commerce Center Drive Bridge and Maximum Spineflower Expansion/Connectivity):

- The RMDP and SCP would be modified from the plans proposed by the applicant, and the requested federal and state permits and authorizations would be granted consistent with those modifications.

- Two bridges across the Santa Clara River and the associated bank stabilization would be constructed, including the Potrero Canyon Road bridge (extended span similar to the proposed Project (Alternative 2) and Alternative 5) and the Long Canyon Road bridge. The previously approved Commerce Center Drive bridge would not be constructed under this alternative.

- Major tributary drainages would be regraded and realigned under this alternative. However, all realigned channels would be wider under this alternative than under the proposed Project (Alternative 2), and the majority of proposed road crossings along the channels would be bridges as opposed to culverts.

- This alternative would designate spineflower preserves on the applicant's property with known spineflower populations (Specific Plan, four preserves; Entrada, one preserve; and VCC, one preserve). Alternative 6 would significantly increase preserve acreage, and provide a total of 891.2 acres of spineflower preserves, protecting 88.5 percent of the cumulative area occupied by spineflower in the Project area.

- This alternative would facilitate development within the Specific Plan and the Entrada planning area, including 20,212 residential units and 5.78 msf of commercial/industrial/business park floor area. No development would be facilitated within the VCC planning area.

Alternative 7 (Avoidance of 100-Year Floodplain, Elimination of Two Planned Bridges, and Avoidance of Spineflower):

- The RMDP and SCP would be modified from the plans proposed by the applicant, and the requested federal and state permits and authorizations would be granted consistent with those modifications

- Only one bridge across the Santa Clara River would be constructed, located at Long Canyon Road. The Potrero Canyon Road bridge and the already approved Commerce Center Drive bridge would not be constructed under this alternative. Bank stabilization along the Santa Clara River would be constructed outside the 100-year floodplain.

- Under this alternative, major tributary drainages would not be regraded or realigned. Bank stabilization would be constructed to protect development, but would be located outside the 100-year floodplain of these drainages. In addition, the Middle Canyon and Magic Mountain Canyon drainages, which are proposed for conversion to buried storm drains under the proposed Project (Alternative 2), would be preserved.

- Alternative 7 was designed to achieve maximal avoidance of the cumulative area occupied by spineflower within the Project area. This alternative would designate spineflower preserves with 300 feet of expansion area surrounding the cumulative area occupied spineflower locations, and provide a total of 660.6 acres of spineflower preserves, protecting 98.2 percent of the cumulative area occupied by spineflower in the Project area.[7]

- This alternative would facilitate development within the Specific Plan and the Entrada planning area, including 17,323 residential units and 3.82 msf of commercial/industrial/business park floor area. No development would be facilitated within the VCC planning area.

Draft Least Environmentally Damaging Practicable Alternative (Draft LEDPA)

Because the proposed Project involves discharges of fill material into waters of the United States, the Corps is required to comply with USEPA's CWA section 404(b)(1) Guidelines promulgated at 40 C.F.R.

[7] The term "expansion area" is used in the SCP to represent the area interior to the core that is not part of the cumulative area occupied. (See, *e.g.*, SCP, Table 3.0-34.)

Part 230. The 404(b)(1) Guidelines prohibit the Corps from issuing a permit unless it is the least environmentally damaging practicable alternative (LEDPA), and where "practicable" is defined in terms of cost, logistics, and technology in light of the overall project purpose. In order to comply with the Guidelines, the Corps typically analyzes alternatives that reduce impacts to aquatic resources through alternative configurations, locations, construction methods, sizes, *etc*. The Guidelines provide that for actions subject to NEPA, the analysis of alternatives required for NEPA environmental documents will in most cases provide the information for the evaluation of alternatives under the Guidelines. On occasion, the NEPA document may not have considered the alternatives in sufficient detail to respond to the requirements of the Guidelines, and, therefore, further information may be provided. Further, the Guidelines require an applicant for a Department of the Army permit to take all appropriate and practicable steps to first avoid and then minimize adverse impacts to aquatic resources, and then compensate for unavoidable adverse impacts remaining after all appropriate and practicable minimization has been undertaken. The Corps has prepared a draft 404(b)(1) alternatives analysis, and has included it as **Appendix F1.0** to the Final EIS/EIR. (A final 404(b)(1) alternatives analysis will be provided with the Record of Decision.) The Corps' draft 404(b)(1) alternatives analysis draws on the analysis in the Draft EIS/EIR and evaluates further avoidance and/or minimization of Corps jurisdiction based on the sequenced approach under the Guidelines and as a result of comments received on the Draft EIS/EIR.

Based on the assessment in the draft 404(b)(1) alternatives analysis, the Corps has identified a Draft LEDPA. The Draft LEDPA, shown in **Figure 3.0-55**, is a modified version of Draft EIS/EIR Alternative 3 that includes additional avoidance of waters of the United States along the Santa Clara River and tributaries, increased spineflower preserve acreage in the Potrero, San Martinez Grande, Grapevine Mesa, and Airport Mesa areas, based on input received from CDFG, and larger riparian corridors within five major tributaries. Under the Draft LEDPA, two of the three bridges crossing the Santa Clara River and the associated bank stabilization would be constructed (Commerce Center Drive bridge and the Long Canyon Road bridge). The Draft LEDPA would not construct Potrero Canyon Road bridge, reducing impacts to jurisdictional waters and wetlands in the Santa Clara River and lower Potrero Canyon. In addition, like Alternative 3, a 19-acre compensatory wetland mitigation area would be implemented in lower Potrero Canyon, contiguous with the existing lower mesic meadow (cismontane alkali marsh).

In two major tributary drainages, Long Canyon and Potrero Canyon, most of the existing drainages would be filled and modified so that there would not be a loss of Corps jurisdiction. In the three other major tributary drainages, Lion Canyon, San Martinez Grande Canyon, and Chiquito Canyon, the Draft LEDPA would incorporate limited channel grading to expand the drainage and adjacent riparian areas and realign their banks. The remainder of the jurisdictional areas in Lion, San Martinez Grande and Chiquito Canyon would be avoided. Overall, of the 660.1 acres of waters of the United States on the Project site, implementation of the Draft LEDPA would result in the permanent fill of 66.3 acres of waters of the United States (29 percent reduction in acreage compared to the proposed Project). The Draft LEDPA would temporarily disturb an additional 1.1 acres when compared to Alternative 3 (2 percent less than the proposed Project). The mitigation associated with the Draft LEDPA would ensure a no net loss of acreage and functions and values of waters of the United States. For purposes of CDFG's streambed jurisdiction under Fish & Game Code section 1600, *et seq.*, the Draft LEDPA would reduce related jurisdictional impacts by 34.4 acres compared to the proposed Project.

The Draft LEDPA would increase the acreage within the spineflower preserves from 167 acres to 247 acres. Under the Draft LEDPA, the acreage of occupied spineflower habitat protected would increase from 13.88 acres under the proposed Project to 13.97 acres, while the area of impacted occupied habitat would be decreased from 6.36 acres to 5.87 acres. The Draft LEDPA would result in a greater level of spineflower protection than the proposed SCP, with increased preservation of occupied habitat and less loss when compared to the proposed Project.

The Draft LEDPA's impacts are the same as Alternative 3 with respect to water quality; traffic; cultural resources; agricultural resources; visual resources; parks, recreation and trails; and socioeconomics and environmental justice. The Draft LEDPA and Alternative 3 have slightly less impacts compared to the proposed Project (Alternative 2) with respect to water resources; biological resources; jurisdictional waters and streams; air quality; and noise. The Draft LEDPA and Alternative 3 also have substantially similar impacts when compared to the proposed Project (Alternative 2) with respect to surface water hydrology and flood control; geomorphology and riparian resources; paleontological resources; geology and geologic hazards; land use; hazards, hazardous materials, and public safety; public services; solid waste services; and global climate change.

The Draft LEDPA is described further in **Subsection 3.5**, below. In addition, the Draft LEDPA's specific, minor variations to Alternative 3, and the associated analysis of the reduced impacts, are described in detail in **Subsection 5.9** of the Final EIS/EIR. The Corps' draft 404(b)(1) alternatives analysis, which is found in **Appendix F1.0** of the Final EIS/EIR, also contains an overview of the Draft LEDPA, as well as an environmental analysis of the Draft LEDPA in the context of the 404(b)(1) Guidelines.

3.4.1 Alternative 1: No Action/No Project Alternative

The purpose of the "No Project" alternative under CEQA and the "No Action" alternative under NEPA is to enable the lead agencies to evaluate the difference in impacts between approving and not approving a proposed action (or project). The Corps and CDFG have combined No Project/No Action alternative because under the circumstances present in this case they are identical. The combined No Project/No Action Alternative describes what would likely occur if neither the Corps nor CDFG issued any of the requested discretionary approvals for the proposed Project. The No Action/No Project Alternative would result in the inability to develop any of the RMDP infrastructure or facilitated development, none of the proposed spineflower preserves would be established, and none of the open space within the Project area would be dedicated and managed as contemplated by the proposed Project.

Under the No Action/No Project Alternative (Alternative 1) there would be no change in existing land use practices and existing agriculture, grazing, and oil leasing activities would continue (see **Figure 2.0-6**, Existing Agricultural, Grazing, and Oil Leasing Activities in Project Area). There also would be no spineflower preserves established or other natural open space set-aside and managed, consistent with the RMDP and SCP components of the proposed Project. Because the requested federal and state permits, which are needed to facilitate development, would not be granted, the previously approved Specific Plan and VCC developments would not proceed; and, the planned development within a portion of the Entrada planning area would not proceed due to the existence of spineflower on site (see **Table 3.0-5**, above).

Some minimal level of urban development could theoretically occur in the Project area under the No Action/No Project Alternative by obtaining required Corps/CDFG permits on an individual tract map basis. However, this theoretical development approach is inconsistent with the primary objectives, purpose, and need of the approved Specific Plan. The creation of a major new community with interrelated villages that allow for the residential, commercial, and non-residential development contemplated in the approved Specific Plan would not occur. Similarly, the preservation of significant natural resources, important landforms, and open areas would not occur. Implementation of the spineflower mitigation program, which is part of the approved Specific Plan, also would not occur, It is also inconsistent with the approved Specific Plan's primary objective of managing on-site resources, and utilizing comprehensive, landscape-level planning within the Project area.

Other important objectives that would be precluded by tract map-by-tract map development include the issuance of a long-term section 404 permit and a Master Streambed Alteration Agreement within the RMDP area, which would streamline the permitting processes for qualified RMDP infrastructure projects, minimize duplication of effort, ensure consistency with overlapping jurisdiction and responsibilities between the Corps and CDFG, and facilitate long-term region-based planning and mitigation, management, monitoring, and maintenance efforts to address impacts to the affected riparian habitats.

Because tract map-by-tract map development is not the applicant's proposed Project, and because such an approach is not considered feasible or practicable for the reasons stated above, the theoretical development under such an option is not considered reasonably foreseeable in light of the specific facts and circumstances presented.

3.4.2 Alternative 2: Applicant's Proposed Project

As described in revised **Section 2.0**, Project Description, and **Subsection 3.4**, above, Alternative 2 represents the applicant's proposed Project. Under Alternative 2, the RMDP and SCP would be approved as proposed by the applicant and the requested federal and state permits, agreements, and authorizations would be granted. The three major bridges crossing the Santa Clara River would be constructed (Commerce Center Drive bridge, Potrero Canyon Road bridge, and Long Canyon Road bridge), along with bank stabilization. Major tributary drainages would be regraded and realigned to facilitate and protect Specific Plan development. Several minor tributaries also would be graded and converted to buried storm drain systems.

Five spineflower preserves would be established within the Specific Plan site and the Entrada planning area, totaling 167.6 acres and preserving 68.6 percent of the cumulative area occupied by spineflower in the Project area. No spineflower preserve would occur within the VCC planning area, facilitating completion of the build-out of the VCC commercial/business park complex. Alternative 2 would facilitate Specific Plan, VCC, and Entrada development, including 22,610 residential units and 9.40 msf of commercial/industrial/business park floor area.

3.4.2.1 Description of Regulated Activities

3.4.2.1.1 *RMDP Component (Alternative 2)*

Under the proposed RMDP, infrastructure would be constructed in and adjacent to the Santa Clara River and tributary drainages within the Project area, which is needed to implement the approved Specific Plan. The proposed RMDP infrastructure is described in detail in **Subsection 2.6** of this EIS/EIR.

Santa Clara River. Figure 3.0-3 depicts the locations of the Alternative 2 proposed RMDP Santa Clara River features relative to river jurisdictional areas. As shown, two proposed bridges, Potrero Canyon bridge and Long Canyon Road bridge, and one previously approved bridge, Commerce Center Drive Bridge, would be located across the main stem of the Santa Clara River. As shown, buried bank stabilization would be installed on the north side of the Santa Clara River from Castaic Creek to the western Project boundary. The WRP outfall to the Santa Clara River also would be installed as part of the approved Newhall Ranch WRP. As shown, the geofabric utility corridor bank protection is proposed on the north side of the Santa Clara River between San Martinez Grande Canyon and Chiquito Canyon. Buried bank stabilization would be installed on the south side of the Santa Clara River from the vicinity of the proposed Long Canyon Road Bridge to the vicinity of the proposed Potrero Canyon Bridge. As shown, bank stabilization areas exist on the north and south banks of the Santa Clara River.

Figure 3.0-3 also presents three Santa Clara River cross-sections (A, B, and C) that depict existing and proposed surface elevations, including variations due to proposed fill and bank stabilization features. For example, up to approximately 20 feet of fill is proposed on the south side of the Santa Clara River to the west of the proposed Long Canyon Road Bridge (refer to cross section B on **Figure 3.0-3**). As shown in **Figure 3.0-3**, the Santa Clara River remains in a largely preserved condition under this alternative. **Figure 3.0-3** depicts the proposed RMDP riparian/upland revegetation zones in green and the newly created river channel in blue.

Table 3.0-6 summarizes the characteristics of the major RMDP infrastructure along the Santa Clara River, including north side (20,016 lf) and south side (9,763 lf) buried bank stabilization to be constructed along the Santa Clara River. This table also shows 22 storm drain outlets along the north bank and three such outlets on the south bank of the Santa Clara River (25 storm drain outlets total). In addition, the table documents the length, width, and vertical clearance of the three bridges, as well as the number of piers supporting the bridges.

Table 3.0-6
Alternative 2 Santa Clara River Major RMDP Infrastructure

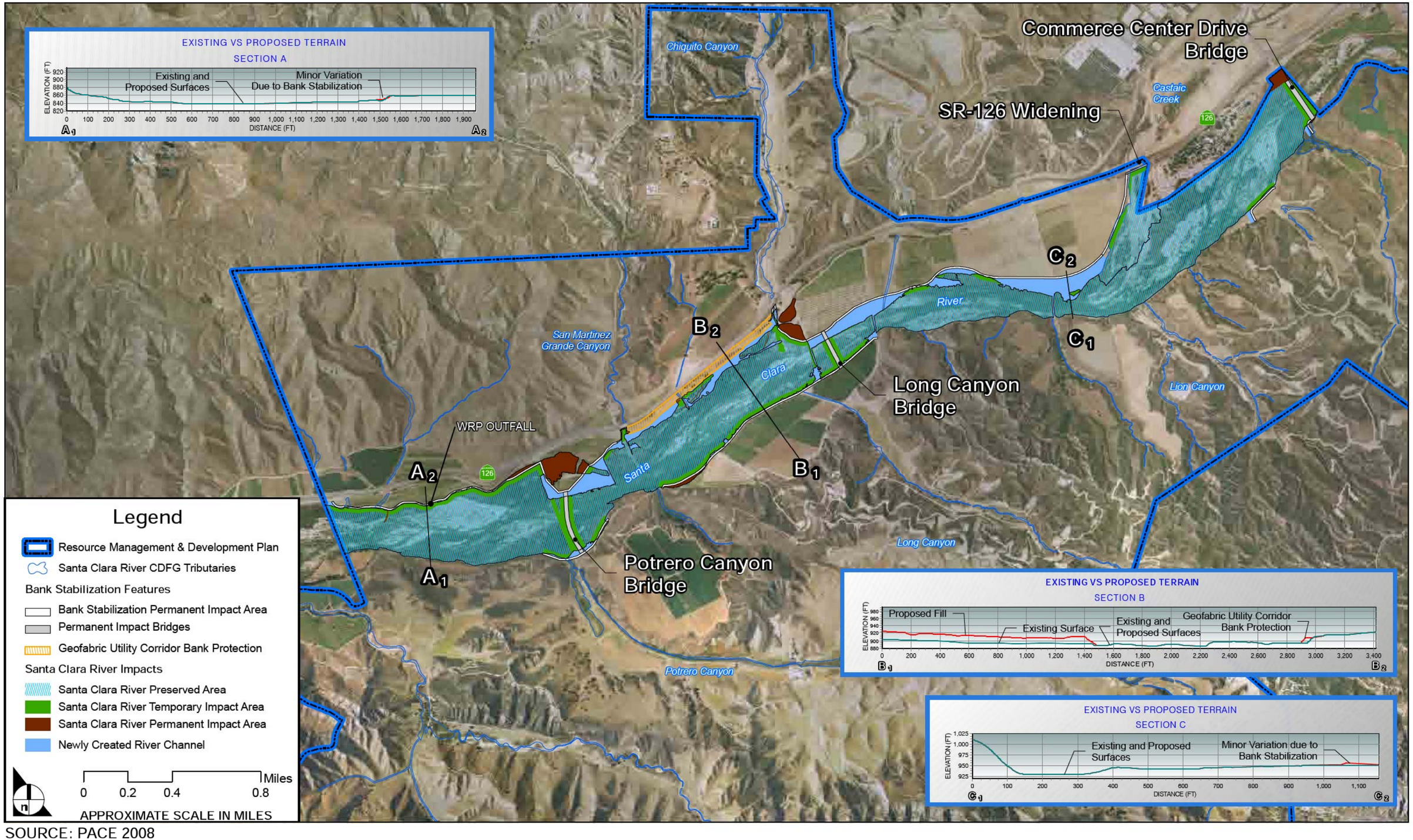
Santa Clara River Location	Bank Stabilization[1] (lf)	Outlets (No.)	Bridges			
			Length (lf)	Width (lf)	Piers (No.)	Vertical Clearance (ft)
Bridges						
Commerce Center Drive Bridge	-	-	1,200	100	9	22
Long Canyon Road Bridge	-	-	980	100	9	31-40
Potrero Canyon Road Bridge	-	-	1,550	84	21	20-24
Banks			-	-	-	-
North River Bank	20,016	22	-	-	-	-
South River Bank	9,763	3	-	-	-	-
Total	**29,779**	**25**	**-**	**-**	**-**	**-**

Notes:
[1] Bank Stabilization for the north bank of the River includes the west bank improvements along Castaic Creek.
Source: PACE, 2007.

Tributary Drainages. Figure 3.0-4 illustrates the modified, converted, and preserved tributary drainages under the proposed Project (Alternative 2). In order to accommodate Specific Plan development, Chiquito Canyon within the RMDP site would be modified to require stabilizing treatments to protect the channel and surrounding development from excessive vertical scour and lateral channel migration. The existing drainage would remain intact, but would be permanently altered by construction of stabilization elements, including buried bank stabilization and grade stabilization structures. Approximately 7,411 lf of buried bank stabilization would be installed along the west bank and 7,280 lf of buried bank stabilization would be installed along the east bank of Chiquito Canyon. In addition, approximately 2,549 lf of drainage would be converted to buried storm drain. Three culverted road crossings would be installed along Chiquito Canyon to accommodate Specific Plan traffic circulation. Additional bridge work would be installed as part of the Caltrans SR-126 road widening project.[8] **Table 3.0-7** describes the proposed Project (Alternative 2) tributary drainage RMDP infrastructure characteristics, including the Chiquito Canyon modified drainage.

Please refer to **Figure 3.0-5** for locations of Chiquito Canyon proposed RMDP tributary drainage features, including affected drainages/jurisdictional areas and development areas along Chiquito Canyon.

[8] In addition, as part of the Caltrans SR-126 road widening project, the existing six-lane bridge allowing SR-126 to cross the Castaic Creek drainage would be expanded to eight lanes.



SOURCE: PACE 2008

FIGURE 3.0-3

ALTERNATIVE 2 PROPOSED RMDP
SANTA CLARA RIVER FEATURES

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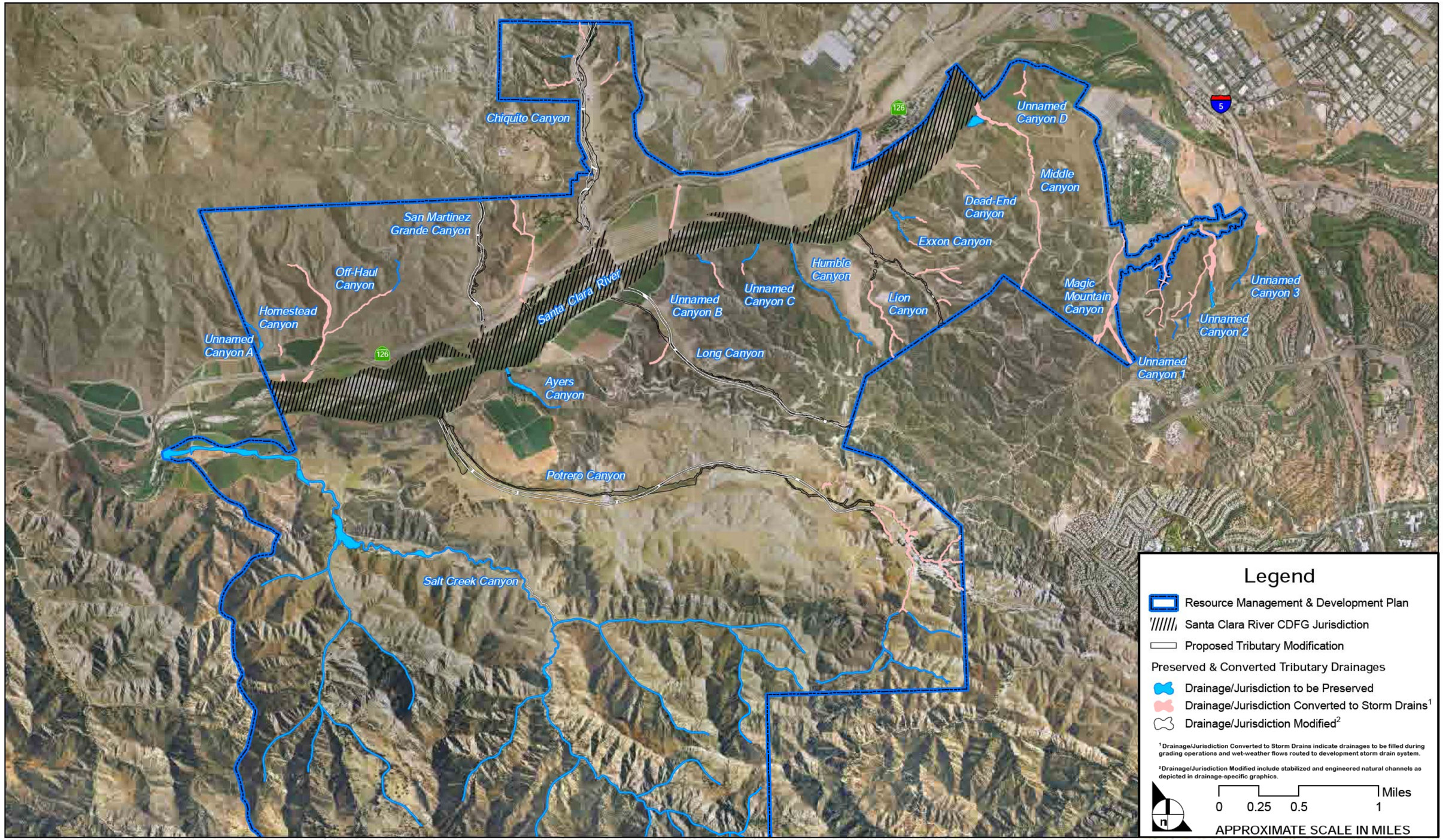

SOURCE: PACE - April 2008

FIGURE 3.0-4

ALTERNATIVE 2 (PROPOSED PROJECT)
MODIFIED, CONVERTED, AND PRESERVED TRIBUTARY DRAINAGES

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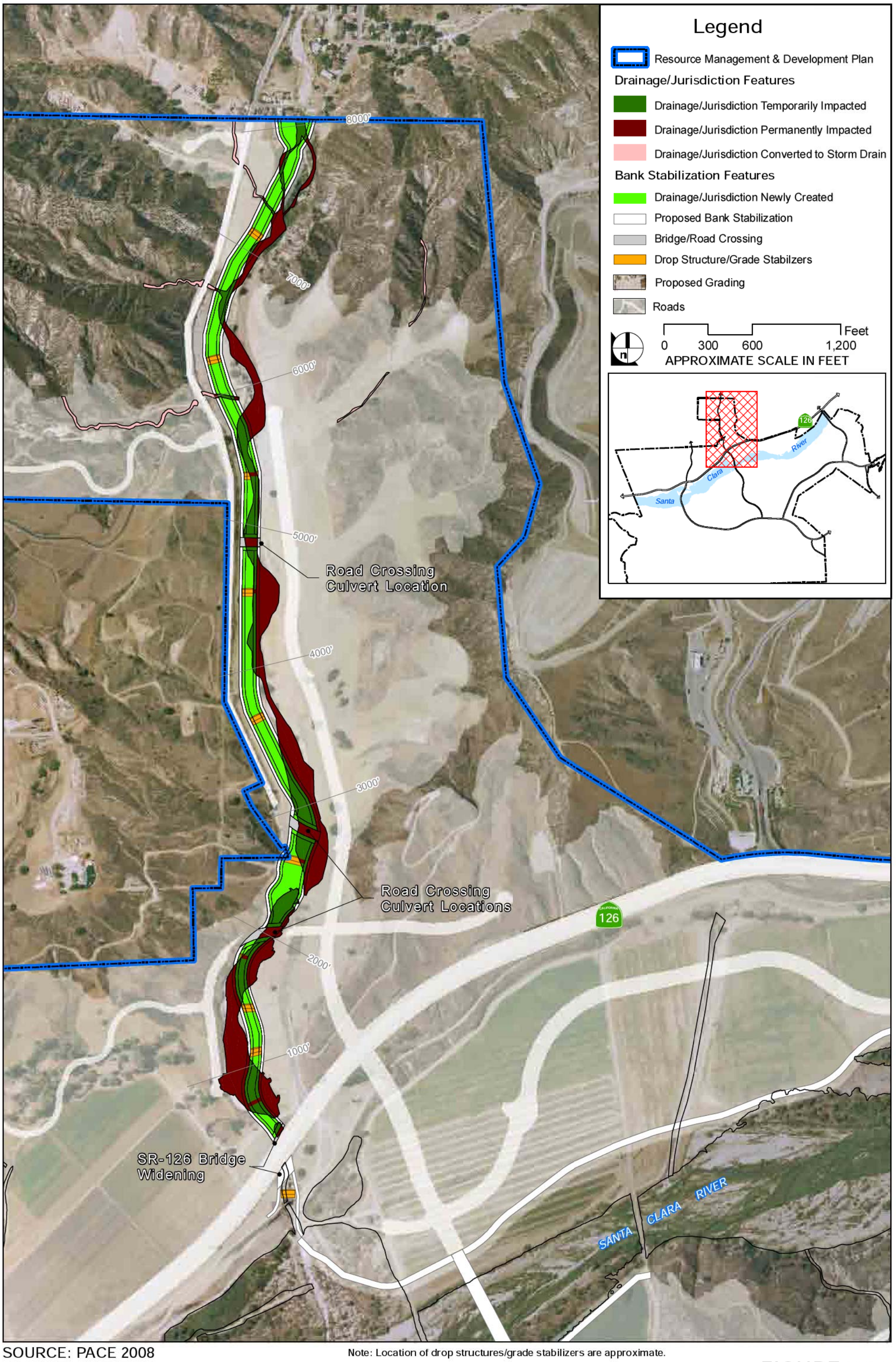


SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-5

CHIQUITO CANYON ALTERNATIVE DETAIL - ALTERNATIVE 2 & 4
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-5_ChiquitoAltemative2-4_PC1_042908.mxd

Table 3.0-7
Alternative 2 Tributary Drainage RMDP Infrastructure

Drainage Location	Drainage Modified (lf)	Drainage Converted to Buried Storm Drain (lf)	Bank Stabilization[1] (lf)		Preserved Drainage (lf)	Road Crossings	
			West Bank	East Bank		Bridges	Culverts
Modified Drainages							
Chiquito Canyon	8,612	2,549	7,411	7,280	898	-	3
Lion Canyon	5,614	6,316	-	-	-	-	1
Long Canyon	9,618	961	8,833	8,815	-	-	3
Potrero Canyon	19,095	10,918	16,354	16,176	9,679	-	5
San Martinez Grande Canyon	5,048	-	4,279	4,287	122	-	2
Unmodified/Converted Drainages							
Agricultural Ditch	317	1,479	-	-	0	-	-
Ayers Canyon[2]	154	-	-	-	2,311	-	1
Dead-End Canyon	-	1,931	-	-	-	-	-
Exxon Canyon	-	1,276	-	-	2,265	-	-
Homestead Canyon	-	609	-	-	-	-	-
Humble Canyon	-	421	-	-	5,116	-	-
Middle Canyon	-	7,439	-	-	148	-	-
Mid-Martinez Canyon	22	4,541	-	-	250	-	-
Off-Haul Canyon	-	7,593	-	-	1,185	-	-
Salt Canyon	7,290	-	-	1,992	101,470	-	-
Magic Mountain Canyon	-	6,111	-	-	-	-	-
Unnamed Canyon 1[3]	-	4,647	-	-	-	-	-
Unnamed Canyon 2	-	416	-	-	-	-	-
Unnamed Canyon A	-	-	-	-	1,293	-	-
Unnamed Canyon B	-	1,004	-	-	568	-	-
Unnamed Canyon C	-	402	-	-	869	-	-
Unnamed Canyon D	-	1,232	-	-	260	-	-
Totals	55,770	59,845	36,877	38,551	126,434	-	15

Notes:

[1] The lf of bank stabilization does not necessarily reflect impacts to jurisdictional areas; it only provides the linear feet of bank protection to be installed along various tributary drainages.

[2] The 154 lf of Drainage Modified is road crossing bridge/culvert-related.

[3] Unnamed Canyons 1 and 2 are located within the Entrada planning area and are given a numerical designation to distinguish them from the four other unnamed canyons located within the Specific Plan area (*i.e.*, Unnamed Canyons A-D).

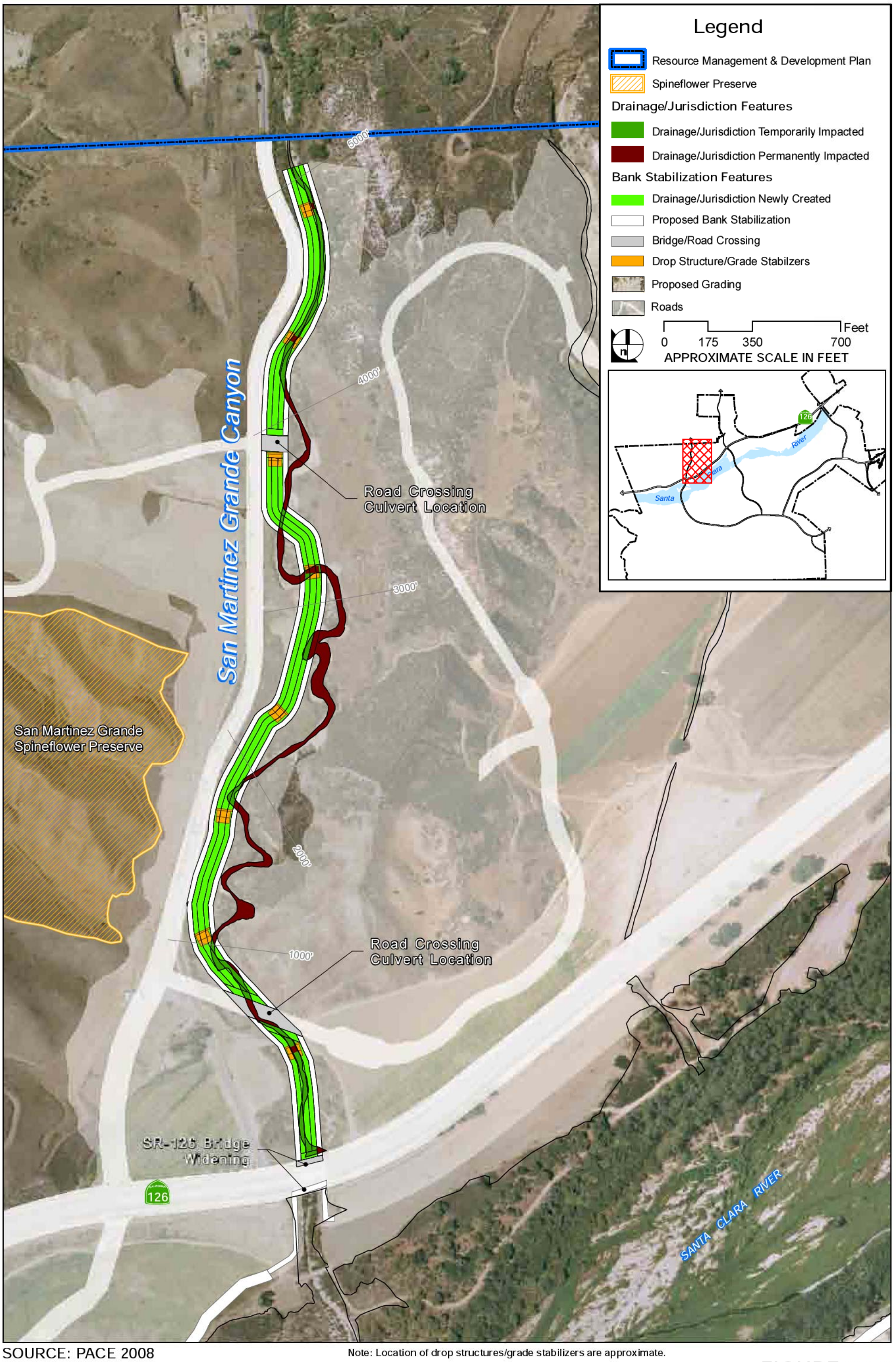
Source: RMDP, 2008.

In order to accommodate Specific Plan development, the proposed Project (Alternative 2) also proposes that a soft-bottom channel be constructed adjacent to the existing alignment of San Martinez Grande Canyon Road between SR-126 and the northern Project boundary as shown on **Figure 3.0-6**. The existing drainage channel would be graded and the drainage would be relocated westward into the soft-bottom channel. The existing drainage would be permanently altered by construction of the modified tributary drainage, including buried bank stabilization and grade stabilizing structures. Approximately 4,279 lf of buried bank stabilization would be installed along the west bank and 4,287 lf of buried bank stabilization would be installed along the east bank of San Martinez Grande Canyon. As shown, two culverted road crossings would be installed along San Martinez Grande Canyon to accommodate Specific Plan traffic circulation, plus a culverted road extension would be installed for the Caltrans SR-126 road widening project. **Table 3.0-7**, above, describes the proposed Project (Alternative 2) tributary drainage RMDP infrastructure characteristics, including the San Martinez Grande Canyon modified drainage.

Please refer to **Figure 3.0-6** for locations of the San Martinez Grande Canyon proposed RMDP tributary drainage features, including affected drainages/jurisdictional areas, and the development areas along San Martinez Grande Canyon. **Figure 3.0-6** also shows the relationship of the proposed drainage modifications in San Martinez Grande Canyon to the proposed San Martinez Grande spineflower preserve to the west.

In Long Canyon, the RMDP proposes that a soft-bottom channel be constructed between the eastern Project boundary and the confluence with the Santa Clara River as shown on **Figure 3.0-7**, above. Less than 10 percent of this modified channel would fall within the existing drainage; the remaining portion would require the channel to be relocated as shown on **Figure 3.0-7**. Two culverted road crossings would cross the drainage within approximately 500 feet and 2,000 feet upstream of the Santa Clara River confluence, respectively. A third earthen-fill culverted road crossing for Magic Mountain Parkway is proposed across the Long Canyon drainage approximately 1,000 feet downstream of the eastern Project boundary as shown on **Figure 3.0-7**. The drainage would be permanently altered by construction of stabilization elements, including buried bank stabilization and grade stabilization structures. Approximately 8,833 lf of buried bank stabilization would be installed along the west bank and 8,815 lf of buried bank stabilization would be installed along the east bank of Long Canyon. In addition, approximately 961 lf of drainage would be converted to buried storm drain. **Table 3.0-7**, above, describes the proposed Project (Alternative 2) tributary drainage RMDP infrastructure characteristics, including the Long Canyon modified drainage.

Please refer to **Figure 3.0-5**, above, for locations of Long Canyon proposed RMDP tributary drainage features, including affected drainages/jurisdictional areas and development areas along Long Canyon.



SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-6

SAN MARTINEZ GRANDE CANYON ALTERNATIVE DETAIL - ALTERNATIVE 2 & 4
PROPOSED RMDP TRIBUTARY TREATMENTS

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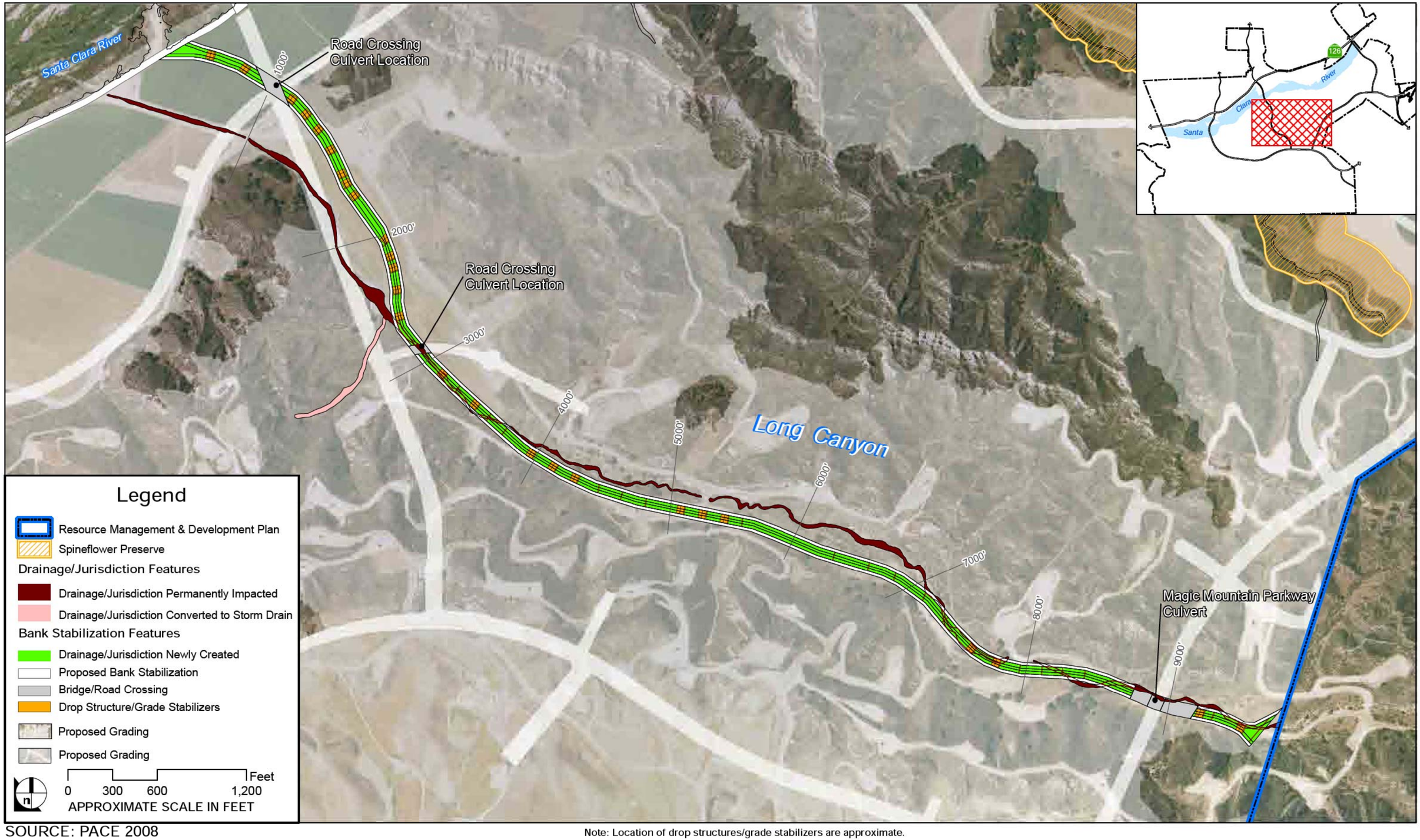

SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-7

LONG CANYON ALTERNATIVE DETAIL - ALTERNATIVE 2 & 3
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-7_LongAlternative2-3_PC1_042908.mxd

In Potrero Canyon, the RMDP proposes that a soft-bottom channel be constructed between the Santa Clara River confluence and a point approximately four-fifths of the way up the drainage near the eastern Project boundary as shown on **Figure 3.0-8**. The existing channel would be graded and relocated mostly westward into the soft-bottom channel. The existing drainage would be permanently altered by construction of stabilization elements, including buried bank stabilization and grade stabilization structures. Approximately 16,354 lf of buried bank stabilization would be installed along the west bank and 16,176 lf of buried bank stabilization would be installed along the east bank of Potrero Canyon. In addition, approximately 10,918 lf of drainage would be converted to buried storm drain. Five culverted road crossings would be constructed to allow Specific Plan roadways to cross the Potrero Canyon drainage at the locations shown on **Figure 3.0-8**. **Table 3.0-7**, above, describes the proposed Project (Alternative 2) tributary drainage RMDP infrastructure characteristics, including the Potrero Canyon modified drainage.

Please refer to **Figure 3.0-8** for locations of Potrero Canyon proposed RMDP tributary drainage features, including affected drainages/jurisdictional areas and development areas along Potrero Canyon. **Figure 3.0-8** also shows the relationship of the proposed drainage modifications in Potrero Canyon to the proposed Potrero spineflower preserve to the west.

In Lion Canyon, drainage modifications include a soft-bottom channel from the Santa Clara River confluence and upstream in areas to the Project eastern boundary as shown on **Figure 3.0-9**. In addition, approximately 6,316 lf of drainage would be converted to buried storm drain in the western, central, and eastern portions of Lion Canyon, as shown on **Figure 3.0-9**. The existing drainage would be permanently altered by construction of stabilizing elements. One culverted road crossing would be constructed to allow Specific Plan roadways to cross the Lion Canyon drainage at the location shown on **Figure 3.0-9**. **Table 3.0-7**, above, describes the proposed Project (Alternative 2) tributary drainage RMDP infrastructure characteristics, including the Lion Canyon modified drainage.

Please refer to **Figure 3.0-9** for locations of Lion Canyon proposed RMDP tributary drainage features, including affected drainages/jurisdictional areas and development areas along Lion Canyon. **Figure 3.0-9** also shows the relationship of the proposed drainage modifications in Lion Canyon to the proposed Grapevine Mesa spineflower preserve to the west.

3.4.2.1.2 *SCP Component (Alternative 2)*

Under the SCP component, specific portions of the Specific Plan would be designated as spineflower preserves. As described in the SCP, the 20.3-acre existing Airport Mesa conservation easement would be contained within a 44.98-acre spineflower preserve, the 44.1-acre existing Grapevine Mesa conservation easement would be designated as a 46.34-acre preserve generally coterminous with the existing easement boundary, a 14.8-acre spineflower preserve would be established west of the mouth of Potrero Canyon, a 34.41-acre preserve would be established west of San Martinez Grande Canyon, and a 27.02-acre spineflower preserve would be established in the Entrada planning area.

In summary, the proposed Project would designate a total of 167.6 acres of spineflower preserves in the Specific Plan and Entrada planning areas. Spineflower occurrences within the VCC planning area, which accounted for approximately three percent of all spineflower observed in the SCP study area in 2003 and

2005, and less than one percent in 2004, would not be conserved, and would allow for completion of the build-out of the VCC industrial/business park/office complex, which is a major employment center in the Santa Clarita Valley. Refer to **Figure 3.0-10** for the Alternative 2 spineflower preserves relative to the connectivity between the preserves and the approved and proposed open space within the SCP study area.

The information provided in the SCP would be used by the applicant in requesting authorization to take spineflower in areas located outside designated spineflower preserves. Specifically, the applicant is requesting a section 2081(b) Incidental Take Permit for spineflower from CDFG under CESA. In addition, the SCP provides the biological background and conservation measures that would form the basis for the CCA to be executed between the applicant and USFWS. **Table 3.0-8** summarizes the proposed Project's spineflower preserve characteristics, including spineflower acreages proposed to be preserved and taken.

Table 3.0-8
Spineflower Preserve Alternatives Summary
Alternative 2 (Proposed Project)

Location	Preserve Size (ac)	Spineflower Preserved (ac)	Spineflower Impacted (ac)	Percent Preserved (ac)	Percent Taken (ac)
Specific Plan					
Airport Mesa	44.98	5.22	3.17	62.2%	37.8%
Grapevine Mesa	46.34	4.02	0.95	80.9%	19.1%
Potrero	14.80	1.32	0.60	68.7%	31.3%
San Martinez Grande	34.42	2.29	0.00	100.0%	0.0%
Subtotal	140.54	12.85	4.32[1]	74.8%	25.6%
Entrada	27.02	1.03	0.78	56.8%	43.2%
Valencia Commerce Center	0.00	0.00	0.85	0.0%	100.0%
Grand Total	**167.56**	**13.88**	**6.36**	**68.6%**	**31.4%**

Notes:

[1] A small portion (0.37 acre) of this area lies within what will be designated open space within the Grapevine Mesa and Potrero Areas. While this area does not fall within the impact footprint, it will not be managed or monitored. For purposes of this analysis this area is considered to be taken and is listed under Other Intermediate.

Source: Dudek, 2007.

SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-8

POTRERO CANYON ALTERNATIVE DETAIL - ALTERNATIVE 2
PROPOSED RMDP TRIBUTARY TREATMENTS

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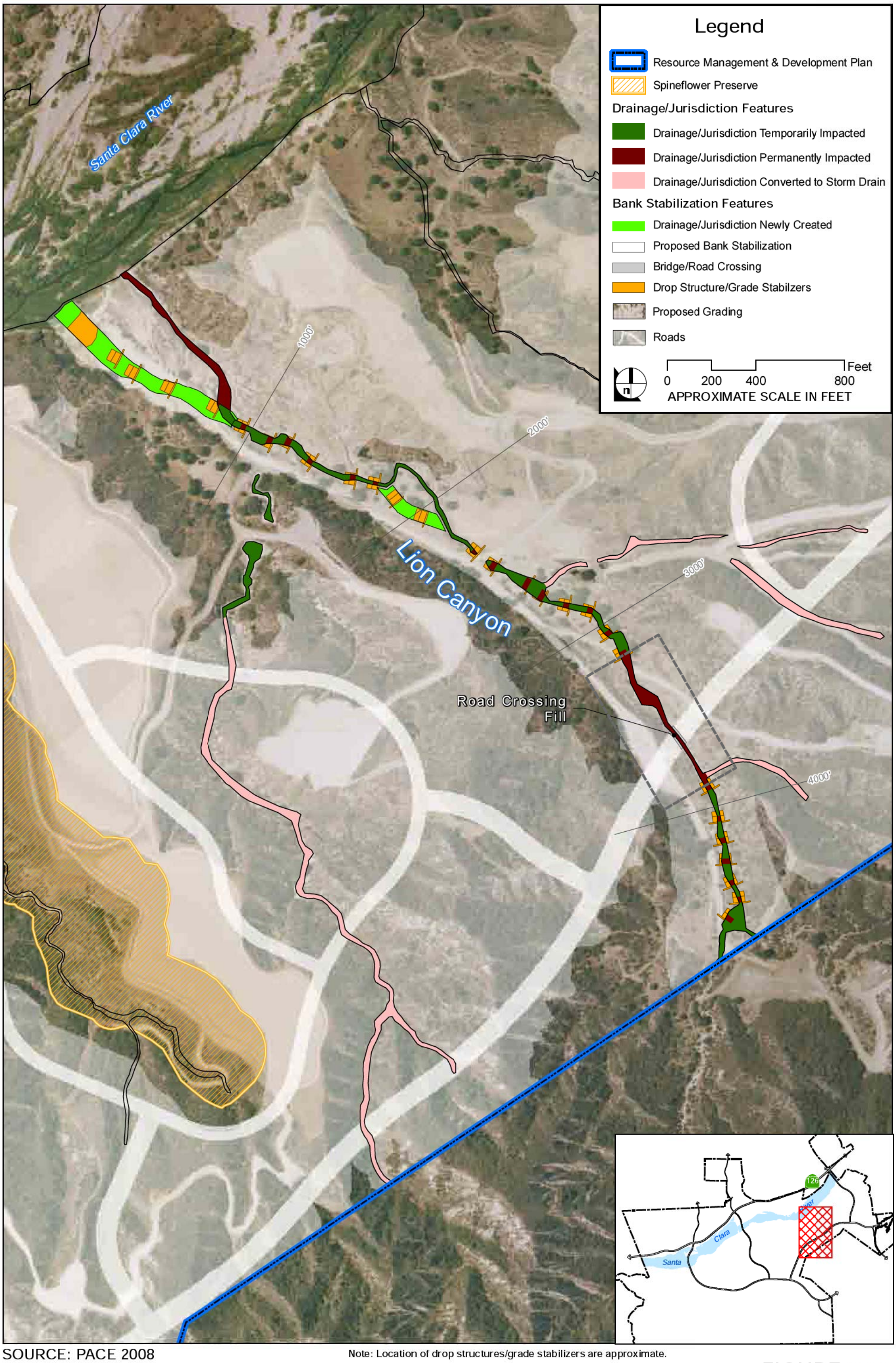

SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-9

LION CANYON ALTERNATIVE DETAIL - ALTERNATIVE 2-6
RMDP TRIBUTARY TREATMENTS

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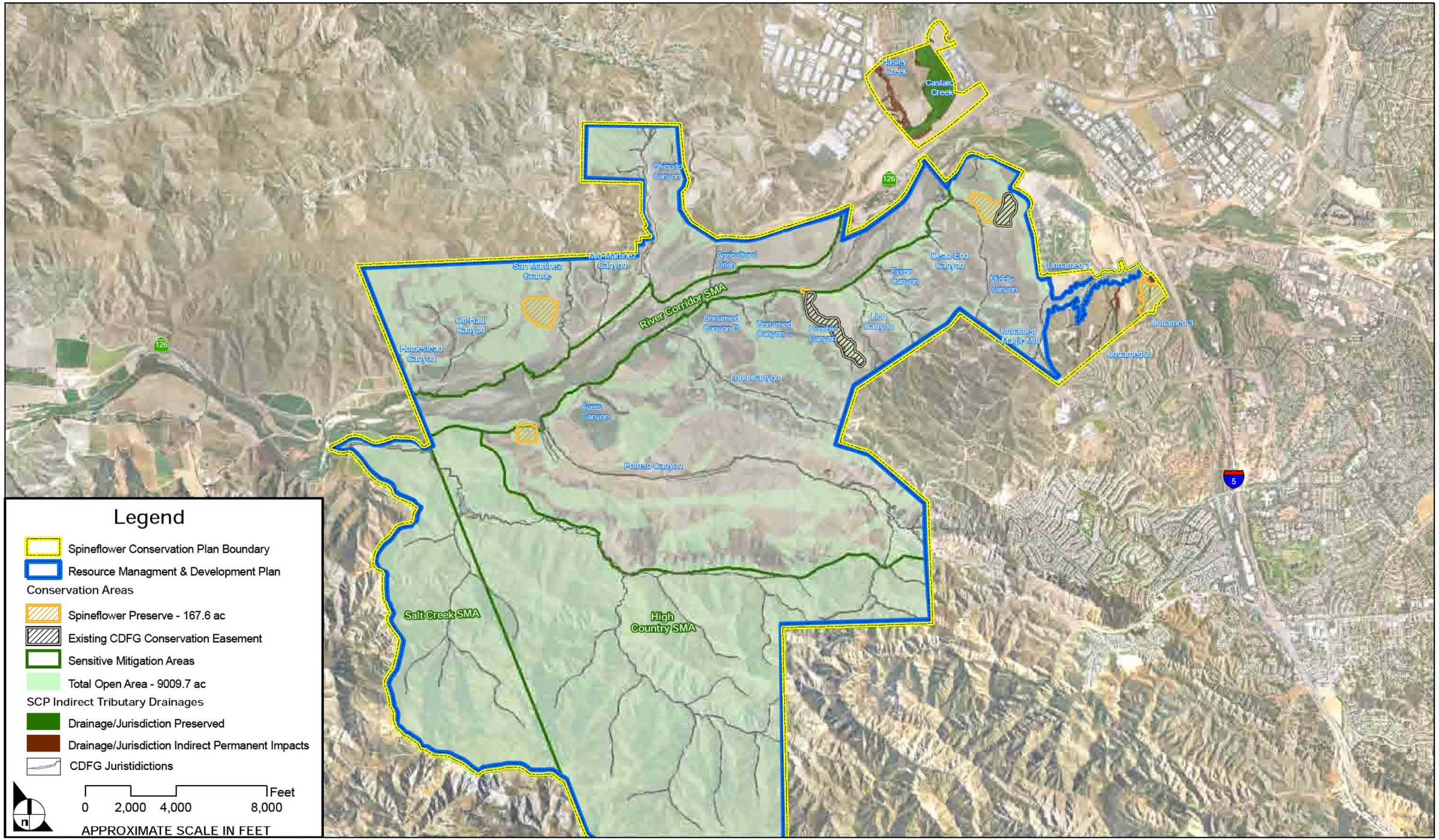

SOURCE: PACE 2008

FIGURE 3.0-10

ALTERNATIVE 2 SPINEFLOWER PRESERVES

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Table 3.0-9 summarizes each of the Alternative 2 proposed preserve areas and the preserve design elements, including the core, or occupied spineflower population areas, the interior areas within the core that allow for expansion of the preserves, and the designated buffer, which represents the area within the preserve between the core perimeter and the outer preserve boundary or urban edge.

Table 3.0-9
Alternative 2 Preserve Design

	Preserve Statistics		Preserve Design Elements		
Preserve	**Proposed Preserve[1] (ac)**	**Cumulative Area Occupied[2] (ac)**	**Core[3]**	**Buffer[4]**	**Expansion[5]**
Specific Plan					
Airport Mesa	44.98	5.22	26.16	18.82	20.94
Grapevine Mesa	46.34	4.02	9.01	37.33	4.99
Potrero	14.80	1.32	4.37	10.43	3.05
San Martinez Grande	34.42	2.29	8.24	26.17	5.95
Subtotal	**140.54**	**12.85**	**47.78**	**92.74**	**34.94**
Entrada	27.02	1.03	9.00	18.02	7.97
VCC	-	-	-	-	-
Grand Total	**167.56**	**13.88**	**56.78**	**110.77**	**42.90**

Notes:

[1] Proposed preserve is the total area within the preserve boundary.

[2] Cumulative area occupied the total area of mapped spineflower within the preserve between 2002 and 2007.

[3] Core identifies the perimetered occupied/preserved populations interior to buffer area and preserve boundary.

[4] Buffer represents the area within the preserve between the core perimeter and the preserve boundary (urban edge.)

[5] Expansion area represents the area interior to the core that is not part of the cumulative area occupied.

Source: Dudek, 2007.

3.4.2.2 Summary Description of Development Facilitated by Alternative 2

If the proposed CWA section 404 permit, ~~and~~ Candidate Conservation Agreement, Master Streambed Alteration Agreement, and CESA permits, are issued to permit the regulated activities as described above, development would be facilitated by the RMDP component of the proposed Project (Alternative 2). **Figure 3.0-11** depicts the RMDP/SCP Alternative 2 land use plan within the Project area boundary. As shown on **Table 3.0-10**, Alternative 2 would facilitate 20,885 residential units and 5.55 msf of commercial uses, along with the dedication and management of a total of about 10,200 acres of open space (8,683 acres in the Specific Plan + 1,517 acres in the Salt Creek area = 10,200 acres).

In addition, as shown on **Table 3.0-10**, Alternative 2 would facilitate a portion of the Entrada planning area; specifically, 1,725 residential units, 450,000 square feet of commercial uses, and approximately 129.5 acres of dedicated and managed open space would be facilitated by implementing the proposed Project (Alternative 2). As to VCC, Alternative 2 would facilitate completion of the industrial/business park/office complex (4.22 msf) and 143.6 acres of dedicated and managed open space.

Table 3.0-10
Development Facilitated by RMDP Component of the Proposed Project (Alternative 2)

Land Use Category[1]	Acres	Res.[4] (DU)	Comm.[5] (MSF)[3]	Percent Res. Reduction (DU)	Percent Comm. Reduction (MSF)	Total Res. Reduction (DU)	Total Comm. Reduction (MSF)
Specific Plan							
Single-Family Residential	1,559.2	9,081	0	-	-	-	-
Multi-Family Residential	991.1	11,804	0	-	-	-	-
Commercial	258.1	0	5.55	-	-	-	-
Public Facilities[6]	642.6	0	0	-	-	-	-
Open Space[7]	10,200.2	0	0	-	-	-	-
Subtotal Specific Plan	**13,651.3**	**20,885**[2]	**5.55**	-	-	-	-
Total Specific Plan Reduction Compared to Proposed Project							
Entrada Development							
Single-Family Residential	68.8	428	0	-	-	-	-
Multi-Family Residential	45.1	1,297	0	-	-	-	-
Commercial	32.2	0	0.45	-	-	-	-
Public Facilities	40.5	0	0	-	-	-	-
Open Space	129.5	0	0	-	-	-	-
Subtotal Entrada	**316.1**	**1,725**	**0.45**	-	-	-	-
Total Entrada Reduction Compared to Proposed Project							
Valencia Commerce Center							
Commercial	53.0	0	1.10	-	-	-	-
Industrial Park	110.9	0	2.30	-	-	-	-
Public Facilities	13.7	0	0	-	-	-	-
Open Space	143.6	0	0	-	-	-	-
Subtotal VCC	**321.3**	**0**	**3.40**	-	-	-	-
Total VCC Reduction Compared to Proposed Project				-	-	-	-
Grand Total Project Reduction Compared to Proposed Project						-	-

Notes:

[1] In some instances, the land use categories for the Specific Plan, Entrada, and VCC have been consolidated to simplify presentation of the land use data.

[2] The total number of permitted residential dwelling units within the Specific Plan of 20,885 may increase by 423 second units with approval of a conditional use permit, which would increase the maximum total Specific Plan dwelling units to 21,308. (Specific Plan 2003, Table 2.3-3.)

[3] MSF means million square feet.

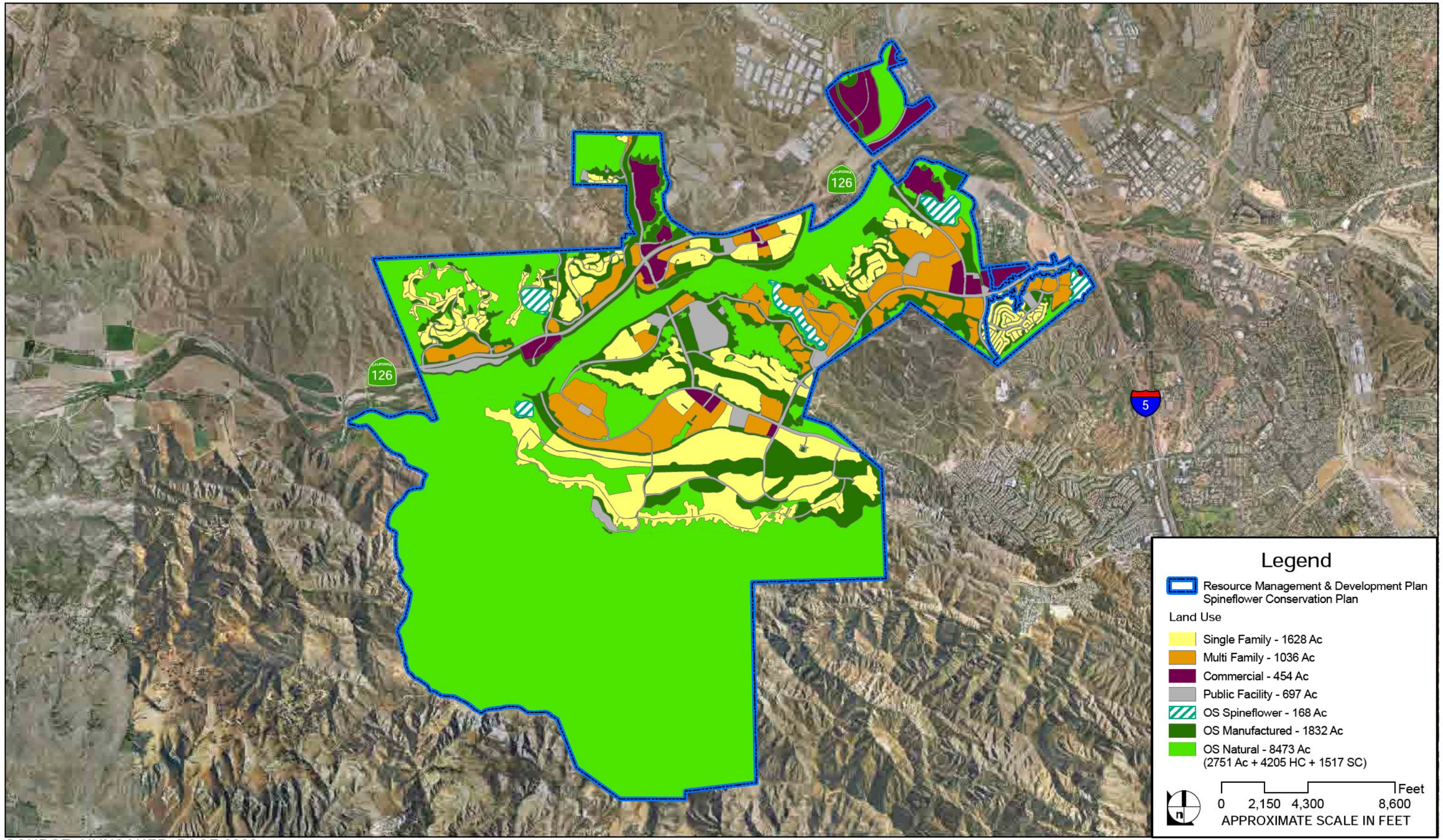
[4] Residential includes single-family (detached homes) and multi-family (condo/townhomes).

[5] Commercial includes business park, office, retail, *etc*.

[6] Public Facilities includes parks, schools, libraries, *etc.*

[7] Open Space means natural (preserved) and manufactured open space, and includes the Specific Plan's High Country SMA/SEA 20, River Corridor SMA/SEA 23, Open Areas, spineflower preservations areas, and other specified open areas, primarily located within the Specific Plan's Estate Residential designation. Open Space does not include the Salt Creek area, adjacent to the Specific Plan boundary, comprised of about 1,517 acres. If the Salt Creek area is included, the total Open Space is approximately 10,200 acres (8,683 + 1,517 = 10,200).

Source: The Newhall Land and Farming Company, 2007.



SOURCE: HUNSAKER, PACE 2008

FIGURE 3.0-11

RMDP/SCP ALTERNATIVE 2
LAND USE PLAN

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Figure 3.0-11 Alternative 2 RMDP/SCP Land Use Plan3.4.3 Alternative 3 (Elimination of Planned Potrero Bridge and Additional Spineflower Preserves)

As described in **Subsection 3.4**, above, Alternative 3 reduces impacts to jurisdictional areas and expands the spineflower preserves within the Project area. Under Alternative 3, two of the three bridges crossing the Santa Clara River and the associated bank stabilization would be constructed, including the Commerce Center Drive bridge and the Long Canyon Road bridge. However, the Potrero Canyon Road bridge would not be constructed (further reducing impacts to jurisdictional areas). Major tributary drainages would be regraded and realigned under this alternative; however, the channels would be wider than those of the proposed Project, and the cismontane alkali marsh in lower Potrero Canyon would be preserved.

Additional spineflower preserve acreage would be established in the Specific Plan's Airport Mesa area and on Entrada. This alternative would provide a total of 221.8 acres of spineflower preserves, and protect 77.5 percent of the cumulative area occupied by spineflower in the Project area. The alternative would facilitate development within the Specific Plan, VCC, and Entrada, including 21,558 residential units and 9.33 msf of commercial/industrial/business park floor area.

3.4.3.1 Description of Regulated Activities

3.4.3.1.1 *RMDP Component (Alternative 3)*

Under Alternative 3, infrastructure would be constructed in and adjacent to the Santa Clara River and tributary drainages within the Project area.

Santa Clara River. Figure 3.0-12 depicts the locations of the Alternative 3 proposed RMDP Santa Clara River features relative to river jurisdictional areas. As shown, one proposed bridge, Long Canyon Road Bridge, and one previously approved bridge, Commerce Center Drive Bridge, would be located across the main stem of the Santa Clara River. No bridge is proposed under Alternative 3 at the mouth of Potrero Canyon (Potrero Canyon Bridge).[9] As shown, buried bank stabilization would be installed in upland and riparian areas along approximately one-half of the north bank and one-third of the south bank of the Santa Clara River. The WRP outfall to the Santa Clara River also would be constructed. As shown, permanent bank stabilization areas exist on the north and south banks of the Santa Clara River. As shown, the geofabric utility corridor bank protection is proposed on the north side of the Santa Clara River between San Martinez Grande Canyon and Chiquito Canyon. Refer to **Figure 3.0-12** for locations of bank protection and stabilization features and bridge locations relative to jurisdictional areas under this alternative. In addition, this figure depicts the proposed RMDP riparian/upland revegetation zones in green and the newly created river channel in blue.

Figure 3.0-12 also presents three Santa Clara River cross-sections (A, B, and C) that depict existing and proposed surface elevations, including variations due to proposed fill and bank stabilization features. For example, up to approximately 20 feet of fill is proposed on the south side of the Santa Clara River to the west of the proposed Long Canyon Road Bridge (refer to cross-section B on **Figure 3.0-12**). In addition,

[9] The Potrero Canyon Bridge was approved by Los Angeles County as part of the Specific Plan on May 27, 2003.

approximately ten feet of fill is proposed on the north side of the Santa Clara River in the vicinity of Point C2 (refer to cross-section C on **Figure 3.0-12**).

Table 3.0-11 summarizes the characteristics of the major RMDP infrastructure along the Santa Clara River, including north side (18,811 lf) and south side (7,728 lf) buried bank stabilization to be constructed along the Santa Clara River. This table also shows 22 storm drain outlets along the north bank and three such outlets on the south bank of the Santa Clara River (25 storm drain outlets). In addition, the table documents the length, width, and vertical clearance of the two bridges, as well as the number of piers supporting the bridges.

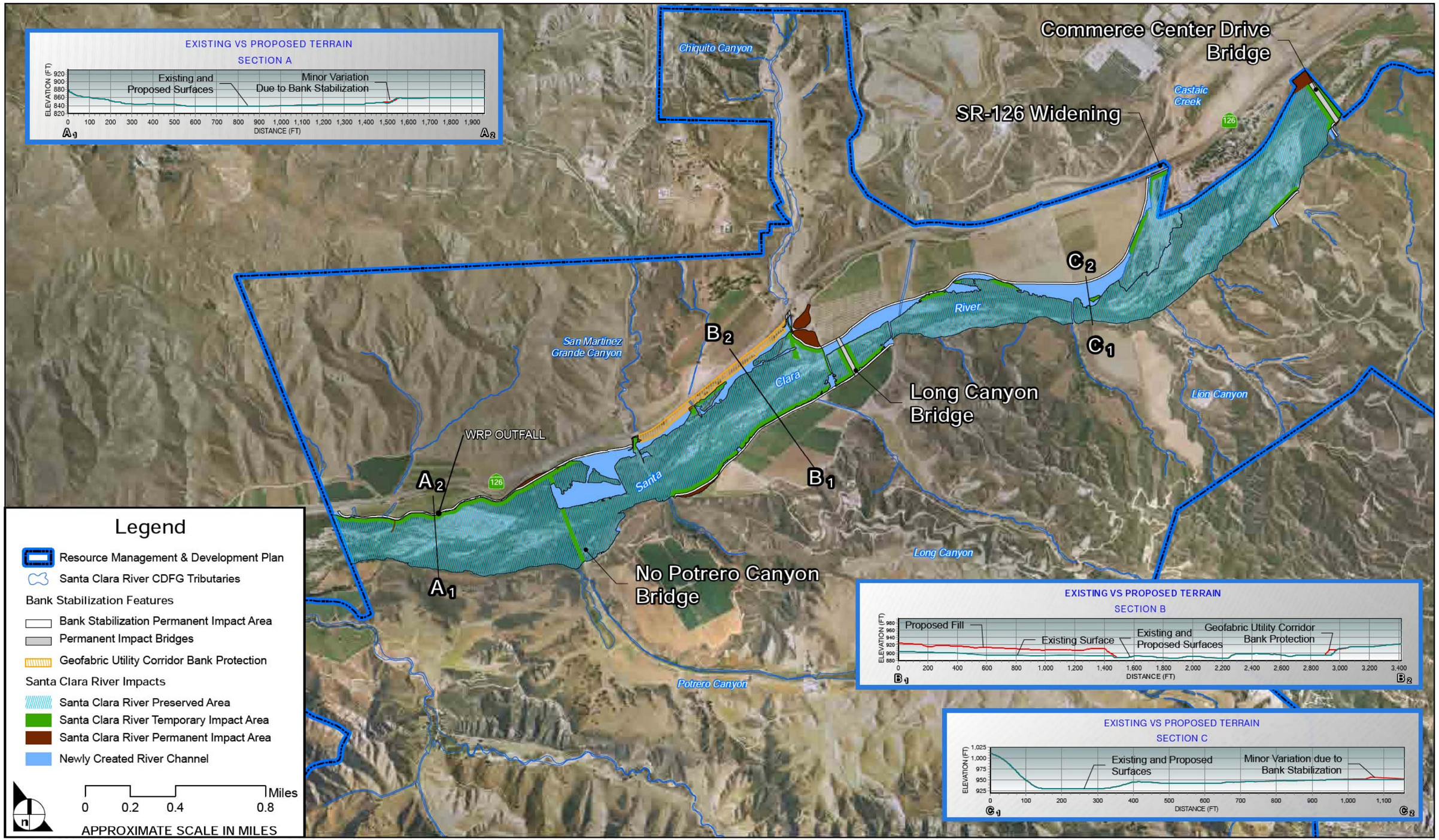
Table 3.0-11
Alternative 3 Santa Clara River Major RMDP Infrastructure

Santa Clara River Location	Bank Stabilization (lf)	Outlets (No.)	Bridges			
			Length (lf)	Width (lf)	Piers (No.)	Vertical Clearance (ft)
Bridges						
Commerce Center Drive Bridge	-	-	1,200	100	9	22
Long Canyon Road Bridge	-	-	980	100	9	31-40
Potrero Canyon Road Bridge	-	-	-	-	-	-
Banks			-	-	-	-
North River Bank	18,811	22	-	-	-	-
South River Bank	7,728	3	-	-	-	-
Total	**26,540**	**25**	**-**	**-**	**-**	**-**

Source: RMDP, 2008.

Tributary Drainages. **Figure 3.0-13** illustrates the modified, converted, and preserved tributary drainages within the Project area under Alternative 3. Chiquito Canyon would be modified to require stabilizing treatments to protect the channel and surrounding development from excessive vertical scour and lateral channel migration as shown on **Figure 3.0-14**. The existing drainage would remain intact, but would be permanently altered by construction of stabilization elements, including buried bank stabilization and grade stabilization structures. Approximately 7,264 lf of buried bank stabilization would be installed along the west bank and 7,380 lf of buried bank stabilization would be installed along the east bank of Chiquito Canyon. In addition, approximately 2,791 lf of drainage would be converted to buried storm drain. Three culverted road crossings would be installed along Chiquito Canyon to accommodate Specific Plan traffic circulation, plus a culverted road extension would be installed for the Caltrans SR-126 road widening project.[10] **Table 3.0-12** describes the Alternative 3 tributary drainage RMDP infrastructure characteristics, including the Chiquito Canyon modified drainage.

[10] In addition, as part of the Caltrans SR-126 road widening project, the existing six-lane bridge allowing SR-126 to cross the Castaic Creek drainage would be expanded to eight lanes.



SOURCE: PACE 2008

FIGURE 3.0-12

ALTERNATIVE 3 & 4 RMDP
SANTA CLARA RIVER FEATURES

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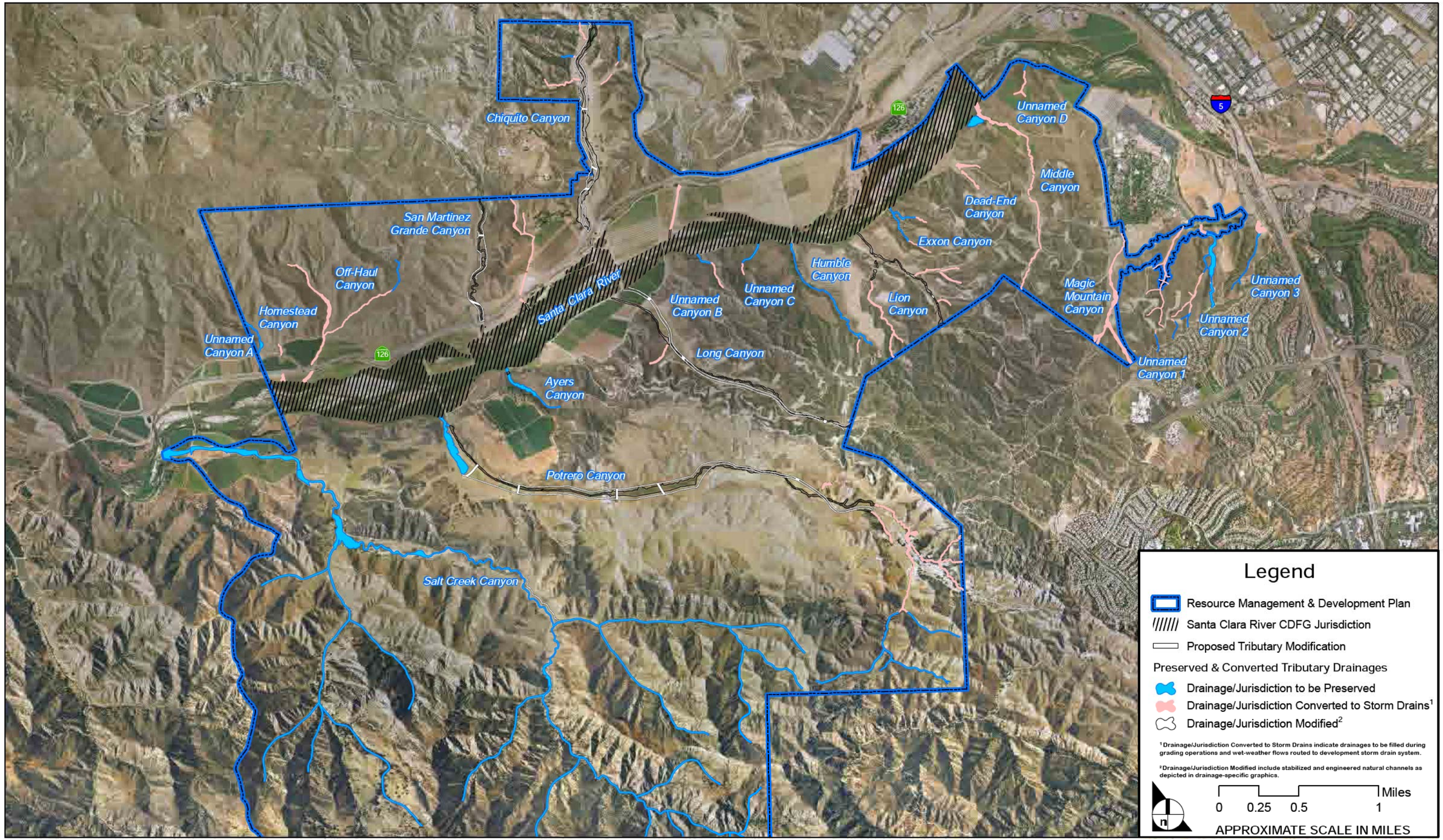
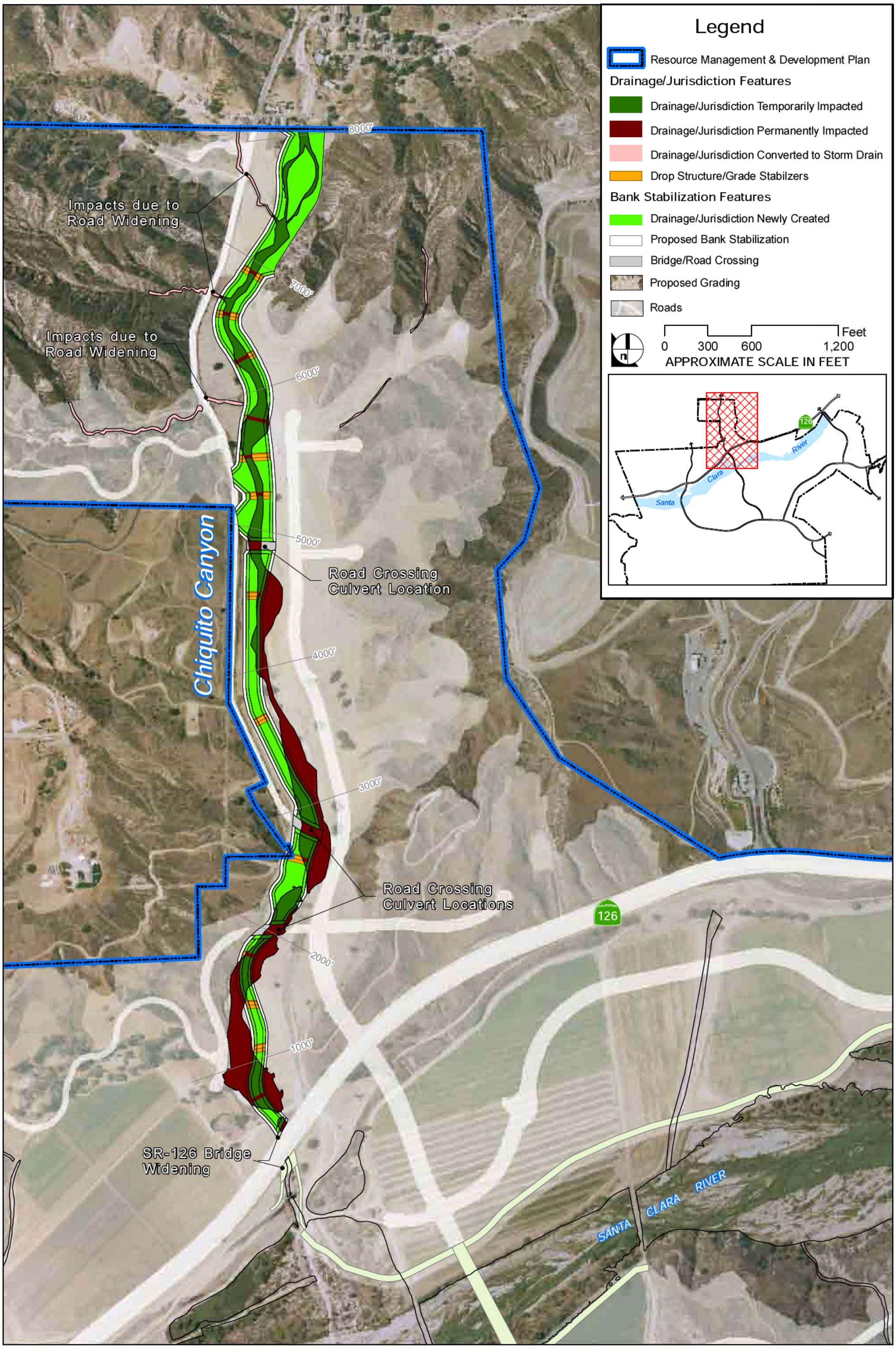


SOURCE: PACE - April 2008

FIGURE 3.0-13

ALTERNATIVE 3
MODIFIED, CONVERTED, AND PRESERVED TRIBUTARY DRAINAGES

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-13_ModifiedConvertedPreservedTributaryDrainageTreatmentsAlt3_Section3_PC1_050108.mxd



SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-14

CHIQUITO CANYON DETAIL - ALTERNATIVE 3 & 6
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-14_ChiquitoAltemative3-6_PC1_042908.mxd

Alternative 3 also proposes that a soft-bottom channel be constructed to incorporate the existing alignment of San Martinez Grande Canyon Road between SR-126 and the northern Project boundary as shown on **Figure 3.0-15**. The existing drainage would be permanently altered by construction of the modified tributary drainage, including buried bank stabilization and grade stabilizing structures. Approximately 2,739 lf of buried bank stabilization would be installed along the west bank and 3,059 lf of buried bank stabilization would be installed along the east bank of San Martinez Grande Canyon. As shown, one bridge and one culverted road crossing would be installed along San Martinez Grande Canyon to accommodate Specific Plan traffic circulation, plus a culverted road extension would be installed for the Caltrans SR-126 road widening project. **Table 3.0-12** describes the Alternative 3 tributary drainage RMDP infrastructure characteristics, including the San Martinez Grande Canyon modified drainage.

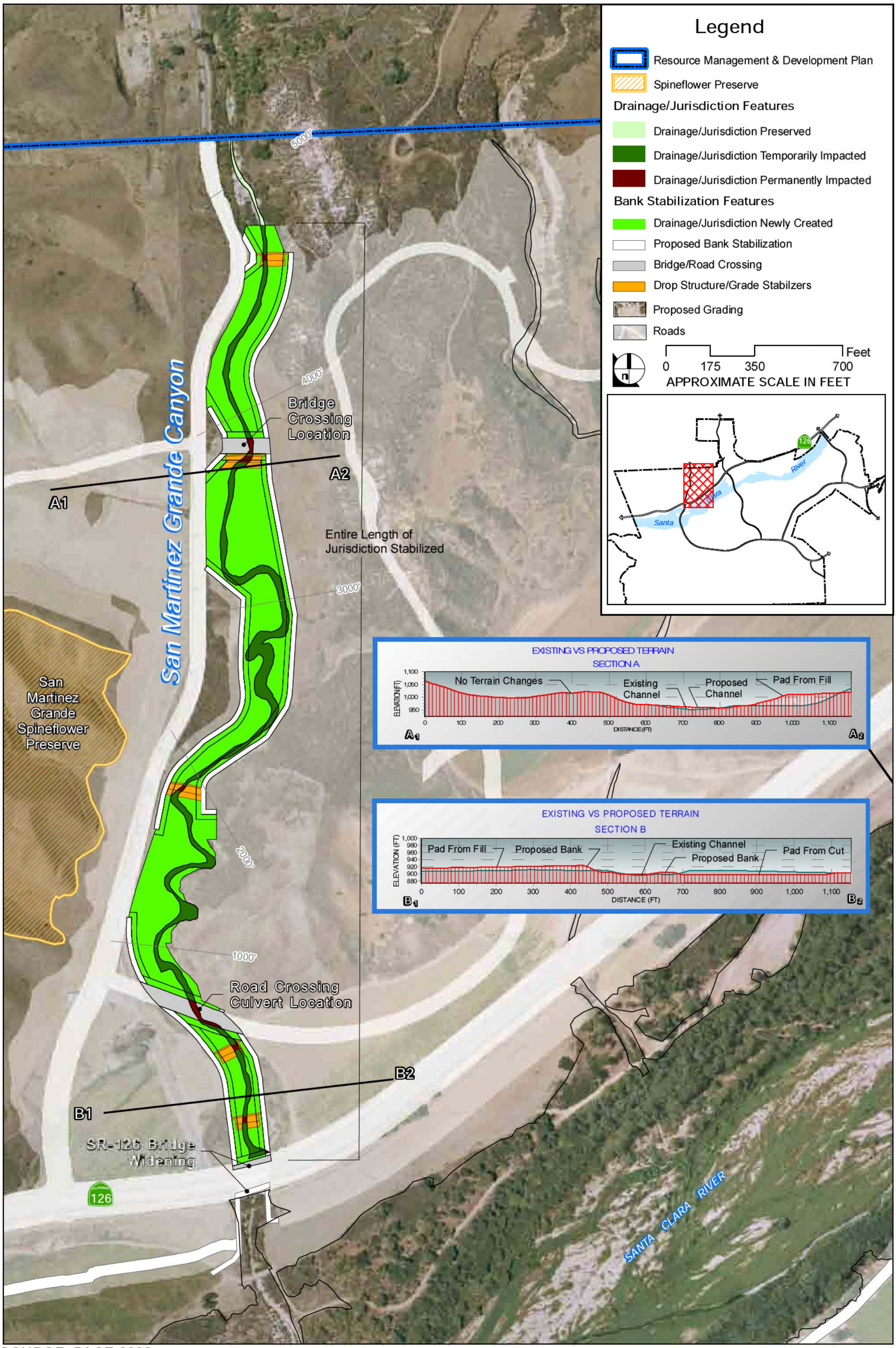
Please refer to **Figure 3.0-15** for locations of the San Martinez Grande Canyon proposed RMDP tributary drainage features, including affected drainages/jurisdictional areas, and the development areas along San Martinez Grande Canyon. **Figure 3.0-15** also shows the relationship of the proposed drainage modifications in San Martinez Grande Canyon to the proposed San Martinez Grande spineflower preserve to the west. Finally, **Figure 3.0-15** presents two San Martinez Grande Canyon cross-sections (A and B) that depict existing and proposed surface elevations, including variations due to proposed fill and bank stabilization features. For example, up to approximately 70 feet of fill is proposed on the west side of the San Martinez Grande Canyon to the south of the upper road crossing (refer to cross-section A on **Figure 3.0-15**).

Proposed drainage treatments in Long Canyon for Alternative 3 are as described previously for the Proposed Project (Alternative 2) in **Subsection 3.4.2.1.1** and shown on **Figure 3.0-7**, above.

Table 3.0-12
Alternative 3 Tributary Drainage RMDP Infrastructure

Drainage Location	Drainage Modified (lf)	Drainage Converted to Buried Storm Drain (lf)	Bank Stabilization[1] (lf)		Preserved Drainage (lf)	Road Crossings	
			West Bank	East Bank		Bridges	Culverts
Modified Drainages							
Chiquito Canyon	8,370	2,791	7,264	7,380	898	-	3
Lion Canyon	5,614	6,316	-	-	-	-	1
Long Canyon	9,669	910	8,828	8,815	-	-	3
Potrero Canyon	15,503	10,918	14,594	13,195	13,272	2	3
San Martinez Grande Canyon	4,792	-	2,739	3,059	378	1	1
Unmodified/Converted Drainages							
Agricultural Ditch	317	1,479	-	-	0	-	-
Ayers Canyon[2]	147	-	-	-	2,318	0	1
Dead-End Canyon	-	1,931	-	-	-	-	-
Exxon Canyon	-	1,276	-	-	2,265	-	-
Homestead Canyon	-	609	-	-	-	-	-
Humble Canyon	-	421	-	-	5,116	-	-
Middle Canyon	-	7,439	-	-	148	-	-
Mid-Martinez Canyon	22	4,541	-	-	250	-	-
Off-Haul Canyon	-	7,593	-	-	1,185	-	-
Salt Canyon	7,290	-	-	1,992	101,470	-	-
Magic Mountain Canyon	-	6,111	-	-	-	-	-
Unnamed Canyon 1[3]	-	4,647	-	-	-	-	-
Unnamed Canyon 2	2	391	-	-	24	-	-
Unnamed Canyon A	-	-	-	-	1,293	-	-
Unnamed Canyon B	-	1,004	-	-	568	-	-
Unnamed Canyon C	-	402	-	-	869	-	-
Unnamed Canyon D	-	1,232	-	-	260	-	-
Totals	**51,725**	**60,010**	**33,426**	**34,442**	**130,314**	**3**	**12**

Notes:
[1] The lf of bank stabilization does not necessarily reflect impacts to jurisdictional areas; it only provides the linear feet of bank protection to be installed along various tributary drainages.
[2] The 147 lf of Drainage Modified is road crossing bridge/culvert-related.
[3] Unnamed Canyons 1 and 2 are located within the Entrada planning area and are given a numerical designation to distinguish them from the four other unnamed canyons located within the Specific Plan area (*i.e.*, Unnamed Canyons A-D).
Source: RMDP, 2008.



SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-15

SAN MARTINEZ GRANDE CANYON DETAIL - ALTERNATIVE 3
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-15_SanMartinezAlternative3_PC1_062608.mxd

In Potrero Canyon, Alternative 3 would require bank stabilization along both sides of the Potrero Canyon drainage as shown on **Figure 3.0-16**. In the eastern upstream reaches of Potrero Canyon, the existing drainage would be graded and flows would be converted to underground storm drain. At a point approximately four-fifths of the way up the drainage, the storm drain would convey flows into a soft-bottom channel constructed approximately parallel to the existing drainage. Between the top of the mesic meadow and the top of the cottonwood/willow woodland just upstream of the saltgrass meadow, bank stabilization would be constructed in upland areas, effectively widening the soft-bottom channel in this reach. Bank stabilization would be discontinued immediately upstream of the mesic meadow, which would remain unstabilized.

Two new bridges and two road crossing culverts would be constructed at approximately even intervals between the upstream end of the mesic meadow and the upstream end of the saltgrass meadow. A third road crossing culvert would cross the channel farther upstream, just downstream of the point where the drainage begins to branch (see **Figure 3.0-16**). Grade stabilization structures are proposed along the entire length of the soft-bottom channel. Approximately 14,594 lf of buried bank stabilization would be installed along the west bank, and 13,195 lf of buried bank stabilization would be installed along the east bank of Potrero Canyon. Approximately 10,918 lf of drainage would be converted to buried storm drain.

As stated, two bridge crossings and three road crossing culverts would be constructed to allow Specific Plan roadways to cross the Potrero Canyon drainage at the locations shown **Figure 3.0-16**, below. **Figure 3.0-16** also includes an existing terrain profile (A) for the western portion of Potrero Canyon upstream of the confluence with the Santa Clara River. Refer to **Figure 3.0-16** for locations of newly created drainage, preserved drainage area, permanent drainage impact areas, side drainage bank stabilization areas, and bridge/road crossing culvert locations relative to jurisdictional areas. **Figure 3.0-16** also shows the relationship of the proposed Potrero Canyon drainage modifications to the proposed Potrero spineflower preserve to the west.

Table 3.0-12, above, describes the Alternative 3 tributary drainage RMDP infrastructure characteristics, including the Potrero Canyon modified drainage.

Proposed drainage treatments in Lion Canyon for Alternative 3 are as described previously for the proposed Project (Alternative 2) in **Subsection 3.4.2.1.1** and shown on **Figure 3.0-9**, above.

One culvert road crossing would be constructed across the mouth of the Ayers Canyon drainage. No other drainage facilities would be constructed in Ayers Canyon. In addition, the existing six-lane bridge allowing SR-126 to cross the Castaic Creek drainage would be expanded to eight lanes.

3.4.3.1.2 SCP Component (Alternative 3)

Under the SCP component, specific portions of the Specific Plan would be designated as spineflower preserves. As described in the SCP, the 20.26-acre existing Airport Mesa conservation easement would be contained within a 53.3-acre spineflower preserve, the 44-acre existing Grapevine Mesa conservation easement would be designated as a 46.34-acre preserve generally coterminous with the existing easement boundary, a 14.8-acre spineflower preserve would be established west of the mouth of Potrero Canyon, and a 34.42-acre preserve would be established west of San Martinez Grande Canyon. In addition,

Alternative 3 would require the establishment of a spineflower preserve on an east-facing slope adjacent to the Six Flags Magic Mountain Amusement Park at the eastern edge of the Project area. Within the Entrada planning area, Alternative 3 would require the establishment of a 72.94-acre spineflower preserve. Like the proposed Project (Alternative 2), no spineflower preserve would be established in the VCC planning area.

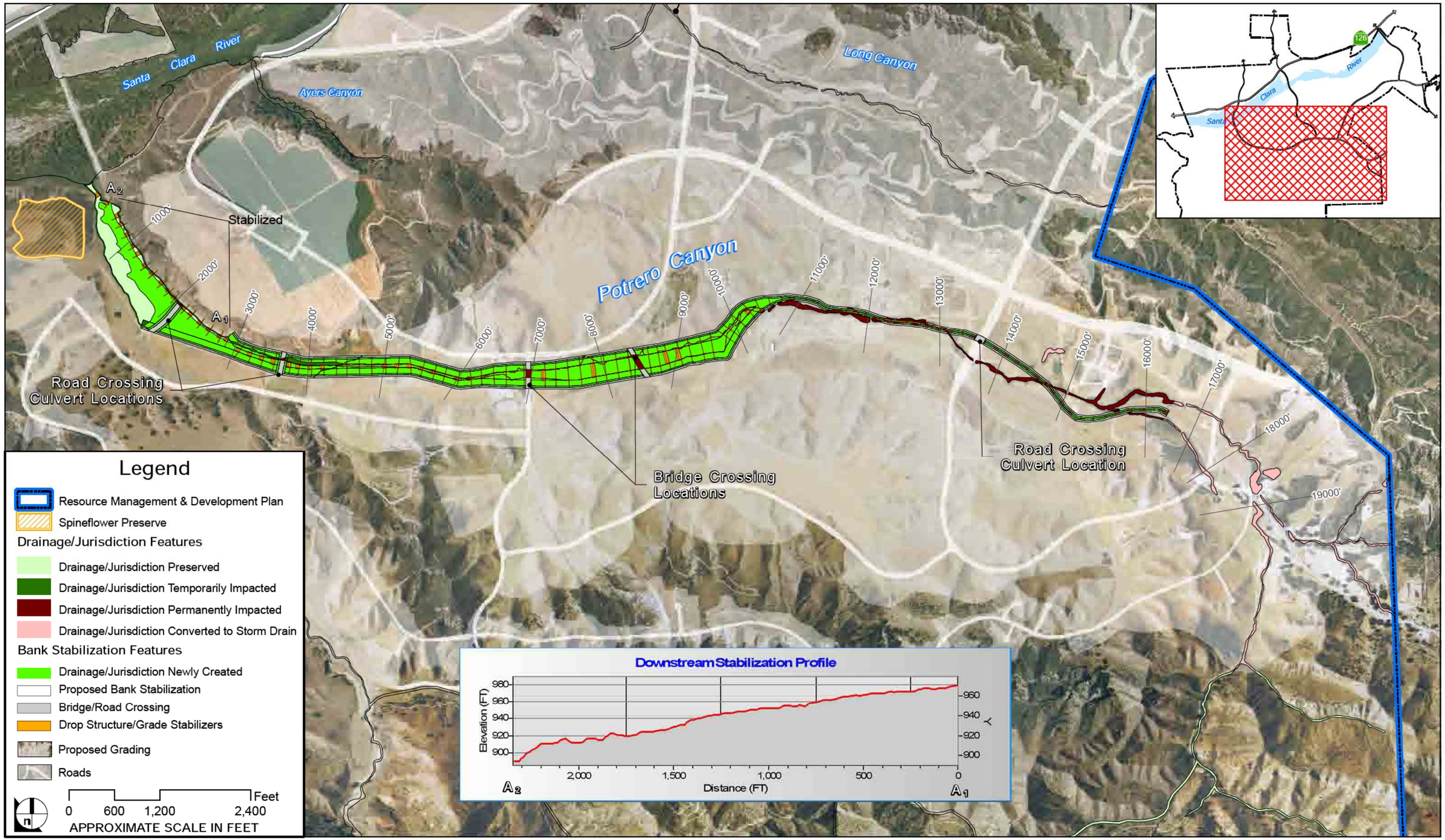
Figure 3.0-17 depicts the Alternative 3 spineflower preserves relative to the connectivity between the preserves and the approved and proposed open space within the SCP study area. Refer to **Table 3.0-13**, which summarizes the Alternative 3 spineflower preserve characteristics, including spineflower acreages proposed to be preserved and taken.

Table 3.0-13
Spineflower Preserve Alternatives Summary Alternative 3

Location	Preserve Size (ac)	Spineflower Preserved (ac)	Spineflower Impacted (ac)	Percent Preserved (ac)	Percent Taken (ac)
Specific Plan					
Airport Mesa	53.26	6.34	2.02	75.9%	24.1%
Grapevine Mesa	46.34	4.02	0.86	82.3%	17.7%
Potrero	14.80	1.32	0.33	80.1%	19.9%
San Martinez Grande	34.42	2.29	0.00	100.0%	0.0%
Subtotal	**148.82**	**13.97**	**3.21**	**81.3%**	**18.7%**
Entrada	72.94	1.64	0.48	77.3%	22.7%
Valencia Commerce Center	0	0	0.85	0.0%	100.0%
Grand Total	**221.76**	**15.61**	**4.54**	**77.5%**	**22.5%**

Source: Dudek, 2007.

Table 3.0-14 summarizes each of the Alternative 3 proposed preserve areas and the preserve design elements, including the core or occupied spineflower population areas, the interior areas within the core that allow for expansion of the preserves, and the designated buffer, which represents the area within the preserve between the core perimeter and the outer preserve boundary or urban edge.



SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-16

POTRERO CANYON DETAIL - ALTERNATIVE 3
PROPOSED RMDP TRIBUTARY TREATMENTS

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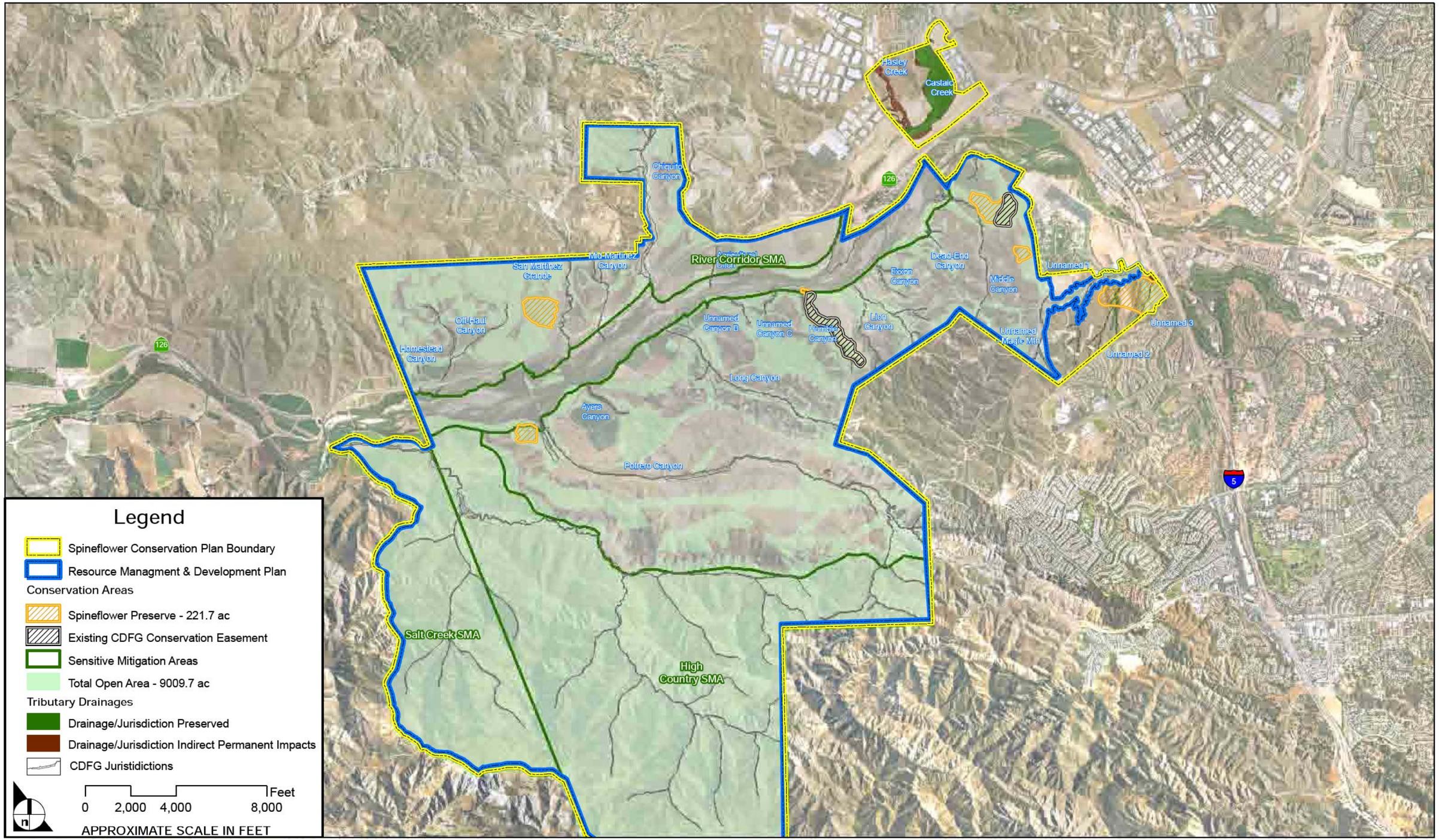

SOURCE: PACE 2008

FIGURE 3.0-17

ALTERNATIVE 3 SPINEFLOWER PRESERVES

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Table 3.0-14
Alternative 3 Preserve Design

Preserve	Preserve Statistics: Proposed Preserve[1] (ac)	Preserve Statistics: Cumulative Area Occupied[2] (ac)	Preserve Design Elements: Core[3]	Preserve Design Elements: Buffer[4]	Preserve Design Elements: Expansion[5]
Specific Plan					
Airport Mesa	53.26	6.34	29.27	23.99	22.93
Grapevine Mesa	46.34	4.02	9.01	37.33	5.00
Potrero	14.80	1.32	4.37	10.43	3.05
San Martinez Grande	34.42	2.29	8.24	26.17	5.95
Subtotal	**148.82**	**13.97**	**50.90**	**97.92**	**36.93**
Entrada	72.94	1.64	26.58	46.36	24.94
VCC	0	0	0.00	0.00	0.00
Grand Total	**221.76**	**15.61**	**77.48**	**144.28**	**61.87**

Notes:

[1] Proposed preserve is the total area within the preserve boundary.

[2] Cumulative area occupied the total area of mapped spineflower within the preserve between 2002 and 2007.

[3] Core identifies the perimetered occupied/preserved populations interior to buffer area and preserve boundary.

[4] Buffer represents the area within the preserve between the core perimeter and the preserve boundary (urban edge.)

[5] Expansion area represents the area interior to the core that is not part of the cumulative area occupied.

Source: Dudek, 2007.

3.4.3.2 Summary Description of Development Facilitated by Alternative 3

If a CWA section 404 permit, Candidate Conservation Agreement, ~~CESA permit, and~~ Master Streambed Alteration Agreement, and CESA permits are issued to permit the regulated activities under Alternative 3, partial build-out of the Specific Plan would be facilitated. **Figure 3.0-18** depicts the RMDP/SCP Alternative 3 land use plan within the Project area boundary. As shown on **Table 3.0-15**, the Specific Plan's approved 20,885 residential units would be reduced by 452 units to 20,433 units, and the approved 5.55 msf of commercial uses would be reduced by 67,000 square feet.

Table 3.0-15
Development Facilitated by Alternative 3

Land Use Category[1]	Acres	Res.[4] (DU)	Comm.[5] (MSF)[3]	Percent Res. Reduction (DU)	Percent Comm. Reduction (MSF)	Total Res. Reduction (DU)	Total Comm. Reduction (MSF)
Specific Plan							
Single-Family Residential	1,365.1	9,003	0	0.86%	0	78	0
Multi-Family Residential	960.6	11,430	0	3.17%	0	374	0
Commercial	227.0	0	5.48	0	1.21%	0	0.07
Public Facilities[6]	635.5	0	0	0	0	0	0
Open Space[7]	10,462.8	0	0	0	0	0	0
Subtotal Specific Plan	**13,651**	**20,433**[2]	**5.48**	**2.16%**	**1.21%**	**452**	**0.07**
Total Specific Plan Reduction Compared to Proposed Project						**452**	**0.07**
Entrada Development							
Single-Family Residential	65.6	428	0	0	-	0	0
Multi-Family Residential	6.4	697	0	46.26%	-	600	0
Commercial	31.4	0	0.45	0	-	0	0
Public Facilities	36.4	0	0	0	-	0	0
Open Space	176.3	0	0	0	-	0	0
Subtotal Entrada	**316.1**	**1,125**	**0.45**	**46.26%**	**-**	**600**	**0**
Total Entrada Reduction Compared to Proposed Project						**600**	**0**
Valencia Commerce Center							
Commercial	53.0	0	1.10	0	0	0	0
Industrial Park	110.9	0	2.30	0	0	0	0
Public Facilities	13.7	0	0	0	0	0	0
Open Space	143.6	0	0	0	0	0	0
Subtotal VCC	**321.3**	**0**	**3.40**	**0**	**0**	**0**	**0**
Total VCC Reduction Compared to Proposed Project						**0**	**0**
Grand Total Project Reduction Compared to Proposed Project						**1,052**	**0.07**

Notes:

[1] In some instances, the land use categories for the Specific Plan, Entrada, and VCC have been consolidated to simplify presentation of the land use data.

[2] The total number of permitted residential dwelling units within the Specific Plan of 20,885 may increase by 423 second units with approval of a conditional use permit, which would increase the maximum total Specific Plan dwelling units to 21,308. (Specific Plan 2003, Table 2.3-3.)

[3] MSF means million square feet.

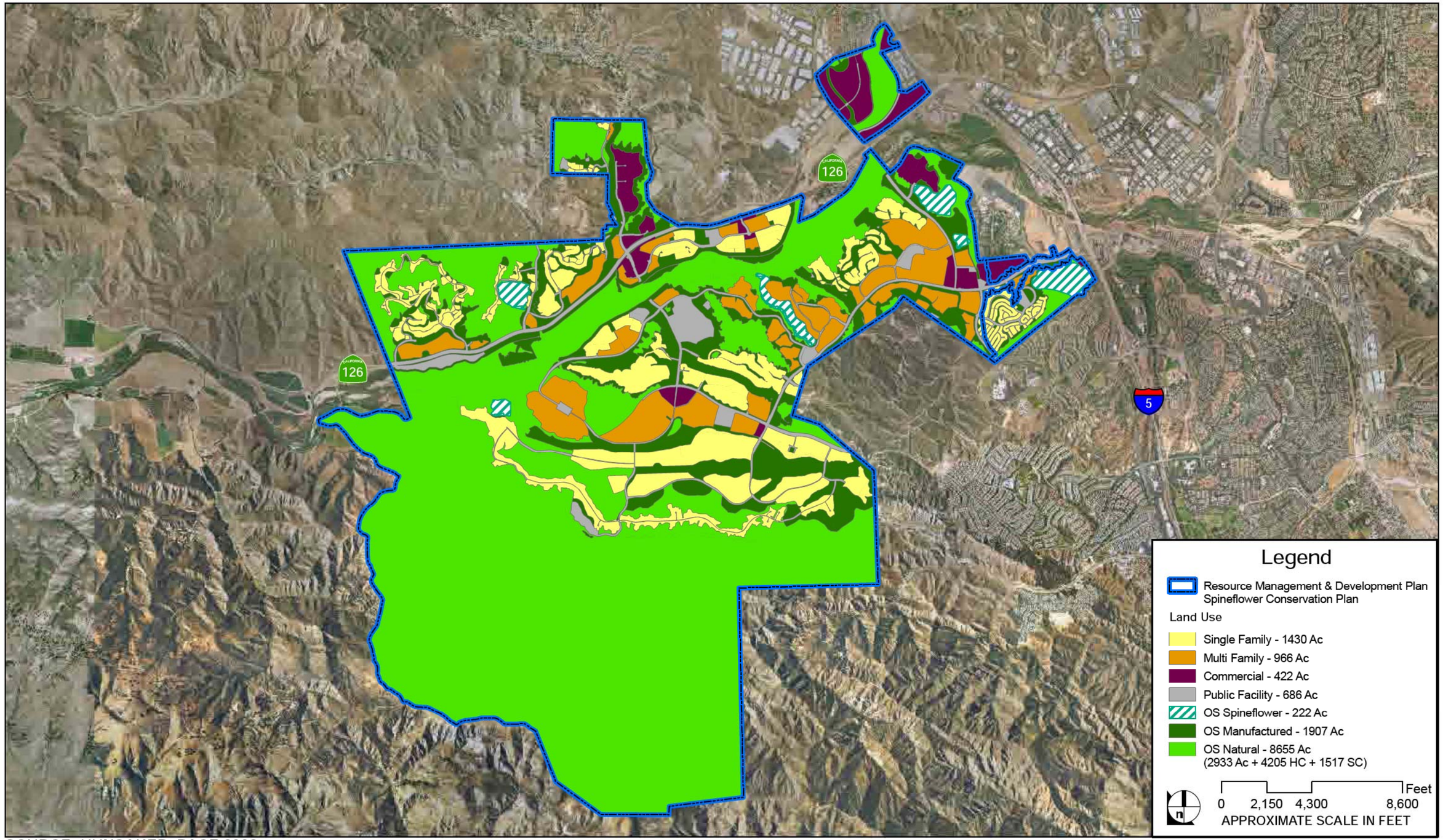
[4] Residential includes single-family (detached homes) and multi-family (condo/townhomes).

[5] Commercial includes business park, office, retail, *etc*.

[6] Public Facilities includes parks, schools, libraries, *etc.*

[7] Open Space means natural (preserved) and manufactured open space, and includes the Specific Plan's High Country SMA/SEA 20, River Corridor SMA/SEA 23, Open Areas, spineflower preservations areas, and other specified open areas, primarily located within the Specific Plan's Estate Residential designation. Open Space does not include the Salt Creek area, adjacent to the Specific Plan boundary, comprised of about 1,517 acres. If the Salt Creek area is included, the total Open Space is approximately 10,462.8 acres (8,946 + 1,517 = 10,462.8).

Source: The Newhall Land and Farming Company, 2007.



SOURCE: HUNSAKER, PACE 2008

FIGURE 3.0-18

RMDP/SCP ALTERNATIVE 3
LAND USE PLAN

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In addition, as shown on **Table 3.0-15**, above, Alternative 3 would partially facilitate a portion of the Entrada planning area; specifically, Alternative 3 would reduce Entrada residential by 600 units to 1,125 units, but would not result in a reduction in commercial uses when compared to the proposed Project (Alternative 2). In addition, when compared to the proposed Project (Alternative 2), Alternative 3 would increase the open space within Entrada from 129.5 acres to 176.3 acres. As to VCC, like the proposed Project (Alternative 2), Alternative 3 would facilitate completion of the industrial/business park/office complex (3.4 msf) and 143.6 acres would be dedicated and managed open space.

3.4.4 Alternative 4 (Elimination of Planned Potrero Bridge and Addition of VCC Spineflower Preserve)

As described in **Subsection 3.4**, above, Alternative 4 represents an effort to further reduce impacts to jurisdictional areas and expand the spineflower preserves within the Project area. The RMDP and SCP would be modified from the plans proposed by the applicant, and the requested federal and state permits, agreements, and authorizations would be granted consistent with those modifications. Under Alternative 4, two of the three bridges crossing the Santa Clara River and the associated bank stabilization would be constructed (Commerce Center/Long Canyon), but the Potrero Canyon Road bridge would not be constructed (further minimizing impacts to jurisdictional areas). Major tributary drainages would be regraded and realigned under this alternative, and the cismontane alkali marsh in lower Potrero Canyon would be preserved.

Additional spineflower preserve acreage would be established in the Specific Plan's Airport Mesa, Potrero Canyon, and Grapevine Mesa areas, and on Entrada. A preserve also would be established within the VCC planning area. This alternative would provide a total of 259.9 acres of spineflower preserves, and protect 82.5 percent of the cumulative area occupied by spineflower in the Project area. The alternative would facilitate development within the Specific Plan and the Entrada planning area, including 21,846 residential units and 5.93 msf of commercial/ industrial/business park floor area. No development would be facilitated within the VCC planning area.

3.4.4.1 Description of Regulated Activities

3.4.4.1.1 *RMDP Component (Alternative 4)*

Under Alternative 4, infrastructure would be constructed in and adjacent to the Santa Clara River and tributary drainages within the Project area.

Santa Clara River. Figure 3.0-12, above, depicts the locations of both the Alternatives 3 and 4 proposed RMDP Santa Clara River features relative to river jurisdictional areas. As shown, one proposed bridge, Long Canyon Road bridge, and one previously approved bridge, Commerce Center Drive Bridge, would be located across the main stem of the Santa Clara River.[11] Like Alternative 3, no bridge is

[11] The Commerce Center Drive Bridge was previously analyzed in the Final EIS/EIR prepared and approved by the Corps and CDFG in connection with previously adopted NRMP (SCH No. 1997061090, August 1998).

proposed under Alternative 4 at the mouth of Potrero Canyon (Potrero Canyon Bridge).[12] As shown, buried bank stabilization would be installed mostly in upland areas along approximately one-half of the north bank and one-third of the south bank of the Santa Clara River. The WRP outfall to the Santa Clara River also would be constructed. As shown, bank stabilization areas exist on the north and south banks of the Santa Clara River. The geofabric utility corridor bank protection is proposed on the north side of the Santa Clara River between San Martinez Grande Canyon and Chiquito Canyon. Refer to **Figure 3.0-12** for locations of bank protection and stabilization features and bridge locations relative to jurisdictional areas under this alternative. In addition, this figure depicts the proposed RMDP riparian/upland revegetation zones in green and the newly created river channel in blue.

Figure 3.0-12, above, also presents three Santa Clara River cross-sections (A, B, and C) that depict existing and proposed surface elevations, including variations due to proposed fill and bank stabilization features. For example, up to approximately 20 feet of fill is proposed on the south side of the Santa Clara River to the west of the proposed Long Canyon Road Bridge (refer to cross-section B on **Figure 3.0-12**). In addition, approximately ten feet of fill is proposed on the north side of the Santa Clara River in the vicinity of Point C2 (refer to cross-section C on **Figure 3.0-12**).

Table 3.0-16 summarizes the characteristics of the major RMDP infrastructure along the Santa Clara River, including north side (19,119 lf) and south side (7,632 lf) buried bank stabilization to be constructed along the Santa Clara River. Like Alternative 3, this table shows 22 storm drain outlets along the north bank and three such outlets on the south bank of the Santa Clara River (25 storm drain outlets). In addition, the table documents the length, width, and vertical clearance of the three bridges, as well as the number of piers supporting the bridges.

Table 3.0-16
Alternative 4 Santa Clara River Major RMDP Infrastructure

Santa Clara River Location	Bank Stabilization (lf)	Outlets (No.)	Bridges			
			Length (lf)	Width (lf)	Piers (No.)	Vertical Clearance (ft)
Bridges						
Commerce Center Drive Bridge	-	-	1,200	100	9	22
Long Canyon Road Bridge	-	-	980	100	9	31-40
Potrero Canyon Road Bridge	-	-	-	-	-	-
Banks			-	-	-	-
North River Bank	19,119	22	-	-	-	-
South River Bank	7,632	3	-	-	-	-
Total	**26,751**	**25**	-	-	-	-

Source: RMDP, 2008.

[12] The Potrero Canyon Bridge was approved by Los Angeles County as part of the Specific Plan on May 27, 2003.

Tributary Drainages. Figure 3.0-19 illustrates the modified, converted, and preserved tributary drainages within the Project area under Alternative 4. Proposed drainage treatments in Chiquito Canyon and San Martinez Grande Canyon for Alternative 4 are as described previously for the proposed Project (Alternative 2) in **Subsection 3.4.2.1.1**, and as shown above on **Figure 3.0-5** (Chiquito) and **Figure 3.0-6** (San Martinez Grande), respectively.

In Long Canyon, Alternative 4 would leave the upper 25 percent of the drainage in a natural, unstabilized (preserved) condition as shown on **Figure 3.0-20**. The lower 75 percent of the existing channel would be graded, and the drainage would be relocated and lined with buried bank stabilization. Two proposed culvert road crossings would cross the drainage approximately 500 and 2,000 feet upstream of the Santa Clara River confluence. A third crossing (Magic Mountain Parkway) would be constructed near the eastern end of the drainage as shown on **Figure 3.0-20**. Under Alternative 4, Long Canyon would involve the placement of 6,813 lf of buried bank stabilization along the west bank and 6,689 lf of buried bank stabilization along the east bank of Long Canyon. In addition, approximately 961 lf of drainage would be converted to buried storm drain. **Figure 3.0-20** presents two Long Canyon cross sections (A and B) that depict existing and proposed surface elevations, including variations due to proposed fill and bank stabilization features.

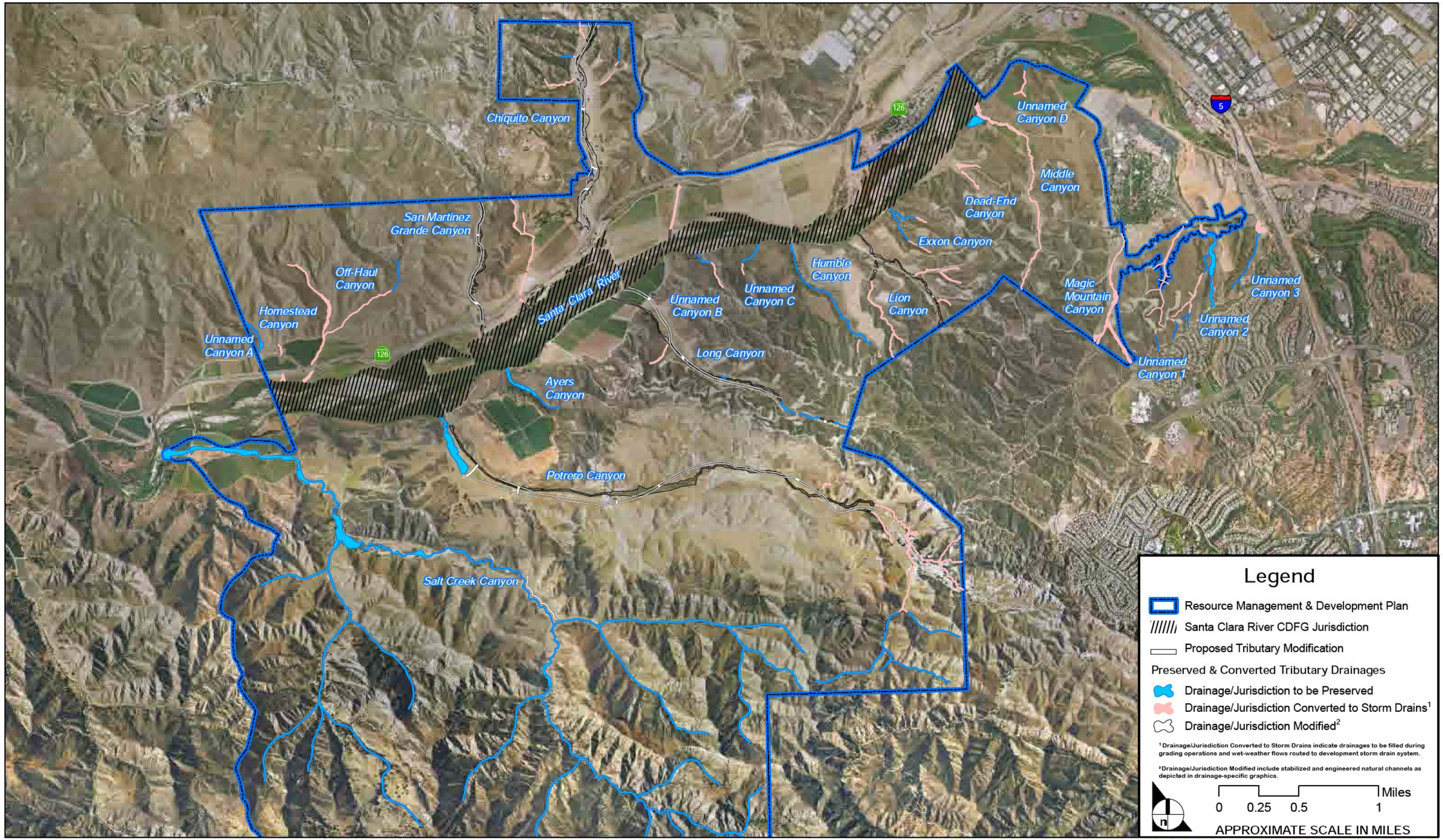
For example, up to approximately 100 feet of fill is proposed on the north side of the mouth of Long Canyon in the vicinity of a proposed road crossing (refer to cross section point A2 on **Figure 3.0-20**). In addition, up to approximately 90 feet of fill is proposed on the north side of Long Canyon approximately 6,000 feet upstream of the confluence with the Santa Clara River (refer to cross section point B2 on **Figure 3.0-20**). Refer to **Figure 3.0-20** for locations of newly created drainage, preserved drainage area, permanent drainage impact areas, side drainage bank stabilization areas, drainage to storm drain conversion areas, and road crossing culvert locations relative to jurisdictional areas. **Table 3.0-17** describes the Alternative 4 tributary drainage RMDP infrastructure characteristics, including the Long Canyon modified drainage.

In Potrero Canyon, Alternative 4 would require bank stabilization between the upstream end of the lower mesic meadow and a point approximately four-fifths of the way up the drainage as shown on **Figure 3.0-21**. This channel would not correspond to the existing location of the drainage, and would require the drainage to be relocated. Downstream of this channel, the mesic meadow area would remain unstabilized and the drainage would be left in its current state. Upstream of this channel, the drainage would be graded and buried storm drains would convey flow. Two new bridges and two culvert road crossings would be constructed at approximately even intervals between the upstream end of the mesic meadow and the upstream end of the saltgrass meadow, allowing roadways to cross the lined, soft-bottom channel. A third culvert road crossing would cross the channel farther upstream, just downstream of the point where the drainage begins to branch (**Figure 3.0-21**). Grade stabilization structures are proposed along the entire length of the soft-bottom channel. Approximately 14,469 lf of buried bank stabilization would be installed along the west bank, and 13,281 lf of buried bank stabilization would be installed along the east bank of Potrero Canyon. The same as Alternative 3, approximately 10,918 lf of drainage

Table 3.0-17
Alternative 4 Tributary Drainage RMDP Infrastructure

Drainage Location	Drainage Modified (lf)	Drainage Converted to Buried Storm Drain (lf)	Bank Stabilization[1] (lf)		Preserved Drainage (lf)	Road Crossings	
			West Bank	East Bank		Bridges	Culverts
Modified Drainages							
Chiquito Canyon	8,563	2,598	7,420	7,296	898	-	3
Lion Canyon	5,614	6,316	-	-	-	-	1
Long Canyon	7,289	961	6,813	6,689	2,329	-	3
Potrero Canyon	15,497	10,918	14,469	13,281	13,277	2	3
San Martinez Grande Canyon	5,048	-	4,279	4,287	122	-	2
Unmodified/Converted Drainages							
Agricultural Ditch	317	1,479	-	-	0	-	-
Ayers Canyon[2]	147	-	-	-	2,318	-	1
Dead-End Canyon	-	1,931	-	-	-	-	-
Exxon Canyon	-	1,276	-	-	2,265	-	-
Homestead Canyon	-	609	-	-	-	-	-
Humble Canyon	-	421	-	-	5,116	-	-
Middle Canyon	-	7,439	-	-	148	-	-
Mid-Martinez Canyon	22	4,541	-	-	250	-	-
Off-Haul Canyon	-	7,593	-	-	1,185	-	-
Salt Canyon	7,290	-	-	1,992	101,470	-	-
Magic Mountain Canyon	-	6,111	-	-	-	-	-
Unnamed Canyon 1[3]	-	4,647	-	-	-	-	-
Unnamed Canyon 2	2	390	-	-	24	-	-
Unnamed Canyon A	-	-	-	-	1,293	-	-
Unnamed Canyon B	-	1,004	-	-	568	-	-
Unnamed Canyon C	-	402	-	-	869	-	-
Unnamed Canyon D	-	1,232	-	-	260	-	-
Totals	**49,789**	**59,868**	**32,981**	**33,545**	**132,392**	**2**	**13**

Notes:
[1] The lf of bank stabilization does not necessarily reflect impacts to jurisdictional areas; it only provides the linear feet of bank protection to be installed along various tributary drainages.
[2] The 147 lf of Drainage Modified is road crossing bridge/culvert-related.
[3] Unnamed Canyons 1 and 2 are located within the Entrada planning area and are given a numerical designation to distinguish them from the four other unnamed canyons located within the Specific Plan area (*i.e.*, Unnamed Canyons A-D).
Source: RMDP, 2008.

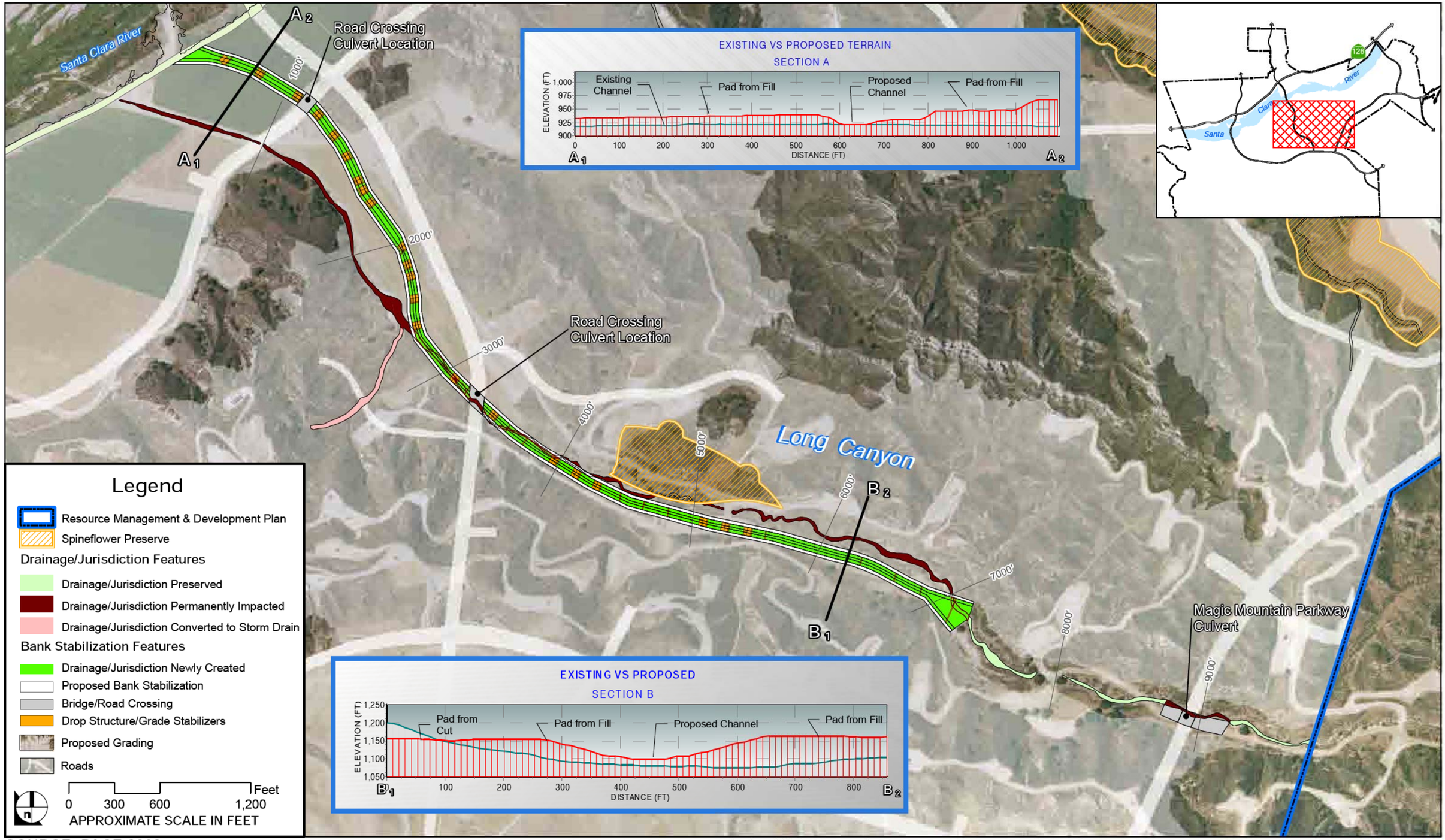


SOURCE: PACE - April 2008

FIGURE 3.0-19

ALTERNATIVE 4
MODIFIED, CONVERTED, AND PRESERVED TRIBUTARY DRAINAGES

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-19_ModifiedConvertedPreservedTributaryDrainageTreatmentsAlt4_Section3_PC1_050108.mxd



SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-20

LONG CANYON ALTERNATIVE DETAIL - ALTERNATIVE 4 & 5
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-20_LongAlternative4-5_PC1_042908.mxd

Legend

- Resource Management & Development Plan
- Spineflower Preserve

Drainage/Jurisdiction Features

- Drainage/Jurisdiction Preserved
- Drainage/Jurisdiction Temporarily Impacted
- Drainage/Jurisdiction Permanently Impacted
- Drainage/Jurisdiction Converted to Storm Drain

Bank Stabilization Features

- Drainage/Jurisdiction Newly Created
- Proposed Bank Stabilization
- Bridge/Road Crossing; Road Crossing Fill
- Drop Structure/Grade Stabilizers
- Proposed Grading
- Roads

0 600 1,200 2,400 Feet

APPROXIMATE SCALE IN FEET

SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-21

POTRERO CANYON ALTERNATIVE DETAIL - ALTERNATIVE 4
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-21_PotreroAlternative4_PC1_04309.mxd

would be converted to buried storm drain under this alternative. As stated, two bridge crossings and three road crossing culverts would be constructed to allow Specific Plan roadways to cross the Potrero Canyon drainage at the locations shown in **Figure 3.0-21**. Refer to **Figure 3.0-21** for locations of newly created drainage, preserved drainage area, permanent drainage impact areas, side drainage bank stabilization areas, drainage to storm drain conversion areas, and bridge and road crossing locations relative to jurisdictional areas.

Proposed drainage treatments in Lion Canyon for Alternative 4 are as described previously for both the proposed Project (Alternative 2) and Alternative 3. Refer to **Subsection 3.4.2.1.1** and **Figure 3.0-9**, above, for a description of the applicable drainage treatments in Lion Canyon. One road culvert crossing would be constructed across the mouth of the Ayers Canyon drainage. No other drainage facilities would be constructed in Ayers Canyon. In addition, the existing six-lane bridge allowing SR-126 to cross the Castaic Creek drainage would be expanded to eight lanes.

3.4.4.1.2 *SCP Component (Alternative 4)*

Under the SCP component, specific portions of the Specific Plan would be designated as spineflower preserves. As described in the SCP, the 20.26-acre existing Airport Mesa conservation easement would be contained within an expanded 53.26-acre spineflower preserve, the 44-acre existing Grapevine Mesa conservation easement would be designated as an expanded 54.5-acre preserve, a 24.97-acre expanded spineflower preserve would be established west of the mouth of Potrero Canyon, and a 34.41-acre expanded preserve would be established west of San Martinez Grande Canyon.

In addition, Alternative 4 would include the establishment of a 72.94-acre preserve within the Entrada planning area and a 19.82-acre preserve in the VCC planning area. **Figure 3.0-22** depicts the Alternative 4 expanded spineflower preserves relative to connectivity between the preserves and the approved and proposed open space within the SCP study area. Refer to **Table 3.0-18**, which summarizes the Alternative 4 spineflower preserve characteristics, including spineflower acreages proposed to be preserved and taken.

Table 3.0-18
Spineflower Preserve Alternatives Summary
Alternative 4

Location	Preserve Size (ac)	Spineflower Preserved (ac)	Spineflower Impacted (ac)	Percent Preserved (ac)	Percent Taken (ac)
Specific Plan					
Airport Mesa	53.26	6.34	2.02	75.9%	24.1%
Grapevine Mesa	54.50	4.18	0.70	85.7%	14.3%
Potrero	24.97	1.48	0.17	89.7%	10.3%
San Martinez Grande	34.41	2.29	0.00	100.0%	0.0%
Subtotal	**167.14**	**14.30**	**2.88**	**83.2%**	**16.8%**
Entrada	72.94	1.64	0.48	77.3%	22.7%
Valencia Commerce Center	19.82	0.68	0.17	80.0%	20.0%
Grand Total	**259.90**	**16.61**	**3.53**	**82.5%**	**17.5%**

Source: Dudek, 2007.

Table 3.0-19 summarizes each of the Alternative 4 proposed preserve areas and the preserve design elements, including the core or occupied spineflower population areas, the interior areas within the core that allow for expansion of the preserves, and the designated buffer, which represents the area within the preserve between the core perimeter and the outer preserve boundary or urban edge.

Table 3.0-19
Alternative 4 Preserve Design

	Preserve Statistics		Preserve Design Elements		
Preserve	**Proposed Preserve[1] (ac)**	**Cumulative Area Occupied[2] (ac)**	**Core[3]**	**Buffer[4]**	**Expansion[5]**
Specific Plan					
Airport Mesa	53.26	6.34	29.27	23.99	22.93
Grapevine Mesa	54.50	4.18	10.35	44.21	6.16
Potrero	24.97	1.48	5.20	19.71	3.72
San Martinez Grande	34.41	2.29	8.24	26.17	5.95
Subtotal	**167.14**	**14.30**	**53.06**	**114.07**	**38.77**
Entrada	72.94	1.64	26.58	46.36	24.94
VCC	19.82	0.68	5.62	14.20	4.94
Grand Total	**259.90**	**16.61**	**85.26**	**174.63**	**68.65**

Notes:

[1] Proposed preserve is the total area within the preserve boundary.

[2] Cumulative area occupied the total area of mapped spineflower within the preserve between 2002 and 2007.

[3] Core identifies the perimetered occupied/preserved populations interior to buffer area and preserve boundary.

[4] Buffer represents the area within the preserve between the core perimeter and the preserve boundary (urban edge.)

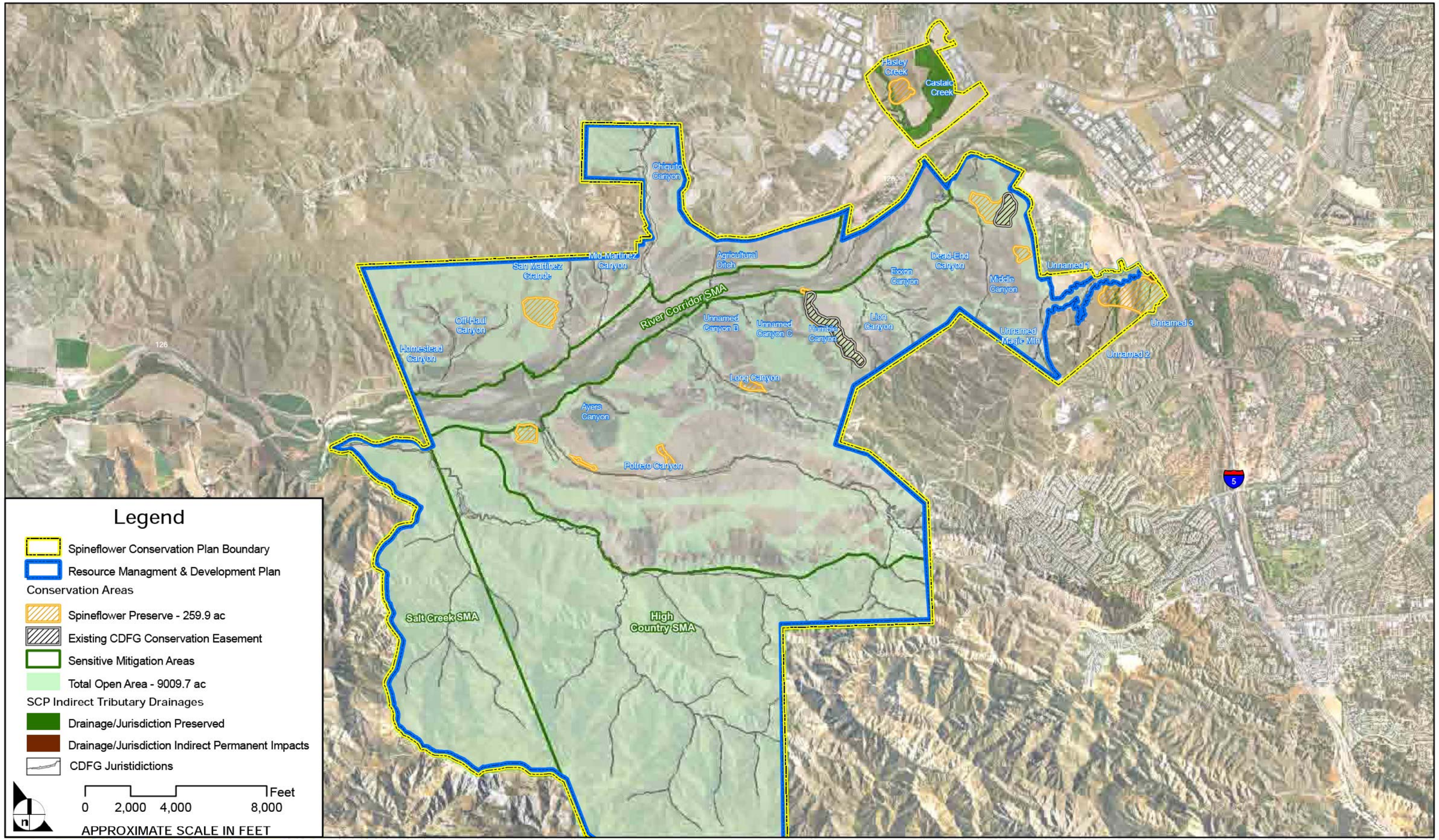
[5] Expansion area represents the area interior to the core that is not part of the cumulative area occupied.

Source: Dudek, 2007.

3.4.4.2 Summary Description of Development Facilitated by Alternative 4

If a CWA section 404 permit, Candidate Conservation Agreement, ~~CESA permit, and~~ Master Streambed Alteration Agreement, and CESA permits are issued to permit the regulated activities under Alternative 4, partial build-out of the Specific Plan would be facilitated. **Figure 3.0-23** depicts the RMDP/SCP Alternative 4 land use plan within the Project area boundary. As shown on **Table 3.0-20**, the Specific Plan's approved 20,885 residential units would be reduced by 164 units to 20,721 units, and the approved 5.55 msf of commercial uses would be reduced by 67,000 square feet.

In addition, as shown on **Table 3.0-20**, Alternative 4 would partially facilitate a portion of the Entrada planning area; specifically, Alternative 4 would reduce Entrada residential by 600 units to 1,125 units, but would not result in a reduction in commercial uses when compared to the proposed Project (Alternative 2). As to VCC, unlike the proposed Project (Alternative 2), Alternative 4 would eliminate all proposed commercial development within the VCC planning area, resulting in a loss of over 3.4 msf of commercial uses when compared to the development facilitated by the proposed Project (Alternative 2).



SOURCE: PACE 2008

FIGURE 3.0-22

ALTERNATIVE 4 SPINEFLOWER PRESERVES

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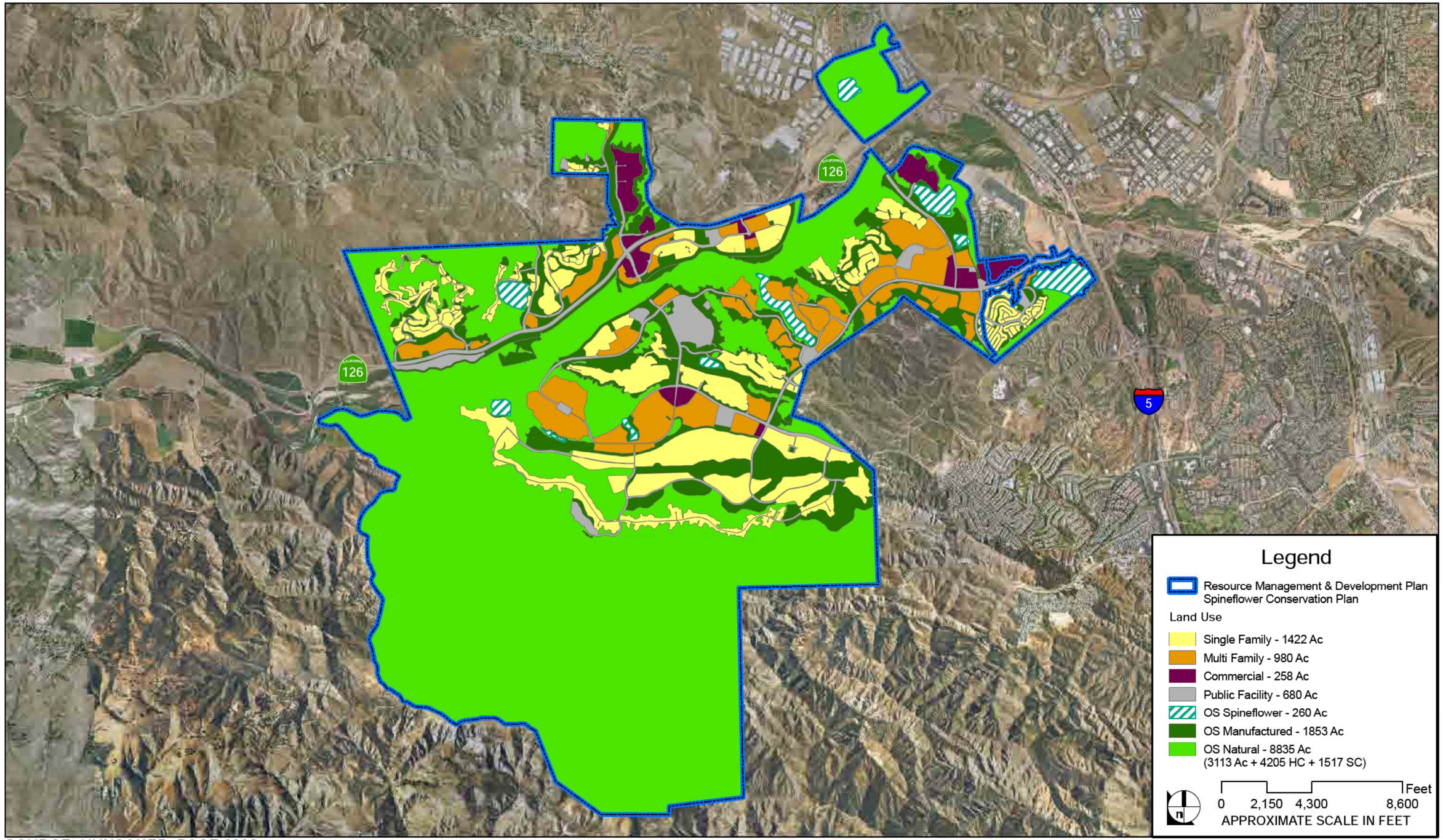

SOURCE: HUNSAKER, PACE 2008

FIGURE 3.0-23

RMDP/SCP ALTERNATIVE 4
LAND USE PLAN

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Table 3.0-20
Development Facilitated by Alternative 4

Land Use Category[1]	Acres	Res.[4] (DU)	Comm.[5] (MSF)[3]	Percent Res. Reduction (DU)	Percent Comm. Reduction (MSF)	Total Res. Reduction (DU)	Total Comm. Reduction (MSF)
Specific Plan							
Single-Family Residential	1,355.9	9,048	0	0.36%	0	33	-
Multi-Family Residential	973.7	11,673	0	1.11%	0	131	-
Commercial	226.8	0	5.48	0	1.21%	-	0.07
Public Facilities[6]	643.6	0	0	-	-	-	-
Open Space[7]	10,450.8	0	0	-	-	-	-
Subtotal Specific Plan	**13,650.9**	**20,721**[2]	**5,483**	**0.79%**	**1.21%**		
Total Specific Plan Reduction Compared to Proposed Project						**164**	**0.07**
Entrada Development							
Single-Family Residential	65.6	428	-	0%	-	0	-
Multi-Family Residential	6.4	697	-	46.26%	-	600	-
Commercial	31.4	-	0.45	-	0%	-	0
Public Facilities	36.4	-	-	-	-	-	-
Open Space	176.3	-	-	-	-	-	-
Subtotal Entrada	**316.1**	**1,125**	**0.45**	**34.78%**	**0%**	**600**	**0**
Total Entrada Reduction Compared to Proposed Project						**600**	**0**
Valencia Commerce Center							
Commercial	0	-	0	-	100%	-	1.10
Industrial Park	0	-	0	-	100%	-	2.30
Public Facilities	0	-	-	-	-	-	-
Open Space	321.3	-	-	-	-	-	-
Subtotal VCC	**321.3**	**-**	**0**	-	100%	-	
Total VCC Reduction Compared to Proposed Project						-	**3.40**
Grand Total Project Reduction Compared to Proposed Project						**764**	**3.47**

Notes:

[1] In some instances, the land use categories for the Specific Plan, Entrada, and VCC have been consolidated to simplify presentation of the land use data.

[2] The total number of permitted residential dwelling units within the Specific Plan of 20,885 may increase by 423 second units with approval of a conditional use permit, which would increase the maximum total Specific Plan dwelling units to 21,308. (Specific Plan 2003, Table 2.3-3.)

[3] MSF means million square feet.

[4] Residential includes single-family (detached homes) and multi-family (condo/townhomes).

[5] Commercial includes business park, office, retail, *etc*.

[6] Public Facilities includes parks, schools, libraries, *etc.*

[7] Open Space means natural (preserved) and manufactured open space, and includes the Specific Plan's High Country SMA/SEA 20, River Corridor SMA/SEA 23, Open Areas, spineflower preservations areas, and other specified open areas, primarily located within the Specific Plan's Estate Residential designation. Open Space does not include the Salt Creek area, adjacent to the Specific Plan boundary, comprised of about 1,517 acres. If the Salt Creek area is included, the total Open Space is approximately 10,451 acres (8,934 + 1,517 = 10,451).

Source: The Newhall Land and Farming Company, 2007.

3.4.5 Alternative 5 (Widen Tributary Drainages and Addition of VCC Spineflower Preserve)

As described in **Subsection 3.4**, above, Alternative 5 represents an effort to further reduce impacts to jurisdictional areas and expand the spineflower preserves within the Project area. The RMDP and SCP would be modified from the plans proposed by the applicant, and the requested federal and state permits, agreements, and authorizations would be granted consistent with those modifications. Under Alternative 5, all three bridges crossing the Santa Clara River and the associated bank stabilization would be constructed as under the proposed Project (Alternative 2). Major tributary drainages would be regraded and realigned under this alternative, but would result in jurisdictional impact reductions in the Chiquito Canyon, San Martinez Grande Canyon, and Potrero Canyon drainages compared to the proposed Project (Alternative 2).

Additional spineflower preserve acreage would be established in the Specific Plan's Airport Mesa, Potrero Canyon, and Grapevine Mesa areas, and on Entrada. A preserve also would be established within the VCC planning area. This alternative would provide a total of 338.6 acres of spineflower preserves, and protect 84.2 percent of the cumulative area occupied by spineflower in the Project area. The alternative would facilitate development within the Specific Plan and the Entrada planning area, including 21,155 residential units, and 5.87 msf of commercial/ industrial/business park floor area. No development would be facilitated within the VCC planning area.

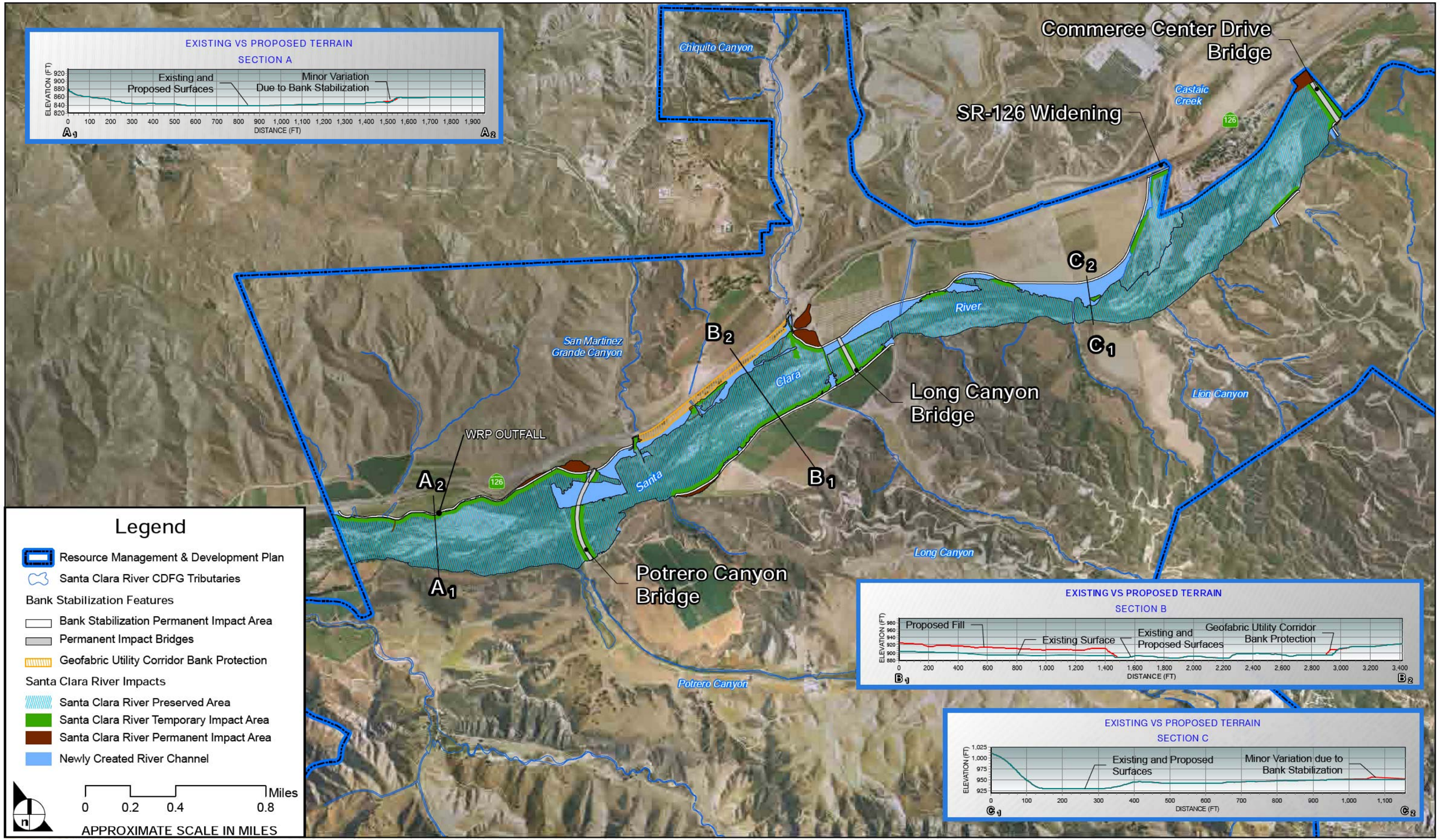
3.4.5.1 Description of Regulated Activities

3.4.5.1.1 *RMDP Component (Alternative 5)*

Under Alternative 5, infrastructure would be constructed in and adjacent to the Santa Clara River and tributary drainages within the Project area.

Santa Clara River. Figure 3.0-24 depicts the locations of the Alternative 5 proposed RMDP Santa Clara River features relative to river jurisdictional areas. As shown, two proposed bridges, Potrero Canyon bridge and Long Canyon Road bridge, and one previously approved bridge, Commerce Center Drive Bridge, would be located across the main stem of the Santa Clara River.[13] As shown, buried bank stabilization would be installed along approximately one-half of the north bank and one-third of the south bank of the Santa Clara River within the RMDP study area. Most of the bank stabilization would be constructed in upland areas. Bank stabilization would be installed upstream of Chiquito Canyon and downstream of San Martinez Grande Canyon on the north bank and between Long and Potrero Canyons on the south bank of the Santa Clara River. The WRP outfall to the Santa Clara River also would be installed as part of the approved Newhall Ranch WRP. As shown, the geofabric utility corridor bank protection is proposed on the north side of the Santa Clara River between San Martinez Grande Canyon and Chiquito Canyon. Permanent bank stabilization areas exist on the north and south banks of the Santa Clara River. Refer to **Figure 3.0-24** for locations of bank protection and stabilization features and bridge locations relative to jurisdictional areas under this alternative. In addition, this figure depicts the proposed RMDP riparian/ upland revegetation zones in green and the newly created river channel in blue.

[13] The Commerce Center Drive Bridge was previously analyzed in the Final EIS/EIR prepared and approved by the Corps and CDFG in connection with previously adopted NRMP (SCH No. 1997061090, August 1998).



SOURCE: PACE 2008

FIGURE 3.0-24

ALTERNATIVE 5 RMDP
SANTA CLARA RIVER FEATURES

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Figure 3.0-24 also presents three Santa Clara River cross-sections (A, B, and C) that depict existing and proposed surface elevations, including variations due to proposed fill and bank stabilization features. For example, up to approximately 10 feet of fill is proposed on the north side of the Santa Clara River to the west of the confluence of Castaic Creek and the Santa Clara River (refer to cross section C on **Figure 3.0-24**).

Table 3.0-21 summarizes the characteristics of the major RMDP infrastructure along the Santa Clara River, including buried bank stabilization on the north side (19,300 lf) and south side (7,652 lf) buried bank stabilization to be constructed along the Santa Clara River. This table also documents the bank stabilization, storm outlets, and the length, width, and vertical clearance of the three bridges, as well as the number of piers supporting the bridges.

Table 3.0-21
Alternative 5 Santa Clara River Major RMDP Infrastructure

Santa Clara River Location	Bank Stabilization (lf)	Outlets (No.)	Bridges			
			Length (lf)	Width (lf)	Piers (No.)	Vertical Clearance (ft)
Bridges						
Commerce Center Drive Bridge	-	-	1,200	100	9	22
Long Canyon Road Bridge	-	-	980	100	9	31-40
Potrero Canyon Road Bridge	-	-	2,265	84	21	20-24
Banks			-	-	-	-
North River Bank	19,300	22	-	-	-	-
South River Bank	7,652	3	-	-	-	-
Total	**26,952**	**25**	-	-	-	-

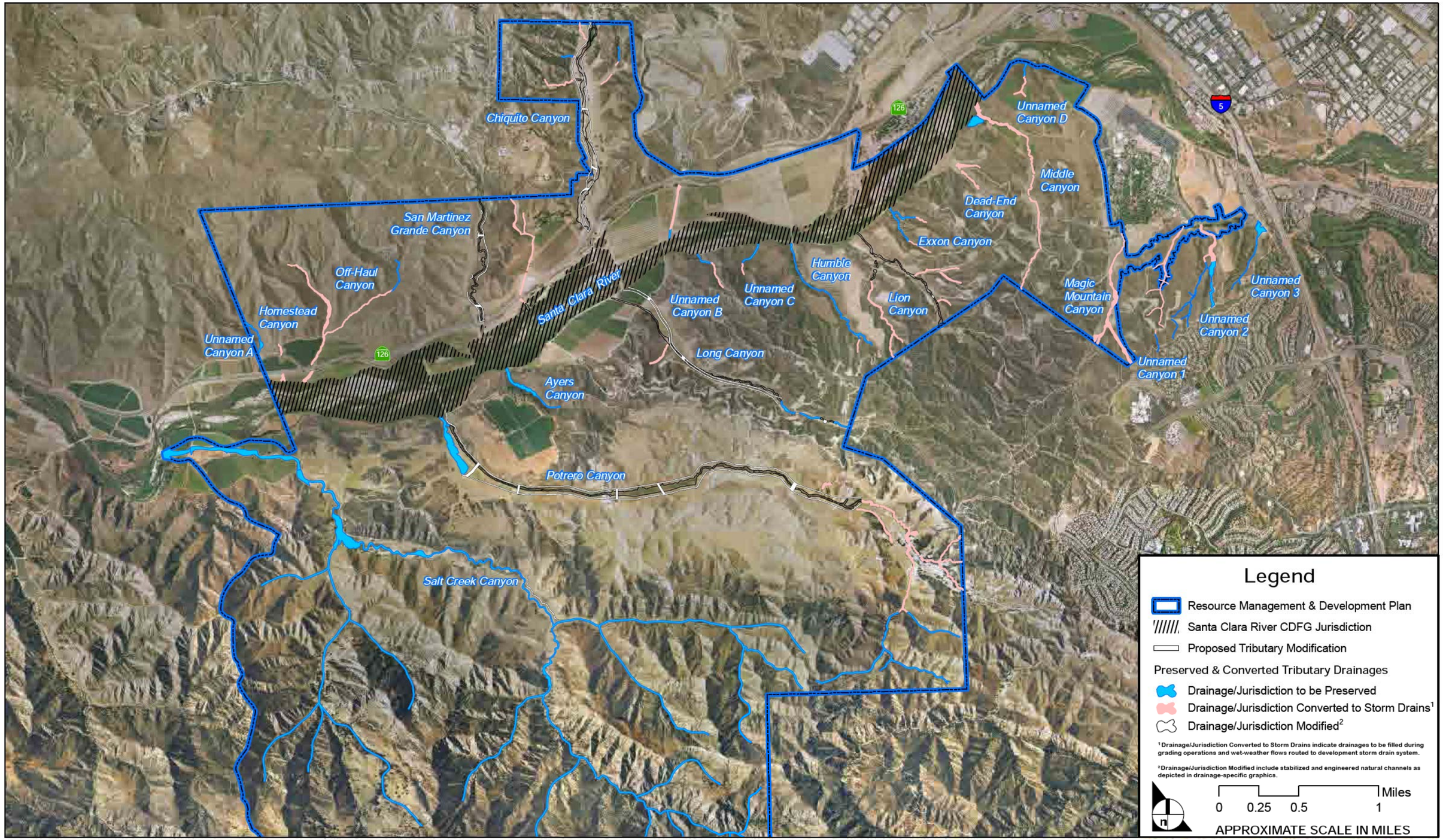
Source: RMDP, 2008.

Tributary Drainages. **Figure 3.0-25** illustrates the modified, converted, and preserved tributary drainages within the Project area under Alternative 5. In Chiquito Canyon, bank stabilization would be placed along the entire length of the eastern side of the drainage except for the cottonwood/willow woodland at the northern Project area boundary as shown on **Figure 3.0-26**. Approximately one-third of this stabilization would be placed in upland areas. Buried bank stabilization also would be placed along the western edge of the drainage except for an approximately 800-foot segment about halfway up the drainage, which would remain unstabilized (preserved). Upstream of this unstabilized area, bank protection would be installed in uplands. One new bridge is proposed under this alternative, approximately halfway up the drainage. Two culverted road crossings are proposed, as shown on **Figure 3.0-26**. In addition, the existing two-lane bridge allowing SR-126 to cross the drainage would be widened to four lanes. Approximately 6,843 lf of buried bank stabilization would be installed along the west bank, and 6,059 lf of buried bank stabilization would installed on the east bank of Chiquito Canyon. In addition, approximately 2,624 lf of drainage would be converted to buried storm drain. **Figure 3.0-26** refers to the locations of the proposed side drainage bank stabilization alignments, newly created drainage, impacted drainages, and development areas in and along Chiquito Canyon. **Table 3.0-22**

describes the Alternative 5 tributary drainage RMDP infrastructure characteristics, including the Chiquito Canyon modified drainage.

In San Martinez Grande Canyon, Alternative 5 would require bank stabilization to be constructed in upland areas along approximately two-thirds of the east bank, and along approximately one-fourth of the west bank as shown on **Figure 3.0-27**. A bridge would be constructed approximately two-thirds of the way between SR-126 and the northern Project area boundary, and another is proposed just upstream of SR-126 (**Figure 3.0-27**). In total, this alternative would involve the placement of 1,669 lf of buried bank stabilization on the west side and 3,085 lf of buried bank stabilization on the east side of the drainage (see **Table 3.0-21**). In addition, the existing bridge allowing SR-126 to cross the drainage would be widened. Refer to **Figure 3.0-27** for locations of proposed side drainage bank stabilization alignments, newly created drainage, affected drainages/jurisdictional areas, grade stabilization structures, and the development areas in the San Martinez Grande Canyon area. This figure also shows the relationship of the proposed drainage modifications in San Martinez Grande Canyon to the proposed San Martinez Grande spineflower preserve to the west.

Proposed drainage treatments in Long Canyon for Alternative 5 are as described previously for Alternative 4 in **Subsection 3.4.4.1** and shown on **Figure 3.0-20**, above.

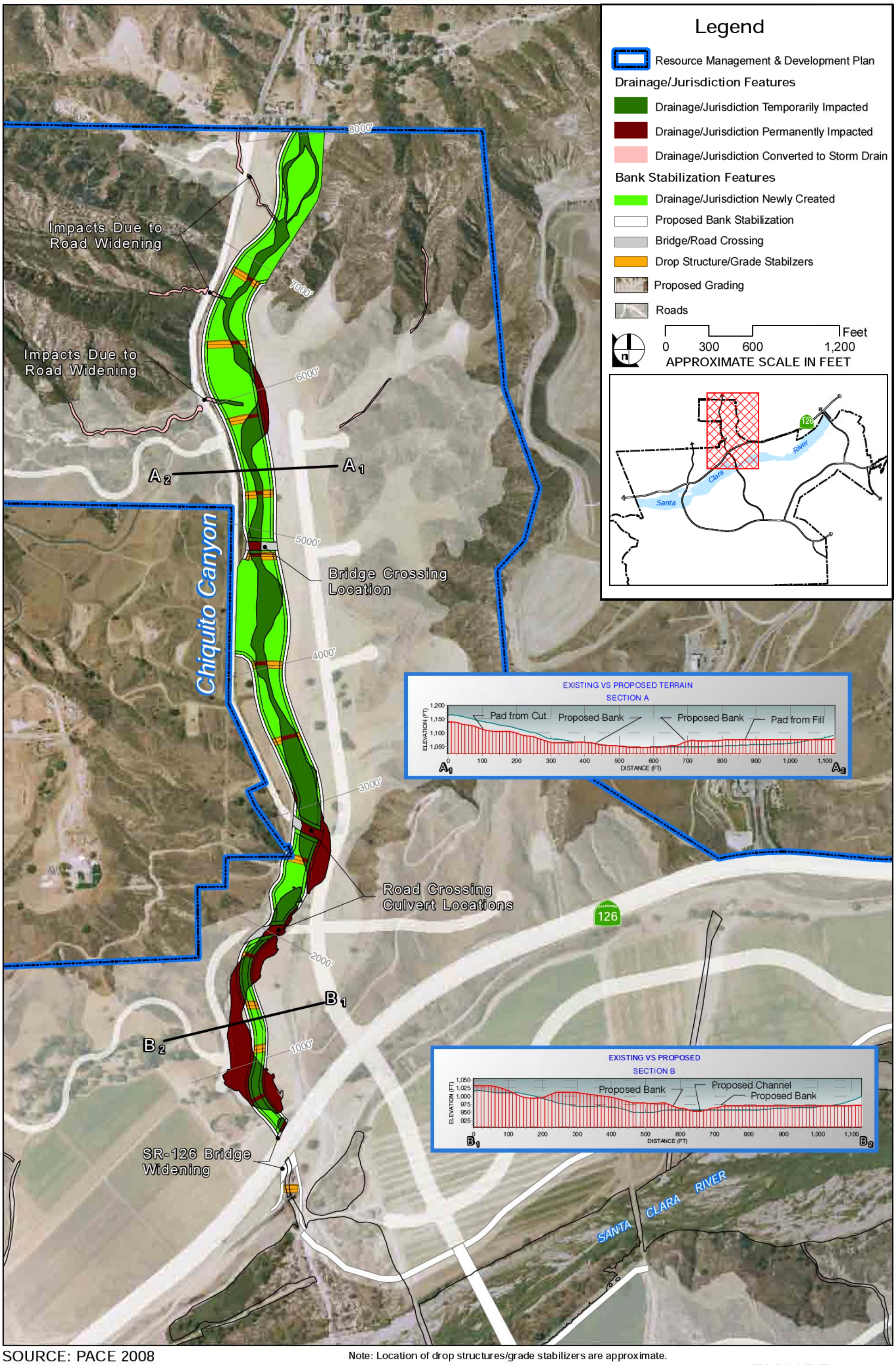


SOURCE: PACE - April 2008

FIGURE 3.0-25

ALTERNATIVE 5
MODIFIED, CONVERTED, AND PRESERVED TRIBUTARY DRAINAGES

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-25_ModifiedConvertedPreservedTributaryDrainageTreatmentsAlt5_Section3_PC1_050108.mxd



SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-26

CHIQUITO CANYON DETAIL - ALTERNATIVE 5
PROPOSED RMDP TRIBUTARY TREATMENTS

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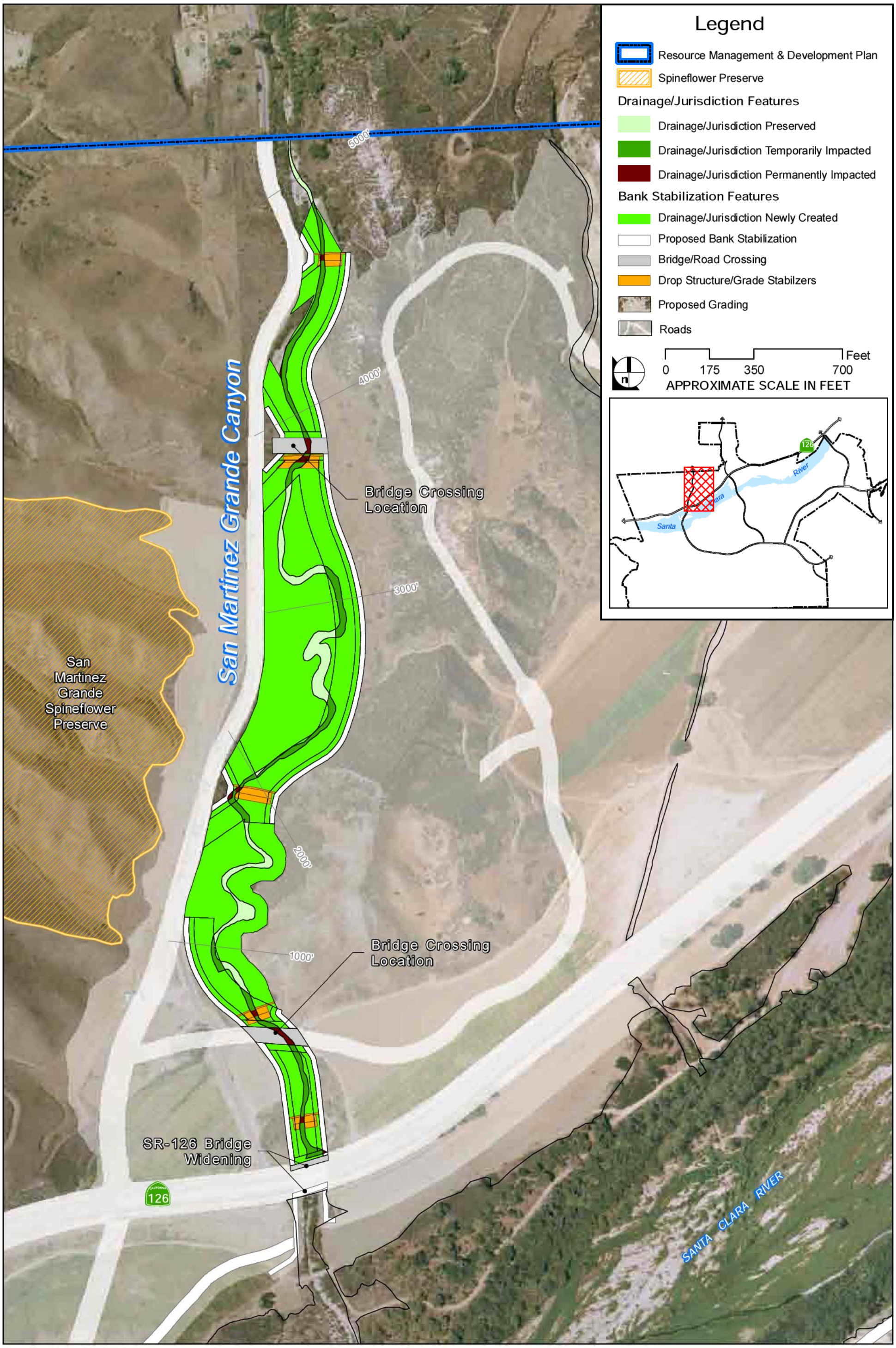

SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-27

SAN MARTINEZ GRANDE CANYON DETAIL - ALTERNATIVE 5
PROPOSED RMDP TRIBUTARY TREATMENTS

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Table 3.0-22
Alternative 5 Tributary Drainage RMDP Infrastructure

Drainage Location	Drainage Modified (lf)	Drainage Converted to Buried Storm Drain (lf)	Bank Stabilization[1] (lf)		Preserved Drainage (lf)	Road Crossings	
			West Bank	East Bank		Bridges	Culverts
Modified Drainages							
Chiquito Canyon	8,537	2,624	6,843	6,059	898	1	2
Lion Canyon	5,614	6,316	-	-	-	-	1
Long Canyon	7,627	961	6,813	6,689	1,991	-	3
Potrero Canyon	15,938	11,909	14,108	15,448	11,846	4	1
San Martinez Grande Canyon	3,050	-	1,669	3,085	2,120	2	-
Unmodified/Converted Drainages							
Agricultural Ditch	317	1,479	-	-	0	-	-
Ayers Canyon[2]	148	-	-	-	2,317	-	1
Dead-End Canyon	-	1,931	-	-	-	-	-
Exxon Canyon	-	1,276	-	-	2265	-	-
Homestead Canyon	-	609	-	-	-	-	-
Humble Canyon	-	421	-	-	5,116	-	-
Middle Canyon	-	7,439	-	-	148	-	-
Mid-Martinez Canyon	25	4,541	-	-	247	-	-
Off-Haul Canyon	-	7,593	-	-	1,185	-	-
Salt Canyon	7,290	-	-	1,992	101,470	-	-
Magic Mountain Canyon	-	6,111	-	-	-	-	-
Unnamed Canyon 1[3]	-	4,647	-	-	-	-	-
Unnamed Canyon 2	-	416	-	-	-	-	-
Unnamed Canyon A	-	-	-	-	1,293	-	-
Unnamed Canyon B	-	1,004	-	-	568	-	-
Unnamed Canyon C	-	402	-	-	869	-	-
Unnamed Canyon D	-	1,004	-	-	487	-	-
Totals	**48,545**	**60,683**	**29,443**	**33,273**	**132,820**	**7**	**8**

Notes:
[1] The lf of bank stabilization does not necessarily reflect impacts to jurisdictional areas; it only provides the linear feet of bank protection to be installed along various tributary drainages.
[2] The 148 lf of Drainage Modified is road crossing bridge/culvert-related.
[3] Unnamed Canyons 1 and 2 are located within the Entrada planning area and are given a numerical designation to distinguish them from the four other unnamed canyons located within the Specific Plan area (*i.e.*, Unnamed Canyons A-D).

Source: RMDP, 2008.

In Potrero Canyon, Alternative 5 would include buried bank stabilization in upland areas along both banks downstream of the point where the drainage begins to branch as shown on **Figure 3.0-28**. One road culvert crossing and four bridge crossings would be constructed along Potrero Canyon (**Figure 3.0-28**). Upstream, the drainage would be graded and diverted into buried storm drain as shown on **Figure 3.0-28**. Alternative 5 would involve the placement of 14,108 lf of buried bank stabilization on the west side and 15,448 lf of buried bank stabilization on the east side of the drainage, along with grade stabilization structures, as shown on **Table 3.0-22**, above. **Figure 3.0-28** also shows the relationship of the proposed drainage modifications in Potrero Canyon to the proposed Potrero spineflower preserve to the west in the vicinity of the confluence with the Santa Clara River.

Figure 3.0-28 also presents three Potrero Canyon cross sections (A, B, and C) that depict existing and proposed surface elevations, including variations due to proposed cut and fill and bank stabilization features. For example, up to approximately 50 feet of cut is proposed on the west side of Potrero Canyon near point A1 (cross section A) and up to about 80 feet of cut on the south side of Potrero Canyon is proposed near point B1 (cross section B). In addition, up to approximately 55 feet of fill is proposed on the upstream end of Potrero Canyon as shown on cross section C. Refer to **Figure 3.0-28** for the locations of proposed side drainage bank stabilization alignments, newly created drainage/jurisdiction, and affected drainages/jurisdictional areas, drainage/jurisdiction converted to storm drains, and development areas in Potrero Canyon.

Proposed drainage treatments in Lion Canyon for Alternative 5 are as described previously for the proposed Project (Alternative 2) in **Subsection 3.4.2.1.1** and shown on **Figure 3.0-9**.

Like Alternatives 2, 3, and 4, one road culvert crossing would be constructed across the mouth of the Ayers Canyon drainage. No other drainage facilities would be constructed in Ayers Canyon. In addition, the existing six-lane bridge allowing SR-126 to cross the Castaic Creek drainage would be expanded to eight lanes.

3.4.5.1.2 *SCP Component (Alternative 5)*

Under the SCP component, specific portions of the Specific Plan would be designated as spineflower preserves. As described in the SCP, the 20.26-acre existing Airport Mesa conservation easement would be contained within an expanded 62.09-acre spineflower preserve, the 44-acre existing Grapevine Mesa conservation easement would be designated as an expanded 54.50-acre preserve, a 24.97-acre expanded spineflower preserve would be established west of the mouth of Potrero Canyon, and a 50.46-acre expanded preserve would be established west of San Martinez Grande Canyon.

In addition, Alternative 5 would include the establishment of a 115.76-acre preserve within the Entrada planning area and a 30.83-acre preserve in the VCC planning area. **Figure 3.0-29** depicts the Alternative 5 expanded spineflower preserves relative to connectivity between the preserves and the approved and proposed open space within the SCP study area. Refer to **Table 3.0-23**, which summarizes the Alternative 5 spineflower preserve characteristics, including spineflower acreages proposed to be preserved and taken.

SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-28

POTRERO CANYON DETAIL - ALTERNATIVE 5
PROPOSED RMDP TRIBUTARY TREATMENTS

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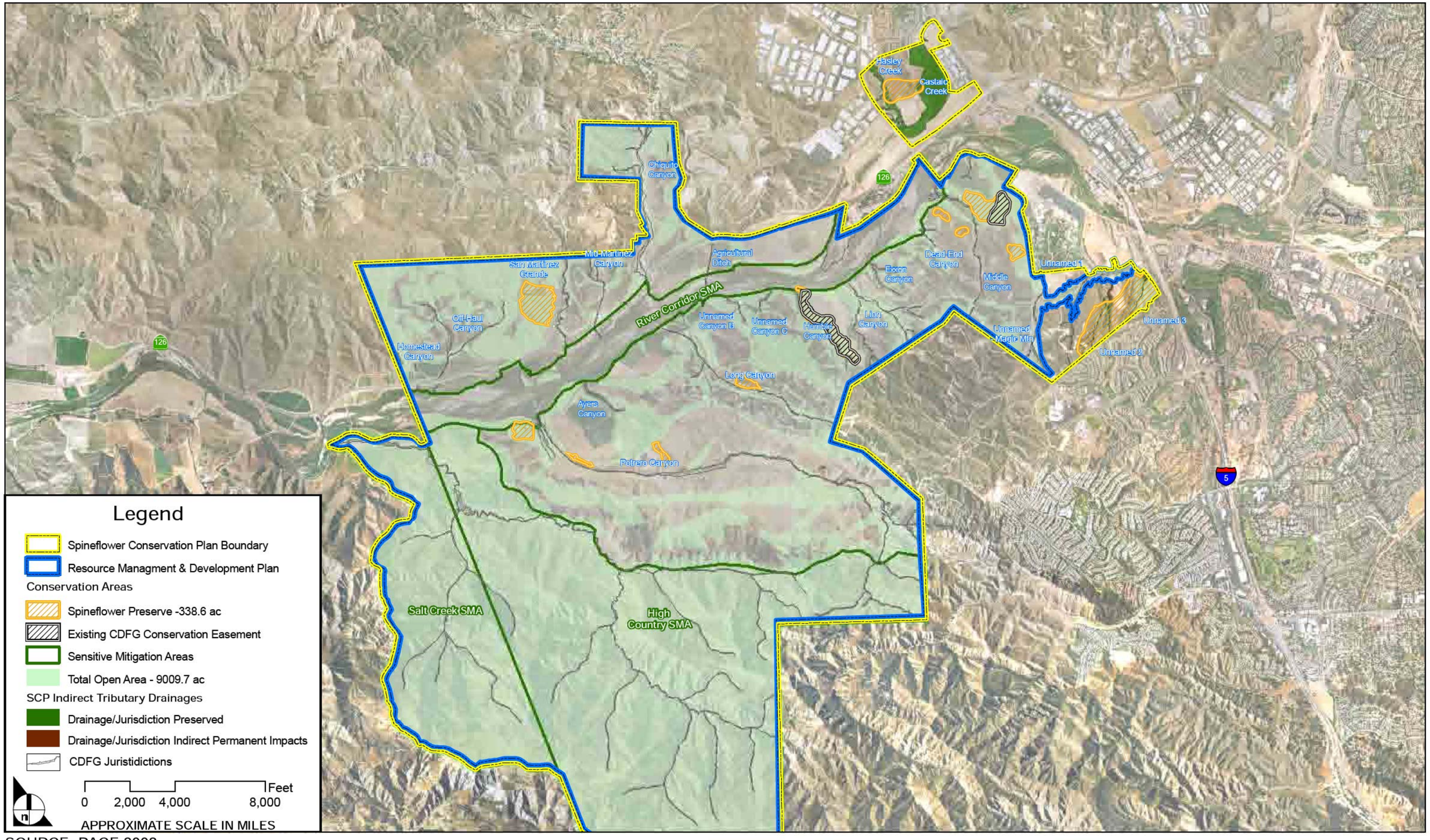

SOURCE: PACE 2008

FIGURE 3.0-29

ALTERNATIVE 5 SPINEFLOWER PRESERVES

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Table 3.0-23
Spineflower Preserve Alternatives Summary
Alternative 5

Location	Preserve Size (ac)	Spineflower Preserved (ac)	Spineflower Impacted (ac)	Percent Preserved (ac)	Percent Taken (ac)
Specific Plan					
Airport Mesa	62.09	7.18	1.18	85.9%	14.1%
Grapevine Mesa	54.50	4.18	0.70	85.7%	14.3%
Potrero	24.97	1.48	0.17	89.7%	10.3%
San Martinez Grande	50.46	2.29	0.00	100.0%	0.0%
Subtotal	**192.02**	**15.14**	**2.04**	**88.1%**	**11.9%**
Entrada	115.76	1.03	1.08	48.7%	51.3%
Valencia Commerce Center	30.83	0.85	0.00	100.0%	0.0%
Grand Total	**338.61**	**16.96**	**3.18**	**84.2%**	**15.8%**

Source: Dudek, 2007.

Table 3.0-24 summarizes each of the Alternative 5 proposed preserve areas and the preserve design elements, including the core or occupied spineflower population areas, the interior areas within the core that allow for expansion of the preserves, and the designated buffer, which represents the area within the preserve between the core perimeter and the outer preserve boundary or urban edge.

Table 3.0-24
Alternative 5 Preserve Design

	Preserve Statistics		Preserve Design Elements		
Preserve	**Proposed Preserve[1] (ac)**	**Cumulative Area Occupied[2] (ac)**	**Core[3]**	**Buffer[4]**	**Expansion[5]**
Specific Plan					
Airport Mesa	62.09	7.18	31.37	30.82	24.19
Grapevine Mesa	54.50	4.18	10.35	44.19	6.16
Potrero	24.97	1.48	5.20	19.63	3.72
San Martinez Grande	50.46	2.29	8.24	42.22	5.95
Subtotal	**192.02**	**15.14**	**55.16**	**136.86**	**40.02**
Entrada	115.76	1.03	9.00	106.76	7.97
VCC	30.83	0.80	6.44	24.39	5.64
Grand Total	**338.61**	**16.96**	**70.60**	**268.01**	**53.63**

Notes:
1 Proposed preserve is the total area within the preserve boundary.
2 Cumulative area occupied the total area of mapped spineflower within the preserve between 2002 and 2007.
3 Core identifies the perimetered occupied/preserved populations interior to buffer area and preserve boundary.
4 Buffer represents the area within the preserve between the core perimeter and the preserve boundary (urban edge.)
5 Expansion area represents the area interior to the core that is not part of the cumulative area occupied.

Source: Dudek, 2007.

3.4.5.2 Summary Description of Development Facilitated by Alternative 5

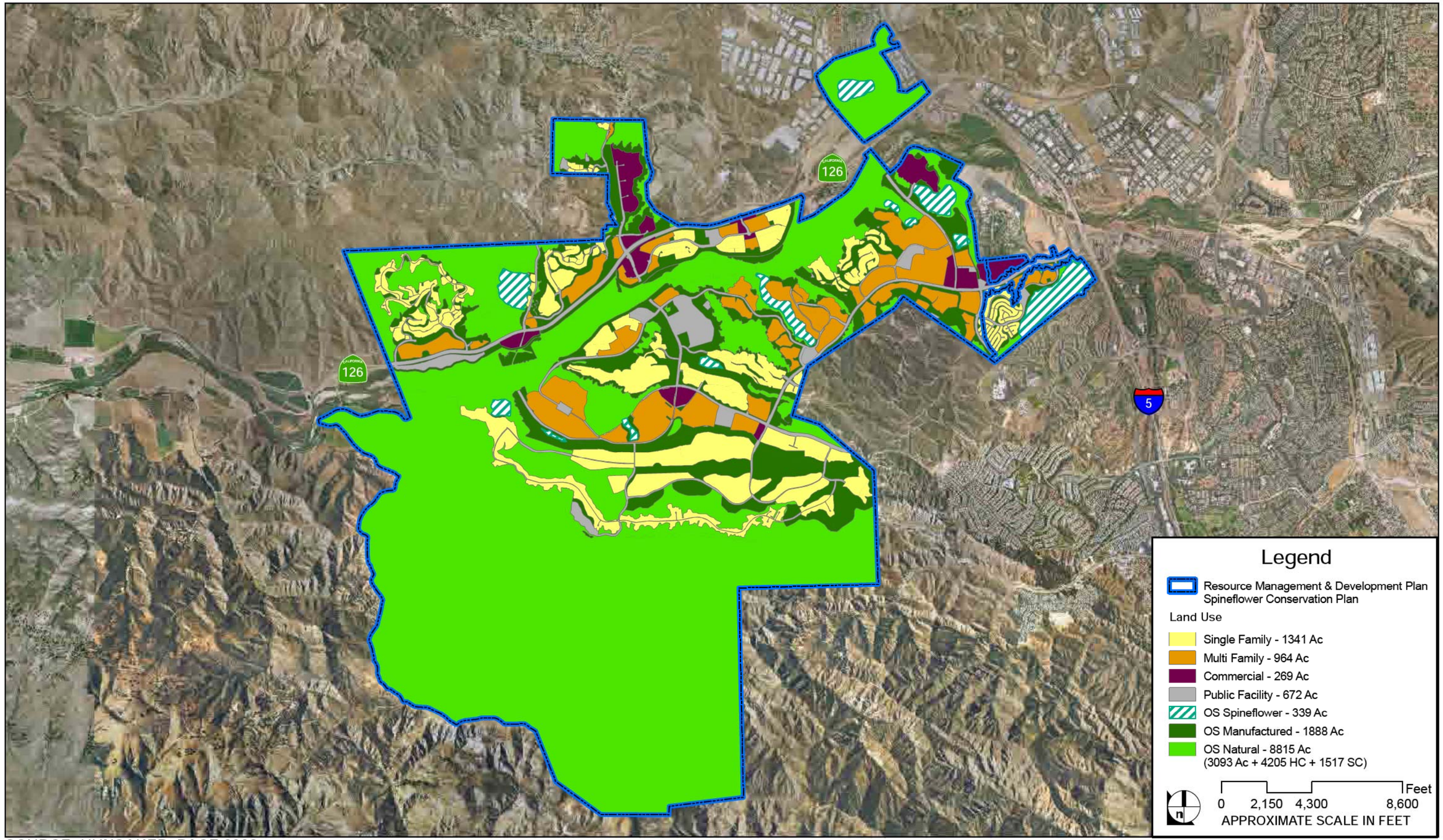
If a CWA section 404 permit, Candidate Conservation Agreement, ~~CESA permit, and~~ Master Streambed Alteration Agreement, and CESA permits are issued to permit the regulated activities under Alternative 5, partial build-out of the Specific Plan would be facilitated. **Figure 3.0-30** depicts the RMDP/SCP Alternative 5 land use plan within the Project area boundary. As shown on **Table 3.0-25**, the Specific Plan's approved 20,885 residential units would be reduced by 689 units to 20,196 units, and the approved 5.55 msf of commercial uses would be reduced by 135,000 square feet.

In addition, as shown on **Table 3.0-25**, Alternative 5 would partially facilitate a portion of the Entrada planning area; specifically, Alternative 5 would reduce Entrada residential by 766 units to 959 units, but would not result in a reduction in commercial uses when compared to the proposed Project (Alternative 2). As to VCC, unlike the proposed Project (Alternative 2), Alternative 5 would eliminate all proposed commercial development within the VCC planning area, resulting in a loss of over 3.4 msf of commercial uses when compared to the development facilitated by the proposed Project (Alternative 2).

3.4.6 Alternative 6 (Elimination of Planned Commerce Center Drive Bridge and Maximum Spineflower Expansion/Connectivity)

As described in **Subsection 3.4**, above, Alternative 6 represents an effort to further reduce impacts to jurisdictional areas and expand the spineflower preserves within the Project area. The RMDP and SCP would be modified from the plans proposed by the applicant, and the requested federal and state permits, agreements, and authorizations would be granted consistent with those modifications. Under Alternative 6, two bridges across the Santa Clara River (Potrero and Long) and the associated bank stabilization would be constructed. The previously-approved Commerce Center Drive bridge would not be constructed under this alternative. Major tributary drainages would be regraded and realigned under this alternative. However, all realigned channels would be wider under this alternative than under the proposed Project (Alternative 2), and the majority of proposed road crossings along the drainages would be bridges as opposed to culverts.

This alternative would designate spineflower preserves on all of the applicant's property with known spineflower populations (Specific Plan, four preserves; Entrada, one preserve; and VCC, one preserve). Alternative 6 would significantly increase preserve acreage, and provide a total of 891.2 acres of spineflower preserves, protecting 88.5 percent of the cumulative area occupied by spineflower in the Project area. The alternative would facilitate development within the Specific Plan and the Entrada planning area, including 20,212 residential units and 5.78 msf of commercial/industrial/business park floor area. No development would be facilitated within the VCC planning area.



SOURCE: HUNSAKER, PACE 2008

FIGURE 3.0-30

RMDP/SCP ALTERNATIVE 5
LAND USE PLAN

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Table 3.0-25
Development Facilitated By Alternative 5

Land Use Category[1]	Acres	Res.[4] (DU)	Comm.[5] (MSF)[3]	Percent Res. Reduction (DU)	Percent Comm. Reduction (MSF)	Total Res. Reduction (DU)	Total Comm. Reduction (MSF)
Specific Plan							
Single-Family Residential	1,287.0	8,900	-	1.99%	-	181	-
Multi-Family Residential	945.0	11,296	-	4.30%	-	508	-
Commercial	239.8	-	5.42	-	2.43%	-	0.14
Public Facilities[6]	640.5	-	-	-	-	-	-
Open Space[7]	10,538.3	-	-	-	-	-	-
Subtotal Specific Plan	**13,650.7**	**20,196**[2]	**5.42**	**3.30%**	**2.43%**	**689**	**0.14**
Total Specific Plan Reduction Compared to Proposed Project						**689**	**0.14**
Entrada Development							
Single-Family Residential	53.9	262	-	38.79%	-	166	-
Multi-Family Residential	19.4	697	-	46.26%	-	600	-
Commercial	29.4	-	0.45	-	0%	-	0
Public Facilities	31.7	-	-	-	-	-	-
Open Space	181.7	-	-	-	-	-	-
Subtotal Entrada	**316.1**	**959**	**0.45**	**44.41%**	**0%**	**766**	**0**
Total Entrada Reduction Compared to Proposed Project						**766**	**0**
Valencia Commerce Center							
Commercial	0	-	0	-	100%	-	1.10
Industrial Park	0	-	0	-	100%	-	2.30
Public Facilities	0	-	-	-	-	-	-
Open Space	321.3	-	-	-	-	-	-
Subtotal VCC	**321.3**	**-**	**0**	-	100%	-	**3.40**
Total VCC Reduction Compared to Proposed Project						-	**3.40**
Grand Total Project Reduction Compared to Proposed Project						**1,455**	**3.54**

Notes:

[1] In some instances, the land use categories for the Specific Plan, Entrada, and VCC have been consolidated to simplify presentation of the land use data.

[2] The total number of permitted residential dwelling units within the Specific Plan of 20,885 may increase by 423 second units with approval of a conditional use permit, which would increase the maximum total Specific Plan dwelling units to 21,308. (Specific Plan 2003, Table 2.3-3.)

[3] MSF means million square feet.

[4] Residential includes single-family (detached homes) and multi-family (condo/townhomes).

[5] Commercial includes business park, office, retail, *etc*.

[6] Public Facilities includes parks, schools, libraries, *etc.*

[7] Open Space means natural (preserved) and manufactured open space, and includes the Specific Plan's High Country SMA/SEA 20, River Corridor SMA/SEA 23, Open Areas, spineflower preservations areas, and other specified open areas, primarily located within the Specific Plan's Estate Residential designation. Open Space does not include the Salt Creek area, adjacent to the Specific Plan boundary, comprised of about 1,517 acres. If the Salt Creek area is included, the total Open Space is approximately 10,538 acres (9,021 + 1,517 = 10,538).

Source: The Newhall Land and Farming Company, 2007.

3.4.6.1 Description of Regulated Activities

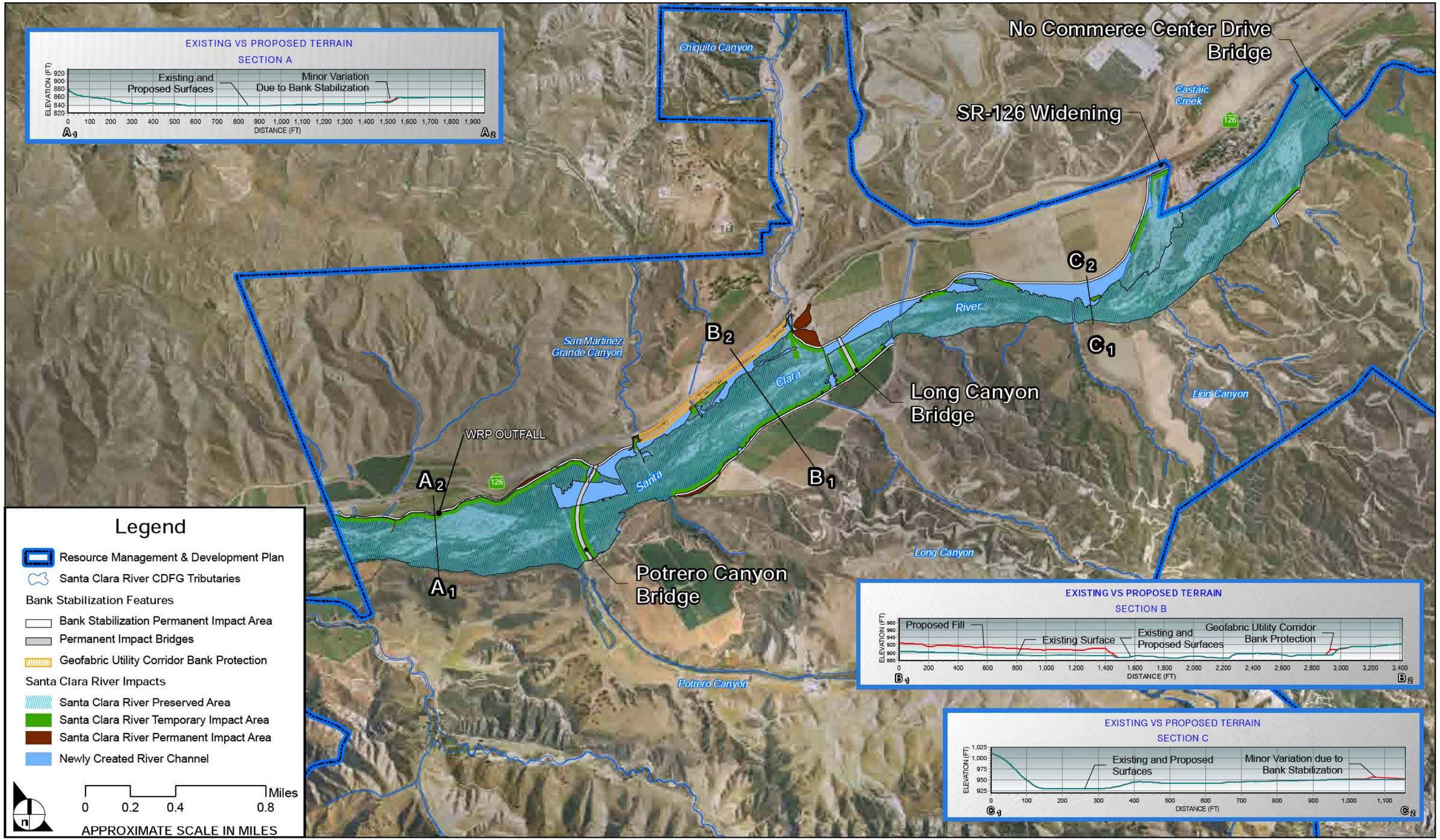
3.4.6.1.1 *RMDP Component (Alternative 6)*

Under Alternative 6, infrastructure would be constructed in and adjacent to the Santa Clara River and tributary drainages within the Project area.

Santa Clara River. **Figure 3.0-31** depicts the locations of the Alternative 6 proposed RMDP Santa Clara River features relative to river jurisdictional areas. As shown, Alternative 6 would involve construction of two bridges across the Santa Clara River; one at the mouth of Potrero Canyon (Potrero Canyon Bridge) and one at the mouth of Long Canyon (Long Canyon Road Bridge). The previously approved bridge at Commerce Center Drive would not be constructed under this alternative. The alternative also would involve construction of buried bank stabilization along approximately one-half of the north bank and one-third of the south bank of the Santa Clara River within the RMDP area as shown on **Figure 3.0-31**. Most of the bank stabilization along the Santa Clara River would occur in upland areas. The WRP outfall to the Santa Clara River also would be constructed. In addition, as proposed, geofabric utility corridor bank protection is proposed on the north side of the Santa Clara River between San Martinez Grande Canyon and Chiquito Canyon. In addition, this figure depicts the proposed RMDP riparian/ upland revegetation zones in green and the newly created river channel in blue.

Figure 3.0-31 also presents three Santa Clara River cross sections (A, B, and C) that depict existing and proposed surface elevations, including variations due to proposed fill and bank stabilization features. For example, up to approximately 20 feet of fill is proposed on the south side of the Santa Clara River to the west of the proposed Long Canyon Road Bridge (refer to cross section B on **Figure 3.0-31**). In addition, approximately 10 feet of fill is proposed on the north side of the Santa Clara River in the vicinity of Point C2 (refer to cross section C on **Figure 3.0-31**).

Table 3.0-26 summarizes the characteristics of the major RMDP infrastructure along the Santa Clara River, including north side (18,927 lf) and south side (7,149 lf) buried bank stabilization to be constructed along the Santa Clara River. Like Alternatives 3, 4 and 5, this table shows 22 storm drain outlets along the north bank and three such outlets on the south bank of the Santa Clara River (25 storm drain outlets). In addition, the table documents the length, width, and vertical clearance of the three bridges, as well as the number of piers supporting the bridges.



SOURCE: PACE 2008

FIGURE 3.0-31

ALTERNATIVE 6 RMDP
SANTA CLARA RIVER FEATURES

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Table 3.0-26
Alternative 6 Santa Clara River Major RMDP Infrastructure

Santa Clara River Location	Bank Stabilization (lf)	Outlets (No.)	Bridges			
			Length (lf)	Width (lf)	Piers (No.)	Vertical Clearance (ft)
Bridges						
Commerce Center Drive Bridge	-	-	-	-	-	-
Long Canyon Road Bridge	-	-	980	100	9	31-40
Potrero Canyon Road Bridge	-	-	2,365	84	22	20-24
Banks						
North River Bank	18,927	22	-	-	-	-
South River Bank	7,149	3	-	-	-	-
Total	**26,076**	**25**	**-**	**-**	**-**	**-**

Source: RMDP, 2008.

Tributary Drainages. **Figure 3.0-32** illustrates the modified, converted, and preserved tributary drainages within the Project area under Alternative 6. Proposed drainage treatments in Chiquito Canyon for Alternative 6 are as described previously for Alternative 3 in **Subsection 3.4.3.1.1** and as shown on **Figure 3.0-14**, above. **Table 3.0-27** describes the Alternative 6 tributary drainage RMDP infrastructure characteristics, including the Chiquito Canyon modified drainage.

Table 3.0-27
Alternative 6 Tributary Drainage RMDP Infrastructure

Drainage Location	Drainage Modified (lf)	Drainage Converted to Buried Storm Drain (lf)	Bank Stabilization[1] (lf)		Preserved Drainage (lf)	Road Crossings	
			West Bank	East Bank		Bridges	Culverts
Modified Drainages							
Chiquito Canyon	8,698	2,463	7,267	6,252	898	-	3
Lion Canyon	5,614	6,316	-	-	-	-	1
Long Canyon	4,579	961	4,023	3,898	5,039	-	3
Potrero Canyon	24,323	1,012	24,772	22,744	14,358	7	-
San Martinez Grande Canyon	563	-	1,206	3,248	4,606	2	-
Unmodified/Converted Drainages							
Agricultural Ditch	317	1,479	-	-	-	-	-
Ayers Canyon[2]	147	-	-	-	2,318	-	1
Dead-End Canyon	-	939	-	-	991	-	-
Exxon Canyon	-	1,276	-	-	2,265	-	-
Homestead Canyon	-	609	-	-	-	-	-
Humble Canyon	-	388	-	-	5,150	-	-
Middle Canyon	-	3,209	-	-	4,377	-	-
Mid-Martinez Canyon	25	4,541	-	-	247	-	-
Off-Haul Canyon	-	7,593	-	-	1,185	-	-
Salt Canyon	7,290	-	-	1,992	101,470	-	-
Magic Mountain Canyon	-	6,111	-	-	-	-	-
Unnamed Canyon 1[3]	-	4,647	-	-	-	-	-
Unnamed Canyon 2	6	384	-	-	26	-	-
Unnamed Canyon A	-	-	-	-	1,293	-	-
Unnamed Canyon B	-	1,004	-	-	568	-	-
Unnamed Canyon C	-	402	-	-	869	-	-
Unnamed Canyon D	-	-	-	-	1,492	-	-
Totals	**51,561**	**43,334**	**37,268**	**38,134**	**147,153**	**9**	**8**

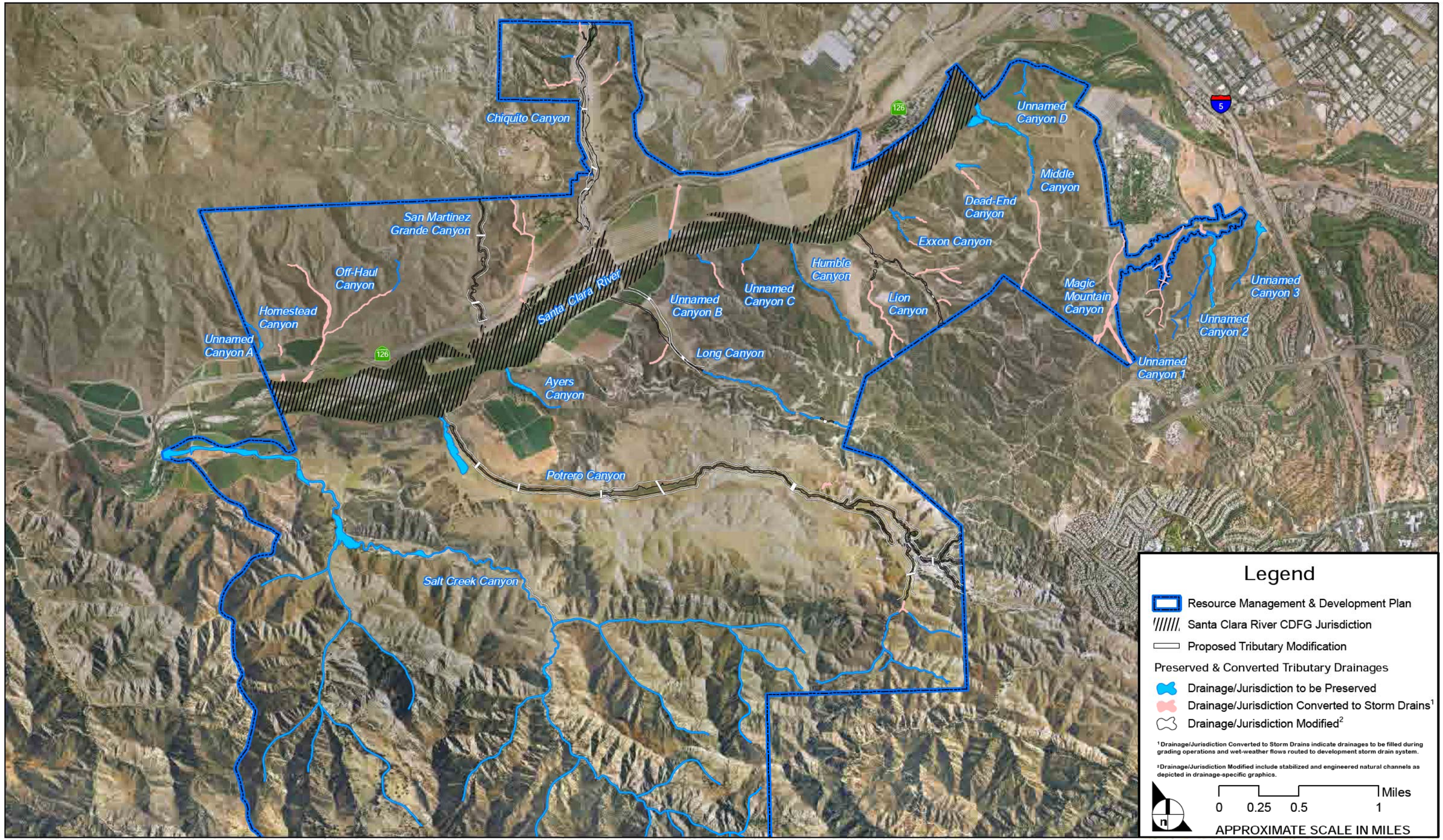
Notes:

[1] The lf of bank stabilization does not necessarily reflect impacts to jurisdictional areas; it only provides the linear feet of bank protection to be installed along various tributary drainages.

[2] The 147 lf of Drainage Modified is road crossing bridge/culvert-related.

[3] Unnamed Canyons 1 and 2 are located within the Entrada planning area and are given a numerical designation to distinguish them from the four other unnamed canyons located within the Specific Plan area (*i.e.*, Unnamed Canyons A-D).

Source: RMDP, 2008.



SOURCE: PACE - April 2008

FIGURE 3.0-32

ALTERNATIVE 6
MODIFIED, CONVERTED, AND PRESERVED TRIBUTARY DRAINAGES

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In San Martinez Grande Canyon, bank stabilization would be installed on both the west and east bank in the areas shown on **Figure 3.0-33**. Approximately 1,206 lf of buried bank stabilization along the west bank and 3,248 lf of buried bank stabilization along the east bank would be installed under this alternative. Two proposed bridge crossings would cross the drainage as shown on **Figure 3.0-33**. In addition, the SR-126 bridge crossing San Martinez Grande Canyon would be widened as part of the Caltrans SR-126 widening project (**Figure 3.0-33**). Refer to **Figure 3.0-33** for locations of proposed side drainage bank stabilization alignments, newly created drainage, affected drainages/ jurisdictional areas, grade stabilization structures, and bridge locations proposed in San Martinez Grande Canyon under Alternative 6.

Under Alternative 6, the upper half of the Long Canyon drainage within the Project area would remain unstabilized (preserved) as shown on **Figure 3.0-34**. The lower portion of the existing drainage would be graded and the drainage relocated to the north and lined with buried bank stabilization. Two new road culvert crossings would cross the drainage within one-half mile of the canyon mouth, and another would be installed approximately one-quarter mile downstream of the Project area boundary (at Magic Mountain Parkway; **Figure 3.0-34**). Approximately 4,023 lf of buried bank stabilization along the west bank and 3,898 lf of buried bank stabilization along the east bank would be installed under this alternative (see **Table 3.0-27**). Refer to **Figure 3.0-34** for locations of newly created drainage, preserved drainage area, permanent drainage impact areas, side drainage bank stabilization alignments, grade stabilization structures, conversion of drainage to storm drain areas, and bridge locations relative to jurisdictional areas.

Under Alternative 6, buried bank stabilization would be installed in upland areas along the full length of both banks of Potrero Canyon between the mouth and the eastern Project boundary as shown on **Figure 3.0-35**. However, the cismontane alkali marsh area at the mouth of Potrero Canyon would remain unstabilized (preserved) on the west side. Four new bridges would be constructed at approximately even intervals between the upstream end of the mesic meadow and the upstream end of the saltgrass meadow. An additional three bridges would be installed in the upstream portion of the drainage, as shown on **Figure 3.0-35**. Approximately 24,772 lf of buried bank stabilization along the west bank and 22,744 lf of buried bank stabilization along the east bank would be installed under this alternative (see **Table 3.0-27**, above). Refer to **Figure 3.0-35** for the locations of proposed side drainage bank stabilization alignments, grade stabilization structures, jurisdictional areas converted to storm drain, new proposed bridges, and newly created, preserved, and permanently impacted drainages/jurisdictional areas.

Proposed drainage treatments in Lion Canyon for Alternative 6 are as described previously for the proposed Project (Alternative 2) in **Subsection 3.4.2.1.1** and shown on **Figure 3.0-9**.

One culvert road crossing would be constructed across the mouth of the Ayers Canyon drainage. No other drainage facilities would be constructed in Ayers Canyon. In addition, the existing six-lane bridge allowing SR-126 to cross the Castaic Creek drainage would be expanded to eight lanes.

3.4.6.1.2 *SCP Component (Alternative 6)*

Under the SCP component, specific portions of the Specific Plan would be designated as spineflower preserves. As described in the SCP, the 20.26-acre existing Airport Mesa conservation easement would be

contained within an expanded 286.50-acre spineflower preserve, the 44-acre existing Grapevine Mesa conservation easement would be designated as an expanded 104.55-acre preserve, a 284.36-acre expanded spineflower preserve would be established west of the mouth of Potrero Canyon, and a 34.41-acre expanded preserve would be established west of San Martinez Grande Canyon.

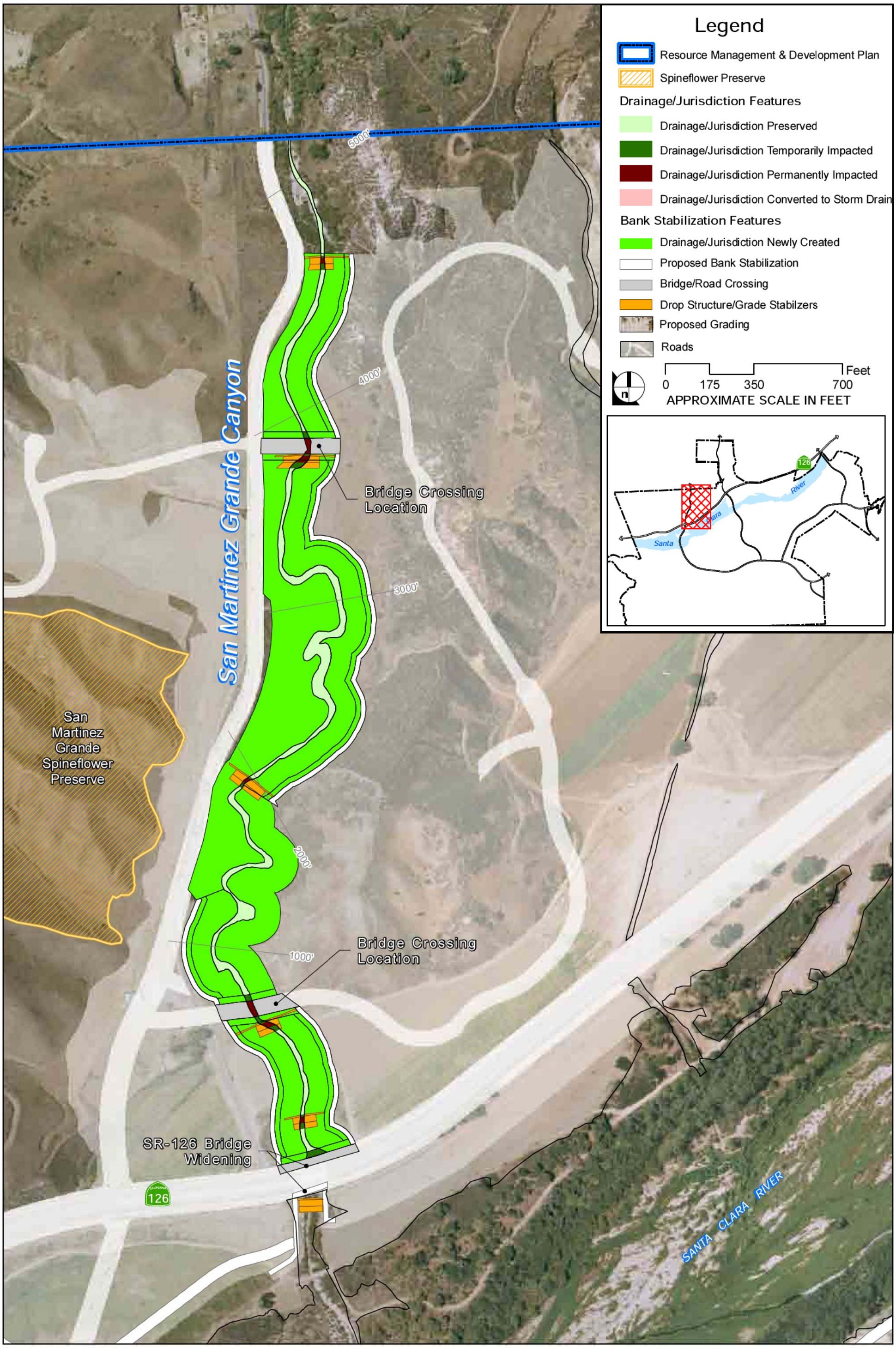
In addition, Alternative 6 would include the establishment of a 150.51-acre preserve within the Entrada planning area and a 30.83-acre preserve in the VCC planning area. **Figure 3.0-36** depicts the Alternative 6 expanded spineflower preserves relative to connectivity between the preserves and the approved and proposed open space within the SCP study area. Refer to **Table 3.0-28**, which summarizes the Alternative 6 spineflower preserve characteristics, including spineflower acreages proposed to be preserved and taken.

Table 3.0-28
Spineflower Preserve Alternatives Summary
Alternative 6

Location	Preserve Size (ac)	Spineflower Preserved (ac)	Spineflower Impacted (ac)	Percent Preserved (ac)	Percent Taken (ac)
Specific Plan					
Airport Mesa	286.50	7.75	0.61	92.7%	7.3%
Grapevine Mesa	104.55	4.02	0.86	82.3%	17.7%
Potrero	284.36	1.32	0.33	80.1%	19.9%
San Martinez Grande	34.41	2.29	0.00	100.0%	0.0%
Subtotal	**709.82**	**15.38**	**1.80**	**89.5%**	**10.5%**
Entrada	150.51	1.64	0.47	77.7%	22.3%
Valencia Commerce Center	30.83	0.85	0.00	100.0%	0.0%
Grand Total	**891.16**	**17.82**	**2.32**	**88.5%**	**11.5%**

Source: Dudek, 2007.

Table 3.0-29 summarizes each of the Alternative 6 proposed preserve areas and the preserve design elements, including the core or occupied spineflower population areas, the interior areas within the core that allow for expansion of the preserves, and the designated buffer, which represents the area within the preserve between the core perimeter and the outer preserve boundary or urban edge.



SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-33

SAN MARTINEZ GRANDE CANYON DETAIL - ALTERNATIVE 6
PROPOSED RMDP TRIBUTARY TREATMENTS

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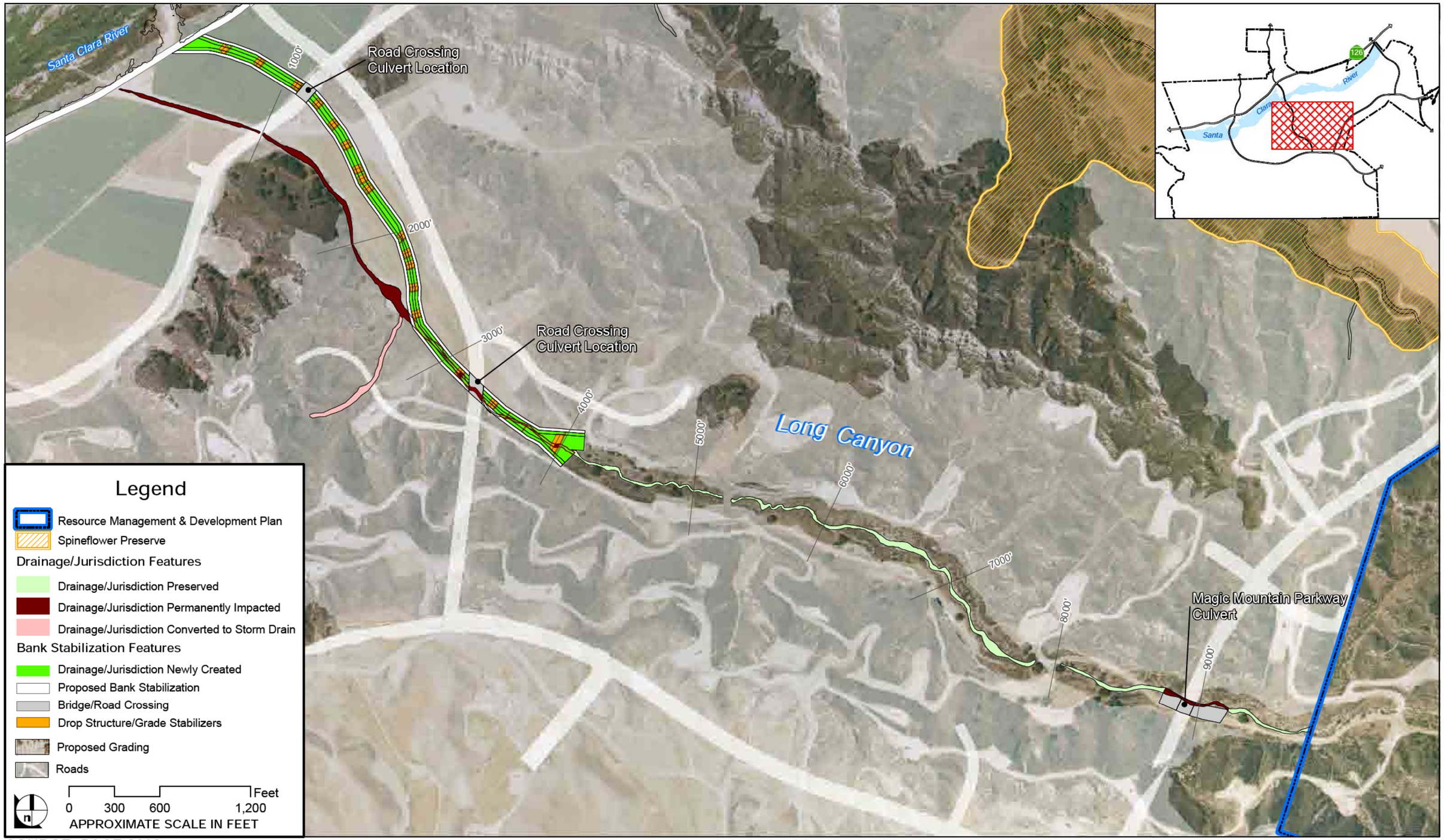

SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-34

LONG CANYON DETAIL - ALTERNATIVE 6
PROPOSED RMDP TRIBUTARY TREATMENTS

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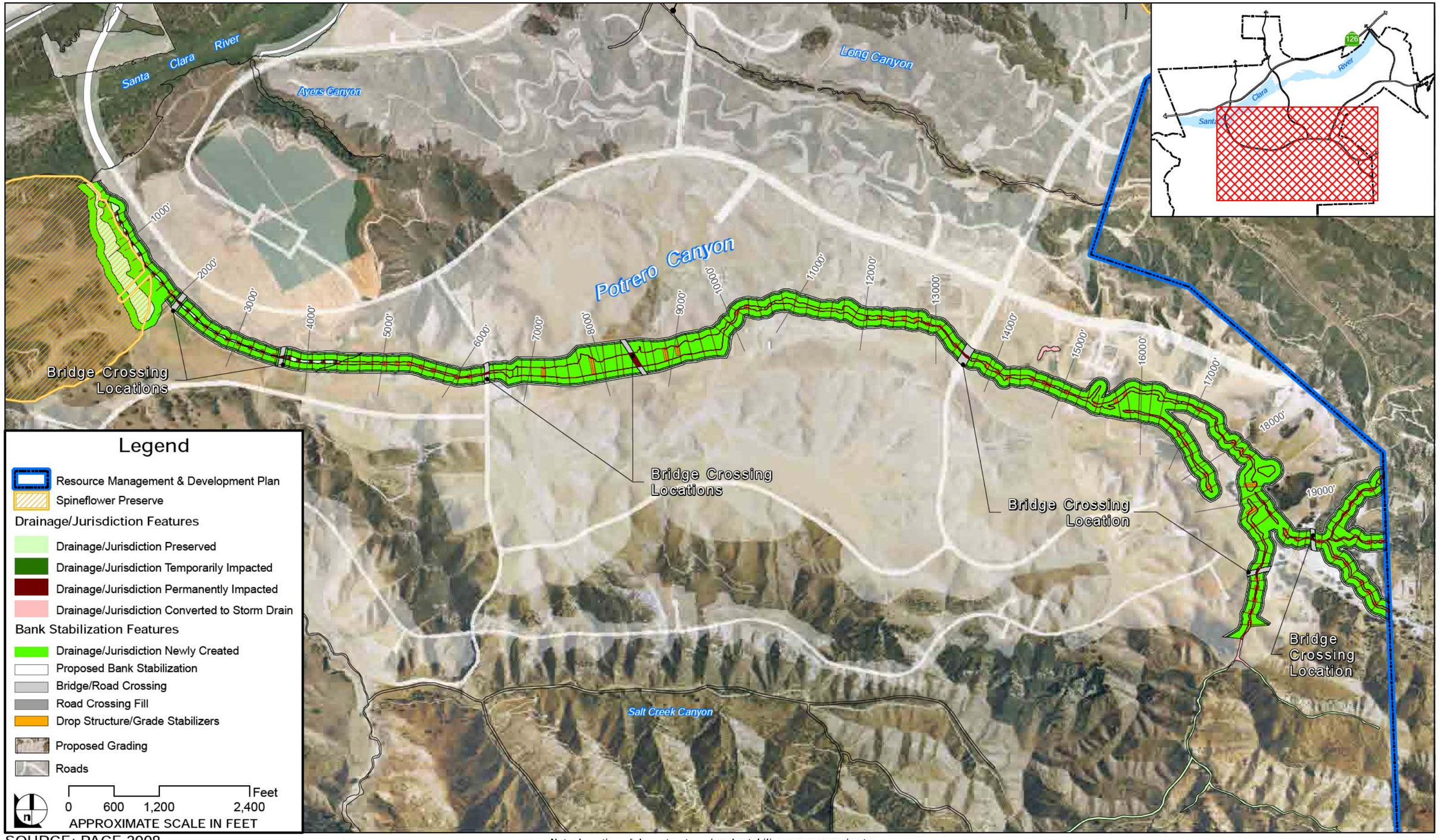

SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-35

POTRERO CANYON DETAIL - ALTERNATIVE 6
PROPOSED RMDP TRIBUTARY TREATMENTS

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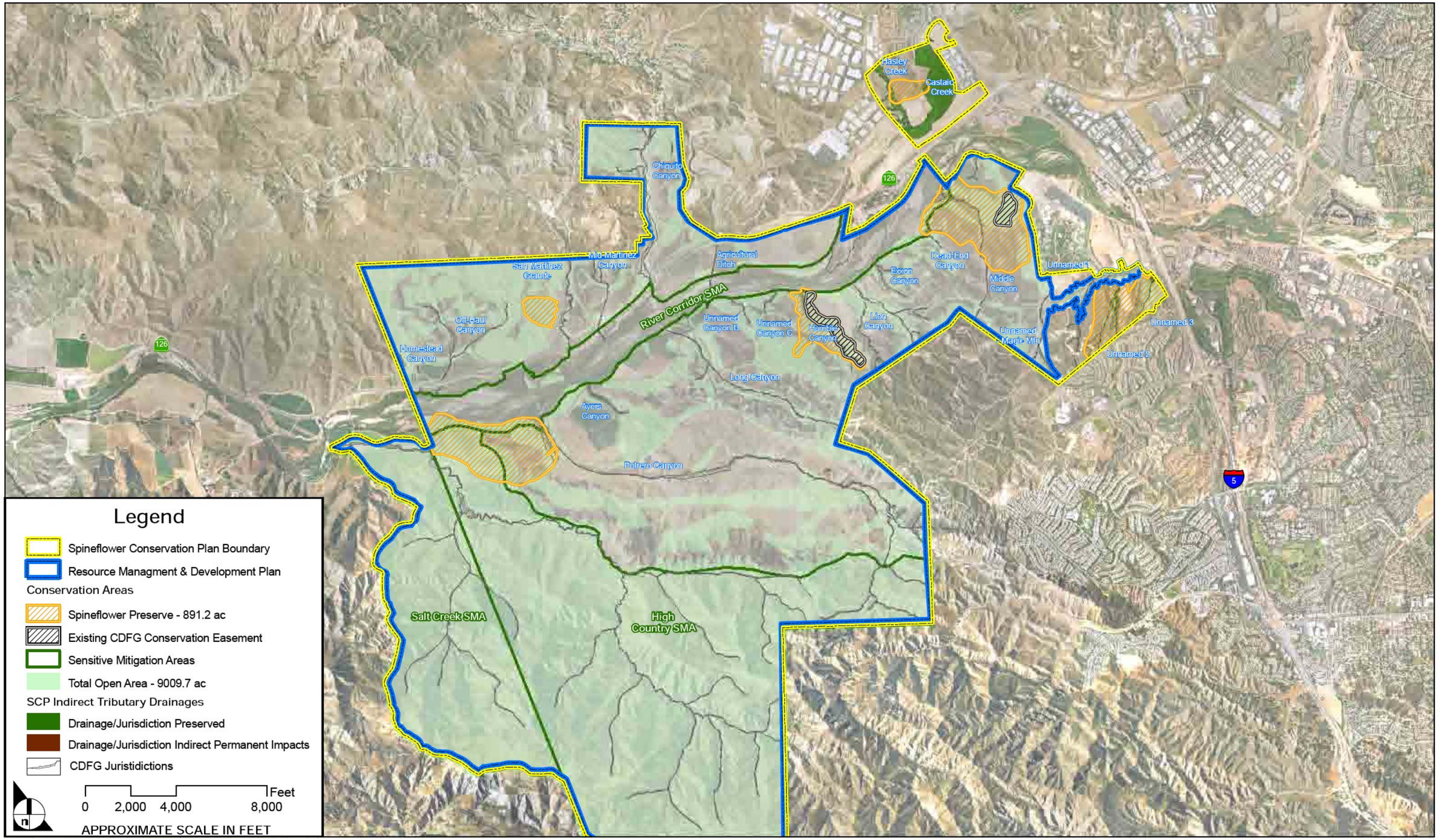

SOURCE: PACE 2008

FIGURE 3.0-36

ALTERNATIVE 6 SPINEFLOWER PRESERVES

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Table 3.0-29
Alternative 6 Preserve Design

Preserve	Preserve Statistics: Proposed Preserve[1] (ac)	Preserve Statistics: Cumulative Area Occupied[2] (ac)	Preserve Design Elements: Core[3]	Preserve Design Elements: Buffer[4]	Preserve Design Elements: Expansion[5]
Specific Plan					
Airport Mesa	286.50	7.75	172.96	113.54	165.22
Grapevine Mesa	104.55	4.02	9.01	95.53	5.00
Potrero	284.36	1.32	4.37	279.99	3.05
San Martinez Grande	34.41	2.29	8.24	26.17	5.95
Subtotal	**709.82**	**15.38**	**194.59**	**515.23**	**179.21**
Entrada	150.51	1.64	12.08	138.43	10.44
VCC	30.83	0.80	6.44	24.39	5.64
Grand Total	**891.16**	**17.82**	**213.11**	**678.05**	**195.29**

Notes:

[1] Proposed preserve is the total area within the preserve boundary.

[2] Cumulative area occupied the total area of mapped spineflower within the preserve between 2002 and 2007.

[3] Core identifies the perimetered occupied/preserved populations interior to buffer area and preserve boundary.

[4] Buffer represents the area within the preserve between the core perimeter and the preserve boundary (urban edge.)

[5] Expansion area represents the area interior to the core that is not part of the cumulative area occupied.

Source: Dudek, 2007.

3.4.6.2 Summary Description of Development Facilitated by Alternative 6

If a CWA section 404 permit, Candidate Conservation Agreement, ~~CESA permit, and~~ Master Streambed Alteration Agreement, and CESA permits are issued to permit the regulated activities under Alternative 6, partial build-out of the Specific Plan would be facilitated. **Figure 3.0-37** depicts the RMDP/SCP Alternative 6 land use plan within the Project area boundary. As shown on **Table 3.0-30**, the Specific Plan's approved 20,885 residential units would be reduced by 1,098 units to 19,787 units, and the approved 5.55 msf of commercial uses would be reduced by 216,000 square feet.

In addition, as shown on **Table 3.0-30**, Alternative 6 would partially facilitate a portion of the Entrada planning area; specifically, Alternative 6 would reduce Entrada residential by 1,300 units to 425 units, but would not result in a reduction in commercial uses when compared to the proposed Project (Alternative 2). As to VCC, unlike the proposed Project (Alternative 2), Alternative 6 would eliminate all proposed commercial development within the VCC planning area, resulting in a loss of over 3.40 msf of commercial uses when compared to the development facilitated by the proposed Project (Alternative 2).

Table 3.0-30
Development Facilitated by Alternative 6

Land Use Category[1]	Acres	Res.[4] (DU)	Comm.[5] (MSF)[3]	Percent Res. Reduction (DU)	Percent Comm. Reduction (MSF)	Total Res. Reduction (DU)	Total Comm. Reduction (MSF)
Specific Plan							
Single-Family Residential	1,269.2	8,698	-	4.22%	-	383	-
Multi-Family Residential	813.7	11,089	-	6.06%	-	715	-
Commercial	207.1	-	5.33	-	3.89%	-	0.22
Public Facilities[6]	604.6	-	-	-	-	-	-
Open Space[7]	10,756.1	-	-	-	-	-	-
Subtotal Specific Plan	**13,650.7**	**19,787**[2]	**5.33**	**5.26%**	**3.89%**	**1,098**	**0.22**
Total Specific Plan Reduction Compared to Proposed Project						**1,098**	**0.22**
Entrada Development							
Single-Family Residential	49.0	262	-	38.79%	-	166	-
Multi-Family Residential	1.4	163	-	87.43%	-	1,134	-
Commercial	29.4	-	0.45	-	0%	-	0
Public Facilities	28.1	-	-	-	-	-	-
Open Space	208.2	-	-	-	-	-	-
Subtotal Entrada	**316.1**	**425**	**0.45**	**75.36%**	**0%**	**1,300**	**0**
Total Entrada Reduction Compared to Proposed Project						**1,300**	**0**
Valencia Commerce Center							
Commercial	0	-	0	-	100%	-	1.10
Industrial Park	0	-	0	-	100%	-	2.30
Public Facilities	0	-	-	-	-	-	-
Open Space	321.3	-	-	-	-	-	-
Subtotal VCC	**321.3**	**-**	**0**	-	100%	-	
Total VCC Reduction Compared to Proposed Project						-	**3.40**
Grand Total Project Reduction Compared to Proposed Project						**2,398**	**3.62**

Notes:

[1] In some instances, the land use categories for the Specific Plan, Entrada, and VCC have been consolidated to simplify presentation of the land use data.

[2] The total number of permitted residential dwelling units within the Specific Plan of 20,885 may increase by 423 second units with approval of a conditional use permit, which would increase the maximum total Specific Plan dwelling units to 21,308. (Specific Plan 2003, Table 2.3-3.)

[3] MSF means million square feet.

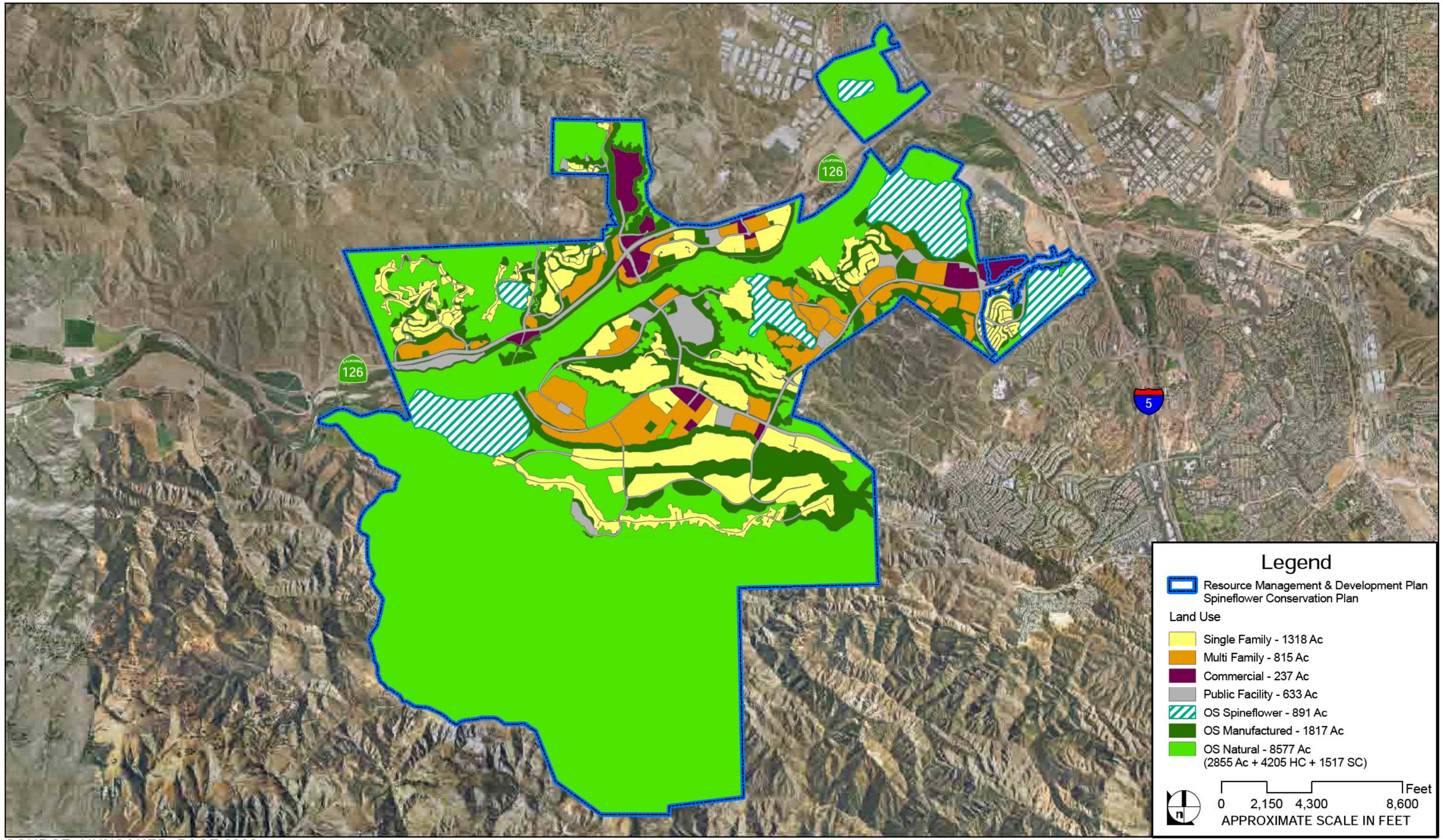
[4] Residential includes single-family (detached homes) and multi-family (condo/townhomes).

[5] Commercial includes business park, office, retail, *etc.*

[6] Public Facilities includes parks, schools, libraries, *etc*.

[7] Open Space means natural (preserved) and manufactured open space, and includes the Specific Plan's High Country SMA/SEA 20, River Corridor SMA/SEA 23, Open Areas, spineflower preservations areas, and other specified open areas, primarily located within the Specific Plan's Estate Residential designation. Open Space does not include the Salt Creek area, adjacent to the Specific Plan boundary, comprised of about 1,517 acres. If the Salt Creek area is included, the total Open Space is approximately 10,756 acres (9,239 + 1,517 = 10,756).

Source: The Newhall Land and Farming Company, 2007.



SOURCE: HUNSAKER, PACE 2008

FIGURE 3.0-37

RMDP/SCP ALTERNATIVE 6
LAND USE PLAN

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3.4.7 Alternative 7 (Avoidance of 100-Year Floodplain, Elimination of Two Planned Bridges, and Avoidance of Spineflower)

As described in **Subsection 3.4**, above, Alternative 7 represents an effort to further reduce impacts to jurisdictional areas and expand the spineflower preserves within the Project area. The RMDP and SCP would be modified from the plans proposed by the applicant, and the requested federal and state permits, agreements, and authorizations would be granted consistent with those modifications. Only one bridge across the Santa Clara River would be constructed, located at Long Canyon Road. The Potrero Canyon Road bridge and the already approved Commerce Center Drive bridge would not be constructed under this alternative. Bank stabilization along the Santa Clara River would be constructed outside the 100-year floodplain. Under this alternative, major tributary drainages would not be regraded or realigned. Bank stabilization would be constructed to protect development, but would be located outside the 100-year floodplain of these drainages. In addition, the Middle Canyon and Magic Mountain Canyon drainages, which are proposed for conversion to buried storm drains under the proposed Project (Alternative 2), would be preserved.

Alternative 7 was designed to achieve maximum avoidance of the cumulative area occupied by spineflower in the Project area. This alternative would designate spineflower preserves with 300 feet of expansion area surrounding the cumulative area occupied spineflower locations, and provide a total of 660.6 acres of spineflower preserves, protecting 98.2 percent of the cumulatively occupied spineflower acreage in the Project area. This alternative would facilitate development within the Specific Plan and the Entrada planning area, including 17,323 residential units and 3.82 msf of commercial/industrial/business park floor area. No development would be facilitated within the VCC planning area.

3.4.7.1 Description of Regulated Activities

3.4.7.1.1 *RMDP Component (Alternative 7)*

Under Alternative 7, infrastructure would be constructed in and adjacent to the Santa Clara River and tributary drainages within the Project area.

Santa Clara River. **Figure 3.0-38** depicts the locations of the Alternative 7 proposed RMDP Santa Clara River features relative to river jurisdictional areas. Bank protection would still be required to protect Specific Plan development from flooding and erosion, and would be constructed in upland areas as shown on **Figure 3.0-38**. This alternative would involve the creation of pads for residential and commercial buildings, and would require 17,425 lf of buried bank stabilization on the north bank, and 8,089 lf of buried bank stabilization on the south bank of the Santa Clara River. One bridge (Long Canyon Road Bridge) would be constructed across the Santa Clara River at the mouth of Long Canyon. In addition, the WRP outfall to the Santa Clara River would be constructed.

Refer to **Figure 3.0-38** for locations of newly created river channel, riparian/upland vegetation zones along the banks of the Santa Clara River, proposed Project bank protection, permanent impact areas, and one bridge location relative to jurisdictional areas. The geofabric utility corridor bank protection also is proposed on the north side of the Santa Clara River, as shown on **Figure 3.0-38**. This figure also presents

three Santa Clara River cross-sections (A, B, and C) that depict and proposed surface elevations, including variations due to proposed fill and bank stabilization features.

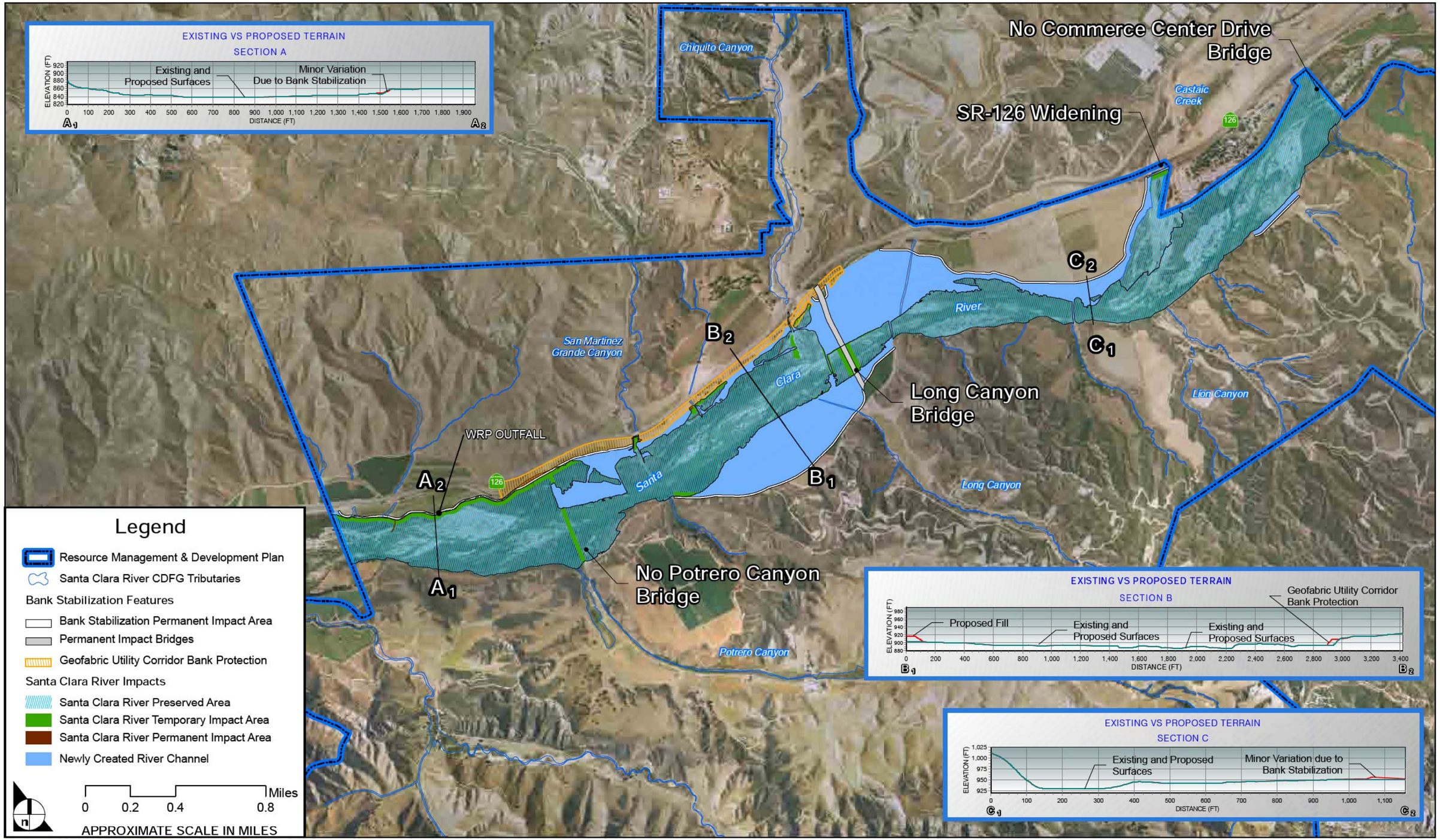
Table 3.0-31 summarizes the characteristics of the major RMDP infrastructure along the Santa Clara River, including north side (17,425 lf) and south side (8,090 lf) buried bank stabilization to be constructed along the Santa Clara River. Like Alternatives 3, 4, 5, and 6, this table shows 22 storm drain outlets along the north bank and three such outlets on the south bank of the Santa Clara River (25 storm drain outlets). In addition, the table documents the length, width, and vertical clearance of the Long Canyon Road Bridge, as well as the number of piers supporting that bridge.

Table 3.0-31
Alternative 7 Santa Clara River Major RMDP Infrastructure

Santa Clara River Location	Bank Stabilization (lf)	Outlets (No.)	Bridges			
			Length (lf)	Width (lf)	Piers (No.)	Vertical Clearance (ft)
Bridges						
Commerce Center Drive Bridge	-	-	-	-	-	-
Long Canyon Road Bridge	-	-	2,600	100	25	31-40
Potrero Canyon Road Bridge	-	-	-	-	-	-
Banks			-	-	-	-
North River Bank	17,425	22	-	-	-	-
South River Bank	8,089	3	-	-	-	-
Total	**25,514**	**25**	-	-	-	-

Source: RMDP, 2008.

Tributary Drainages. **Figure 3.0-39** illustrates the modified, converted, and preserved tributary drainages within the Project area under Alternative 7. The west bank of Chiquito Canyon would remain unstabilized, except for the area within approximately 1,000 feet of the mouth as shown on **Figure 3.0-40**. On the east bank, Alternative 7 would include stabilization in upland areas along the entire length of the drainage except for a 1,000-foot section at the northern Project area boundary. Three bridges would cross the Chiquito Canyon drainage under this alternative, and would be located approximately 2,000, 3,000, and 5,000 feet upstream of the Santa Clara River confluence. In addition, the existing two-lane bridge allowing SR-126 to cross the drainage would be widened to four lanes (**Figure 3.0-40**). Approximately 1,454 lf of buried bank stabilization would be installed along the west bank and 5,999 lf of buried bank stabilization would be installed on the east bank, approximately 192 lf of drainage would be converted to buried storm drain in Chiquito Canyon (see **Table 3.0-32**). Refer to **Figure 3.0-40** for locations of newly created drainage, preserved drainage, proposed Project bank protection and grade stabilization structures, drainage to storm drain conversion areas, and bridge/road crossings relative to jurisdictional areas. **Table 3.0-32** describes the Alternative 7 tributary drainage RMDP infrastructure characteristics, including the Chiquito Canyon modified drainage.



SOURCE: PACE 2008

FIGURE 3.0-38

ALTERNATIVE 7 RMDP
SANTA CLARA RIVER FEATURES

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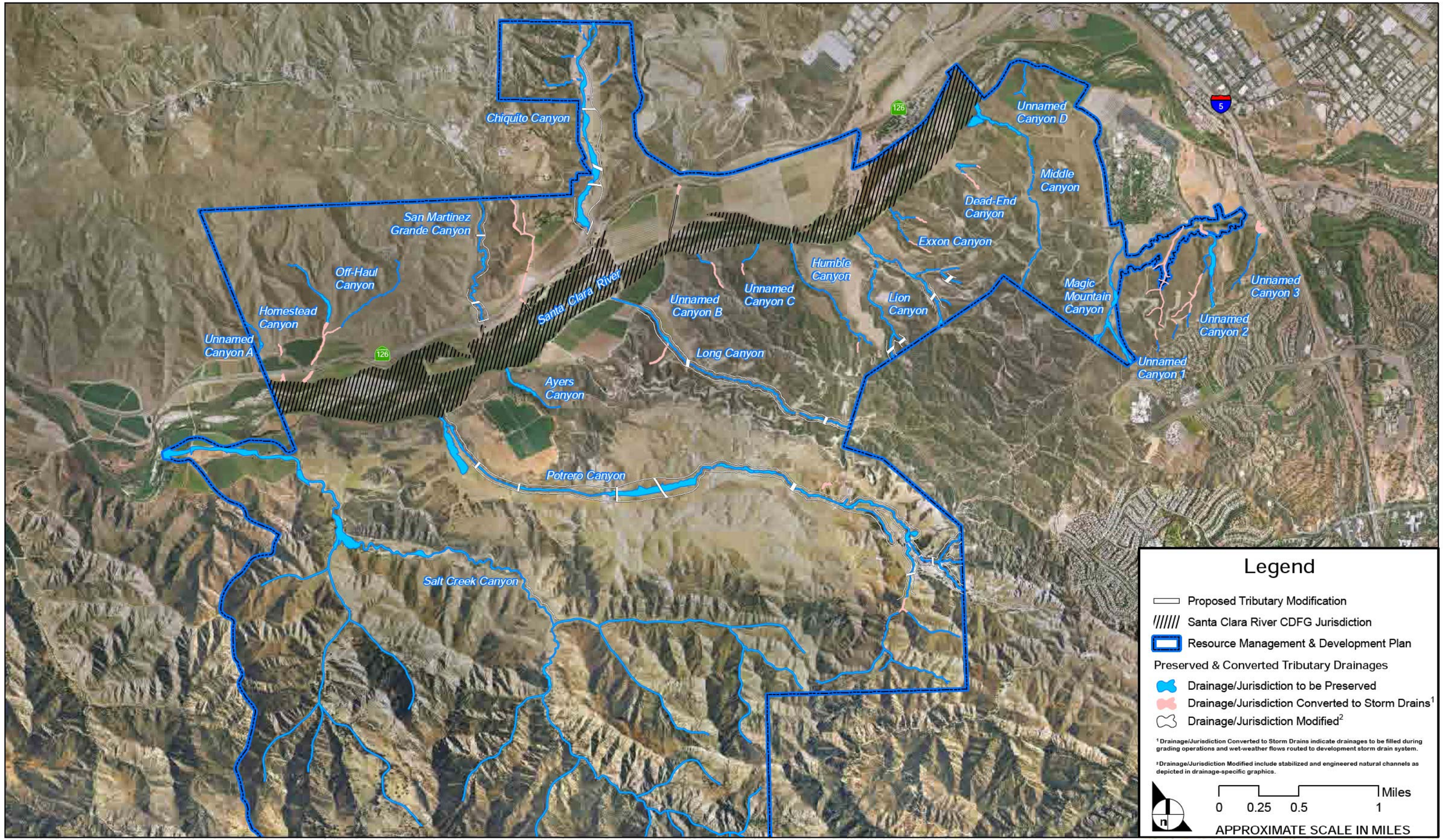

SOURCE: PACE - April 2008

FIGURE 3.0-39

ALTERNATIVE 7
MODIFIED, CONVERTED, AND PRESERVED TRIBUTARY DRAINAGES

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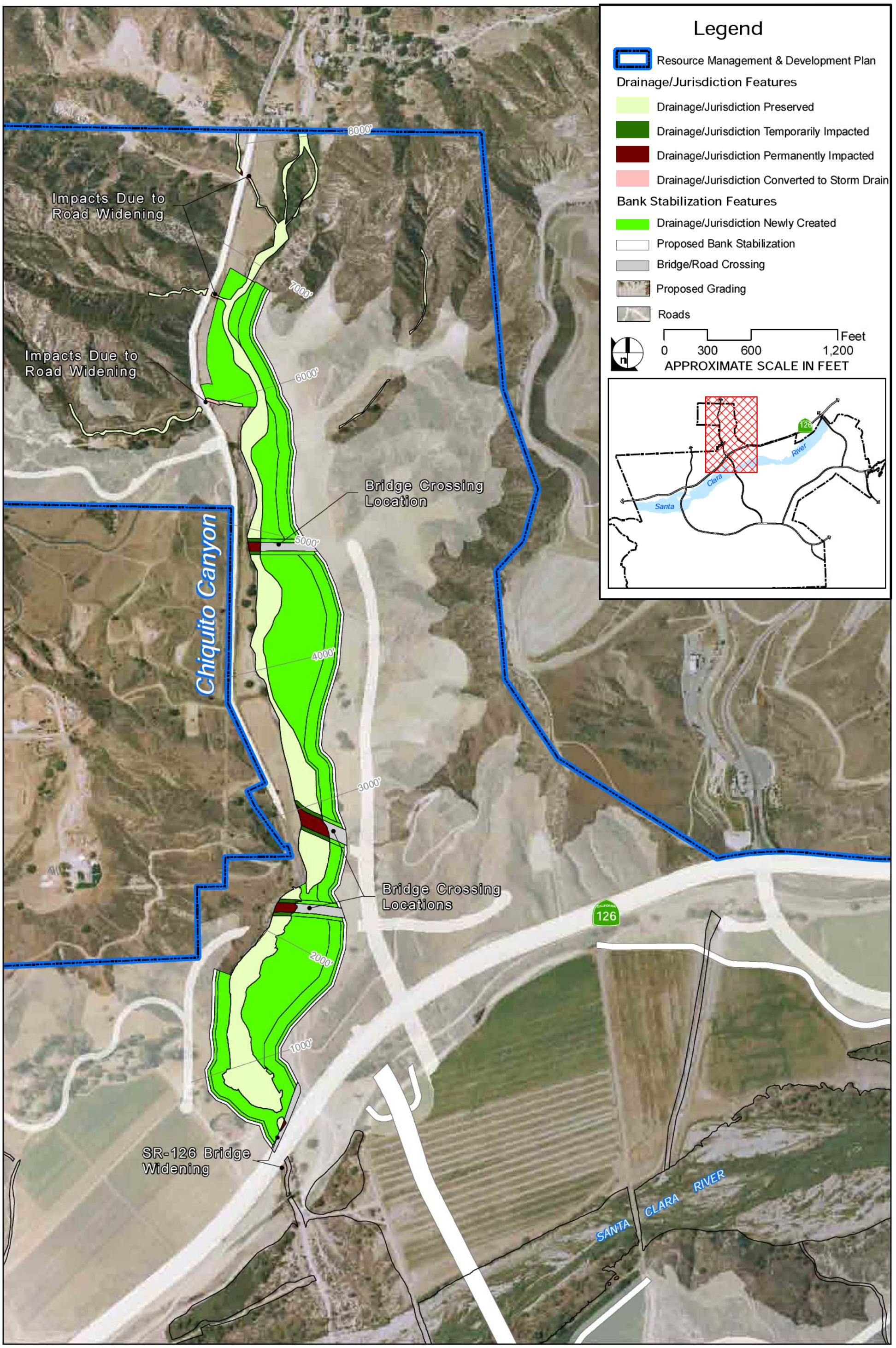


SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-40

CHIQUITO CANYON DETAIL - ALTERNATIVE 7
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-40_ChiquitoAlternative7_PC1_042908.mxd

Table 3.0-32
Alternative 7 Tributary Drainage RMDP Infrastructure

Drainage Location	Drainage Modified (lf)	Drainage Converted to Buried Storm Drain (lf)	Bank Stabilization[1] (lf)		Preserved Drainage (lf)	Road Crossings	
			West Bank	East Bank		Bridges	Culverts
Modified Drainages							
Chiquito Canyon	468	192	1,454	5,999	11,399	3	-
Lion Canyon	1,059	-	1,931	1,906	10,871	4	-
Long Canyon	1,286	961	8,800	10,871	8,331	2	-
Potrero Canyon	907	1,121	26,274	22,363	37,664	7	-
San Martinez Grande Canyon	269	-	1,233	3,149	4,901	2	-
Agricultural Ditch	1,499	297	-	-	-	-	-
Ayers Canyon[2]	106	-	-	-	2,359	1	-
Dead-End Canyon	-	928	-	-	1,003	-	-
Exxon Canyon	-	1,276	-	-	2,265	-	-
Homestead Canyon	-	609	-	-	-	-	-
Humble Canyon	-	325	-	-	5,212	-	-
Middle Canyon	4	-	-	-	7,582	-	-
Mid-Martinez Canyon	22	4,541	-	-	250	-	-
Off-Haul Canyon	-	2,611	-	-	6,167	-	-
Salt Canyon	7,290	-	-	1,992	101,470	-	-
Magic Mountain Canyon	-	-	-	-	6,111	-	-
Unnamed Canyon 1[3]	-	4,647	-	-	-	-	-
Unnamed Canyon 2	-	416	-	-	-	-	-
Unnamed Canyon A	-	-	-	-	1,293	-	-
Unnamed Canyon B	-	1,004	-	-	568	-	-
Unnamed Canyon C	-	402	-	-	869	-	-
Unnamed Canyon D	-	0	-	-	1,492	-	-
Totals	**12,910**	**19,330**	**39,692**	**46,279**	**209,809**	**19**	**-**

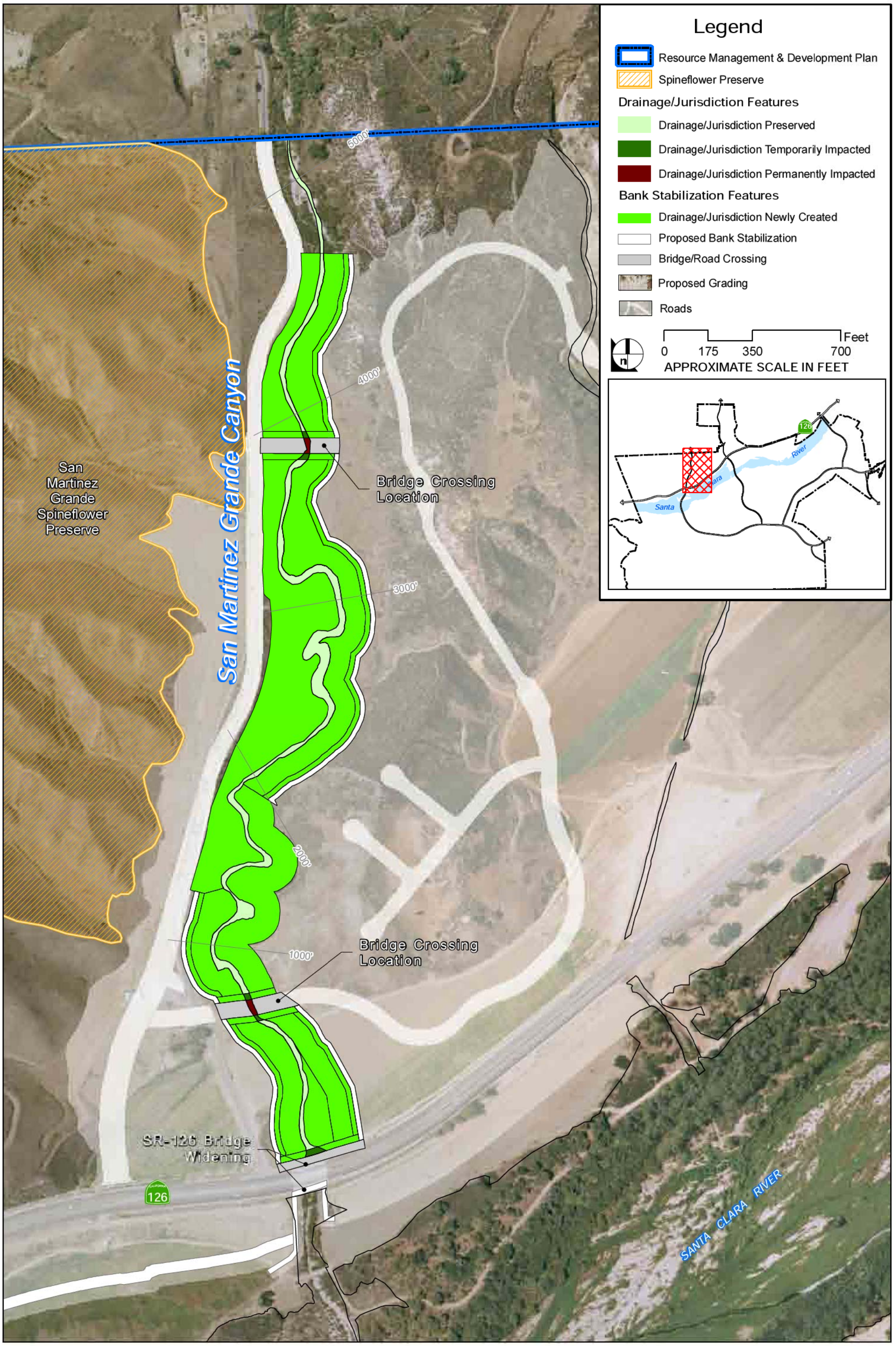
Notes:
[1] The lf of bank stabilization does not necessarily reflect impacts to jurisdictional areas; it only provides the linear feet of bank protection to be installed along various tributary drainages.
[2] The 106 lf of Drainage Modified is road crossing bridge/culvert-related.
[3] Unnamed Canyons 1 and 2 are located within the Entrada planning area and are given a numerical designation to distinguish them from the four other unnamed canyons located within the Specific Plan area (*i.e.*, Unnamed Canyons A-D).
Source: RMDP, 2008.

In San Martinez Grande Canyon, buried bank stabilization would be installed in upland areas along the lower one-third of the west bank and approximately two-thirds of the east bank as shown on **Figure 3.0-41**. Approximately 1,233 lf of buried bank stabilization along the west bank and 3,149 lf of buried bank stabilization along the east bank would be installed under this alternative. One new bridge would cross the drainage approximately two-thirds of the way up from the mouth of the canyon to the northern boundary of the Project area, and another would be installed just upstream of SR-126 (**Figure 3.0-41**). In addition, this alternative would include widening of SR-126 north of the confluence of San Martinez Grande Canyon with the Santa Clara River pursuant to the Caltrans SR-126 widening project. Refer to **Figure 3.0-41** for locations of newly created drainage, preserved drainage, proposed Project bank protection and stabilization features, and bridge/road crossings relative to jurisdictional areas.

In Long Canyon, buried bank stabilization would be installed in upland areas along the full length of both banks between the mouth and the eastern Project area boundary as shown on **Figure 3.0-42**. Approximately 8,800 lf of buried bank stabilization along the west bank and 10,871 lf of buried bank stabilization along the east bank would be installed under this alternative. In addition, approximately 961 lf of drainage would be converted to buried storm drain. Two bridges would cross the drainage, located approximately 2,000 feet upstream of the Santa Clara River confluence and approximately 1,000 feet downstream (Magic Mountain Parkway) of the eastern boundary of the Project area. Refer to **Figure 3.0-42** for locations of newly created drainage, preserved drainage, proposed Project bank protection and stabilization features, drainage to storm drain conversion areas, and bridges relative to jurisdictional areas.

Under Alternative 7, the Potrero Canyon drainage would be stabilized with buried soil cement installed in upland areas along the full length of the north/east banks between the mouth and the eastern boundary of the Project area as shown on **Figure 3.0-43**. The south/west bank would be similarly stabilized, but the mesic meadow area at the mouth of Potrero Canyon would not have bank protection installed on the west side. Approximately 26,274 lf of buried bank stabilization along the west bank and 22,363 lf of buried bank stabilization along the east bank would be installed under this alternative. In addition, approximately 1,121 lf of drainage would be converted to buried storm drain. Seven new bridge crossing locations would be constructed across the drainage as shown on **Figure 3.0-43**. Refer to **Figure 3.0-43** for locations of newly created drainage, preserved drainage, proposed Project bank protection and stabilization features, permanent impact areas, drainage to storm drain conversion areas, and bridge crossings relative to jurisdictional areas.

In addition to the bridges installed within the major drainages of the Project area, several bridges/road crossings would be constructed spanning minor drainages. Four bridges/crossings would be constructed across the three forks of the Lion Canyon drainage, one across the east fork, two across the middle fork, and one across the west fork as shown on **Figure 3.0-44**. Approximately 1,931 lf of buried bank stabilization along the west bank and 1,906 lf of buried bank stabilization along the east bank would be installed along the Lion Canyon drainage under this alternative.



SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-41

SAN MARTINEZ GRANDE CANYON DETAIL - ALTERNATIVE 7
PROPOSED RMDP TRIBUTARY TREATMENTS

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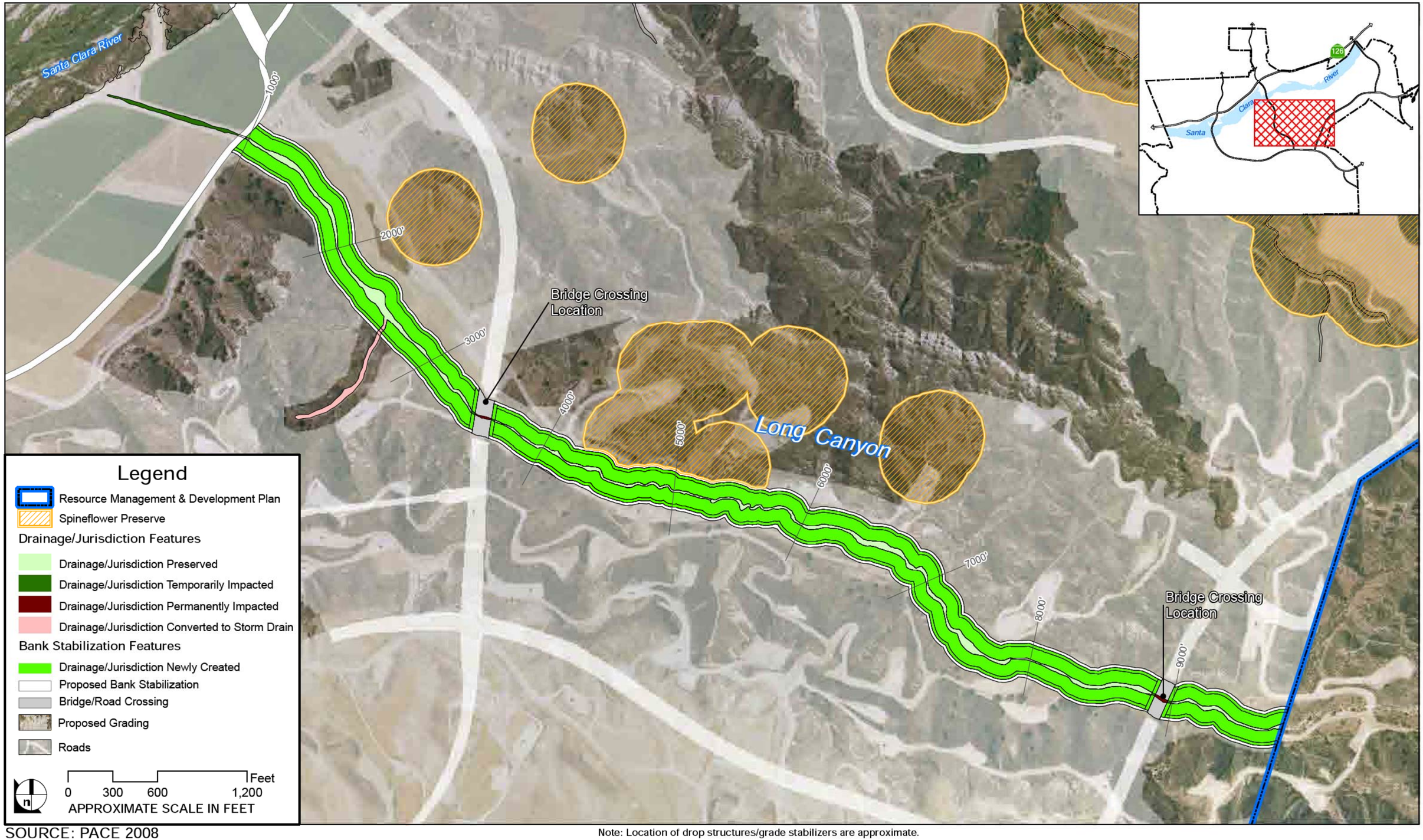


SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-42

LONG CANYON DETAIL - ALTERNATIVE 7
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-42_LongAlternative7_PC1_042908.mxd

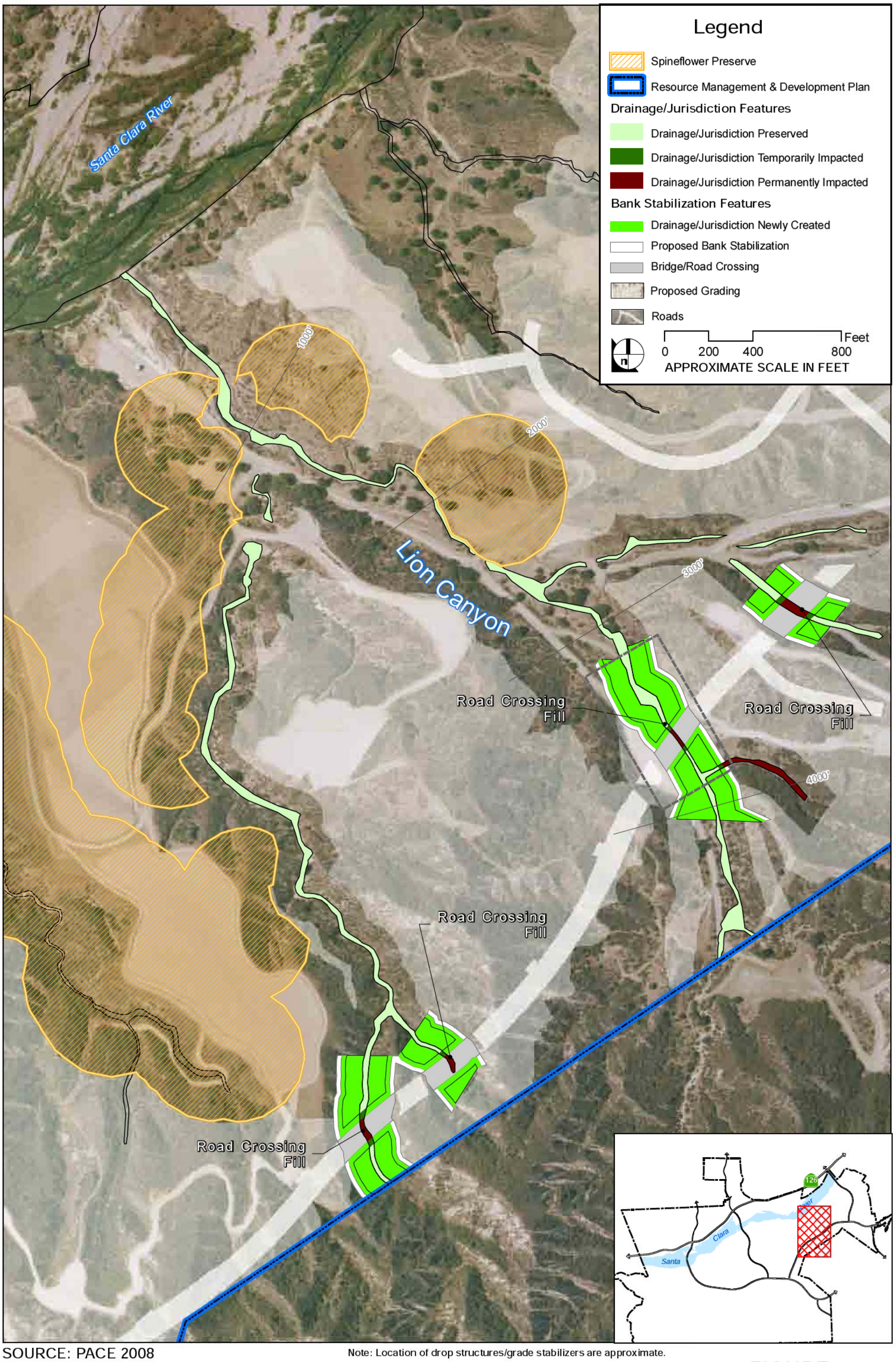
SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-43

POTRERO CANYON DETAIL - ALTERNATIVE 7
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-43_PotreroAlternative7_PC1_043008.mxd



SOURCE: PACE 2008

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-44

LION CANYON DETAIL - ALTERNATIVE 7
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-44_LionAlternative7_PC1_043008.mxd

The existing six-lane bridge allowing SR-126 to cross the Castaic Creek drainage would be widened to eight lanes. Upland areas along one segment of the Salt Creek drainage would be stabilized with 1,992 lf of buried soil cement, and the Salt Creek watershed would be dedicated as permanent open space in conjunction with the High Country SMA/SEA 20. Minor RMDP-related treatments to tributary drainages such as Salt Creek Canyon are shown on **Figure 3.0-39**, above, for Alternative 7.

3.4.7.1.2 *SCP Component (Alternative 7)*

Under the SCP component, specific portions of the Specific Plan would be designated as spineflower preserves. As described in the SCP, the 20.26-acre existing Airport Mesa conservation easement would be contained within an expanded 211.0-acre spineflower preserve, the 44-acre existing Grapevine Mesa conservation easement would be designated as an expanded 181.23-acre preserve, a 68.38-acre expanded spineflower preserve would be established west of the mouth of Potrero Canyon, and a 96.39-acre expanded preserve would be established west of San Martinez Grande Canyon.

In addition, Alternative 7 would include the establishment of a 65.99-acre preserve within the Entrada planning area and a 37.56-acre preserve in the VCC planning area. **Figure 3.0-45** depicts the Alternative 7 expanded spineflower preserves relative to connectivity between the preserves and the approved and proposed open space within the SCP study area. Refer to **Table 3.0-33**, which summarizes the Alternative 7 spineflower preserve characteristics, including spineflower acreages proposed to be preserved and taken.

Table 3.0-33
Spineflower Preserve Alternatives Summary
Alternative 7

Location	Preserve Size (ac)	Spineflower Preserved (ac)	Spineflower Impacted (ac)	Percent Preserved (ac)	Percent Taken (ac)
Specific Plan					
Airport Mesa	211.00	8.36	0.04	99.5%	0.5%
Grapevine Mesa	181.23	4.88	0.02	99.6%	0.4%
Potrero	68.38	1.65	0.06	96.5%	3.5%
San Martinez Grande	96.39	2.29	0.00	100.0%	0.0%
Subtotal	**557.00**	**17.18**	**0.12**	**99.3%**	**0.7%**
Entrada	65.99	1.70	0.24	87.6%	12.4%
Valencia Commerce Center	37.56	0.85	0.00	100%	0%
Grand Total	**660.55**	**19.73**	**0.36**	**98.2%**	**1.8%**

Source: Dudek, 2007.

Table 3.0-34 summarizes each of the Alternative 7 proposed preserve areas and the preserve design elements, including the core or occupied spineflower population areas, the interior areas within the core that allow for expansion of the preserves, and the designated buffer, which represents the area within the preserve between the core perimeter and the outer preserve boundary or urban edge.

Table 3.0-34
Alternative 7 Preserve Design

Preserve	Preserve Statistics: Proposed Preserve[1] (ac)	Preserve Statistics: Cumulative Area Occupied[2] (ac)	Preserve Design Elements: Core[3]	Preserve Design Elements: Buffer[4]	Preserve Design Elements: Expansion[5]
Specific Plan					
Airport Mesa	211.00	8.06	45.36	165.64	37.00
Grapevine Mesa	181.23	4.95	16.98	164.24	12.11
Potrero	68.38	1.80	5.55	62.83	3.90
San Martinez Grande	96.39	2.29	8.24	88.15	5.95
Subtotal	**557.00**	**17.09**	**76.14**	**480.86**	**58.96**
Entrada	65.99	1.85	13.87	52.12	12.17
VCC	37.56	0.85	12.76	24.80	11.91
Grand Total	**660.55**	**19.80**	**102.77**	**557.78**	**83.04**

Notes:

1 Proposed preserve is the total area within the preserve boundary.

2 Cumulative area occupied the total area of mapped spineflower within the preserve between 2002 and 2007.

3 Core identifies the perimetered occupied/preserved populations interior to buffer area and preserve boundary.

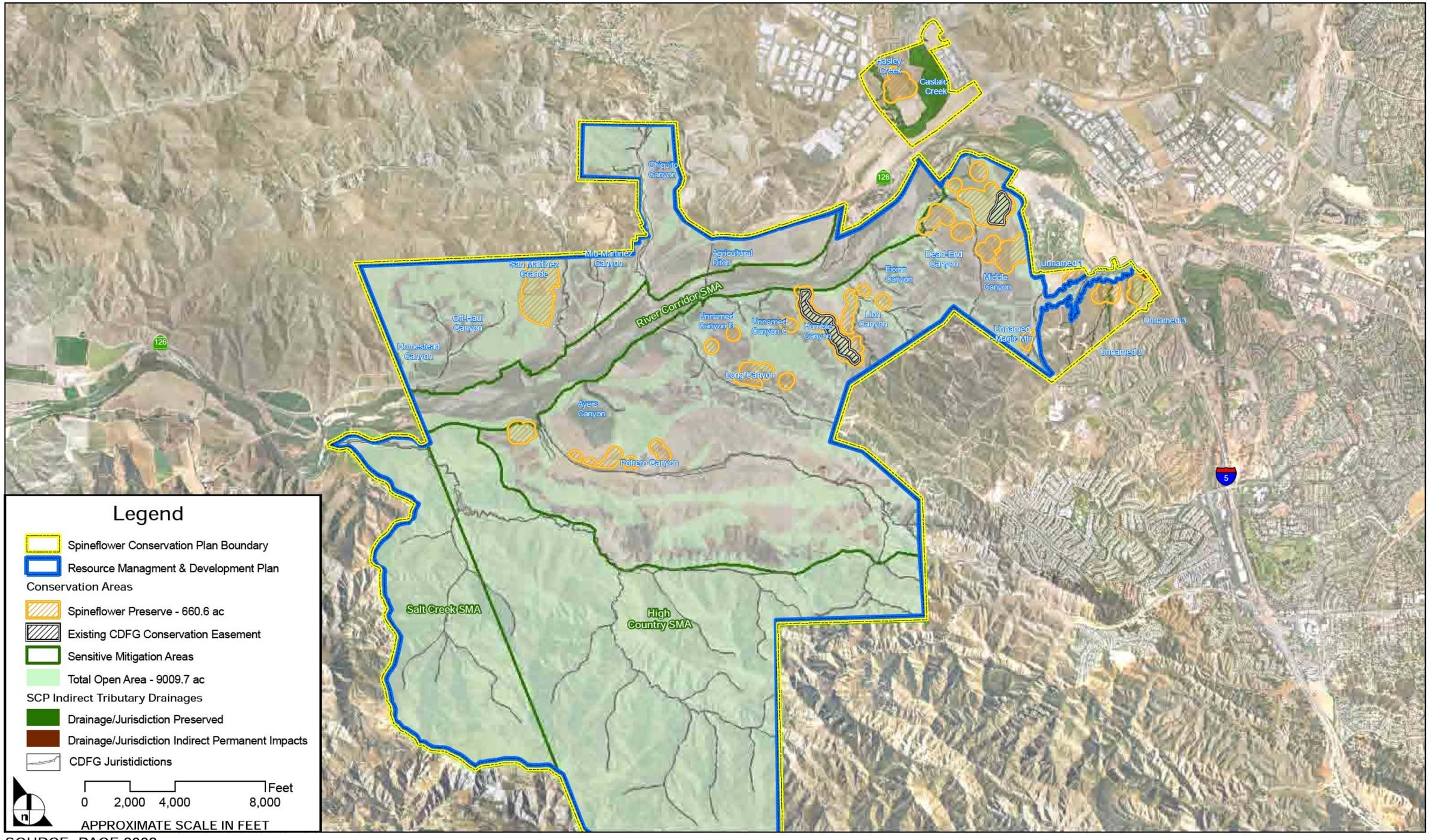
4 Buffer represents the area within the preserve between the core perimeter and the preserve boundary (urban edge.)

5 Expansion area represents the area interior to the core that is not part of the cumulative area occupied.

Source: Dudek, 2007.

3.4.7.2 Summary Description of Development Facilitated by Alternative 7

If a CWA section 404 permit, Candidate Conservation Agreement, ~~CESA permit, and~~ Master Streambed Alteration Agreement, and CESA permits are issued to permit the regulated activities under Alternative 7, partial build-out of the Specific Plan would be facilitated. **Figure 3.0-46** depicts the RMDP/SCP Alternative 7 land use plan within the Project area boundary. As shown on **Table 3.0-35**, the Specific Plan's approved 20,885 residential units would be reduced by 4,414 units to 16,471 units, and the approved 5.55 msf of commercial uses would be reduced by 1,786,000 square feet.



SOURCE: PACE 2008

FIGURE 3.0-45

ALTERNATIVE 7 SPINEFLOWER PRESERVES

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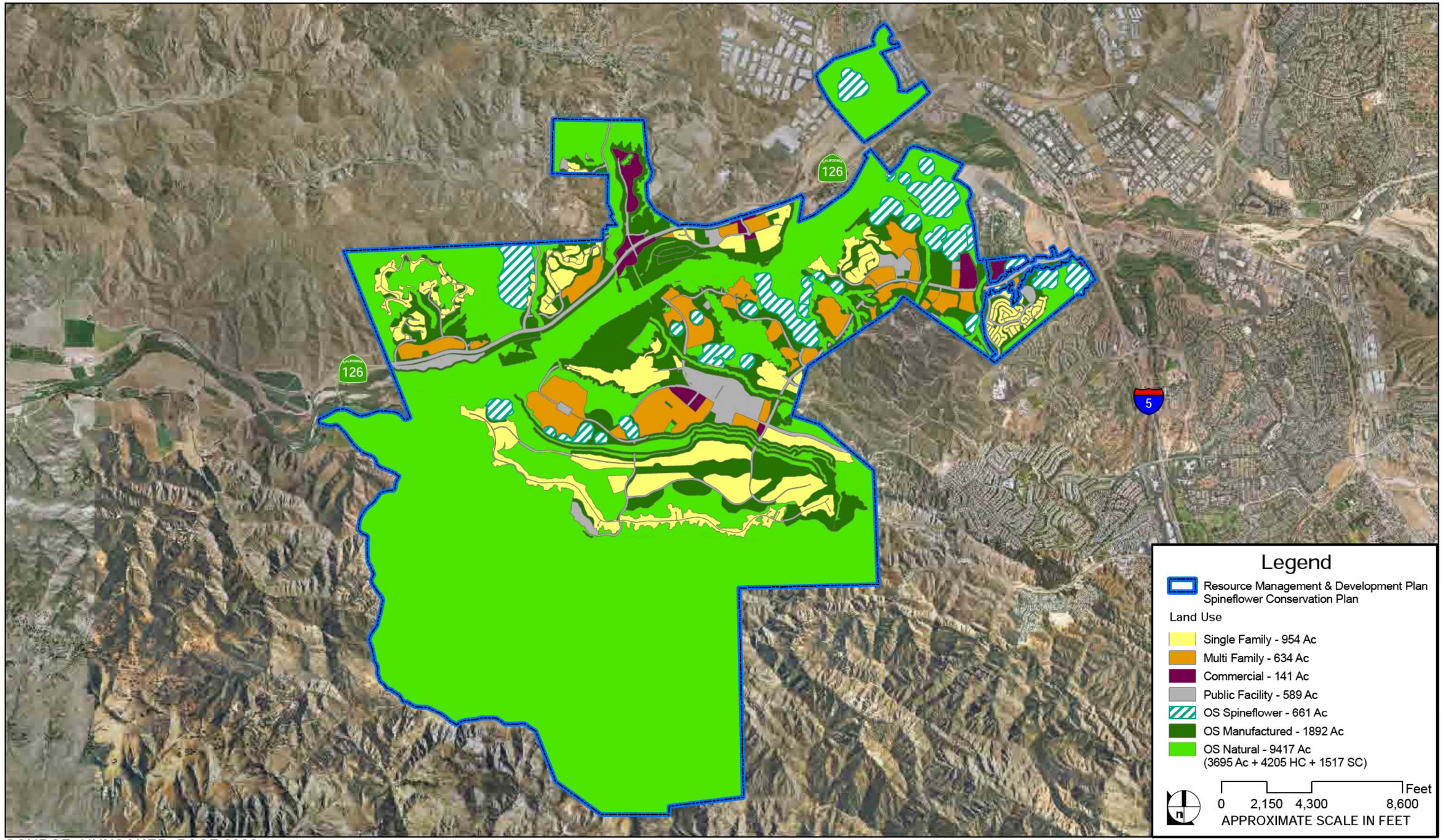


SOURCE: HUNSAKER, PACE 2008

FIGURE 3.0-46

RMDP/SCP ALTERNATIVE 7
LAND USE PLAN

P:\8238E\GIS\mxds\EIR_2008\Section3\8238E_FIGURE-3-0-46_Alternative7RmdpScpLandUsePlanPC1_071608.mxd

Table 3.0-35
Development Facilitated by Alternative 7

Land Use Category[1]	Acres	Res.[4] (DU)	Comm.[5] (MSF)[3]	Percent Res. Reduction (DU)	Percent Comm. Reduction (MSF)	Total Res. Reduction (DU)	Total Comm. Reduction (MSF)
Specific Plan							
Single-Family Residential	897.3	7,280	-	19.83%	-	1,801	-
Multi-Family Residential	633.0	9,191	-	22.14%	-	2,613	-
Commercial	124.8	-	3.76	-	32.18%	-	1.79
Public Facilities[6]	549.2	-	-	-	-	-	-
Open Space[7]	11,446.4	-	-	-	-	-	-
Subtotal Specific Plan	**13,650.7**	**16,471**[2]	**3.76**	**21.13%**	**32.18%**	**4,414**	**1.79**
Total Specific Plan Reduction Compared to Proposed Project						**4,414**	**1.79**
Entrada Development							
Single-Family Residential	56.8	428	-	0%	-	0	-
Multi-Family Residential	0.9	424	-	67.31%	-	873	-
Commercial	16.1	-	0.05	-	88.67%	-	0.40
Public Facilities	40.0	-	-	-	-	-	-
Open Space	202.2	-	-	-	-	-	-
Subtotal Entrada	**316.1**	**852**	**0.05**	**50.61%**	**88.67%**	**873**	**0.40**
Total Entrada Reduction Compared to Proposed Project						**873**	**0.40**
Valencia Commerce Center							
Commercial	0	-	0	-	100%	-	1.10
Industrial Park	0	-	0	-	100%	-	2.30
Public Facilities	0	-	-	-	-	-	-
Open Space	321.3	-	-	-	-	-	-
Subtotal VCC	**321.3**	**-**	**-**	-	100%	-	**3.40**
Total VCC Reduction Compared to Proposed Project						-	**3.40**
Grand Total Project Reduction Compared to Proposed Project						**5,287**	**5.59**

Notes:

1 In some instances, the land use categories for the Specific Plan, Entrada, and VCC have been consolidated to simplify presentation of the land use data.

2 The total number of permitted residential dwelling units within the Specific Plan of 20,885 may increase by 423 second units with approval of a conditional use permit, which would increase the maximum total Specific Plan dwelling units to 21,308. (Specific Plan 2003, Table 2.3-3.)

3 MSF means million square feet.

4 Residential includes single-family (detached homes) and multi-family (condo/townhomes).

5 Commercial includes business park, office, retail, *etc.*

6 Public Facilities includes parks, schools, libraries, *etc.*

7 Open Space means natural (preserved) and manufactured open space, and includes the Specific Plan's High Country SMA/SEA 20, River Corridor SMA/SEA 23, Open Areas, spineflower preservations areas, and other specified open areas, primarily located within the Specific Plan's Estate Residential designation. Open Space does not include the Salt Creek area, adjacent to the Specific Plan boundary, comprised of about 1,517 acres. If the Salt Creek area is included, the total Open Space is approximately 11,446 acres (9,929 + 1,517 = 11,446).

Source: The Newhall Land and Farming Company, 2007.

3.5 Draft LEDPA (Elimination Of Planned Potrero Bridge, Additional Spineflower Preserve Acreage, And Larger Riparian Areas In Tributary Drainages)

As described in **Subsection 3.4**, above, the Draft LEDPA is a modified version of Draft EIS/EIR Alternative 3 that includes additional avoidance of waters of the United States along the Santa Clara River and tributaries, increased spineflower preserve acreage in the Potrero, San Martinez Grande, Grapevine Mesa, and Airport Mesa areas, based on input received from CDFG, and larger riparian corridors within five major tributaries. Under the Draft LEDPA, two of the three bridges crossing the Santa Clara River and the associated bank stabilization would be constructed (Commerce Center Drive bridge and the Long Canyon Road bridge). The Draft LEDPA would not construct Potrero Canyon Road bridge, reducing impacts to jurisdictional waters and wetlands in the Santa Clara River and lower Potrero Canyon. In addition, like Alternative 3, a 19-acre compensatory wetland mitigation area would be implemented in lower Potrero Canyon, contiguous with the existing lower mesic meadow (cismontane alkali marsh).

In two major tributary drainages, Long Canyon and Potrero Canyon, most of the existing drainages would be filled and modified so that there would not be a loss of Corps jurisdiction. In the three other major tributary drainages, Lion Canyon, San Martinez Grande Canyon, and Chiquito Canyon, the Draft LEDPA would incorporate limited channel grading to expand the drainage and adjacent riparian areas and realign their banks. The remainder of the jurisdictional areas in Lion, San Martinez Grande and Chiquito Canyon would be avoided. Overall, of the 660.1 acres of waters of the United States on the Project site, implementation of the Draft LEDPA would result in the permanent fill of 66.3 acres of waters of the United States (29 percent reduction in acreage compared to the proposed Project). The Draft LEDPA would temporarily disturb an additional 1.1 acres when compared to Alternative 3 (2 percent less than the proposed Project). The mitigation associated with the Draft LEDPA would ensure a no net loss of acreage and functions and values of waters of the United States. For purposes of CDFG's streambed jurisdiction under Fish & Game Code section 1600, *et seq.*, the Draft LEDPA would reduce related jurisdictional impacts by 34.4 acres compared to the proposed Project.

The Draft LEDPA would increase the acreage within the spineflower preserves from 167 acres to 247 acres. Under the Draft LEDPA, the acreage of occupied spineflower habitat protected would increase from 13.88 acres under the proposed Project to 13.97 acres, while the area of impacted occupied habitat would be decreased from 6.36 acres to 5.87 acres. The Draft LEDPA would result in a greater level of spineflower protection than the proposed SCP, with increased preservation of occupied habitat and less loss when compared to the proposed Project.

3.5.3.1 Description of Regulated Activities

3.5.3.1.1 *RMDP Component (Draft LEDPA)*

Under the Draft LEDPA, infrastructure would be constructed in and adjacent to the Santa Clara River and tributary drainages within the Project area. A description of the infrastructure and related channel design elements is provided below.

Santa Clara River. Figure 3.0-47 depicts the locations of the Draft LEDPA proposed RMDP Santa Clara River features relative to jurisdictional areas. As shown, one proposed bridge, Long Canyon Road bridge, and one previously approved bridge, Commerce Center Drive bridge, would be located across the main stem of the Santa Clara River. No bridge is proposed under the Draft LEDPA at the mouth of Potrero Canyon (Potrero Canyon bridge). As shown, buried bank stabilization would be installed in upland and riparian areas along approximately one-half of the north bank and one-third of the south bank of the Santa Clara River. The WRP outfall to the Santa Clara River also would be constructed. As shown, permanent bank stabilization areas exist on the north and south banks of the Santa Clara River. The geofabric utility corridor bank protection is proposed on the north side of the Santa Clara River between San Martinez Grande Canyon and Chiquito Canyon. Refer to **Figure 3.0-47** for locations of bank protection and stabilization features and bridge locations relative to jurisdictional areas under the Draft LEDPA. In addition, this figure depicts the proposed RMDP riparian/upland revegetation zones in green and the newly created river channel in blue.

Figure 3.0-47 also presents three Santa Clara River cross-sections (A, B, and C) that depict existing and proposed surface elevations, including variations due to proposed fill and bank stabilization features. For example, up to approximately 20 feet of fill is proposed on the south side of the Santa Clara River to the west of the proposed Long Canyon Road bridge (refer to cross-section B on **Figure 3.0-47**). In addition, approximately ten feet of fill is proposed on the north side of the Santa Clara River in the vicinity of Point C2 (refer to cross-section C on **Figure 3.0-47**).

(New) **Table 3.0-36,** summarizes the characteristics of the Draft LEDPA major RMDP infrastructure along the Santa Clara River, including north side (18,811 lf) and south side (7,728 lf) buried bank stabilization to be constructed along the Santa Clara River. This table also shows 25 storm drain outlets along the north bank and 10 such outlets on the south bank of the Santa Clara River (35 storm drain outlets). In addition, the table documents the length, width, and vertical clearance of the two bridges, as well as the number of piers supporting the bridges.

(New) Table 3.0-36
Draft LEDPA Santa Clara River Major RMDP Infrastructure

Santa Clara River Location	Bank Stabilization (lf)	Outlets (No.)	Bridges			
			Length (lf)	Width (lf)	Piers (No.)	Vertical Clearance (ft)
Bridges						
Commerce Center Drive Bridge	-	-	1,200	100	9	22
Long Canyon Road Bridge	-	-	980	100	9	31-40
Potrero Canyon Road Bridge	-	-	-	-	-	-
Banks			-	-	-	-
North River Bank	18,811	25	-	-	-	-
South River Bank	7,728	10	-	-	-	-
Total	**26,539**	**359**	**-**	**-**	**-**	**-**

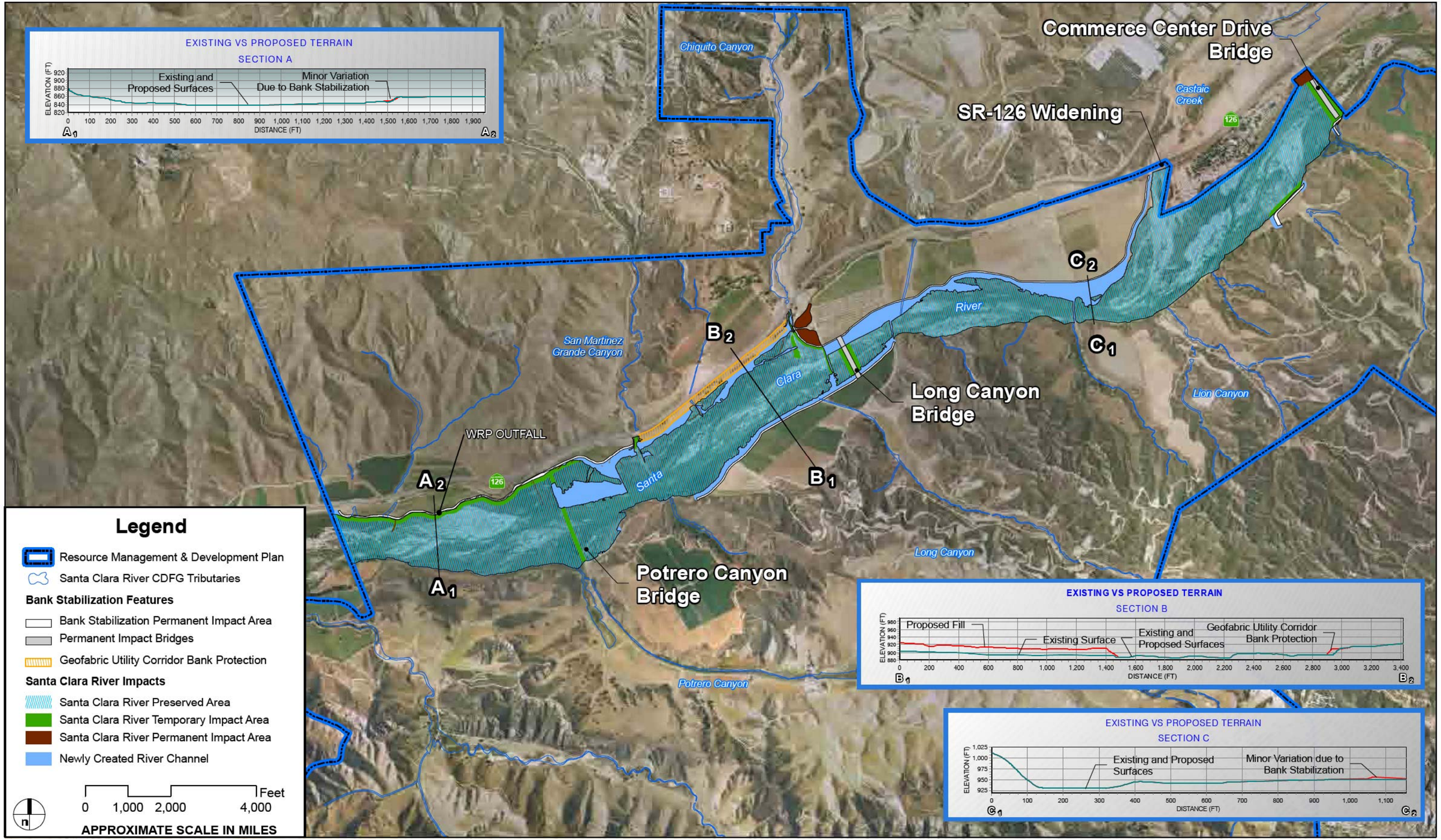
Source: Corps' draft 404(b)(1) alternatives analysis (June 2010).

Tributary Drainages. Figures 3.0-48 through 3.0-53 illustrate the modified, converted, and preserved tributary drainages within the Project area under the Draft LEDPA. (New) **Table 3.0-37** describes the characteristics of the tributary drainages. Overall, the Draft LEDPA would preserve 131,769 lf of on-site drainages, which is 54 percent of the total 242,049 lf of jurisdictional drainages on the Project site. The Draft LEDPA would modify 54,001 feet of on-site tributaries; convert 56,291 lf of tributary channel to buried storm drain; install 69,913 lf of bank stabilization; and provide three bridges over tributaries and 13 culvert road crossings over tributaries.

Chiquito Canyon. Under the Draft LEDPA, Chiquito Canyon would require stabilizing treatments to protect the channel and surrounding development from excessive vertical scour and lateral channel migration as shown on **Figure 3.0-49**. The existing drainage would remain mostly intact but would be permanently altered by construction of stabilization elements, including buried bank stabilization and grade stabilization structures. Approximately 5,722 lf of buried bank stabilization would be installed along the west bank and 7,069 lf of buried bank stabilization would be installed along the east bank of Chiquito Canyon. In addition, approximately 2,624 lf of drainage would be converted to buried storm drain. Three culverted road crossings would be installed along Chiquito Canyon to accommodate traffic circulation, and a culverted road extension would be installed for the Caltrans SR-126 road widening project.[14] (New) **Table 3.0-37** summarizes the proposed changes.

San Martinez Grande Canyon. The Draft LEDPA proposes to construct a soft-bottom channel to incorporate the existing alignment of San Martinez Grande Canyon Road between SR-126 and the northern Project boundary as shown on **Figure 3.0-50**. Portions of the existing drainage would be permanently altered by construction of the modified tributary drainage, including buried bank stabilization and grade stabilizing structures. Approximately 3,686 lf of buried bank stabilization would be installed along the west bank and 2,558 lf of buried bank stabilization would be installed along the east bank of San Martinez Grande Canyon. As shown, one bridge and one culverted road crossing would be installed along San Martinez Grande Canyon to accommodate traffic circulation, and a culverted road extension would be installed for the Caltrans SR-126 road widening project. (New) **Table 3.0-37** summarizes the proposed changes. Please refer to **Figure 3.0-50** for locations of the San Martinez Grande Canyon proposed RMDP tributary drainage features, including affected drainages/jurisdictional areas, and the development areas along San Martinez Grande Canyon.

[14] In addition, as part of the Caltrans SR-126 road widening project, the existing six-lane bridge allowing SR-126 to cross the Castaic Creek drainage would be expanded to eight lanes.

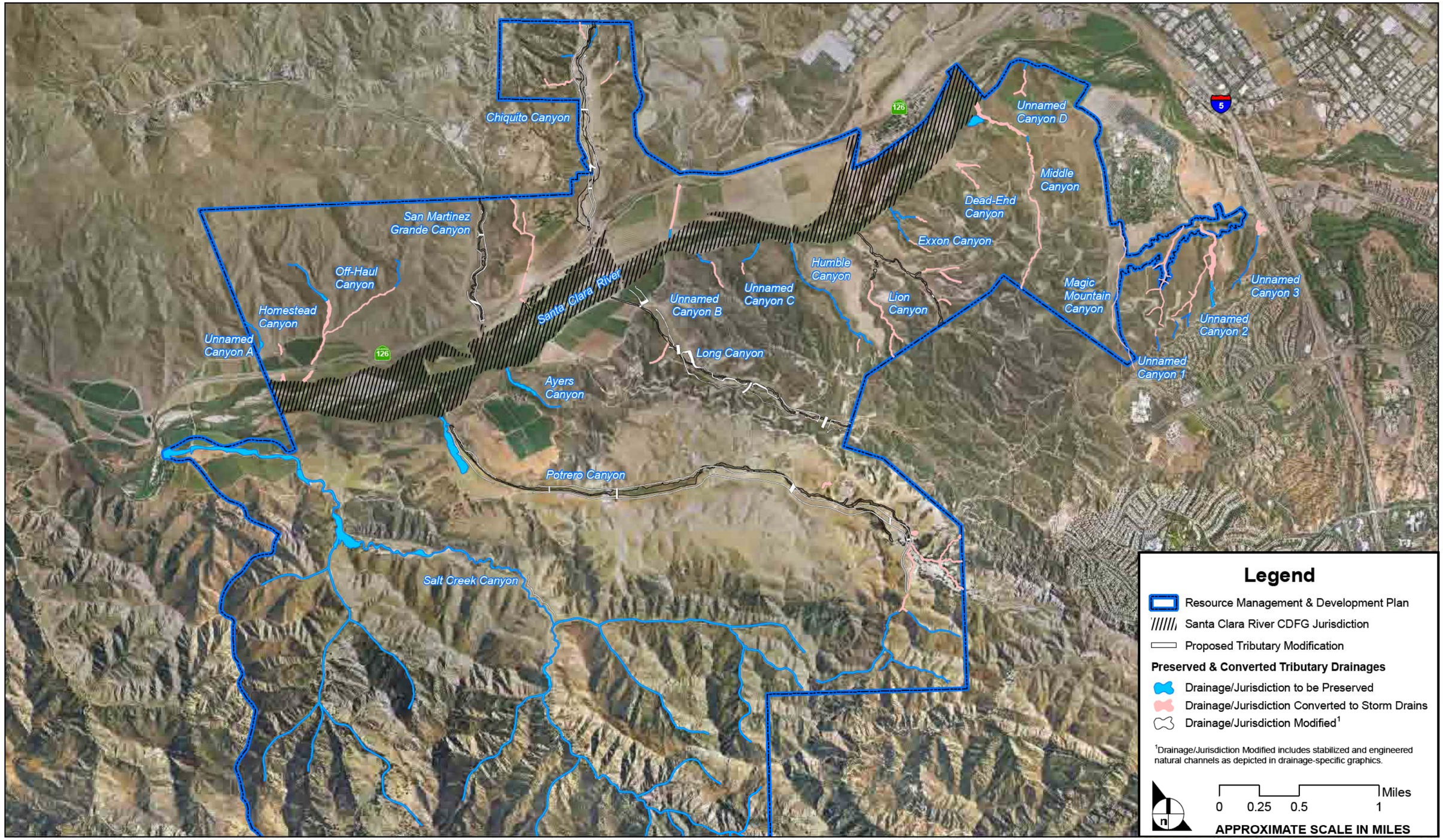


SOURCE: PACE 2008

FIGURE 3.0-47

DRAFT LEDPA
SANTA CLARA RIVER MAJOR FEATURES

P:\8238E\GIS\mxds\LEDPA\ReportFigures_20100223\Section3\8238E_FIGURE-3-0-47_DraftLedpaSantaClaraRiverMajorFeatures_PC1_20100309.mxd



SOURCE: PACE - April 2010

FIGURE 3.0-48

DRAFT LEDPA
MODIFIED, CONVERTED, AND PRESERVED TRIBUTARY DRAINAGES

P:\8238E\GIS\mxds\LEDPA\ReportFigures_20100223\Section3\8238E_FIGURE-3-0-48_ModifiedConvertedPreservedTributaryDrainageTreatmentsAlt10_PC1_20100309.mxd

Legend

- Resource Management & Development Plan

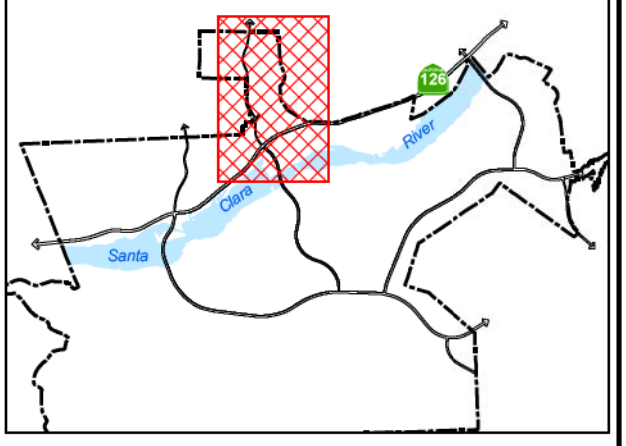
Drainage/Jurisdiction Features

- Drainage/Jurisdiction Preserved
- Drainage/Jurisdiction Temporarily Impacted
- Drainage/Jurisdiction Permanently Impacted
- Drainage/Jurisdiction Converted to Storm Drain

Bank Stabilization Features

- Drainage/Jurisdiction Newly Created
- Proposed Bank Stabilization
- Bridge/Road Crossing
- Drop Structure/Grade Stabilzers
- Proposed Grading
- Roads

Feet
0 300 600 1,200
APPROXIMATE SCALE IN FEET



8000'
7000'
6000'
5000'
4000'
3000'
2000'
1000'

Bridge Crossing Location

Road Crossing Culvert Locations

SR-126 Bridge Widening

126

SANTA CLARA RIVER

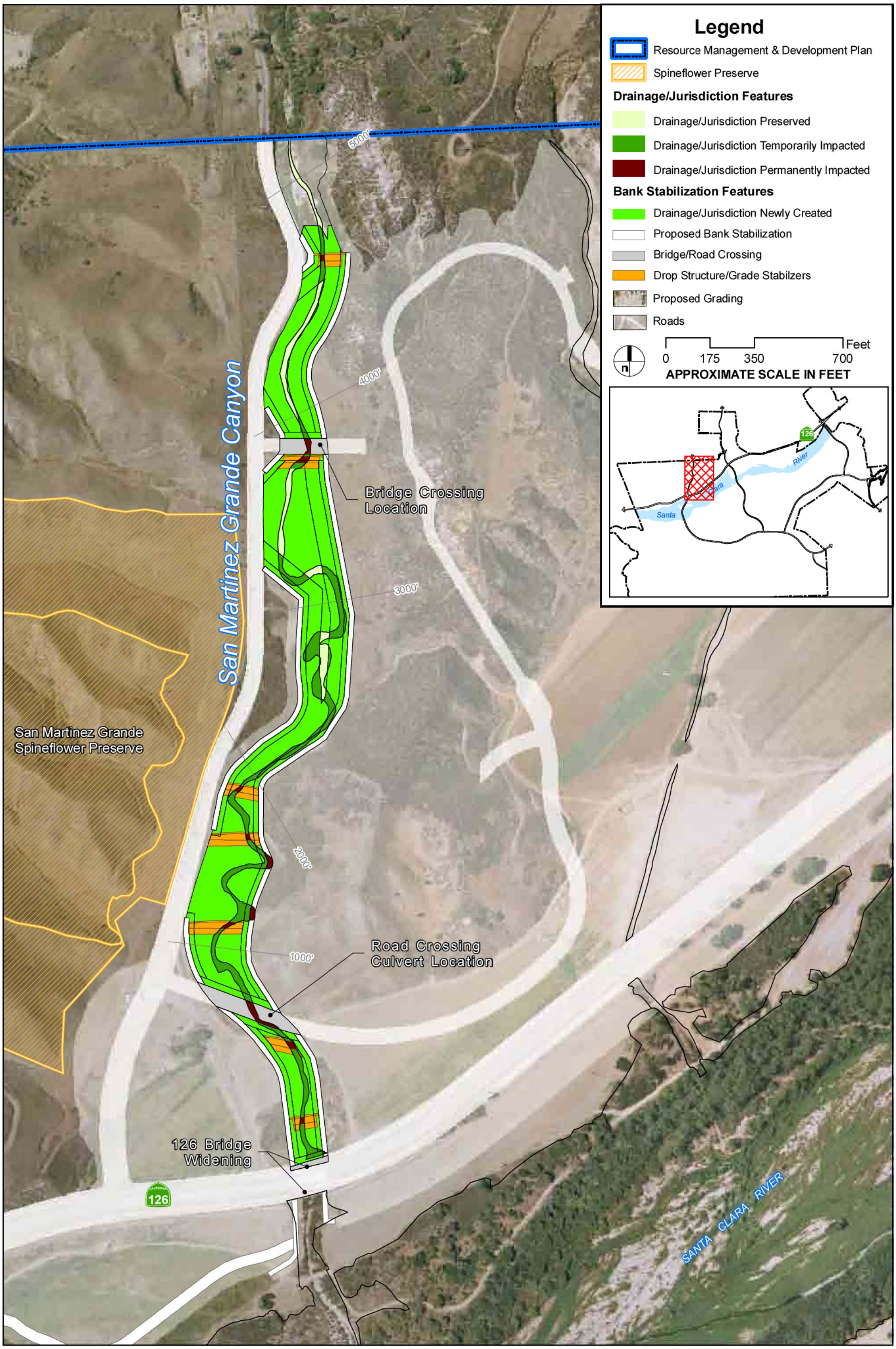
SOURCE: PACE 2010

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-49

CHIQUITO CANYON DETAIL - DRAFT LEDPA
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\LEDPA\ReportFigures_20100223\Section3\8238E_FIGURE-3-0-49_ChiquitoDraftLedpa_PC1_20100309.mxd



SOURCE: PACE 2010

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-50

SAN MARTINEZ GRANDE CANYON DETAIL - DRAFT LEDPA
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\LEDPA\ReportFigures_20100223\Section3\8238E_FIGURE-3-0-50_SanMartinezDraftLedpa_PC1_20100309.mxd

Potrero Canyon. In Potrero Canyon, the Draft LEDPA would require bank stabilization along both sides of the Potrero Canyon drainage as shown on **Figure 3.0-51**. In the southeastern upstream reaches of Potrero Canyon, the existing drainage would be graded and flows would be converted to buried storm drain. At a point approximately four-fifths of the way up the drainage, from the drainage's mouth at the river, the storm drain would convey flows into a soft-bottom channel constructed approximately parallel to the existing drainage. Geotechnically stabilized earthen fill would be constructed in the upper two-thirds of Potrero Valley to support residential and commercial development, as well as a wide, reconstructed channel and riparian corridor. Bank stabilization would be constructed in upland areas, effectively widening the soft-bottom channel in this reach. The fill portion of Potrero Canyon would be discontinued immediately upstream of the mesic meadow, which meadow would remain preserved. Approximately 18,316 lf of Potrero Canyon would consist of reconstructed channel.

One new bridge and three road crossing culverts would be constructed at approximately even intervals between the upstream end of the mesic meadow and just downstream of the point where the drainage begins to branch (see **Figure 3.0-51**). The Via Canyon portion of the upper Potrero Valley would be reconstructed as well. Grade stabilization structures are proposed along the entire length of the reconstructed soft-bottom channel. Approximately 17,202 lf of buried bank stabilization would be installed along the west bank, and 17,130 lf of buried bank stabilization would be installed along the east bank of Potrero Canyon. Approximately 9,389 lf of drainage would be converted to buried storm drain. (New) **Table 3.0-37** summarizes the proposed changes.

Refer to **Figure 3.0-51** for locations of newly created drainage, preserved drainage area, permanent drainage impact areas, side drainage bank stabilization areas, and bridge/road crossing culvert locations relative to jurisdictional areas. **Figure 3.0-51** also shows the relationship of the proposed Potrero Canyon drainage modifications to the proposed Potrero spineflower preserve to the west.

Long Canyon. In Long Canyon, the Draft LEDPA proposes to reconstruct a wide, stabilized channel along the same general alignment as the existing drainage. The reconstructed Long Canyon channel would be graded on top of 10 to 30 feet of fill material within Long Canyon. The reconstructed channel includes numerous grade stabilization structures to ensure vertical stability and a wider channel and valley bottom to accommodate controlled, lateral migration within a revegetated corridor.

Under the Draft LEDPA, approximately 9,618 lf of Long Canyon would consist of reconstructed channel, while roughly 800 lf would be preserved and 961 lf would be converted to buried storm drain. There would be 8,040 lf of buried bank stabilization along the west bank, and 6,665 lf along the east bank of Long Canyon. The Draft LEDPA includes four road crossing culverts in Long Canyon, including a large fill-supported crossing for Magic Mountain Parkway. (New) **Table 3.0-37** summarizes the proposed changes. Please refer to **Figure 3.0-52** for locations of the proposed infrastructure features, affected drainages/jurisdictional areas, and development areas along Long Canyon.

Lion Canyon. The main branch of Lion Canyon would be stabilized for its entire length, selectively regraded in some areas, and stabilized with grade control structures in others. Approximately 5,835 lf of the existing drainage would be permanently altered by construction of stabilizing elements. In addition, approximately 6,095 lf of drainage would be converted to buried storm drain.

There would be one major road crossing culvert to support Magic Mountain Parkway in the uppermost reach. An existing agricultural road crossing in the lower reach would remain and be converted for maintenance access to the water quality basin near the confluence with the Santa Clara River. (New) **Table 3.0-37** summarizes the proposed changes. Please refer to **Figure 3.0-53** for locations of the proposed features, including affected drainages/jurisdictional areas, and the development areas along Lion Canyon.

~~(New)~~ Table 3.0-37
Draft LEDPA Tributary Drainage RMDP Infrastructure

Drainage Location	Drainage Modified (lf)	Drainage Converted to Buried Storm Drain (lf)	Bank Stabilization[1] (lf)		Preserved Drainage (lf)	Road Crossings	
			West Bank	East Bank		Bridges	Culverts
Modified Drainages							
Chiquito Canyon	8,004	2,624	5,722	7,069	1,432	1	2
Lion Canyon	5,835	6,095	-	-	-	-	1
Long Canyon	9,618	961	8,040	6,665	-	-	4
Potrero Canyon	18,316	9,389	17,202	17,130	11,989	1	4
San Martinez Grande Canyon	4,792	-	3,686	2,558	378	1	1
Unmodified/Converted Drainages							
Agricultural Ditch	-	1,479	-	-	329	-	-
Ayers Canyon[2]	147	-	-	-	2,317	0	1
Dead-End Canyon	-	1,931	-	-	-	-	-
Exxon Canyon	-	1,276	-	-	2,265	-	-
Homestead Canyon	-	609	-	-	-	-	-
Humble Canyon	-	421	-	-	5,116	-	-
Middle Canyon	-	7,375	-	-	211	-	-
Mid-Martinez Canyon	-	4,557	-	-	256	-	-
Off-Haul Canyon	-	5,764	-	-	3,014	-	-
Salt Canyon	7,290	-	-	1,841	101,470	-	-
Magic Mountain Canyon	-	6,111	-	-	-	-	-
Unnamed Canyon 1[3]	-	4,647	-	-	-	-	-
Unnamed Canyon 2	-	416	-	-	-	-	-
Unnamed Canyon A	-	-	-	-	1,293	-	-
Unnamed Canyon B	-	1,004	-	-	568	-	-
Unnamed Canyon C	-	402	-	-	869	-	-
Unnamed Canyon D	-	1,230	-	-	262	-	-
Totals	**54,001**	**56,291**	**34,650**	**35,263**	**131,769**	**3**	**13**

Notes:

[1] The lf of bank stabilization does not necessarily reflect impacts to jurisdictional areas; it only provides the linear feet of bank protection to be installed along various tributary drainages, some of which is in upland areas.

[2] The 147 lf of Drainage Modified is road crossing bridge/culvert-related.

[3] Unnamed Canyons 1 and 2 are located within the Entrada planning area and are given a numerical designation to distinguish them from the four other unnamed canyons located within the Specific Plan area (*i.e.*, Unnamed Canyons A-D).

Source: Corps' draft 404(b)(1) alternatives analysis (June 2010).

SOURCE: PACE 2010

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-51

POTRERO CANYON DETAIL - DRAFT LEDPA
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\LEDPA\ReportFigures_20100223\Section3\8238E_FIGURE-3-0-52_PotreroDraftLedpt_PC1_20100309.mxd

Santa Clara River

Road Crossing
Culvert Locations

1000'

2000'

3000'

4000'

5000'

6000'

7000'

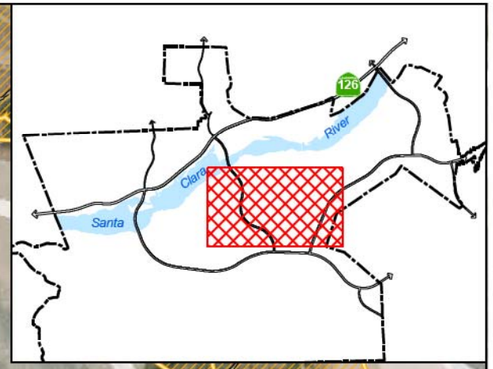
8000'

9000'

Long Canyon

Road Crossing
Culvert Location

Road Crossing
Culvert Location



Legend

- Resource Management & Development Plan
- Spineflower Preserve

Drainage/Jurisdiction Features

- Drainage/Jurisdiction Preserved
- Drainage/Jurisdiction Temporarily Impacted
- Drainage/Jurisdiction Permanently Impacted
- Drainage/Jurisdiction Converted to Storm Drain

Bank Stabilization Features

- Drainage/Jurisdiction Newly Created
- Proposed Bank Stabilization
- Bridge/Road Crossing
- Proposed Grading
- Roads

n

0 300 600 1,200 Feet

APPROXIMATE SCALE IN FEET

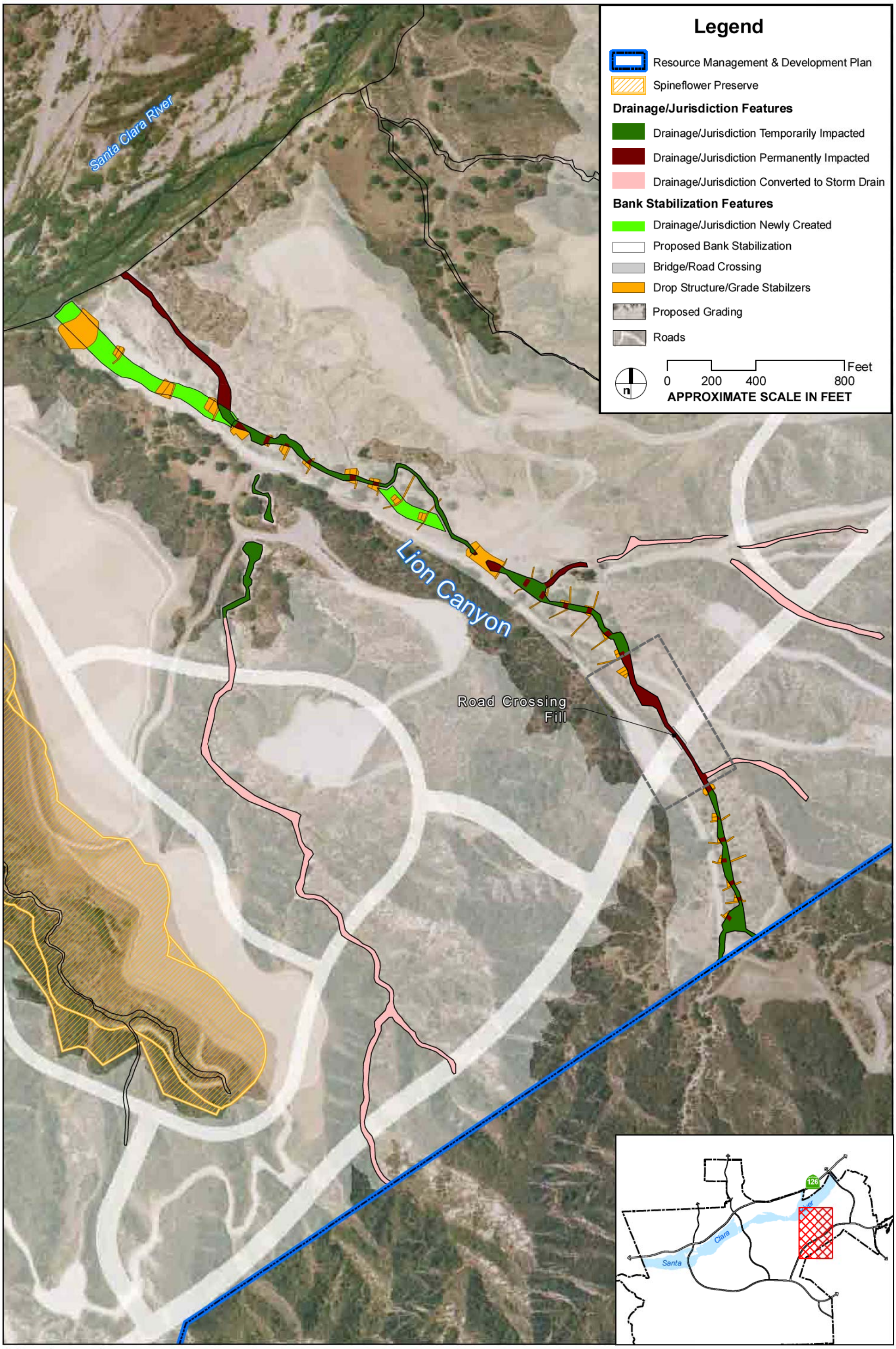
SOURCE: PACE 2010

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-52

LONG CANYON DETAIL - DRAFT LEDPA
PROPOSED RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\LEDPA\ReportFigures_20100223\Section3\8238E_FIGURE-3-0-51_LongDraftLedpa_PC1_20100309.mxd



SOURCE: PACE 2010

Note: Location of drop structures/grade stabilizers are approximate.

FIGURE 3.0-53

LION CANYON DETAIL - DRAFT LEDPA
RMDP TRIBUTARY TREATMENTS

P:\8238E\GIS\mxds\LEDPA\ReportFigures_20100223\Section3\8238E_FIGURE-3-0-9_LionAlternative2_6_PC1_043008.mxd

Other Drainages. One culverted road crossing would be constructed across the mouth of the Ayers Canyon drainage. No other drainage facilities would be constructed in Ayers Canyon. In addition, the existing six-lane bridge allowing SR-126 to cross the Castaic Creek drainage would be expanded to eight lanes.

3.5.3.1.2 *SCP Component (Draft LEDPA)*

The spineflower preserve design identified in the Revised Initial LEDPA has been carried forward in the Draft LEDPA, as summarized in (New) **Table 3.0-38 and (New) Table 3.0-39,** and depicted in **Figure 3.0-54**. This design would result in a greater level of spineflower protection than the proposed SCP, with increased preservation of occupied habitat and less loss when compared to the proposed Project. Within the preserves, spineflower management and monitoring actions would be the same as those described in the proposed SCP.

Figure 3.0-54 depicts the Draft LEDPA spineflower preserves relative to the connectivity between the preserves and the approved and proposed open space within the SCP study area. Refer to (New) **Table 3.0-38**, which summarizes the Draft LEDPA spineflower preserve characteristics, including spineflower acreages proposed to be preserved and taken. (New) **Table 3.0-39** summarizes the Draft LEDPA preserve design.

(New) Table 3.0-38
Spineflower Preserve Alternatives Summary
Draft LEDPA

Location	Preserve Size (ac)	Spineflower Preserved (ac)	Spineflower Impacted (ac)	Percent Preserved (ac)	Percent Taken (ac)
Specific Plan					
Airport Mesa	68.52	5.31	3.05	63.5%	36.5%
Grapevine Mesa	65.75	4.02	1.23	82.4%	17.6%
Potrero	16.9	1.32	0.33	80.0%	20.0%
San Martinez Grande	69.2	2.29	-	100%	0.0%
Subtotal	**220.37**	**12.94**	**4.24**[1]	**75.3%**	**24.7%**
Entrada[1]	27.02	1.03	0.78	56.8%	43.2%
Valencia Commerce Center[1]	0.00	0.00	0.85	0.0%	100.0%
Grand Total	**247.39**	**13.97**	**5.87**	**70.4%**	**29.6%**

Notes:

[1] A small portion (0.37 acre) of this area lies within what will be designated open space within the Grapevine Mesa and Potrero Areas. While this area does not fall within the impact footprint, it will not be managed or monitored. For purposes of this analysis this area is considered to be taken and is listed under Other Intermediate.

[2] The Entrada preserve and Valencia Commerce Center spineflower population areas are outside of both the RMDP and the scope of the Corp's Section 404(b)(1) Alternatives Analysis; however, the data is included here for information purposes only.

Source: Dudek, 2010.

(New) Table 3.0-39
Draft LEDPA Preserve Design

Preserve	Preserve Statistics		Preserve Design Elements		
	Proposed Preserve[1] (ac)	Cumulative Area Occupied[2] (ac)	Core[3]	Buffer[4]	Expansion[5]
Specific Plan					
Airport Mesa	68.52	5.31	26.16	18.82	23.54
Grapevine Mesa	65.75	4.02	9.01	37.33	19.41
Potrero	16.90	1.32	4.37	10.43	2.10
San Martinez Grande	69.20	2.29	8.24	26.17	34.79
Subtotal	**220.37**	**12.94**	**47.78**	**92.75**	**79.84**
Entrada[6]	27.02	1.03	9.00	18.02	7.97
VCC[6]	-	-	-	-	-
Grand Total	**247.39**	**13.97**	**56.78**	**110.77**	**87.81**

Notes:

1 Proposed preserve is the total area within the preserve boundary.

2 Cumulative area occupied the total area of mapped spineflower within the preserve between 2002 and 2007.

3 Core identifies the perimetered occupied/preserved populations interior to buffer area and preserve boundary.

4 Buffer represents the area within the preserve between the core perimeter and the preserve boundary (urban edge.)

5 Expansion area represents the area interior to the core that is not part of the cumulative area occupied.

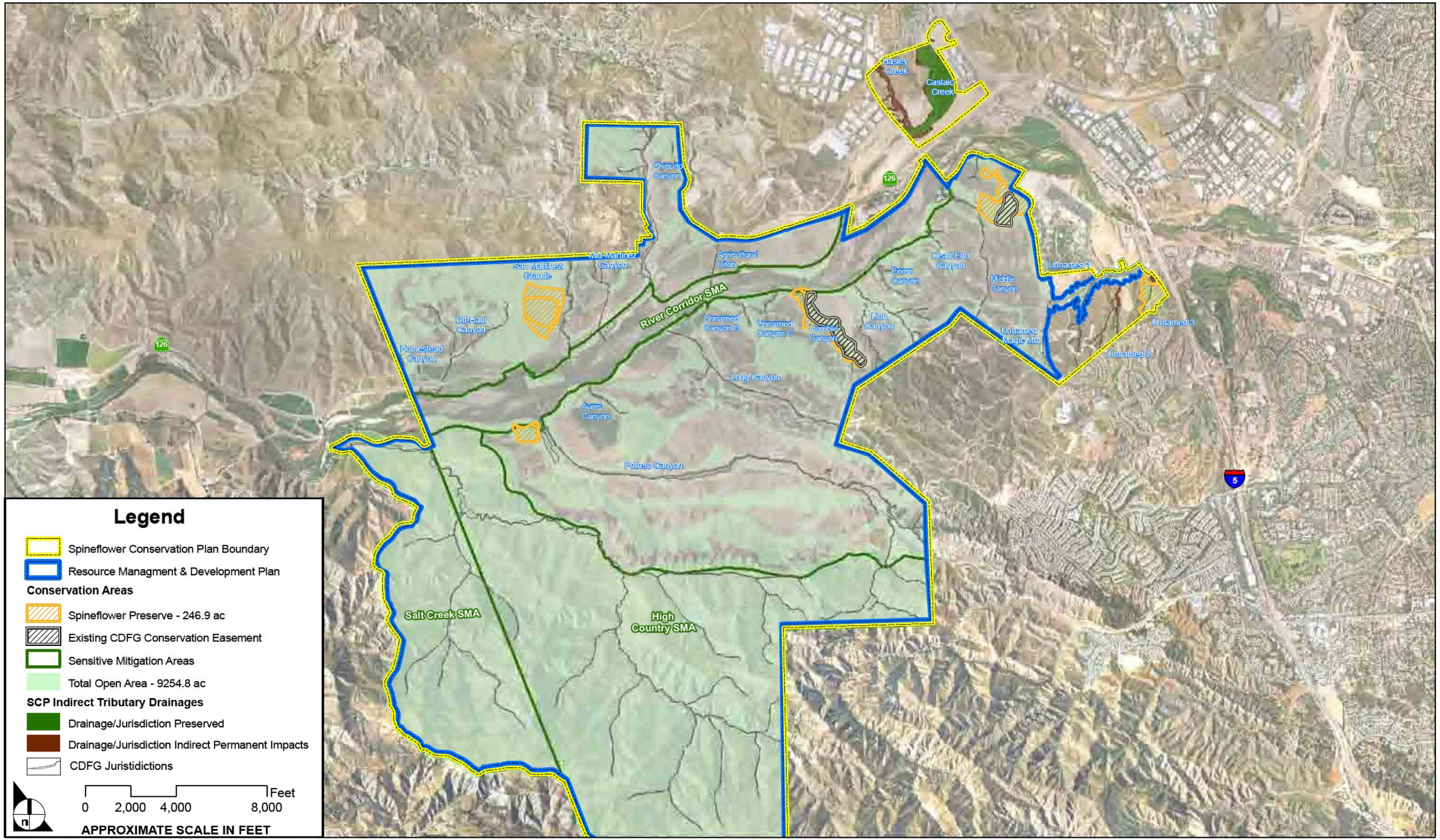
6 The Entrada preserve and Valencia Commerce Center spineflower population areas are outside of both the RMDP and the scope of the Corp's Section 404(b)(1) Alternatives Analysis; however, the data is included here for information purposes only.

Source: Dudek, 2010.

The spineflower preserve design for the RMDP area that is contained in the Draft LEDPA is subject to change based on further input from CDFG. CDFG is responsible for granting incidental take authorization under CESA for impacts to spineflower.

3.5.3.2 Summary Description of Development Facilitated by the Draft LEDPA

Figure 3.0-55 depicts the land uses that would be facilitated within the RMDP Area under the Draft LEDPA. The Draft LEDPA would provide 2,587.0 net developable acres, 19,812 residential units and 5.41 million square feet of commercial uses. (New) **Table 3.0-40** describes the development facilitated under the Draft LEDPA in relation to the development approved under the Specific Plan.

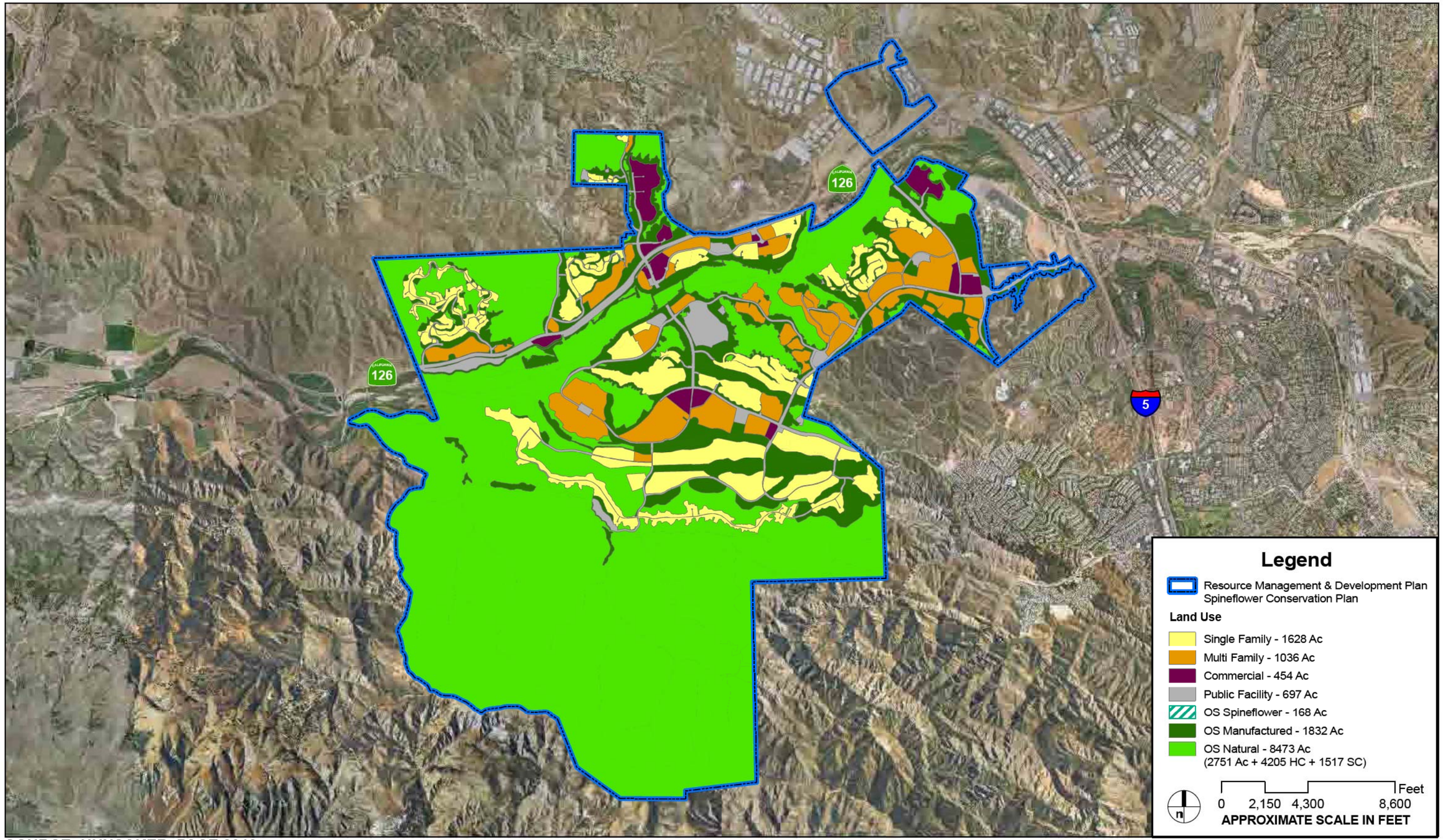


SOURCE: PACE 2010

FIGURE 3.0-54

DRAFT LEDPA SPINEFLOWER PRESERVES

P:\8238E\GIS\mxds\LEDPA\ReportFigures_20100223\Section3\8238E_FIGURE-3-0-54_SpineflowerPreservesInRelationtoOpenSpace_PC1_20100309.mxd



SOURCE: HUNSAKER, PACE 2010

FIGURE 3.0-55

DRAFT LEDPA RMDP/SCP
LAND USE PLAN

P:\8238E\GIS\mxds\LEDPA\ReportFigures_20100223\Section3\8238E_FIGURE-3-0-55_DraftLedpaRmdpScpLandUsePlanPC1_20100309.mxd

(New) Table 3.0-40
Development Facilitated by the Draft LEDPA

Land Use Category[1]	Acres	Res. (DU)[2]	Comm.[3] (MSF)[4]	Percent Res. Reduction (DU)[5]	Percent Comm. Reduction (MSF)[5]	Total Res. Reduction (DU)[5]	Total Comm. Reduction (MSF)[5]
Single-Family Residential	1,247.6	8,228	-	9.40%	-	853	-
Multi-Family Residential	973.6	11,584	-	1.86%	-	220	-
Commercial	222.5	-	5.41	-	2.49%	-	0.14
Public Facilities[6]	143.3	-	-	-	-	-	-
Subtotal – Net Developable Acreage	2,587.0						
Other Public Facilities[7]	71.3	-	-	-	-	-	-
Open Space[8]	10,553.7	-	-	-	-	-	-
Subtotal RMDP Area	**13,212**	**19,812**	**5.41**	**5.14%**	**2.49%**	**1,073**	**0.14**
Entrada Development							
Single-Family Residential	68.8	428	0	-	-	-	-
Multi-Family Residential	45.1	1,297	0	-	-	-	-
Commercial	32.2	0	0.45	-	-	-	-
Public Facilities	40.5	0	0	-	-	-	-
Open Space	129.5	0	0	-	-	-	-
Subtotal Entrada	**316.1**	**1,725**	**0.45**	**-**	**-**	-	-
Total Entrada Reduction Compared to Proposed Project							
Valencia Commerce Center							
Commercial	53.0	0	1.10	-	-	-	-
Industrial Park	110.9	0	2.30	-	-	-	-
Public Facilities	13.7	0	0	-	-	-	-
Open Space	143.6	0	0	-	-	-	-
Subtotal VCC	**321.3**	**0**	**3.40**	**-**	**-**	-	-
Total VCC Reduction Compared to Proposed Project	-	-	-	-			

Notes:
1 In some instances, land use categories have been consolidated to simplify presentation of the land use data.
2 "DU" means development units
3 Commercial includes business park, office, retail, *etc.*
4 "MSF" means million square feet.
5 All reductions represent a comparison to the amount of development approved under the Specific Plan and included in the Proposed Project.
6 Public Facilities includes parks, schools, libraries, *etc*.
7 Other public facilities includes roads, utilities, and other facilities not included above.
8 Open Space means natural (preserved) and manufactured open space, and includes the Specific Plan's High Country SMA/SEA 20, River Corridor SMA/SEA 23, Open Areas, spineflower preservations areas, and other specified open areas, primarily located within the Specific Plan's Estate Residential designation. Open Space does not include the Salt Creek area, adjacent to the Specific Plan boundary, comprised of about 1,517 acres. If the Salt Creek area is included, the total Open Space is approximately 10,462.8 acres (8,946 + 1,517 = 10,462.8).
Source: Corps' draft 404(b)(1) alternatives analysis (June 2010)