

Castaic Area Multi-Use Trails Plan

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SECTION 1.0 INTRODUCTION

1.1 PLANNING AREA

At the direction of Supervisor Michael D. Antonovich, the County of Los Angeles Department of Parks and Recreation (County Parks) embarked on the development of the Castaic Area Multi-Use Trails Plan (CAMUTP) due to the emerging need for additional trail recreation opportunities in this area of the County. The Castaic Project Area, which encompasses approximately 75 square miles in the Castaic Area of Los Angeles County, is composed of generally mountainous and valley terrain that abuts the Angeles National Forest to the north, the City of Santa Clarita to the southeast, Highway 126 to the south, and Ventura County to the west (see **Figure 1-3 Regional Vicinity Map**).

The Castaic Project Area is generally considered rural and is home to approximately 29,000 residents¹ living in the unincorporated communities of Castaic, Castaic Junction, Val Verde, Hasley Canyon, Hillcrest, and Paradise Ranch. Other destinations of note are Castaic Lake; the canyons of Charlie, Tapia, Romero, Sloan, and Violin; the Valencia Commerce Center; the Peter Pitchess Detention Center; and the Northlake development and part of the Newhall Ranch developments, both of which are governed by specific plans (Northlake Specific Plan adopted in 1992², Newhall Ranch Specific Plan adopted in 2003³). The actual boundaries of the Castaic Project Area are shown on **Figure 1-4 Castaic Project Area Map**.

Other governing forces in the Castaic Project Area include the Santa Clarita Valley Area Plan (One Valley One Vision)⁴, the Castaic and San Francisquito Canyon Community Standards Districts,^{5, 6} and the Castaic

Area Town Council. Additionally, the County Parks recognizes there are other trail planning efforts in the region such as Castaic Lake State Recreation Area, Newhall Ranch developments, and Northlake development. Trail alignments from the Northwest San Fernando Valley and Southwest Santa Clarita Valley Sub areas of the Santa Susana Mountains Trails Master Plan⁷ have recently been adopted south of the Castaic Project Area.

The County Parks has undertaken previous planning that has been considered as part of this Trails Plan, such as detailed trail assessments for existing County trails, development of the County trails database, Maintenance Reports, the Trails Signage Program, development of the County of Los Angeles Trails Manual (Trails Manual),⁸ and the Trail Safety and Emergency Response Plan/Program. These resources provide the County Parks staff, other County staff, and developers with guidelines for trail planning, design, development, and maintenance of County Parks trails. The Trail Safety and Emergency Response Plan focuses on emergency response methods and information in conjunction with other County departments, such as the Los Angeles County Fire Department, the Los Angeles County Sheriff's Department including the Parks Bureau, Mounted Assistance Unit, and Urban Search & Rescue, as well as the County Parks staff. Emergency issues in the plan include, but are not limited to, injuries, evacuations, wildlife encounters, lost trail users, and natural disasters.

1. U.S. Census Bureau, *Community Facts, 2010 Census*; using American FactFinder, <http://factfinder2.census.gov>

2. Los Angeles County Department of Regional Planning. June 1992. *Northlake Specific Plan*. Available at: http://planning.lacounty.gov/view/northlake_specific_plan/

3. Los Angeles County Department of Regional Planning. May 2003. *Newhall Ranch Specific Plan*. Available at: http://planning.lacounty.gov/assets/upl/data/pd_sp_newhall-ranch.pdf

4. Los Angeles County Department of Regional Planning. 2012. *Santa Clarita Valley Area Plan (One Valley One Vision)*. http://planning.lacounty.gov/assets/upl/data/pd_santa-clarita-area-plan-2012.pdf

5. Los Angeles County Department of Regional Planning. November 2004. *Los Angeles Municipal Code 22.44.137 - Castaic Community Standards District*. Available at: https://www.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT22PLZO_DIV1PLZO_CH22.44SUDI_PT2COSTDI_22.44.137CAARCOSTDI

6. Los Angeles County Department of Regional Planning. November 2009. *Los Angeles Municipal Code 22.44.144- San Francisquito Canyon Community Standards District*. Available at: https://www.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT22PLZO_DIV1PLZO_CH22.44SUDI_PT2COSTDI_22.44.144SAFRCACOSTDI

7. Los Angeles County Department of Parks and Recreation. May 2015. *Santa Susana Mountains Final Trails Master Plan*. Available at: <https://trails.lacounty.gov/Files/Documents/115/FINAL%20Santa%20Susana%20Mountains%20Final%20Trails%20Master%20Plan%20May%202015.pdf>

8. Los Angeles County Department of Parks and Recreation. June 2013. *County of Los Angeles Multi-Use trails Plan*. Available at: [https://trails.lacounty.gov/Files/Documents/69/LA%20County%20Trails%20Manual%20\(Revised%2006-20-13\).compressed.pdf](https://trails.lacounty.gov/Files/Documents/69/LA%20County%20Trails%20Manual%20(Revised%2006-20-13).compressed.pdf)

1.2 PLANNING EFFORT

The proposed CAMUTP is intended to address the existing practice of conceptualizing and requiring implementation of trail segments in conjunction with the approval process for development projects on a case-by-case basis with no overarching plan to guide the development of a backbone trail that meets the needs of the Castaic region. The overall work effort consists of three primary components: the CAMUTP; the environmental document, a proposed mitigated negative declaration, to support the County Parks as the lead agency pursuant to CEQA; and technical studies to support the analysis in the environmental document. The work effort is separated into two phases. Phase I contains the CAMUTP. Phase II would include the environmental document, a proposed mitigated negative declaration, and technical studies that are pertinent to CEQA (**Figure 1-1**).

The County Parks intends for the CAMUTP to act as a framework to encourage and promote new multi-use trails and recommend improvements to existing trails, taking various factors into consideration, including circulation, accessibility and connectivity, and property rights. A goal of the CAMUTP is to provide a conceptual “optimum” trail alignment with seamless transitions throughout the Castaic Project Area and to areas and jurisdictions adjacent to the Castaic Project Area. In particular, the plan for the Castaic Project Area must recognize and complement other regional trail planning efforts being undertaken by (including but not limited to) the Newhall Ranch Specific Plan, Northlake Specific Plan, City of Santa Clarita, US Forest Service (USFS), National Park Service (NPS) and California State Parks. The planning effort outlined the existing conditions within the Castaic Project Area through an inventory of existing and mapped trails or trails

easements, preferred trail alignments including needs, and identification of “gaps” and “missing” segments required to improve connectivity (**Figure 1-2**). The CAMUTP provides an analysis of potential trails and connectors between prime destination points (i.e., County and other jurisdictions’ park and open space facilities, particularly nodes or other relevant trail-heads, staging grounds, and equestrian centers) that will provide the opportunity for enhanced recreational opportunities for County residents and visitors.

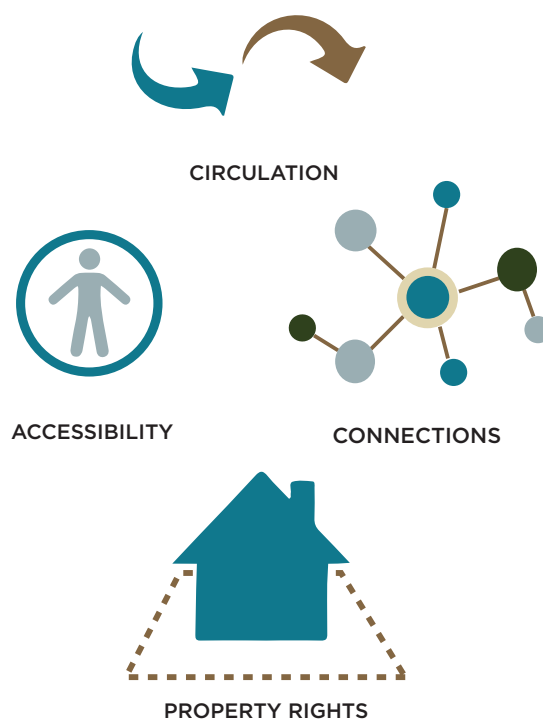


Figure 1-1 Factors of consideration towards development of the CAMUTP

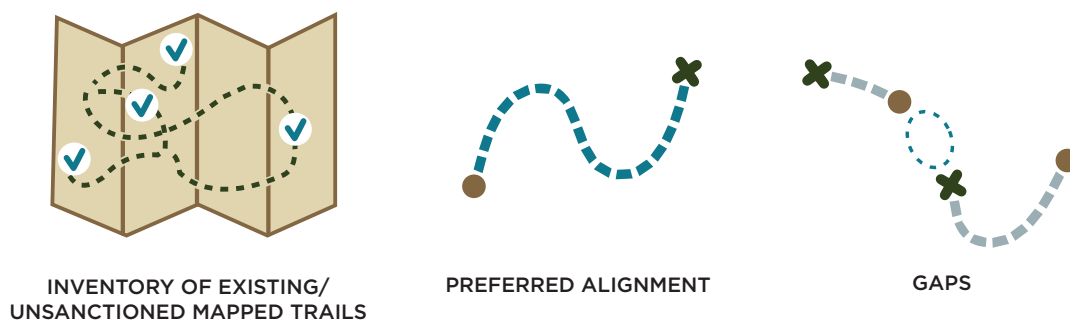
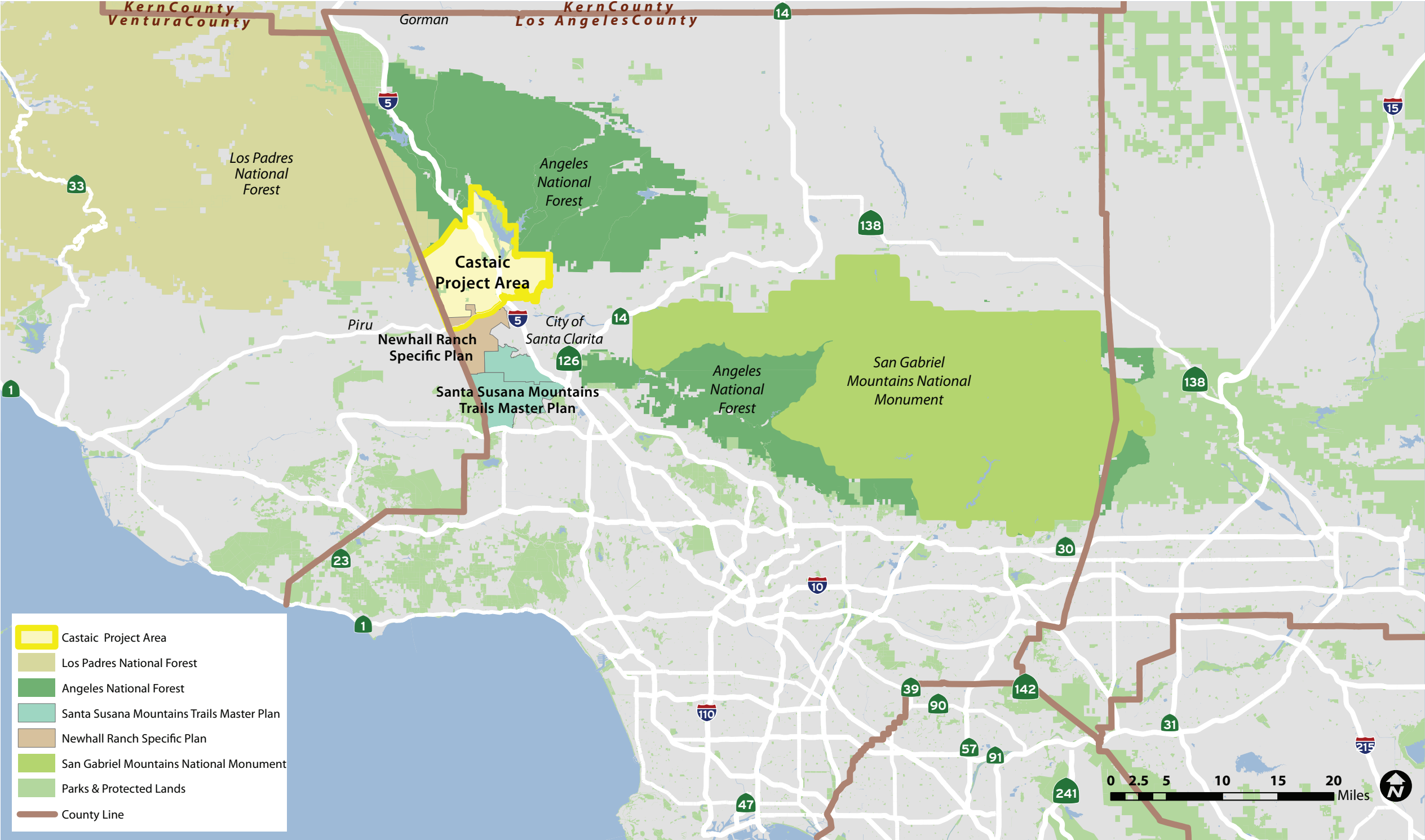
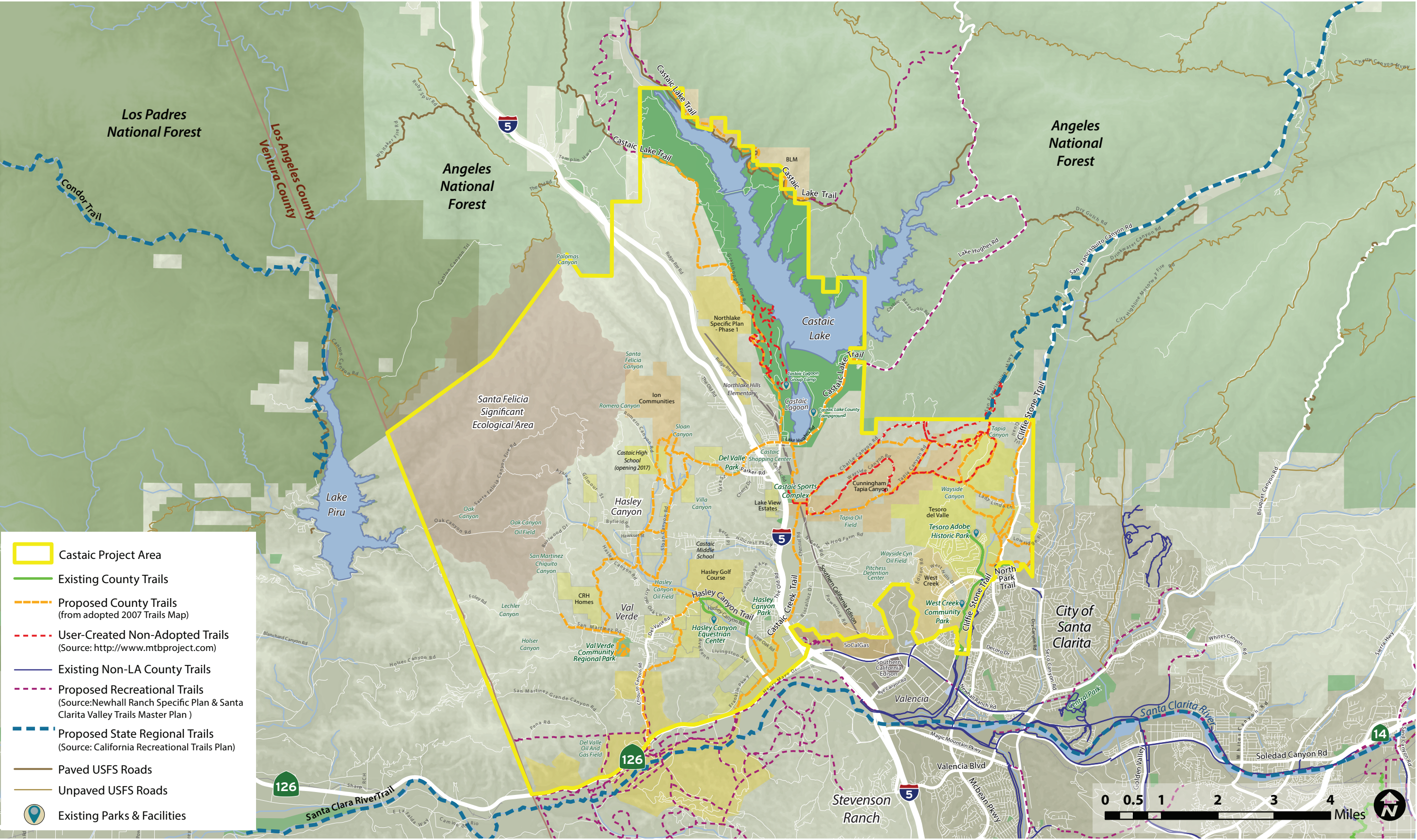


Figure 1-2 Planning Efforts towards the development of the CAMUTP



DISCLAIMER: This map was created for trail planning purposes only. Some trails shown do not exist currently and are planned for the future, or they exist but are not officially designated. Permission to use trails shown on this map should not be assumed. Some trails may traverse private property and suggested alignments do not imply rights of public use.

Figure 1-3 Regional Vicinity Map



DISCLAIMER: This map was created for trail planning purposes only. Some trails shown do not exist currently and are planned for the future, or they exist but are not officially designated. Permission to use trails shown on this map should not be assumed. Some trails may traverse private property and suggested alignments do not imply rights of public use.

Figure 1-4 Castaic Project Area Map

MAP DATA SOURCES
Date Map Created/Revised: 9/30/2015 Basemap: USGS 2006 LA County LIDAR 10ft DEM
Data Sources: mtbproject.org, ESRI Streetmap NA 2013, Los Angeles County Enterprise GIS, California Protected Areas Database 2015a, Santa Clarita Valley Master Plan of Trails 2015, California Recreational Trails Plan 2011, Los Angeles County General Plan 2007, USFS Road Core, City of Santa Clarita
Map Author: James Powell

1.3 COUNTY OF LOS ANGELES GENERAL PLAN 2035

The County of Los Angeles General Plan 2035 is a guiding document for community based planning with an emphasis on sustainability. The CAMUTP will be incorporated into various elements of the County's General Plan 2035 (such as the Community/Area Plans and Regional Trail System) and be used to guide development of trails that would constitute projects under CEQA.

The CAMUTP addresses this document's goals of designing for a sense of place, sustainable design, conservational efforts, the land use designation of public and semi-public land, and the parks and recreation requirements. The County designates the Castaic Project Area as the Santa Clarita Valley Planning Area.

Multiple policies reflect the County's desire to address these goals, including:

- Encouraging the implementation of future designs concepts that promote active transportation, whenever available and feasible. (Policy M 2.6)
- Requiring sidewalks, trails and bikeways to accommodate the existing and projected volume of pedestrian, equestrian and bicycle activity, considering both the paved width and the unobstructed width available for walking. (Policy M 2.7)
- Connecting trails and pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations. (Policy M 2.8)
- Where the creation of new or the retrofit of roadways or other transportation systems is necessary in areas with sensitive habitats, particularly Significant Ecological Areas (SEAs), using best practice design to encourage species passage and minimize genetic diversity losses. (Policy M 7.4)
- In rural areas, requiring rural highway and street standards that minimize the width of paving and the placement of curbs, gutters, sidewalks, street lighting, and traffic signals, except where necessary for public safety. (Policy M 7.5)
- Facilitating the implementation and maintenance of the Community Climate Action Plan to ensure that the County reaches its climate change and greenhouse gas emission reduction goals. (Policy AQ 3.1)
- Reducing energy consumption in County operations by 20 percent by 2015. (Policy AQ 3.2)
- Reducing water consumption in County operations. (Policy AQ 3.3)
- Supporting rooftop solar facilities on new and existing buildings. (Policy AQ 3.6)

1.4 COUNTY OF LOS ANGELES TRAILS MANUAL

The Trails Manual clarifies the standards for the alignment and design of the trails that will comprise the County Parks Castaic Area system. Adopted in 2011, the Trails Manual is a comprehensive guide for the planning, design and implementation of trails by the County of Los Angeles.

The Trails Manual includes Trail Design Guidelines (*Section 4.0*) that address methods of trail alignment and design to provide trails that are sustainable; controlling runoff and avoiding erosion; requiring limited maintenance; accommodating users well; and creating minimal environmental impact. It includes trail classifications to accommodate trails in different settings. It is County Parks' policy and objective that all trails will be multi-use whenever possible - accommodating pedestrians/hikers, people walking dogs, mountain bikers, and equestrians.

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SECTION 2.0

PLAN GOALS, OBJECTIVES, AND PROCESS

2.1 GOALS AND OBJECTIVES

2.1.1 GOALS

The CAMUTP will act as a framework to encourage and promote new multi-use trails and recommend improvements to existing trails, providing an alignment with seamless transitions throughout the Castaic Project Area to areas, jurisdictions, and prime destinations within and adjacent to the Castaic Project Area. The plan will include recommendations for reducing unmet local recreation demand in the Santa Clarita Valley Planning Area and in the 5th Supervisorial District.

The overall goal of the CAMUTP is to develop a complete multi-use trail system connecting user groups and local populations to desired recreation

destinations and experiences, with seamless transitions to the trails of adjacent jurisdictions, compatibility with adjacent land uses and environmental resources, and a safe and sustainable design that is consistent with the Trails Manual.

Another goal of the CAMUTP is to develop a recreational trail system that supports low-intensity use, including mountain biking, equestrian use, and hiking, to accommodate the population increase anticipated in Santa Clarita Valley Planning Area, shown in **Figure 2-1: Santa Clarita Valley Area Plan Master Plan of Trails**.

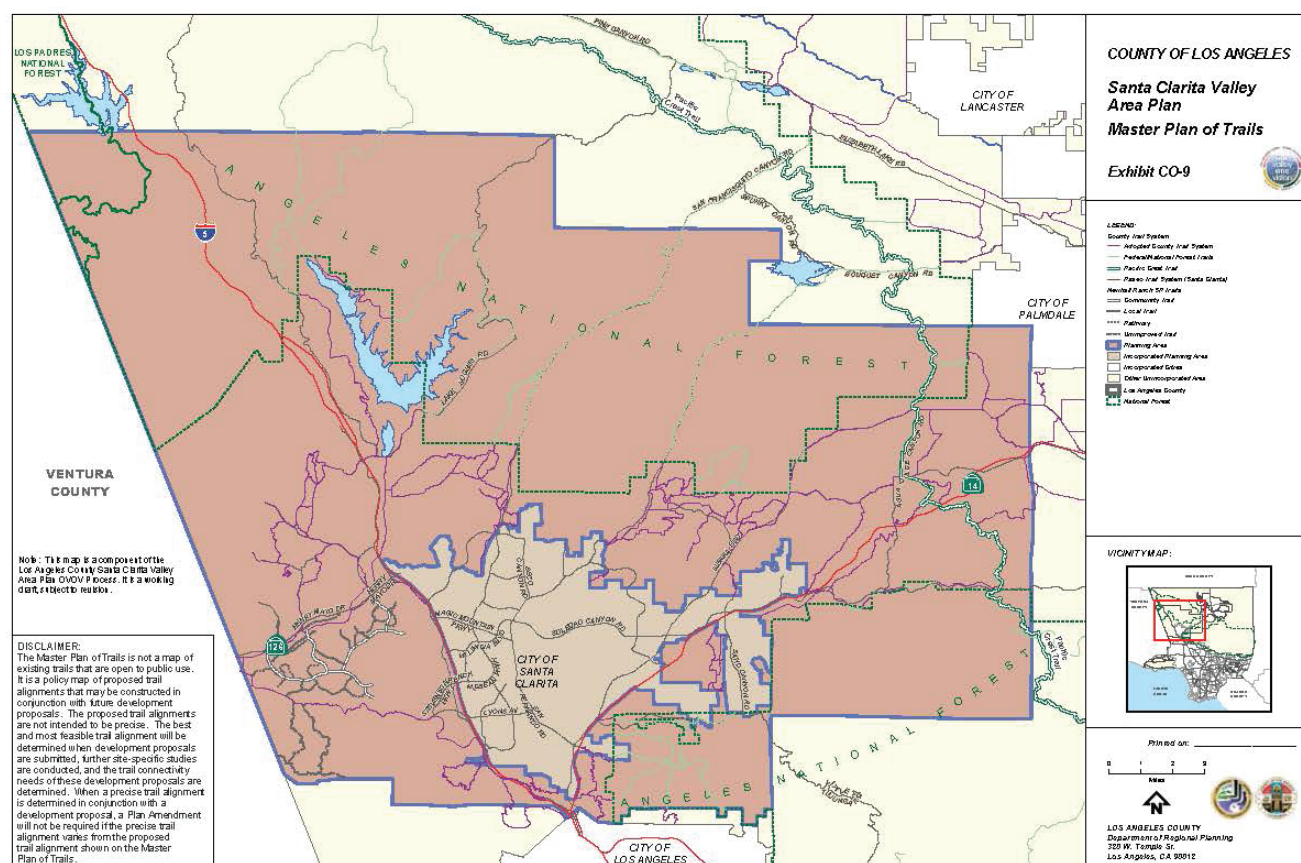


Figure 2-1 Santa Clarita Valley Area Plan Master Plan of Trails
 (based on the Parks and Recreation Element of the Los Angeles County General Plan 2035.
 Source: http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan-ch10.pdf)

2.1.2 OBJECTIVES AND MEASURES

Figure 2-2 provides an overview of objectives for the CAMUTP. Detailed measures towards these objectives are as follows:

1. Accommodate a wide range of trail user types and abilities

- Provide multi-use trails typically open to all users—hikers, mountain bikers, equestrians
- Provide natural surfaced trails (paved only at driveways and crossings)
- Provide or identify trail staging/parking areas to accommodate future access and improve existing access
- Provide bike skills parks
- Provide family-oriented trail loops
- Provide accessible trails for people with disabilities where feasible and as budget allows
- Provide nature trails/interpretive trails
- Assess user-created trails and determine their disposition

2. Connect to desirable destinations, features, and settings

- Connect to key destinations (examples):
 - Loma Verde Peak
 - Castaic Lake (Santa Clarita Valley Area Plan designated scenic water body)
 - Castaic Lagoon
 - Equestrian centers (public and private)
- Provide trails and staging in proximity to major populations and public road access points
- Connect to existing trails and reconcile alignments with the adopted proposed trails from the County General Plan:
 - Castaic Lake Trail
 - Hasley Canyon Trail
 - Cliffie Stone Trail
 - Castaic Creek Trail
- Connect to existing and proposed trails of other systems (examples):
 - San Francisquito Canyon, City of Santa Clarita (Santa Clarita Valley Area Plan designated scenic canyon)



Figure 2-2 Plan Objectives

- Bowers Cave, unincorporated Los Angeles County (Santa Clarita Valley Area Plan designated historic/cultural resource)
 - Harry Carey Ranch, City of Santa Clarita (Santa Clarita Valley Area Plan designated historic/cultural resource)
- e. Prioritize links to existing trails within ½ mile of Castaic Project Area.

3. Provide safe and sustainable trails

- a. Align and configure trails to minimize grading, preserve or replicate natural drainage patterns, and minimize impact on streams and wetlands
- b. Use best practices for trail design from the Trails Manual
- c. Identify logical connections between limited-use city trails and County multi-use trails
- d. Use best practices for bicycle, equestrian, and pedestrian crossings where trails must cross public or other roads

4. Avoid or minimize environmental impacts

- a. Avoid or address environmental hazard areas such as contaminated soils and geologic hazards
- b. Protect valued biological resources
 - Special status vegetation
 - Native vegetation and habitats
 - Habitats and known occurrences of special status species
- c. Protect cultural resources
- d. Respect private property rights
 - Be compatible with existing and planned land uses and ownerships



Image 2-1 Example gathering area

- Understand and respond to the constraints of residential, agricultural, transportation, and utilities uses on or adjacent to the trail alignment
- Respect private property rights while defining needs and seeking opportunities to secure the rights for trail access

5. Identify the means to implement and maintain trails as feasible within the scope and budget of the CAMUTP

- a. Generally define trail alignments and design/construction requirements for each segment
- b. Identify opportunities for establishing trails in conjunction with development entitlements and other projects
- c. Identify anticipated technical studies, permitting, access requirements, agreements, and other implementation
- d. Prepare planning-level cost estimates for construction and other implementation steps
- e. Identify trail planning and implementation phases and priorities
- f. Identify responsible parties, partners, and key stakeholders for implementation, operation, and maintenance of trail segments

6. Develop plan consistent with the County's multi-use (equestrian, hikers and mountain biker) trail policy

- a. The Trail Manual is the standard approved design resource for trail planning, design, construction, and maintenance
- b. The Trails Manual offers guidance for all County departments that interface with trail planning, design, development, and maintenance



Image 2-2 Hikers on a multi-use trail

- c. County's multi-use trail policy recognizes the existence of regional trail networks in Los Angeles and surrounding counties that provides access to recreational resources operated by federal, state, and local agencies
- d. Trails policy provides guidelines for implementation of the goals, objectives, and purpose of the Parks and Recreation Element of the Los Angeles County General Plan 2035¹

7. Develop plan consistent with Parks and Recreation Element of County General Plan

8. Develop plan consistent with the Castaic Lake Recreation Plan

2.2 PLANNING PROCESS

The County Parks developed outreach activities in support of the overall CAMUTP process focused on agency, stakeholder, and public participation opportunities. The initial run of public outreach included four meetings with trail users and the community at-large. The purpose of the outreach was to gather information about where people wanted to ride/hike, and where trail connections and amenities are needed. The information collected was used to inform the proposed trail network that was developed as part of the CAMUTP and CEQA process.

All four meetings were held in the Community Room of the Castaic Branch of the Los Angeles Public Library, 27971 Sloan Canyon Road, Castaic, CA 91384. Although meetings were focused on specific user groups, they were made public and all users and community member were invited to participate.

Meetings were held on:

*August 20, 2015 / General Stakeholders
Community Workshop*

*September 17, 2015 / Mountain Bike User Focused
Community Workshop*

*September 24, 2015 / Equestrian User Focused
Community Workshop*

*October 1, 2015 / Hiking Community User Focused
Workshop*

E-mail blasts and mailings to area residents were made in an effort to alert the public about the project and invite them to participate in formulating alignments and policies for the CAMUTP. Outreach activities in support of the overall planning process focused on agency, stakeholder, and public participation opportunities. A project website² was created and linked to the County Parks websites³ to keep the public involved. The website contained a feature that launched an interactive map where users were able to provide feedback on new routes, potential new trail facilities, and general comments. Valuable data was gathered from a short survey taken by users on their first visit to use the map. Public comment sheets were made available at all meetings and provided participants with the opportunity to write comments and fill out a questionnaire. Detailed comments from the four meetings as well as data compiled from the online survey are provided in **Appendix A**.

2.2.1 COMMUNITY WORKSHOP: AUGUST 20, 2015

The following is a summary of the first community workshop on Thursday, August 20, 2015:

The County Parks Planning and Development Agency held the first Community Workshop to introduce the proposed CAMUTP and solicit initial input from community stakeholders at-large. The meeting was held at the County's Castaic Library with approximately 52 attendees. The meeting was facilitated by the project team members, including staff from the County Parks Planning and Development Agency, Sapphos Environmental, Inc., and Alta Planning + Design.

The meeting format consisted of a presentation that provided an overview of the Castaic Project Area, the County's commitment to multi-use (equestrian, hiking, and mountain biking) trails, and adherence to the Trails Manual. The presentation also included an overview of the project goals and objectives, project process, and timeline (**see Figure 2-3: CAMUTP Study Process**

1. Los Angeles Department of Regional Planning. 2015. County of Los Angeles General Plan 2035. Available at: http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan.pdf

2. <http://www.castaicmultiusetrails.org/>

3. <http://lacounty.gov> and <http://trails.lacounty.gov>

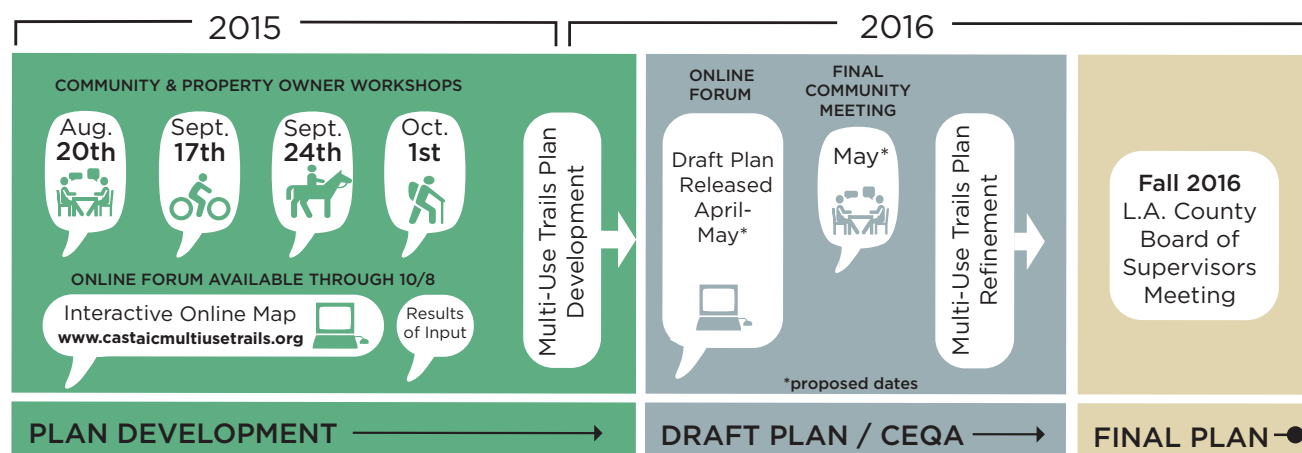


Figure 2-3 CAMUTP Study Process Timeline

Timeline). The presentation was followed by a question-and-answer period and a public forum.

The meeting focus included “information gathering break-out stations,” which consisted of six small group sessions. The small group sessions encouraged dialogue pertaining to trail opportunities and constraints and provided an opportunity for gathering feedback on poster boards. The topics covered included Project Goals and Objectives, Existing Use Areas, Interactive Trail Map, and Amenities. The Interactive Trail Map station allowed the attendees to register for a username and provide comments directly onto the project website⁴. The project team also created a comment form that was available for individuals to complete.

2.2.2 COMMUNITY WORKSHOP: SEPTEMBER 17, 2015

In early September 2015, the County Parks sent 16,092 meeting notices to property owners in Los Angeles and Ventura counties located within a half-mile radius of the Castaic Project Area for the September 17, September 24, and October 1, 2015 community workshops.

The following is a summary of the second community workshop on Thursday, September 17, 2015:

The County Parks Planning and Development Agency hosted the second Community Workshop with

discussions focused on the mountain bicycling user group. There were 45 participants in this workshop.

The meeting format began with an informational PowerPoint similar to the one used in the August 20th meeting. The room was set up around four small group stations to allow for more interaction amongst the stakeholders present. The amenities station from the August meeting remained the same, and an additional station was added specifically for local property owners to express their concerns. Each station was led by at least one project team member to facilitate trail opportunities and constraints discussion. Valuable feedback about use patterns, opportunities, and constraints and specific parcel information sparked passion and enthusiasm from property owners and recreational users. Additional input specifically from the mountain bike community was extremely important in the evaluation of the feasibility of trail alignments and trail connectivity in the Castaic Project Area.

4. <http://www.castaicmultiusetrails.org/>



Image 2-6 Community meeting presentation

2.2.3 COMMUNITY WORKSHOP: SEPTEMBER 24, 2015

The following is a summary of the third community workshop on Thursday, September 24, 2015:

The County Parks Planning and Development Agency hosted the third Community Workshop with discussions focused on the equestrian user group. There were 30 participants in this workshop. The meeting format consisted of a presentation which began with an overview of the Castaic Project Area, the County's commitment to multi-use (equestrian, hiking, and mountain biking) trails, and adherence to the Trails Manual. The presentation also included an overview of the project goals and objectives, project process, and timeline and was followed by a question-and-answer period.

The break-out sessions consisted of small group stations staffed by a dedicated project team member (County representative or specialized consultant) to facilitate and assist in note-taking of trail opportunities, constraints and issues based on feedback from the public. Based on the conversations taking place that evening, it was evident that the proposed project sparked passion and enthusiasm from all, including property owners and recreation users alike.



Image 2-7 Community meeting group sessions

2.2.4 COMMUNITY WORKSHOP: OCTOBER 1, 2015

The following is a summary of the fourth community workshop on Thursday, October 1, 2015:

County Parks Planning and Development Agency hosted the fourth and last Community Workshop with discussions focused on the hiking user group. There were 22 participants in this workshop. The meeting format followed those of the September 17th and 24th meetings. Similar to previous workshops, the project team distributed and collected Public Comment Sheets. The Public Comment Sheet provided an additional method of submitting important feedback to the project team. One side of the Public Comment Sheet had space for written comments; the other side had a questionnaire.

The project team received Public Comments Sheets in the mail and as well as email correspondence with valuable feedback from the community. The comment period for consideration in this comprehensive trail planning effort ended on October 31, 2015.

SECTION 3.0 EXISTING CONDITIONS

The CAMUTP recognizes and complements other local and regional trail planning efforts. An extensive list of policy and planning documents pertinent to the Castaic Project Area was reviewed during the existing conditions survey. Summaries are provided below with special attention to how each document related to the Castaic Project Area.

3.1 RELATED PLANS, PROJECTS AND POLICIES

There are 4 Federal, 3 State, 15 regional and local planning documents that address recreational trails at the regional and local levels in the vicinity of the Castaic Project Area, as shown in **Table 3-1**. Detailed information for each document can be found in **Appendix B**.

TABLE 3-1 Relevant Existing and Proposed Regional and Local Plans and Policies

DOCUMENT	AGENCY	RELEVANCE TO PLAN
FEDERAL		
Rim of the Valley Draft Special Resource Study and Environmental Assessment (2015)¹	<i>National Parks Service</i>	Connections to regional trails
Santa Monica Mountains National Recreation Area (SMMNRA) General Management Plan (2002)²	<i>National Parks Service</i>	Connections to regional trails
Pacific Southwest Region Land Management Plan (2005)³	<i>United States Department of Agriculture, Forest Service</i>	Connections to regional trails and land conservation
16 U.S. Code § 1131 - National Wilderness Preservation System⁴	<i>United States Department of Agriculture, Forest Service</i>	Connections to regional trails and national land preservation as it pertains to trail use
STATE		
California Recreational Trails Plan (2002)⁵	<i>California Department of Parks and Recreation</i>	Connection to regional trails
Statewide Comprehensive Outdoor Recreation Plan (SCORP) (2015)⁶	<i>California Department of Parks and Recreation</i>	Strategies for outdoor recreation leadership and action including tools for assessing park needs and ways to improve and fund parks in California
Castaic Lake State Recreation Area Operating Agreement (1969, amended 1990)⁷	<i>State of California Department of Parks and Recreation and County of Los Angeles Department of Parks and Recreation</i>	Proposed trail around Castaic Lake
REGIONAL AND LOCAL		
Ventura County General Plan (2011)⁸	<i>County of Ventura Resource Management Agency, Planning Division</i>	Connections to regional trails
Rim of the Valley Trail Corridor Master Plan (1990)⁹	<i>Santa Monica Mountains Conservancy</i>	Connections to regional trails

1. *National Park Service, Rim of the Valley Corridor Draft Special Resource Study and Environmental Assessment (Spring 2015)* http://park-planning.nps.gov/rimofthevalley_draftreport
2. *National Park Service, Santa Monica Mountains National Recreation Area (SMMNRA) General Management Plan (2002)*. Available at: <http://www.nps.gov/samo/learn/management/upload/samofgmpla.pdf>
3. *United States Department of Agriculture, Forest Service, Land Management Plan, R5-MB-075, -076, -078 and -080, September 2005 (2005)* <http://www.fs.usda.gov/main/r5/landmanagement/planning>
4. *United States Department of Agriculture, 16 U.S. Code § 1131 - National Wilderness Preservation System (1964)* Available at: <https://www.gpo.gov/fdsys/granule/USCODE-2011-title16/USCODE-2011-title16-chap23-sec1131>
5. *California Department of Parks and Recreation, 2002. California Recreational Trails Plan*. Available at: http://www.parks.ca.gov/?page_id=23443
6. *Los Angeles Department of Regional Planning. 2015. Statewide Comprehensive Outdoor Recreation Plan (SCORP)*. Available at: http://www.parksforcalifornia.org/data/Calif_SCORP2015_ScreenRes.pdf
7. *State of California Department of Parks and Recreation and County of Los Angeles Department of Parks and Recreation. Original Agreement Made 18 November 1969. Amendment No. 5 Approved 10 August 1990. Castaic Lake State Recreation Area Operating Agreement*. Available at County of Los Angeles Department of Parks and Recreation Headquarters, 510 S. Vermont Avenue, Los Angeles, California.
8. *County of Ventura Resource Management Agency, Planning Division, 2011. Ventura County General Plan*. Available at: <http://www.countyofventura.org/rma/planning/pdf/plans/Goals-Policies-and-Programs-6-28-11.pdf>
9. *Santa Monica Mountains Conservancy, Rim of the Valley Trail Corridor Master Plan (1990)* Available at: <http://smmc.ca.gov/ROV%20Master%20Plan.pdf>

TABLE 3-1 Relevant Existing and Proposed Regional and Local Plans and Policies (continued)

DOCUMENT	AGENCY	RELEVANCE TO PLAN
Santa Felicia Project Recreational Trail Plan (2015)¹⁰	<i>United Water Conservation District</i>	Connections to regional trails
Ventura County Regional Trails and Pathways Final Master Plan Report (1995)¹¹	<i>Ventura County Board of Supervisors</i>	Connections to regional trails
Santa Paula Branch Line Recreational Trail¹²	<i>Ventura County Transportation Commission</i>	Connections to regional trails
County of Los Angeles General Plan 2035 (2015)¹³	<i>County of Los Angeles Department of Regional Planning</i>	Standards for active trans. facilities, sustainability, land conservation, multi-use trail development, design and maintenance in LA County
City of Santa Clarita General Plan (2011)¹⁴	<i>City of Santa Clarita</i>	Connections to local trails and destinations
Santa Clarita Valley Area Plan (One Valley, One Vision) (2012)¹⁵	<i>County of Los Angeles Department of Regional Planning</i>	Connections to local trails
Santa Susana Mountains Final Trails Master Plan (2015)¹⁶	<i>County of Los Angeles Department Parks and Recreation</i>	Connection to regional trails
LACMC 22.44 Part 9–Rural Outdoor Lighting District Ordinance (2012)¹⁷	<i>County of Los Angeles Department of Regional Planning</i>	Trail design and amenities standards and guidelines
LACMC 22.44.144–San Francisquito Canyon Community Standards District (2009)¹⁸	<i>County of Los Angeles Department of Regional Planning</i>	Trail design and amenities standards and guidelines
LACMC 22.44.137–Castaic Area Community Standards District (2004)¹⁹	<i>County of Los Angeles Department of Regional Planning</i>	Trail design and amenities standards and guidelines
Newhall Ranch Specific Plan (2003)²⁰	<i>County of Los Angeles Department of Regional Planning</i>	Connections to local trails
Northlake Specific Plan (1992)²¹	<i>County of Los Angeles Department of Regional Planning</i>	Connections to local trails
County of Los Angeles Trails Manual (2011)²¹	<i>County of Los Angeles Department of Parks and Recreation</i>	Trail design and amenities standards and guidelines

10. United Water Conservation District, Santa Felicia Project Recreational Trail Plan (2015)

11. Ventura County Board of Supervisors. Ventura County Regional Trails and Pathways Final Master Plan Report, 1995.

12. Ventura County Transportation Commission. Santa Paula Branch Line Recreational Trail

13.. California Department of Parks and Recreation. 2015. County of Los Angeles General Plan 2035. Available at: http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan.pdf

14. City of Santa Clarita. City of Santa Clarita General Plan, 2011. Available at: <http://cdm16255.contentdm.oclc.org/cdm/ref/collection/p266301ccp2/id/698>

15.. Los Angeles County Department of Regional Planning. 2012. Santa Clarita Valley Area Plan (One Valley One Vision). http://planning.lacounty.gov/assets/upl/data/pd_santa-clarita-area-plan-2012.pdf

16. Los Angeles County Department of Parks and Recreation. May 2015. Santa Susana Mountains Final Trails Master Plan. Available at: <https://trails.lacounty.gov/Files/Documents/115/FINAL%20Santa%20Susana%20Mountains%20Final%20Trails%20Master%20Plan%20May%202015.pdf>

17. Los Angeles County Department of Regional Planning. 2012. Los Angeles Municipal Code 22.44 Chapter 9 - Rural Outdoor Lighting District Ordinance. Available at: https://www.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT22PLZO_DIV1PLZO_CH22.44SUDI_PT9RUOULIDI

18. Los Angeles County Department of Regional Planning. November 2004.. Los Angeles Municipal Code 22.44.137 - Castaic Community Standards District. Available at: https://www.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT22PLZO_DIV1PLZO_CH22.44SUDI_PT2COSTDI_22.44.137CAARCOSTDI

19. Los Angeles County Department of Regional Planning, November 2009. Los Angeles Municipal Code 22.44.144- San Francisquito Canyon Community Standards District. Available at: https://www.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT22PLZO_DIV1PLZO_CH22.44SUDI_PT2COSTDI_22.44.144SAFRCACOSTDI

20. County of Los Angeles. Newhall Ranch Specific Plan. May, 2003. Available at: http://planning.lacounty.gov/assets/upl/data/pd_sp_newhall-ranch.pdf

21. County of Los Angeles. Northlake Specific Plan. June 1992. Available at: http://planning.lacounty.gov/assets/upl/data/pd_sp_northlake.pdf

21. Los Angeles County Department of Parks and Recreation. June 2013. County of Los Angeles Multi-Use trails Plan. Available at: [https://trails.lacounty.gov/Files/Documents/69/LA%20County%20Trails%20Manual%20\(Revised%2006-20-13\).compressed.pdf](https://trails.lacounty.gov/Files/Documents/69/LA%20County%20Trails%20Manual%20(Revised%2006-20-13).compressed.pdf)

3.1.1 RELATED PROJECTS

3.1.1.1 Multi-Use Trails Included as Conditions of Approval Through Tentative Subdivision Parcel or Tract Maps

There are multiple recent subdivisions located in the Castaic Project Area, as shown in **Table 3-2**. Many of these subdivisions have included Multi-Use Trails designated for county use as per Castaic Area Community Standards District regulations (MC 22.44.137)²³ and the Trails Manual. The County has also obtained easements within the Castaic Project Area for trails purposes. These include Cliffie Stone Trail and North Park Trail locations. Proposed trails for the local subdivisions and County easements can be seen in **Figure 3-1 Subdivisions, Easements, and Existing Trails**.

3.1.2 TRAILS

3.1.2.1 Regional Trails

The multiple regional proposed trails discussed in the previous sections are part of the California Regional Trails Plan, Rim of the Valley Trail Corridor, and the Santa Monica Mountains National Recreation Area. Only one of these proposed trails, Santa Clara River Trail, is adjacent the Castaic Project Area. The proposed regional trails can be seen in **Figure 3-2 Regional Trails**.

3.1.2.2 Proposed Local Trails

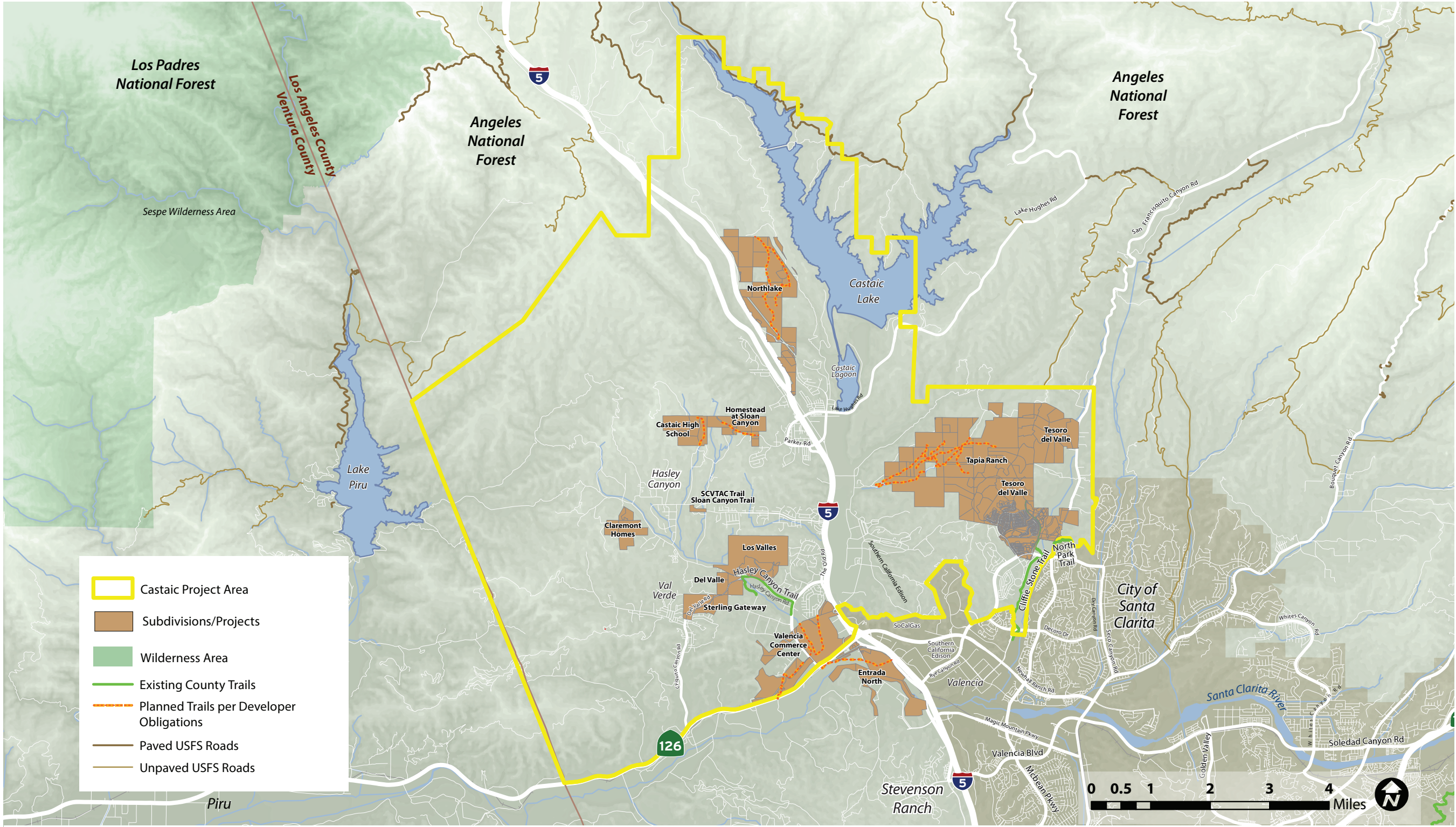
Several proposed and existing trails are located within or adjacent to the Castaic Project Area. These trails include the Los Angeles County Adopted Proposed Trails (from the Los Angeles County General Plan, 2007 and referenced in the updated 2015 County of Los Angeles General Plan 2035) and the Santa Clarita Valley and City of Santa Clarita adopted proposed trails (Santa Clarita Valley Master Plan of Trails, 2015). These proposed trails can be seen in **Figure 3-3 Proposed County Trails**.

23. https://www2.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT22PLZO_DIV1PLZO_CH22.44SUDI_PT2COSTDI_22.44.137CAARCOSTDI

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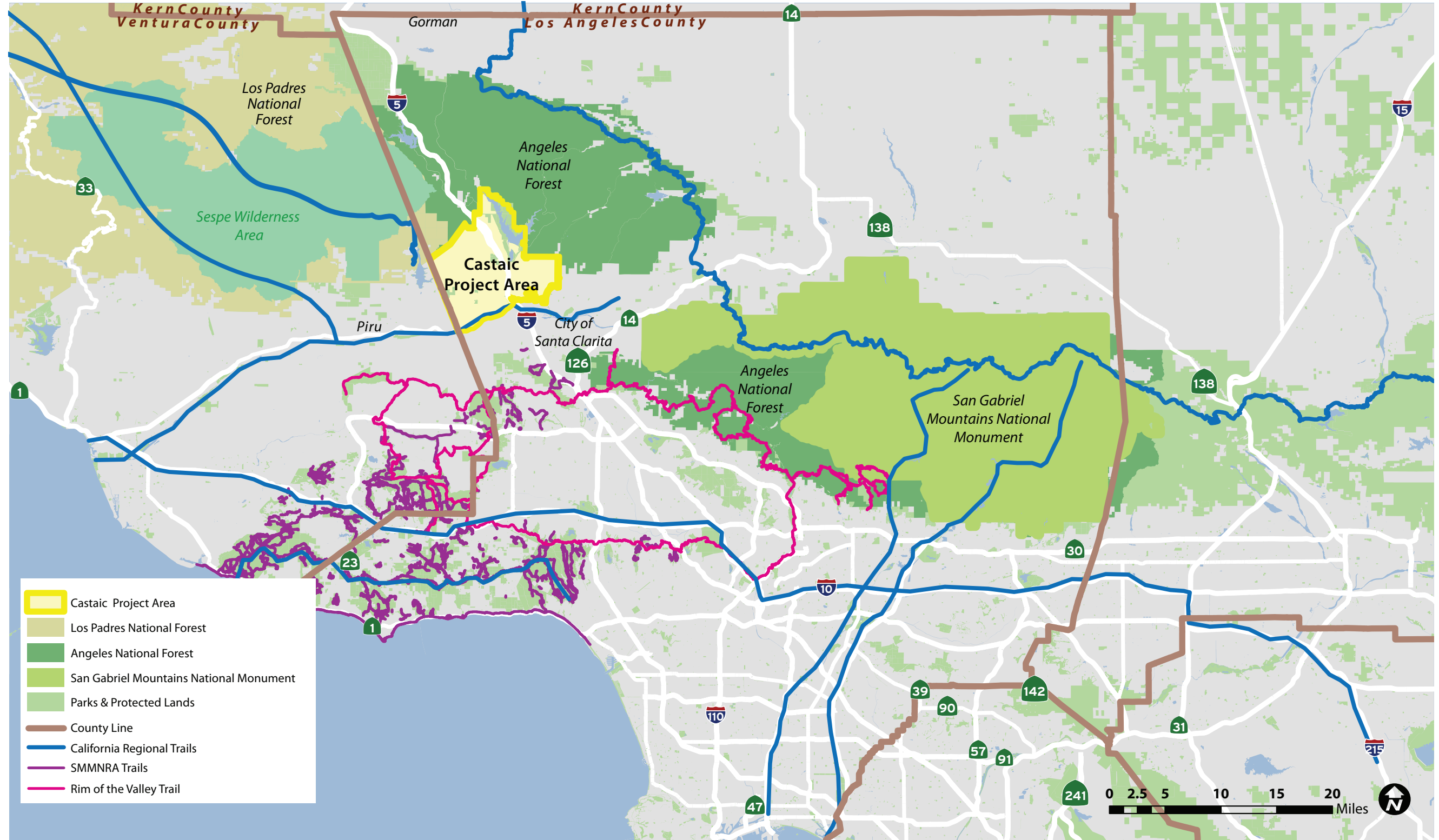
TABLE 3-2 Subdivisions and Projects

SUBDIVISION/PROJECT	APN	DESCRIPTION
Northlake (Tract Map 73336)	3247-040-008, 3247-041-008, 3247-041-020, 3247-041-021, 3247-041-023, 3247-041-022, 2865-036-003, 2865-036-002, 2865-036-001, 2865-003-013, 3244-012-049, 3244-012-048, 3244-012-046, 3244-012-058, 3244-004-052, 3244-004-024, 3244-013-001, 3244-012-045, 3247-017-019, 3244-012-050, 3244-014-015, 3244-014-067, 3244-014-068, 3247-041-018, 3247-041-015, 3244-014-053, 3244-013-004, 3244-013-002, 3244-013-005, 3244-013-009, 3244-013-010, 3244-014-050, 3244-014-062, 3247-041-007, 3247-041-009, 3247-041-010, 3244-014-045, 2865-003-035, 3244-004-051, 3244-004-053, 3247-040-013, 3247-040-009, 3244-012-054, 3244-012-059, 3244-012-057, 3244-012-013	Under Review 2016- Residential subdivision (1,974 residential dwelling units [DUs] consisting of 288 single-family lots, 23 multi-family lots [1,686 DUs]; 2 commercial lots; 5 industrial lots; 10 park [1 public] lots; 40 open space lots [including private parklets, trails, natural open space, landscaping, and various other green spaces]; 2 water tanks; 10 debris basins; 1 water quality basin; 1 pump station; and 1 fire station) on approximately 720-acre project site, with a basic Quimby park land obligation of 16.00 net acres (maximum slope 3%). Subdivider proposes to include one public park as part of the subdivision: Lot 319 (15.1 net acres). Project includes a 20-foot wide easement dedication to the County for multi-use trail purposes, construction of a variable seven to ten-foot wide natural trail within the dedicated trail easement, and installation of required trail infrastructure. Trail alignments will be designated as the Castaic Lake Trail and the Castaic Lake Connector Trail (Grasshopper Canyon Area).
Tapia Ranch (Tract Map 72126)	2865-005-002, 2865-005-003, 2865-005-005, 2865-005-006, 2865-005-008, 2865-005-017, 2865-005-018, 2865-005-019, 2865-005-020, 2865-005-021, 2865-005-024, 2865-005-025, 2865-006-001, 2865-006-002, 2865-006-011, 2865-006-012, 2865-006-013, 2865-006-014, 2865-021-016, 3244-023-017, 3244-024-011, 3244-024-013	Under Review 2016- Residential Subdivision includes Multi-use trails diverting around current areas of conflict between property owners and mountain bicyclists with possible connections to the Tesoro Del Valle development. Subdivision is currently on hold.
Los Valles (Tract Map 52584)	2866-062-032, 2866-062-033, 3247-032-052	Under Review 2016- Residential subdivision (497 single-family dwelling units) including a community recreation center controlled by a homeowner’s association, an approximately 19-acre community park, seven private recreational lots, and approximately 5 miles of pedestrian trails and accompanying infrastructure and public and private roadways. Approximately 232 acres, comprising over 50 percent of the Property, will be utilized as recreational and open space. Project requires an oak tree permit for the removal of one or more protected trees; a variance to authorize the non-exempted development of the easterly ridgeline, which is mapped as a significant ridgeline; and a CUP authorizing density-controlled development, a CSD significant ridgeline exemption with respect to the westerly ridgeline for open space, construction of trails, landscape areas, stabilization of a pre-existing sand mining operation and access via extension of Barcelona Road and related infrastructure, development in accordance with the County’s urban hillside management criteria, and an on-site grading project involving more than 100,000 cubic yards of combined cut/fill.
Homestead at Sloan Canyon (Tract Map 72680)	2865-023-006, 2865-023-007, 2865-018-033, 2865-018-034, 3247-026-055, 2865-023-019, 2865-023-021, 3247-026-056	Under Review 2016- Residential subdivision (139 single-family lots, 2 open space lots, and 9 public facility lots) on approximately 186.5-acre project site. Project requires a zone change from A-2-2 and A-2-1 Zone to RPD Zone, a variance to allow development within 50-foot radius of the crest of a primary ridgeline, a CUP for hillside management and on-site grading in excess of 100,000 cubic yards, and an oak tree permit for removal of 24 oak trees. Project included payment of Quimby parkland obligation in-lieu fees of \$80,634 to meet obligation of 0.42 net acres. Project (not yet approved) has been revised to include trail easement
Claremont (Tract Map 72630)	3247-052-003, 3247-052-004	Under Review 2016- Proposing 46 single family units and one open space lot on 168.73 gross acres. No trail alignments.
Valencia Commerce Center (Parcel Map 18108)	2866-001-001, 2866-002-045, 2866-002-052, 2866-002-061, 3271-001-038, 3271-002-017, 3271-002-038, 2866-002-007	Under Review 2016- Subdivision to create 74 lots, including 25 industrial lots, 25 open space lots, 18 commercial lots, 3 water quality lots, 1 parking lot, 1 utility lot, and 1 debris basin, on 591 gross acres. Project requires an Oak Tree Permit for removal of 33 oak trees (1 heritage) and a CUP for grading in excess of 100,000 cubic yards, construction of supporting infrastructure including a water tank, and modification of the Castaic Community Standards District development standards. Project includes dedication of a 14-foot-wide easement to the County for multi-use (hiking, mountain biking, and equestrian) trail purposes, construction of a minimum 10-foot-wide trail, and installation of appropriate fencing within the dedicated trail easement for the Castaic Creek Trail and the Hasley Canyon Trail.
Castaic High School Project	3247-068-900, 3247-068-901 , 3247-068-902 3247-068-903	Approved – Construction of a new approximately 250,000-square-foot Castaic High School facility and associated access roads within a 198-acre, four-parcel site, which includes the 58-acre site for development of the high school campus. The project proposes to permanently impact 1.20 acres of streambed, and mitigate with 2.48 acres of restoration of similar habitat to that which was impacted. In addition, the approved project provides for the grading and construction of other facilities on the School Site (such as water tanks, helipad, debris basins, and perimeter road), and grading and construction of access roads. A Supplemental EIR was prepared to address modification related to Approved Project including grading, site configuration, drainage, and location of mitigation sites. The project includes the dedication of a 12- to 16-foot-wide wide multi-use (hiking, mountain biking, and equestrian) trail easement and trail construction outside of the public right-of-way and any other easements. The proposed “Sloan Canyon Trail” or “unnamed SCVTAC trail” runs contiguous to and parallel to the north side of Sloan Canyon Road and Canyon Hill Road. Full public access will be provided for the trail easement dedications.
Hasley Canyon Trail (Tract Map 71800)	2866-060-073	Approved by Regional Planning Commission. Existing Hasley Canyon Trail passes through northern side of the project site. No trail requirements.
Tract Map 70839	3247-047-032	Under Review 2016- Residential subdivision of one existing single-family parcel to create four new single-family parcels varying between two and six acres in size on 12.7 gross acres. Requires a CUP for non-urban hillside management, an Oak Tree Permit for two encroachments, and provision of 0.03 acres of park land obligation or \$5,686 of in-lieu fees. Project requires Applicant to dedicate two separate 12-foot-wide multi-use (hiking, mountain biking, and equestrian) trail easements to the County of Los Angeles and construct the required segments of the Adopted Proposed Trail alignments consistent with the Master Plan of Trails within the Santa Clarita Valley Area Plan.
Cliffie Stone Trail and County (Schinahara Trail) (Tract Map 69788)	3244-030-005	Approved – Residential subdivision creating four single-family parcels on 29.1 gross acres, as well as a 13.5 gross acre remainder parcel. The entire remainder parcel, which is located on a SEA, shall be permanent open space. Includes updates and extensions to the Cliffie Stone Trail along San Francisquito Road’s realignment
Tesoro Del Valle Expansion (Tract Map 51644)	3244-30-3 & 27, 3244-160-ALL PARCELS ON SHT.1, 3244-160-043, 3244-160-048, 3244-161-ALL PARCELS, 3244-162-ALL PARCELS, 3244-163-ALL PARCELS, 3244-163-ALL PARCELS, 3244-164-ALL PARCELS	Under Review 2016- Revised Tentative Tract Map for the unrecorded portion of TR 51644, a density-controlled development of 1,791 residential units originally approved in 1998. Of this number, 1,077 dwelling units have been recorded and developed on the southern portion of the tract. The applicant proposes to revise the northern portion of the tract to include the development’s remaining 714 authorized dwelling units, as well as 81 additional units. In addition, 8 park lots, 18 open space lots, and 9 public facilities lots are proposed, for a total of 842 lots. Project includes multi-use trail easement.



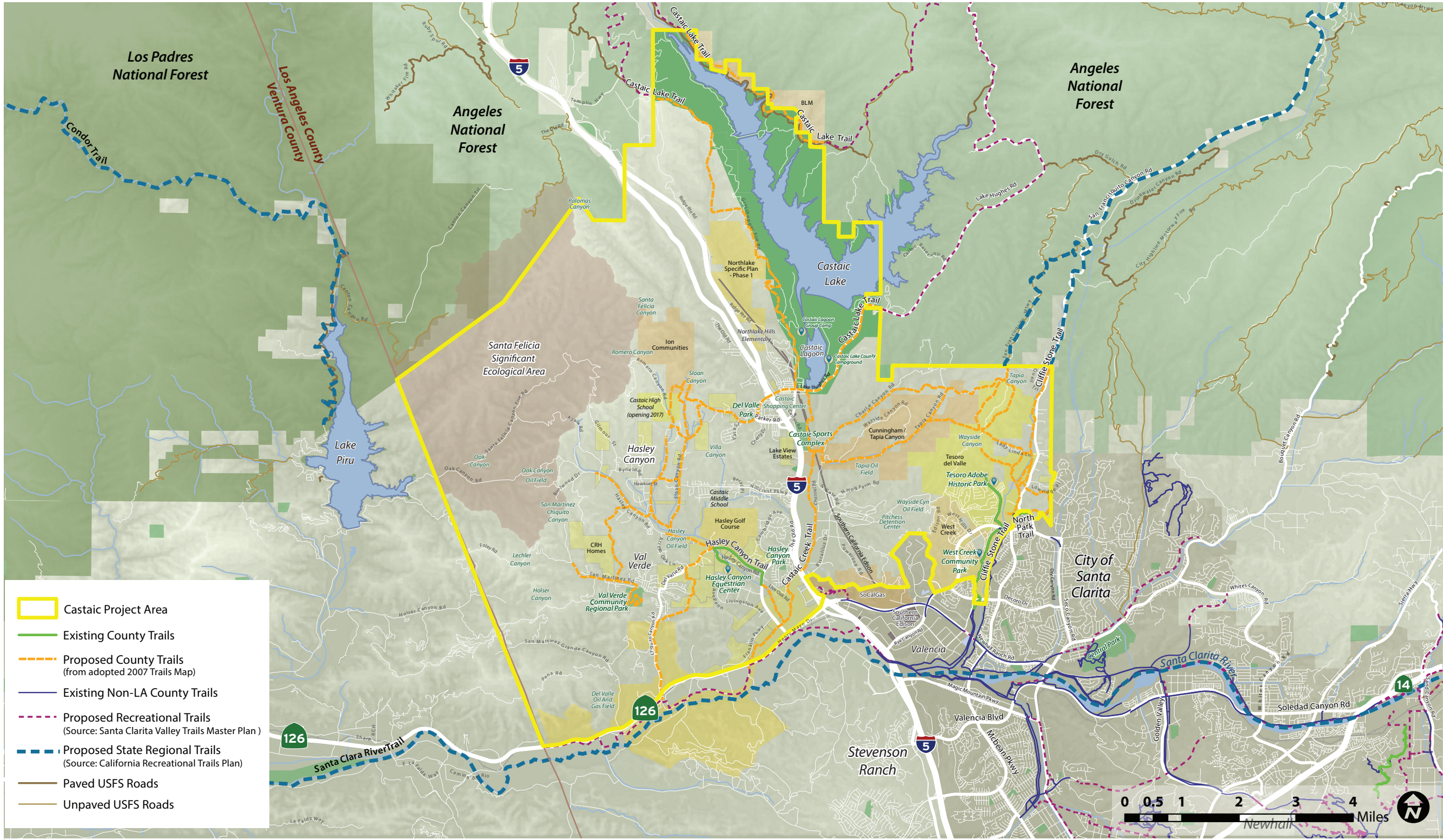
DISCLAIMER: This map was created for trail planning purposes only. Some trails shown do not exist currently and are planned for the future, or they exist but are not officially designated. Permission to use trails shown on this map should not be assumed. Some trails may traverse private property and suggested alignments do not imply rights of public use.

Figure 3-1 Subdivisions, Easements, and Existing Trails



DISCLAIMER: This map was created for trail planning purposes only. Some trails shown do not exist currently and are planned for the future, or they exist but are not officially designated. Permission to use trails shown on this map should not be assumed. Some trails may traverse private property and suggested alignments do not imply rights of public use.

Figure 3-2 Regional Trails



DISCLAIMER: This map was created for trail planning purposes only. Some trails shown do not exist currently and are planned for the future, or they exist but are not officially designated. Permission to use trails shown on this map should not be assumed. Some trails may traverse private property and suggested alignments do not imply rights of public use.

MAP DATA SOURCES
Date Map Created/Revised: 9/30/2015 Basemap: USGS 2006 LA County LIDAR 10ft DEM
Data Sources: mtbproject.org, ESRI Streetmap NA 2013, Los Angeles County Enterprise GIS, California Protected Areas Database 2015a, Santa Clarita Valley Master Plan of Trails 2015, California Recreational Trails Plan 2011, Los Angeles County General Plan 2007, USFS Road Core, City of Santa Clarita
Map Author: James Powell

Figure 3-3 Proposed County Trails

3.2 EXISTING TRAILS AND DESTINATIONS

3.2.1 EXISTING TRAILS

There are 3 existing trail segments and 15 existing trail access points in or directly adjacent to the CAMUTP Area (**Figure 3-4, Existing Local and Regional Trails with Access Points**). There are 4.9 miles of existing trails managed by the County of Los Angeles. Detailed information on trail length, type and descriptions are found below in **Table 3-3**.

TABLE 3-3 Existing Trails in the Castaic Project Area

TRAIL NAME	TRAIL SURFACE	TRAIL LENGTH (MI)	TRAIL TYPE	TRAIL DESCRIPTION
Hasley Canyon Trail	Decomposed Granite, Asphalt, Concrete, Partial Sandy	1.67	Urban/Developed	Access through the industrial and business park area is adjacent to the roadway, with a connection to the Hasley Canyon Equestrian Center in the hills. The urban trail is relatively flat, with landscaped areas adjacent to the trail.
Cliffie Stone Trail	Decomposed Granite, Asphalt, Concrete, Partial Sandy, Sandy	2.9	Urban/Developed	Runs parallel to the west side of the San Francisquito Creek corridor. Relatively flat and easily accessible from the adjacent residential areas, the creekbed offers a variety of different native plants and wildlife.
North Park Trail	Partial Sandy	0.33	Natural/Open Space	Offers views of both the adjacent residential development and the natural surroundings of the San Francisquito Creek, this gentle, well maintained trail is primarily used by horses and is lined by white equestrian fencing, making it easy to follow.



Image 3-1 Hasley Canyon Trail



Image 3-2 Cliffie Stone Trail



Image 3-3 North Park Trail

3.2.2 EXISTING PRIORITY DESTINATIONS

Existing priority destinations within the Castaic Project Area include recreational facilities, other public facilities such as community centers, schools, and public libraries that may serve as starting points and destinations for recreation users, such as natural features. Descriptions for the destination types can be found below and locations within the CAMUTP can be seen in **Figure 3-5: Existing Priority Destinations**. Detailed information for these destinations can be found in **Table 3-4: Existing Priority Destinations**.

3.2.2.1 Public Parks

The County of Los Angeles uses seven classifications for parks: Regional, Community Regional, Community, Neighborhood, Pocket Parks, Park Nodes, and Special Use Facilities. Regional Parks are generally greater than 100 acres in size and offer a variety of recreational activities. Community Regional Parks are generally 20 to 100 acres in size and provide passive and active recreational activities. Community parks are generally between 10 and 20 acres in size and provide passive and active recreational activities. Neighborhood Parks are generally between 3 and 10 acres in size and provide active recreational activities. Pocket Parks are between 1/4 and 3 acres. Park Nodes are between 0 and a 1/4 acre. Special Use Facilities have no size criteria. There are 5 public parks within the Castaic Project Area.

- Valle Verde Community Regional Park
- Hasley Canyon Park
- Del Valle Park
- Tesoro Adobe Historic Park
- West Creek Community Park

3.2.2.2 Community Centers and Recreational Facilities

A community center is a location where people from a community meet for social, educational, or recreational activities. There are two recreational facilities within the Castaic Project Area that would fall into this category, the Castaic Regional Sports Complex and the Hasley Canyon Equestrian Center.

3.2.2.3 Public Schools

A public school is a school supported by public funds which provides education to children of a community. A private school is a school supported by private

individuals or corporations which provides education to children of a community. There are 6 public and 1 private schools within the Castaic Project Area.

Public Schools within Castaic Project Area:

- Northlake Hills Elementary
- Castaic Elementary School
- Live Oak Elementary School
- Castaic Middle School
- Castaic High School (under construction)
- Santa Clarita Valley International School (Charter School, K-12)

3.2.2.4 Public Libraries

A library provides information resources and research services to the public. There is one public library, the County of Los Angeles Public Library- Castaic Library, located within the Castaic Project Area. There is also a The County of Los Angeles Stevenson Ranch Library located south of the Castaic Project Area in Valencia.

3.2.2.5 Natural Features

Natural features located in the Castaic Project Area are identified as points of interest due to the potential for scenic vistas, interaction with wildlife and local plant communities, provide access to natural features, or areas of particular aesthetic character. Natural features considered destinations in the Castaic Project Area include the Santa Felicia SEA, Santa Clara River SEA, the Loma Verde Peak, Tapia Canyon, Castaic Lake and Lagoon located in the Castaic Lake State Recreation Area (SRA), the Angeles National Forest and the Los Padres National Forest. Castaic Lake SRA offers paid parking at lots on the west side of Castaic Lagoon.

Since 2012, the Castaic Lake SRA has seen an average of 75,200 visitors annually. The use of Castaic Lake SRA is highly seasonal, with a vast majority of visitors using driving to the SRA in the spring and summer months (78% of all users). During peak season, ticket sales can range from approximately 20 to 1,500 vehicles per day. During fall and winter months, the amount of people driving to the SRA rarely exceeds 500 vehicles per day, and in most cases is well below the overall average per daily amount. Demand for parking at Castaic Lake SRA spikes at various points throughout the calendar due to holidays and special events. In these instances, parking demand can reach as high as 2,500 vehicles per day.

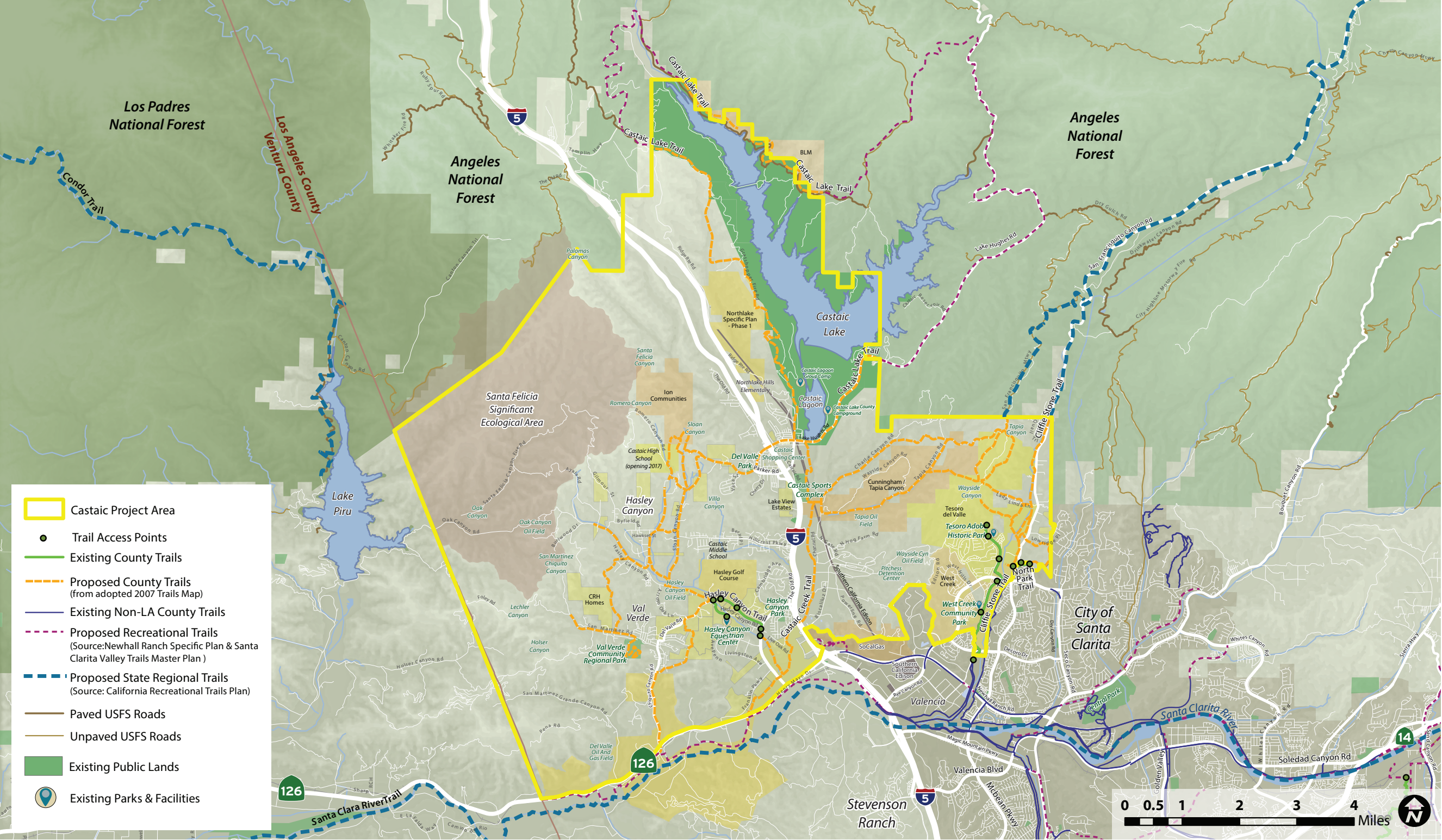
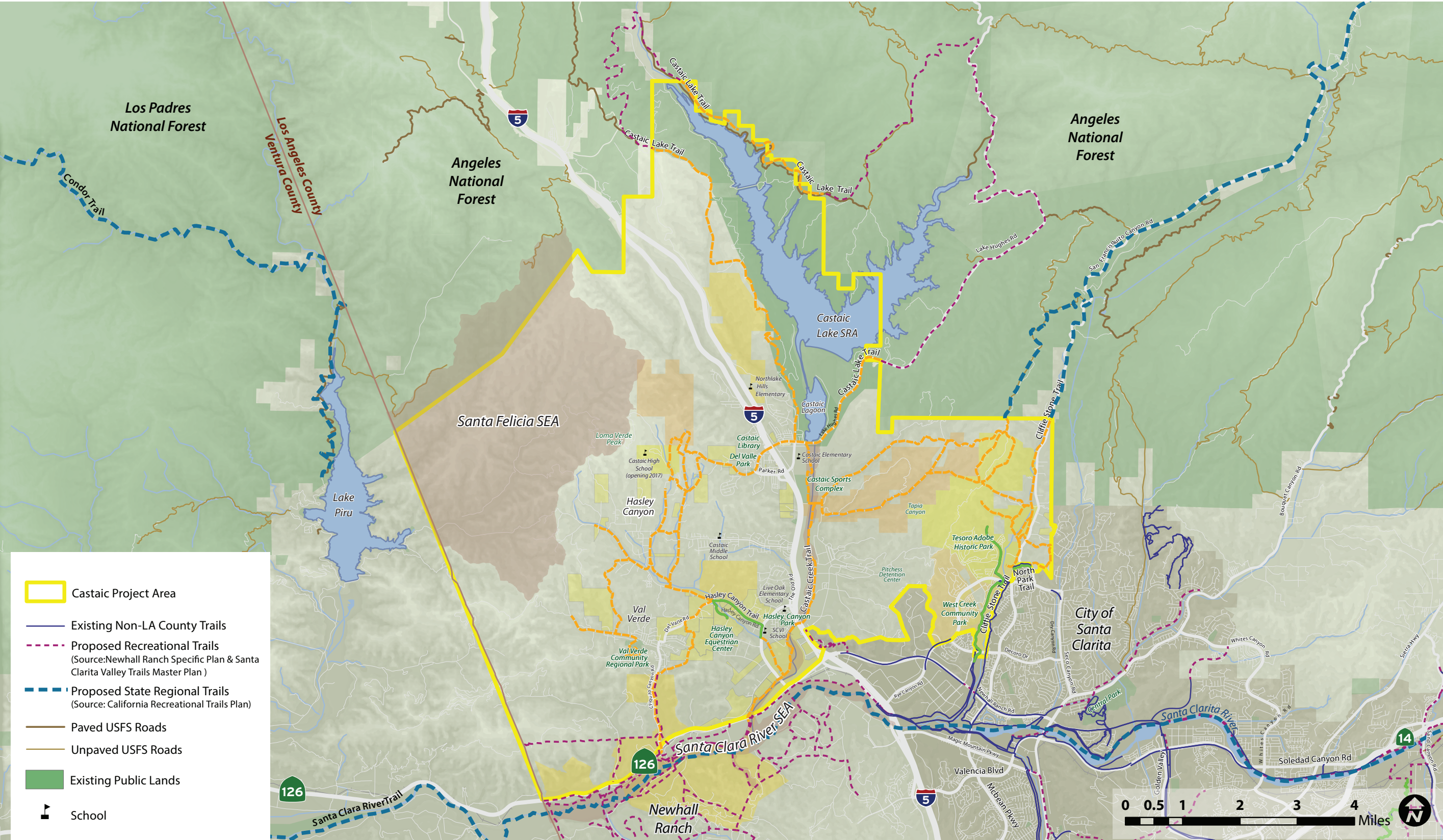


Figure 3-4 Existing Local and Regional Trails with Access Points



DISCLAIMER: This map was created for trail planning purposes only. Some trails shown do not exist currently and are planned for the future, or they exist but are not officially designated. Permission to use trails shown on this map should not be assumed. Some trails may traverse private property and suggested alignments do not imply rights of public use.

MAP DATA SOURCES
Date Map Created/Revised: 7/9/2016 Basemap: USGS 2006 LA County LIDAR 10ft DEM Map Author: James Powell
Data Sources: ESRI Streetmap NA 2013, Los Angeles County Enterprise GIS, California Protected Areas Database 2015a, Santa Clarita Valley Master Plan of Trails 2015, California Recreational Trails Plan 2011, Los Angeles County General Plan 2007, USFS Road Core, City of Santa Clarita, comments from public outreach.
*Tentative Tract Maps: Los Valles, Valencia Commerce Center, Entrada North, Claremont Homes, Castaic HS, Homestead at Sloan Canyon, and North Lake Hills Elementary

Figure 3-5 Existing Priority Destinations

TABLE 3-4: Existing Priority Destinations

DESTINATION	DESCRIPTION	DESTINATION TYPE	CONNECTION TYPE
Santa Felicia Significant Ecological Area	A group of mostly undeveloped parcels, known as Temescal Ranch, covers most of this area and access to those parcels has not been historically granted. The Trust for Public Land received a grant in 2015 to acquire property in the SEA, which it plans to grant to the Mountains Recreation and Conservation Authority (MRCA).	Natural Feature	Regional
Santa Clara River Significant Ecological Area	The Santa Clara River passes just outside the Castaic Project Area to the south. Its associated SEA, however, includes land surrounding Castaic Creek, as far north as the southern edge of Castaic Lake, and the San Francisquito Canyon Wash, which follows the eastern border of the Castaic Project Area.	Natural Feature	Regional
Loma Verde Peak	Loma Verde is the only summit ²⁴ identified by the USGS within the project area, at 2,424 feet, it allows views for miles in every direction	Natural Feature	Local
Tapia Canyon	Area includes private property and user-defined mountain bike and hiking trails. Provides access to views from ridgelines	Natural Feature	Local
Angeles National Forest	Located northeast of the Castaic Project Area, offers natural environments, spectacular scenery, developed campgrounds and picnic areas, swimming, fishing, skiing and trails that accommodate hikers, equestrians, mountain bikers and off-highway vehicle enthusiasts.	Natural Feature/ Recreational	Regional
Los Padres National Forest	Located northwest of the Castaic Project Area, provides Southern California and the Bay Area with a variety of terrain, vegetation, and recreational settings. There are 1,257 miles of maintained trails, with much of the forest being unroaded and primitive with 10 congressionally designated wildernesses comprising approximately 875,000 acres or about 48% of the forest.	Natural Feature/ Recreational	Regional
Castaic Lake State Recreation Area (SRA)	Castaic Lake SRA comprises is over 6 square miles. The Castaic Lake and Lagoon are the central attractions within the SRA. Providing access to natural wildlife and plant species, these areas also provide both water-specific and general recreation opportunities such as picnic areas, campsites, and boat rentals. Several trails exist within the SRA but currently do not connect to destinations or trails outside the SRA as it is a regional recreation destination on its own.	Recreation	Regional
Santa Clarita Valley and Santa Clarita City Trails	The City of Santa Clarita has an extensive network of trails and bike paths, several of which approach the Castaic Project Area. Planning trails that connect into this existing trails network will help bring more trail users into Castaic and will expand available trails for existing users in Santa Clarita.	Trails	Regional
Newhall Ranch Specific Plan Proposed Trails	Newhall Ranch, directly south of Castaic, in its specific plan, has an extensive network of proposed unbuilt trails, all of which can provide an extension of the trails in Castaic.	Trails	Regional

24. Prominent elevation rising above the surrounding level of the Earth's surface; does not include pillars, ridges, or ranges" - source USGS <http://geonames.usgs.gov/apex/f?p=136:8>

TABLE 3-4: Existing Priority Destinations (continued)

DESTINATION	DESCRIPTION	DESTINATION TYPE	CONNECTION TYPE
Los Angeles County Library- Castaic Public Library	The only library in the Castaic Project Area, features a community meeting room, two group study rooms, an expansive Children's Area and a dedicated Teen Area.	Community Center	Local
Castaic Regional Sports Complex	Community sports complex that includes baseball diamonds, a gymnasium, walking paths, aquatic center which includes two outdoor pools, a 12-station par/jogging course, indoor and outdoor basketball courts, indoor volleyball, locker room with showers, multi-purpose field, skate park, picnic tables, barbecues, play areas, community rooms, and horseshoe pits.	Community Center/ Recreational Facility	Regional
Val Verde Community Regional Park	A 58-acre community regional facility which is a community gathering place and cultural and recreational focal point for the Val Verde community. Park includes play area, community recreation building, horseshoe pits, outdoor basketball court, picnic tables and barbecue grills, softball field, swimming pool, tennis court	Park/Recreation	Local
Hasley Canyon Park	Community park located in scenic Hasley Canyon includes barbecues, play areas, open playing field, and picnic tables. Also a venue for concerts and other special events, as well as a variety of community recreational activities.	Park	Local
Hasley Canyon Equestrian Center	Features restrooms, a fenced arena, horse warm-up area, equestrian barn with office and storage space, equestrian trail connections and day use parking for horse trailers and cars.	Recreational Facility	Local
Del Valle Park	This passive community park provides picnic areas, play areas, open play field, restrooms and walking paths.	Park	Local
Tesoro Adobe Historic Park	The former Western Movie Star Harry Carey's ranch is a community park which includes the Adobe Ranch House, amphitheater, and an outdoor picnic area with barbecue grill.	Park	Local
West Creek Park	Developed as part of the Quimby Act, a 17-acre park that includes an amphitheater seating area, a basketball court, play areas, large picnic shelters and tables, a par course with exercise stations, and a walking path.	Park/Recreation	Local
Northlake Hills Elementary	K-5th grades	School	Local
Castaic Elementary School	K-6th grades	School	Local
Live Oak Elementary School	K-6th grades	School	Local
Castaic Middle School	7th and 8th grades	School	Local
Castaic High School	(Under construction)	School	Local
Santa Clarita Valley International (SCVI) School	Charter School, K-12	School	Local

3.3 TRAIL USER PROFILES AND NEEDS

Designing successful multi-use trails requires an understanding of the specific needs, tendencies, and limitations of each user type. The following sections summarize these considerations as context for the conflict avoidance/reduction recommendations that follow. Additional information on user profiles and needs can be found in the public comments summary found in **Appendix A**.

3.3.1 EQUESTRIAN

The Castaic Project Area features a number of private individual stables, private stables open to the public, the Hasley Canyon Equestrian Center and the Jack Bones Equestrian Center at Peter J. Pitchess Detention Center.

Where equestrians are accommodated, the following design guidelines should be followed:

1. Minimum inside turn radius of five feet.
2. If the trail is used by pack stock, the minimum inside turn radius should be six feet.
3. The grade of the upper and lower leg of the turn should not exceed 14 percent, unless the parent material is durable enough to support a steeper grade.

The inherent characteristics of horses are important to understand when planning and designing trails accommodating equestrians and informing other trail users. For instance, horses are herd animals and have the instinct to run when frightened. The U.S. Forest Service (USFS) Equestrian Design Guidebook for Trails, Trailheads, and Campgrounds clarifies that horses and mules are prey animals, and flight is their primary defense.²⁵ They become nervous when escape routes are narrow or blocked and can startle when spooked when something comes by them unexpectedly and/or quickly. Any new element that is unfamiliar to the horse, such as a mountain biker, dog, or even a hiker, can trigger this startle instinct, particularly when they appear suddenly. This can lead to a horse running, jumping, turning quickly, kicking, or biting.

Because of the height at which equestrians ride, they can be seriously injured if they fall from a horse. Given these characteristics of horses, other users using equestrian trails must yield the right-of-way. All equestrian trails should have signs that explain right-of-way protocols. When approaching a horse, other users should make themselves as visible as possible, not approach too rapidly, and speak in a low and friendly voice to ensure recognition. Other users should select a wide spot in the trail or an area with a gentle side slope and step off to the downhill side of the trail. Most equestrians prefer to have the uphill side of the trail during an encounter in case the horse bolts. When the horse approaches, other users should not make any sudden movements and should maintain their conversation. The hiker or biker should not step back on the trail until the horse is a full body length down the trail. Equestrians also have responsibilities to comply with appropriate multi-use trail etiquette. A horse that is inexperienced with encountering other types of trail users, especially in combination with an inexperienced rider, can be a hazard to other trail users, even if other users comply with trail use rules and guidelines.

3.3.2 HIKER/PEDESTRIAN

Hikers are the most flexible trail users and are easiest to accommodate in trail designs. Traveling by foot allows hikers to adjust to varying trail conditions, travelling over trails that are extremely steep or barely evident. Hiking trails generally traverse all types of environments, land capabilities, grades and surfaces. While hikers can impact the trail and surrounding resources, upgrading or adding structures to manage impacts of a hiking-designated trail is less problematic than for equestrian or mountain bike uses. In the community meetings for the CAMUTP, the majority of the participants stated that they hike or walk, even if they identified themselves as mountain bikers or equestrians.

3.3.3 MOUNTAIN BIKE

Mountain bicycling is a very popular activity in the Castaic Project Area, appealing to a younger cross-section of users. A list of federal, state, and local specifications and design publications that were evaluated for inclusion in the Trails Manual can be found in its

25. Hancock, Jan ; Vander Hoek, Kim K. Jones; Bradshaw, Sunni ; Coffman, James D.; Engelmann, Jeffrey . 2007. *Equestrian Design Guidebook for Trails, Trailheads, and Campgrounds*. 0723 2816. Missoula, MT: U.S. Department of Agriculture, Forest Service, Missoula Technology and Development Center. 312 p.

introduction, Section 1.4. Most notably for mountain bicyclists were guidelines adapted from publications of the International Mountain Biking Association (IMBA), that are intended to provide trail alignments that help control mountain bike speed to reduce trail use conflict. Mountain bikers often desire challenging trail experiences including narrow “single track” trails, rough or loose surfaces, turns, and relatively steep grades, aided by ever-advancing technology for light weight, power transfer, traction, and suspension. Mountain bikers can attain high rates of speed, particularly on wide trails with good sight lines, flat or downhill grades, and few obstacles. While County Parks policy is that all trails will be multi-use whenever feasible, the multi-use trail system is not intended to provide for fast, highly technical, or “adventure” riding for mountain bicyclists. The Multi-Use Trails Plan includes bike skills park to accommodate these more adventurous and athletic pursuits.

3.4 TRAIL PLANNING AND DESIGN POLICIES AND STANDARDS

The design standards and policies found within the Trails Manual will be used for the CAMUTP. The following sections provide relevant details. More information can be found in the Trails Manual. Supplemental design guidelines that are recommended which do not comply with those guidelines may be considered as an update to the Trails Manual and can be found in **APPENDIX C: Additional Design Standards.**

3.4.1 TRAIL AND ROADWAY CROSSINGS

Section 4.3.7 of the Trails Manual discusses Road Crossing Design. It suggests that road crossings be avoided where there is a potential for conflict between vehicles and trail users, due to the high costs of installation of signs and sidewalk modifications. Two typical crossings are found in the Trails Manual, at grade crossings or under the road through a culvert. Expansive bridge are also an option when at-grade crossings are unsafe or not feasible. The manual states that the design of all road crossings be consistent with the



Image 3-4 At-grade crossing

requirements of the applicable regulatory oversight body:

“The County of Los Angeles Department of Public Works, Division of Traffic and Lighting is the regulatory oversight body in the unincorporated territory of the County. Road crossings on roadways under federal, state, or local jurisdiction must be coordinated with the appropriate authority, and plans and guidelines for the road crossing must be submitted for plan check and approval.”

3.4.2 EMERGENCY ACCESS AND RESPONSE

In accordance with Section 5.1.5 of the Trails Manual:

“Emergency response to County trails will be provided by various agencies, depending on the location. In many cases, the closest public safety agency will respond, which may include County sheriff’s, local police, or national forest personnel.”

3.4.3 ADA - ACCOMMODATING PEOPLE WITH DISABILITIES

The Trails Manual, adopted in 2013, provides a more relaxed set of standards for design of recreational trails than the requirements for urban transportation routes or routes that connect developed facilities within a site. The Federal Register published revised final regulations for ADA Guidelines, known as the Final Rule²⁶, which made it easier to exempt an entire trail from the ADA Guidelines. Importantly, the ADA Guidelines do not apply to shared use trails that accommodate

26. U.S. Department of Justice. Americans with Disabilities Act. “Highlights of the Final Rule to Amend the Department of Justice’s Regulation Implementing Title III of the ADA.” Available at: http://www.ada.gov/regs2010/factsheets/title3_factsheet.html

horses or bicycles – only hiking/pedestrian trails – but the Trails Manual has specifically adopted them as guidelines for the County’s multi-use trail system.

The Trails Manual, *Section 2.4.1.1.1*, addresses accessible trails and states that trail planning must take into account users’ various needs and conditions.

“In areas where it is feasible, trails should be located adjacent to already accessible trailheads and or accessible recreational elements, such as parks. It is also important to locate accessible trails that reach highly used destination areas such as waterfalls, scenic vistas, or other points of interest. Trail alignments should be located in areas where grade and obstacles will not be a problem with accessible trails.”

Ideally grades are below 8 percent and widths at least 36 inches, with few protruding objects and tread obstacles below 2 inches in height with a reasonable firm surface.

Section 4.3.1.1 of the Trails Manual discusses ADA Compliance. It states that outdoor facilities such as trails are not covered in the Americans with Disabilities Act Guidelines of 2002. On September 15, 2010, the Federal Register published revised the Final Rule. Along with these new guidelines the The U.S. Department of Agriculture Forest Service (Forest Service) has published trail accessibility guidelines, which are based on the final report on Accessibility Guidelines for Outdoor Developed Areas from the Regulatory Negotiating Committee for the Architectural and Transportation Barriers Compliance.^{27, 28} The trail classification guidelines found in the Trails Manual take into account the Forest Service Trails Accessibility Guidelines and synopsis of the applicable Forest Service access guidelines and exceptions are included in *Appendix I* of the Trails Manual.

3.4.3.1 County Parks Trail System Accessibility Goal and Objectives

Los Angeles County Parks’ commitment to trail system accessibility mirrors that of California State Parks, with the particular goal of providing the same range of trail experiences (views, natural environments and

amenities) for people with disabilities. To achieve this County Parks will:

- Provide fully accessible trails satisfying the more stringent standards for Outdoor Recreation Access (5% maximum grade, paved surface) designed to fully accommodate wheelchairs and other assistive devices where this would not be prohibitively expensive, fundamentally alter the nature of the trail experience for other users or damage the resource that was being accessed;
- Provide information about the accessibility-related conditions of the trails to allow users to make their own decisions about their ability to access them.

3.5 PROPERTY RIGHTS ANALYSIS

3.5.1 OVERVIEW

In order to effectively strategize for land acquisitions, an understanding of property ownership in the Castaic Project Area is necessary. As **Table 3-5: Property Ownership**, and **Figure 3-6: Ownership Percentage in the Castaic Project Area** indicates, the majority of property within the Castaic Project Area is privately owned (72.95 percent) (**Figure 3-7: Property Ownership**). Land use zoning and districts are defined by Los Angeles County Code, Section 22.12 - Zones and Districts.²⁹ Most of the land on which new trails are envisioned has a “Rural” General Plan land use classification, and is zoned A-2-2. This includes the proposed trail alignments on the west side and northeast side of the Castaic Project Area.

A small proportion of the proposed trail alignments pass through areas designated “Single Family Residential” with corresponding R-1 zoning. This includes a proposed trail alignment along San Martinez Road that passes through a mostly built-out Val Verde residential area, connecting to the existing open Val Verde Park on the south and extending through two undeveloped parcels zoned A-1-2 to connect west and east. The proposed trail connection to the south along

27. U.S. Department of Agriculture Forest Service. 5 May 2005. *Draft Forest Service Trails Accessibility Guidelines*. Contact: Forest Service, Mail Stop 1125, 1400 Independence Avenue, SW, Washington, DC 20250. Available at: <http://www.fs.fed.us/recreation/programs/accessibility/>

28. Architectural and Transportation Barriers Compliance Board. 30 September 1999. *Accessibility Guidelines for Outdoor Developed Areas: Final Report*. Available at: <http://www.access-board.gov/outdoor/outdoor-rec-rpt.htm>

29. Los Angeles County. “Chapter 22.12 - ZONES AND DISTRICTS”. Available at: https://www.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT22PLZO_DIV1PLZO_CH22.12ZODI

Chiquito Canyon Road extends through an undeveloped portion of the Newhall Ranch Specific Plan area.

The proposed Hasley Canyon Trail and the Castaic Creek Trail pass through a generally built-out “Office and Professional” area in the Val Verde district that is zoned M-1.5-DP.

A proposed trail alignment through upper San Francisquito Canyon passes through an as-yet undeveloped area that is designated “Single Family Residential” with corresponding R-1 zoning.

A portion of the Castaic Creek Trail would be on “Public and Semi-Public” designated land that is zoned A-2-5. This Los Angeles County owned Parcel on which the Pitchess Detention Center is located along Castaic Creek is also in a Significant Ecological Area (SEA) and floodplain.

The proposed trail crossing of I-5 at Lake Hughes Road passes through a generally built-out area of residential and commercial development. On the west side of I-5, there is a potential connection to an open space area owned by the Mountains Recreation and Conservation Authority. In addition to private Rural/A-2-2 land, the Castaic Lake Trail connection to the north passes

through U.S. Forest Service land, Bureau of Land Management land, and an undeveloped area of the Northlake Specific Plan area.

Table 3-5: Existing Trails Parcel Ownership, indicates that all existing trails segments are owned by Los Angeles County (4.9 miles).

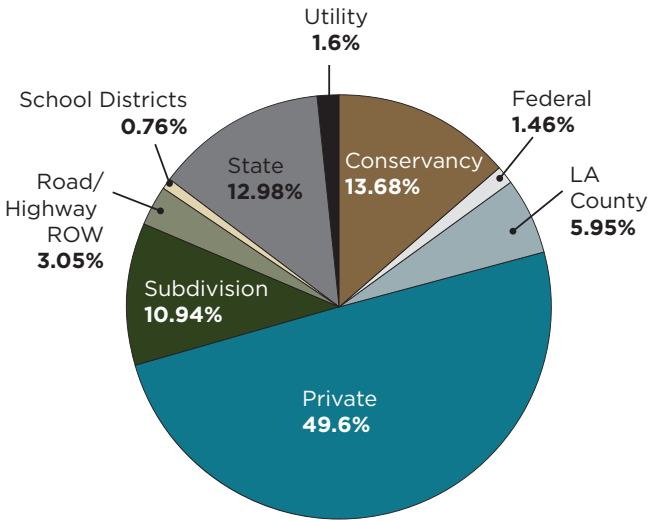


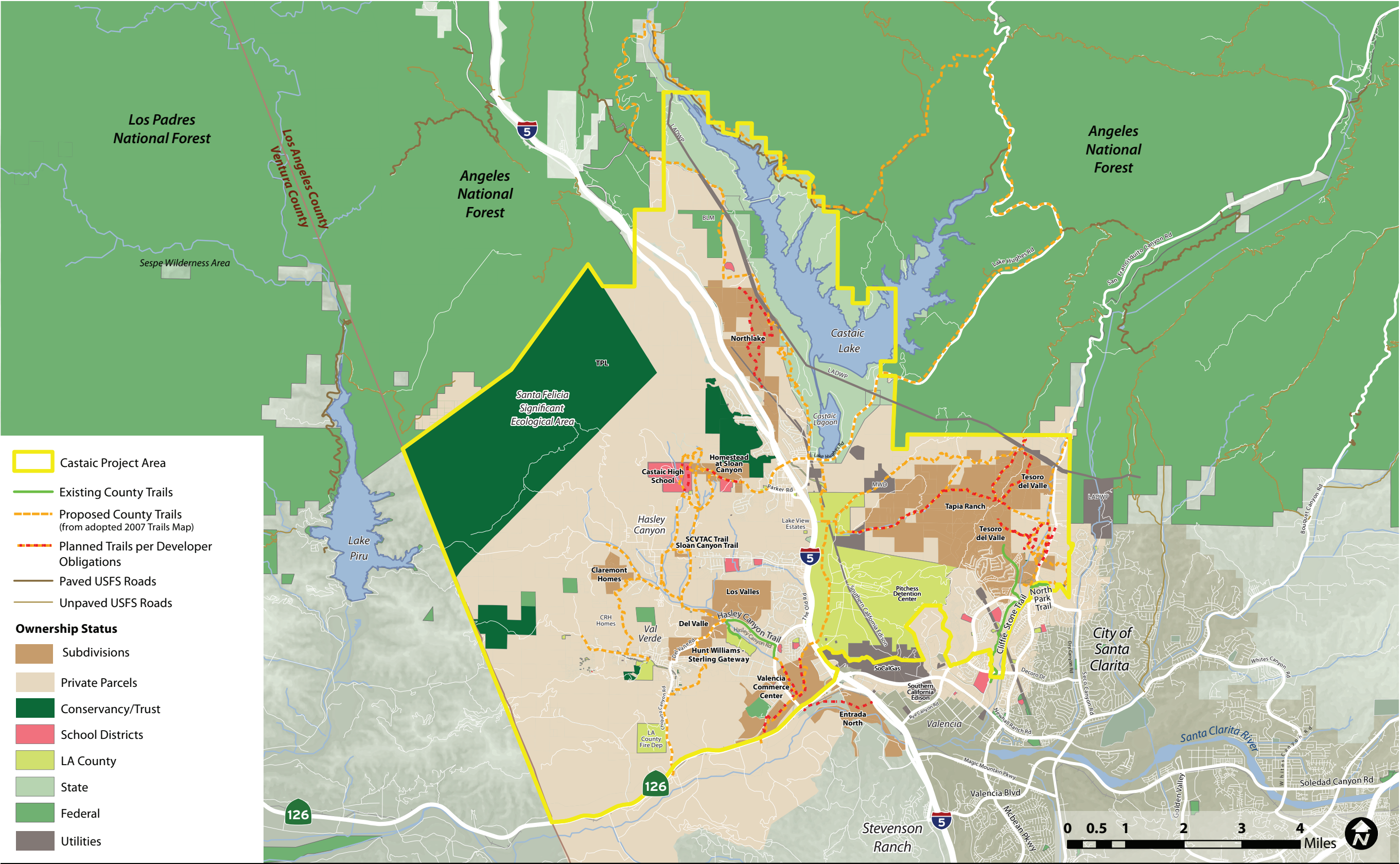
Figure 3-6 Ownership Percentage in the Castaic Project Area

TABLE 3-5: Property Ownership

OWNERSHIP	SQUARE MILES	OWNERSHIP PERCENTAGE
Conservancy/Trust	10.28	13.68%
Federal	1.10	1.46%
Los Angeles County	4.47	5.95%
Private	37.28	49.60%
Subdivision	8.22	10.94%
Road/Highway ROW	2.29	3.05%
School Districts	0.57	0.76%
State	9.76	12.98%
Utility	1.20	1.60%
Total	75.17	100%

TABLE 3-6: Existing Trails Parcel Ownership

TRAIL	MILES	OWNERSHIP
Cliffie Stone Trail	2.9	Los Angeles County
Hasley Canyon Trail	1.67	Los Angeles County
North Park Trail	0.33	Los Angeles County



DISCLAIMER: This map was created for trail planning purposes only. Some trails shown do not exist currently and are planned for the future, or they exist but are not officially designated. Permission to use trails shown on this map should not be assumed. Some trails may traverse private property and suggested alignments do not imply rights of public use.

MAP DATA SOURCES
Date Map Created/Revised: 7/9/2016 Basemap: USGS 2006 LA County LIDAR 10ft DEM
Data Sources: mtbproject.org, ESRI Streetmap NA 2013, Los Angeles County Enterprise GIS, California Protected Areas Database 2015a, Santa Clarita Valley Master Plan of Trails 2015, California Recreational Trails Plan 2011, Los Angeles County General Plan 2007, USFS Road Core, City of Santa Clarita
Map Author: James Powell
*Tentative Tract Maps: Los Valles, Valencia Commerce Center, Entrada North, Claremont Homes, Castaic HS, Homestead at Sloan Canyon, and North Lake Hills Elementary

Figure 3-7 Property Ownership

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3.6 OPPORTUNITIES AND CONSTRAINTS

3.6.1 OVERVIEW

The Castaic Project Area features large swathes of open space, which has seen frequent use by hikers, mountain bikers, and equestrians for many years (**Figure 3-8: Opportunities and Constraints Overview**). Visitors to the Castaic Project Area often follow worn-in trails developed by previous users' desire lines, rather than designated paths leading to approved destinations. These trails often fall in privately owned land, creating challenges to the development of an extensive trail network from these trails. (see previous **Figure 3-7: Property Ownership**). While some landowners have tolerated or even embraced the use of trails on their property, others have actively tried to prevent trail use or have found themselves in conflict with trail users. Beyond individual private landowners, large subdivisions cover much of the Castaic Project Area and are in varied states of planning, approval, or development. All new land divisions in the Castaic Project Area, in accordance with the Castaic Area Community Standards District (Castaic Code), *Section D.3*, are to include trails as identified with the County Master Plan of Trails or Santa Clarita Valley Area Plan. Negotiations with developers will be a necessary and ongoing process to ensure the success of a system of trails throughout the Castaic Project Area.

The Castaic Lake State Recreation Area (SRA) comprises the largest recreational space in the Castaic Project Area. Trails weave throughout it but are not clearly mapped or consistently signed. Nearby residents have cited parking fees and lack of connectivity from outside the SRA as discouragements to frequent use. Other major land uses in the Castaic Project Area are industrial, institutional, oil extraction, utility corridors, training areas for fire and law enforcement, and The Peter J. Pitchess Detention Center.

3.6.2 CONNECTIONS TO POINTS OF INTEREST

The most significant opportunities in the Castaic Project Area are its natural features, intact significant ecological areas, and the many ridgelines and canyons provide winding trails and panoramic views of native landscapes (**Figure 3-9: Topography and Hydrology**).

3.6.2.1 Significant Ecological Areas

Santa Felicia SEA (Figure 3-10: Specific Opportunities and Constraints, Marker #1)

Nearly the entire northwestern quadrant of the Castaic Project Area is comprised of the Santa Felicia Significant Ecological Area. A group of mostly undeveloped parcels, known as Temescal Ranch, covers most of this area, and access to those parcels has not been historically granted. The Trust for Public Land received a grant in 2015 to acquire the property, which it plans to grant to the Mountains Recreation and Conservation Authority (MRCA). The MRCA and County Parks have a history of cooperation, and their management of these properties should help preserve the area as open space and allow for the area to be used for public trails.

Santa Clara River SEA (Figure 3-10 Marker #2)

The Santa Clara River passes just outside the Castaic Project Area to the south. Its associated SEA, however, includes land surrounding Castaic Creek, as far north as the southern edge of Castaic Lake, and the San Francisquito Canyon Wash, which follows the eastern border of the Castaic Project Area. This SEA designation allows an additional level of environmental review upon any development in the immediate area of the creek, but would not create additional restrictions on trail activities beyond those imposed by USGS blue line designation.

3.6.2.2 Topography

Loma Verde Peak (Figure 3-10 Marker #3)

Loma Verde is the only summit identified by the USGS within the Castaic Project Area. At 2,424 feet, it allows views for miles in every direction, is a major focal point of the region, and should be considered a landmark for the trail system.

Significant Ridgelines (Figure 3-9)

The Castaic Project Area includes 129 significant ridgelines, as identified by Los Angeles County Department of Regional Planning. These ridgelines provide panoramic views of the area and are protected by the Los Angeles County Code of Ordinances, chapter 22.44.137: Castaic Project Area Community Standards District. This ordinance restricts development, construction, and grading within 50 feet of primary ridgelines and 25 feet of secondary ridgelines.

Exemptions are available to this restriction, to which trails, parks, and recreation areas may apply. Details of the exemption application process are in *Section 6.d.i.* of the code.

The protection of these ridgelines increases the scenic potential of the Castaic Project Area, and also helps these ridgelines become more available for trail development, as many other kinds of development are off limits. An overall slope analysis of the Castaic Project Area can be found in **Figure 3-11: Slope Analysis** and shows areas of steeper incline that can affect the development in trails in the area.

3.6.2.3 Oil Wells

Portions of the Castaic Project Area overlie state designated oil fields. The designated oil field boundaries, the areas of production and major drilling, specifically underlie the Castaic Project Area, as depicted by the City of Los Angeles (1996) and the State Division of Oil, Gas, and Geothermal Resources (DOGGR, 2001). Each of these oil fields is associated with structural features (e.g., anticlines or elongated domes) that trap petroleum and related compounds (crude oil and natural gas). The location of wells in the Castaic Project Area seen in **Figure 3-12: Oil Wells** is highly variable, and should not determine trail alignment until more precise well locations are determined.

3.6.2.4 Water

Castaic Lake and Lagoon (Figure 3-10 Marker #4)

The Castaic Lake and Lagoon are the central attractions within the Castaic Lake State Recreation Area (SRA). Providing access to natural wildlife and plant species, these areas also provide both water-specific and general recreation opportunities. The Castaic Lagoon offers activities such as swimming (in the summer only), fishing, picnicking, camping and non-gasoline powered boating. The Castaic Lake provides water-specific recreation activities including gas-powered boating, fishing, and wake boarding and waterskiing (in designated areas). The variety of recreational activities attracts a large and diverse population of users.

Castaic Dam and the Elderberry Forebay Dam (Figure 3-10 Marker #5 & 6)

These structures provide the only linkages across Castaic Lake. These linkages allow for continuous loop

trails through the entire Castaic Project Area, and bring trail users into the Castaic Lake SRA. If these structures cannot provide trail access, trails connections in the northeast section of the Castaic Project Area will not be feasible, and will restrict trail planning to the west side of Castaic Lake.

Hydrology (Figure 3-9)

The Castaic Project Area includes over 200 miles of USGS blue line streams, including two named streams: a spur of the California Aqueduct at the far northern edge, and Castaic Creek, which runs north-south through the center of the Castaic Project Area. Blue line designation limits development within the immediate area, including disturbances to native vegetation and riparian habitat. Trails constructed adjacent to the established centerline of these streams will need to avoid grading or native vegetation removal. These development restrictions remove competition for other uses in these areas, leaving large areas of land available for trail use.

The Metropolitan Water District of Southern California's Foothill Feeder is located in the project area and special considerations for trail development will need to be taken. More information on specific guidelines can be found in **Appendix E**.

Elderberry Forebay Facilities (Figure 3-10-Marker #20)

The area immediately surrounding the Elderberry Forebay is located within the boundary of the South State Water Project (SWP) Hydropower, Federal Energy Regulatory Commission (FERC) Project No. 2426, which is jointly licensed to DWR and LADWP. Trails will stay out of a 100-foot radius of these facilities as requested by LADWP.

3.6.2.5 Existing Trails and Recreation Facilities

Castaic Lake State Recreation Area (Figure 3-10 Marker #7)

The Castaic Lake SRA is owned by the California State Parks, but operated by the County Parks. The SRA is over 6 square miles in size. Several trails exist within the SRA, but they are not maintained as a network that connects to destinations or trails outside the SRA. The surrounding community has voiced concerns regarding the lack of connectivity and the reliance

on SRA parking, its entry gates, and parking fees, for access, which limits their use of the trails. If connections were available from outside the SRA, it could easily be reached by residents without having to drive.

In addition to trails, the SRA contains picnic areas, campsites, and boat rentals, all of which can serve as destinations to trail users. Public feedback suggested that amenities at the lake have decreased over time, and a rehabilitation of these facilities would help draw additional local users.

Existing Los Angeles County Trails and Trailheads (Figure 3-8)

County Parks currently operates three trails within the Castaic Project Area. The Hasley Canyon Trail, in the southwestern portion of the Castaic Project Area (**Figure 3-10 Marker #8**), includes a parking lot and equestrian center, and 1.7 miles of existing trail. While it does not form a loop or formally connect to other trails, it can serve as a prominent connection for future trail development. In the southeastern portion of the Castaic Project Area, the Cliffie Stone Trail (**Figure 3-10 Marker #9**) provides a connection into Santa Clarita and the city's extensive network of Class I bike trails. Being a paved path, it does not provide the same appeal to mountain bikers or equestrian users as natural surface trails, but it does have a dirt sidepath separated by a lodgepole fence in a few segments. The connection into Santa Clarita is a significant opportunity to broaden the extent of the Castaic trail network, but also poses a significant challenge, as no formal connection exists from the Cliffie Stone Trail to other trails. Adjacent to the Cliffie Stone Trail is the North Park Trail (**Figure 3-11 Marker #10**), which is 1,700 feet long, and provides the easternmost trail connection from Castaic into Santa Clarita.

Adjacent Trails (Figure 3-8)

The City of Santa Clarita has an extensive network of trails and bike paths, several of which terminate at the Castaic Project Area. Planning trails that connect into this existing trails network will help bring more trail users into the Castaic Project Area and will expand available trails for existing users in Santa Clarita. Newhall Ranch, directly south of the Castaic Project Area, in its specific plan, has an extensive network of proposed trails, all of which can provide an extension to trails in the Castaic Project Area.

Regional Trails (Figure 3-8)

Following the southern edge of the Castaic Project Area is the Santa Clara River, which is proposed as a major regional trail continuing west into Ventura County and eventually reaching the Pacific Ocean. Approaching the western edge of Castaic, the proposed Condor Trail winds through the Los Padres National Forest, ending at Lake Piru. At the eastern edge of the Castaic Project Area, the San Francisquito River provides a potential trail corridor connection to the Pacific Crest Trail.

3.6.2.6 Private Property

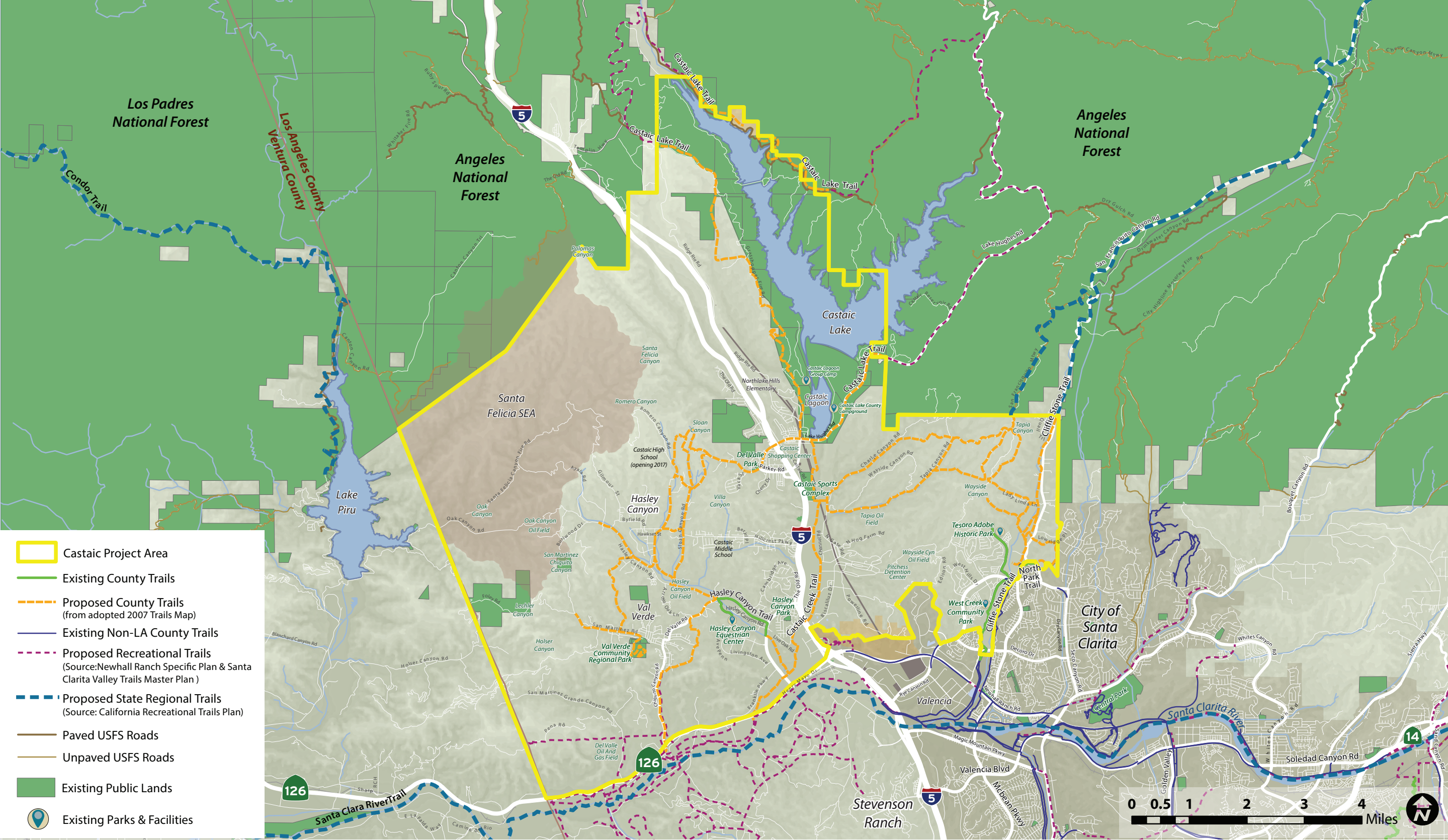
Subdivision easements and agreements (Figure 3-10 Marker #11)

The existing Cliffie Stone Trail is built on an easement resulting from an agreement reached with the adjacent developer and County Parks. Future trail development in the Castaic Project Area depends on further negotiations with developers in order to encourage the inclusion of trails in subdivision plans. This provides a far more efficient strategy for trail development in the Castaic Project Area, where so much land is under private ownership, as it requires negotiation with a single owning entity for a large area for trail easements, as opposed to multiple individual landowners. These agreements also allow the trails to be built at the same time as housing and other amenities, avoiding potential conflicts in future trail development with private land owners. The current status of trails in relation to specific subdivision plans is covered in **Section 3.1.3** and shown in **Figure 3.1**.

Homeowners Requesting Access (Figure 3-10 Marker #12)

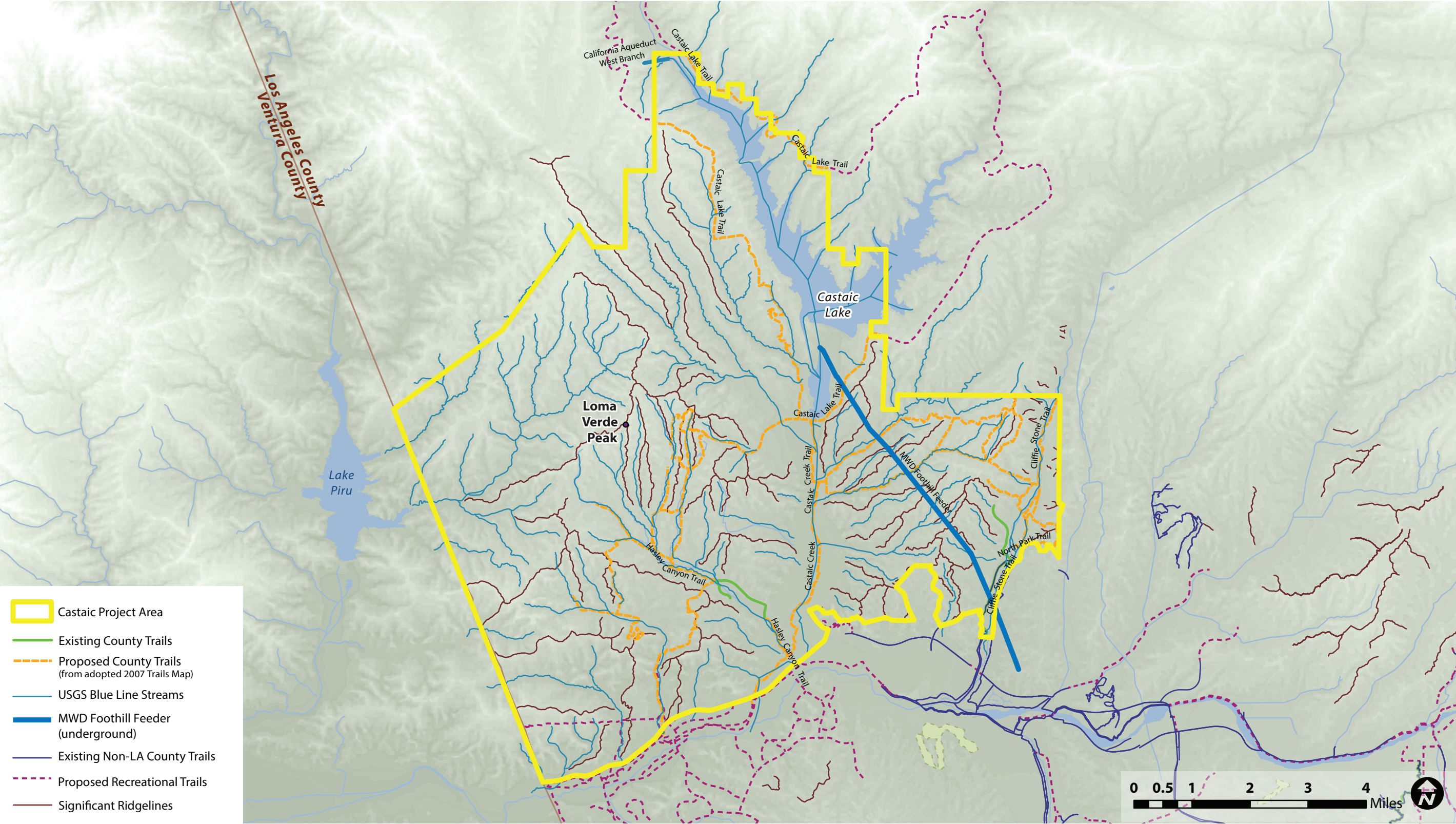
There are homeowners within the Castaic Project Area that are amenable to trails on their property. These could provide negotiation-free easements for future trails in a context that encourages their use.

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DISCLAIMER: This map was created for trail planning purposes only. Some trails shown do not exist currently and are planned for the future, or they exist but are not officially designated. Permission to use trails shown on this map should not be assumed. Some trails may traverse private property and suggested alignments do not imply rights of public use.

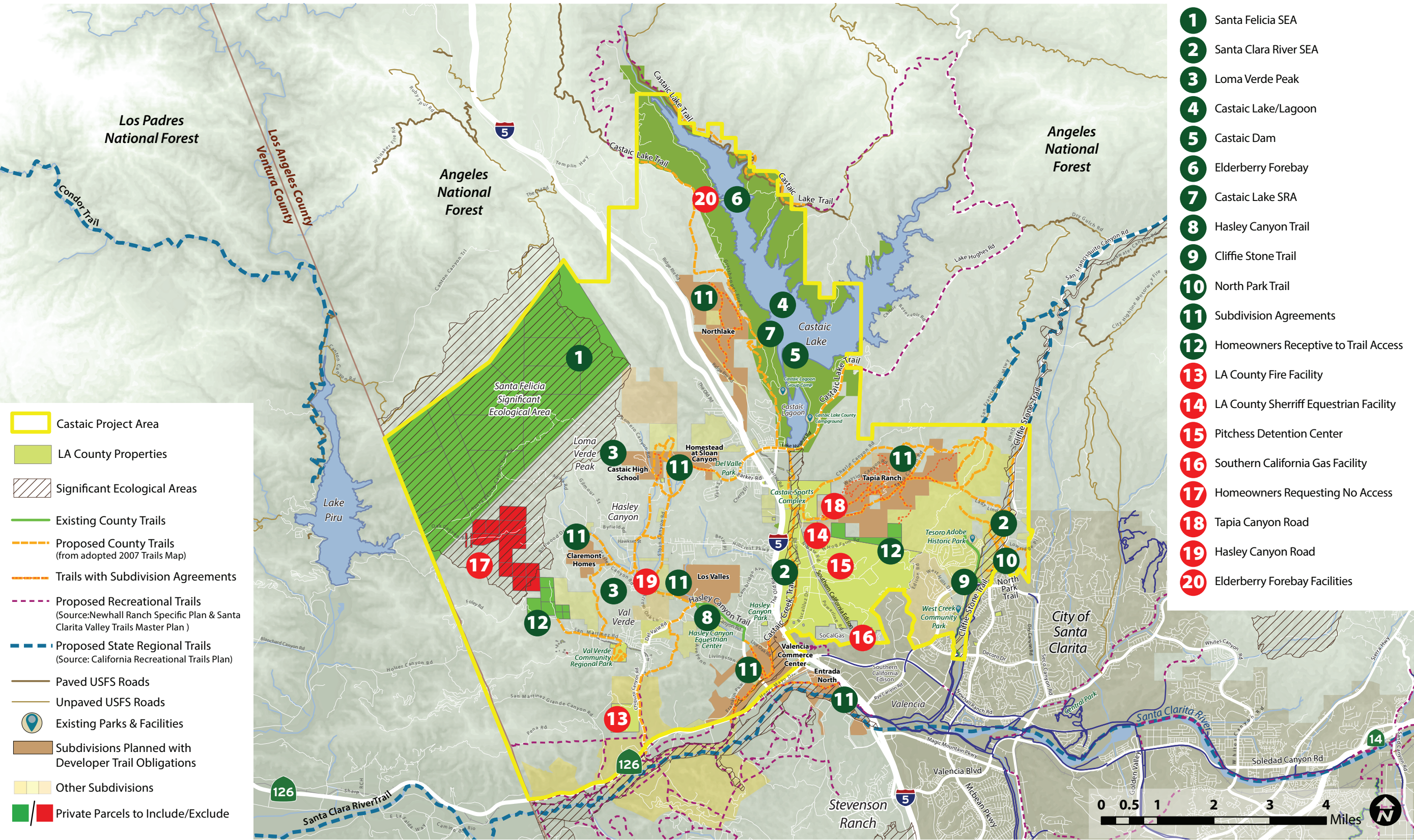
Figure 3-8 Opportunities and Constraints Overview



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Data Sources: Los Angeles County Enterprise GIS, California Protected Areas Database 2015a, Santa Clarita Valley Master Plan of Trails 2015, California Recreational Trails Plan 2011, Los Angeles County General Plan 2007, USFS Road Core, City of Santa Clarita, National Hydrography Dataset 2015.

Figure 3-9 Topography and Hydrology



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*Tentative Tract Maps: Los Valles, Valencia Commerce Center, Entrada North, Claremont Homes, Castaic HS, Homestead at Sloan Canyon, and North Lake Hills Elementary

Figure 3-10 Specific Opportunities and Constraints

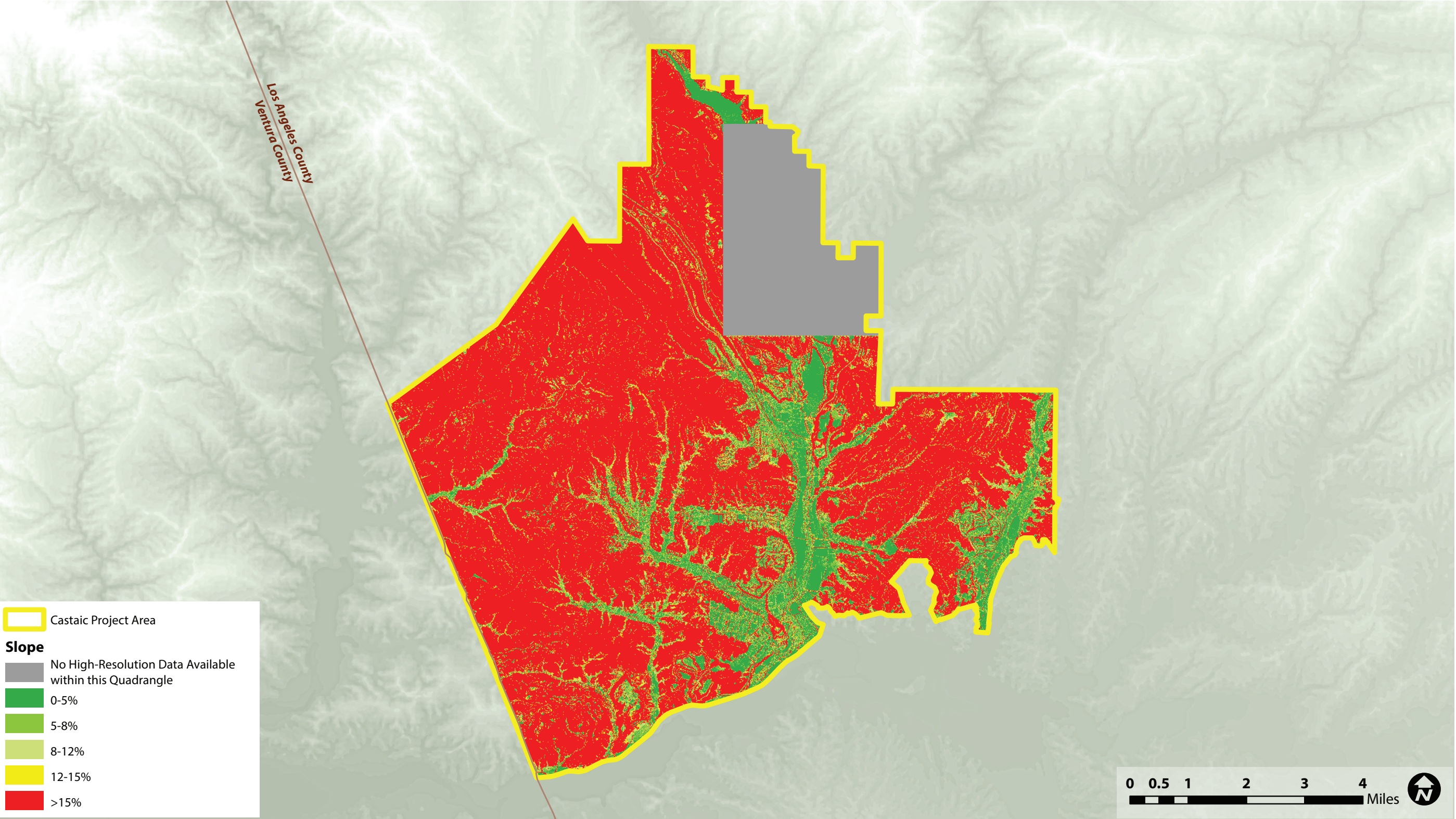
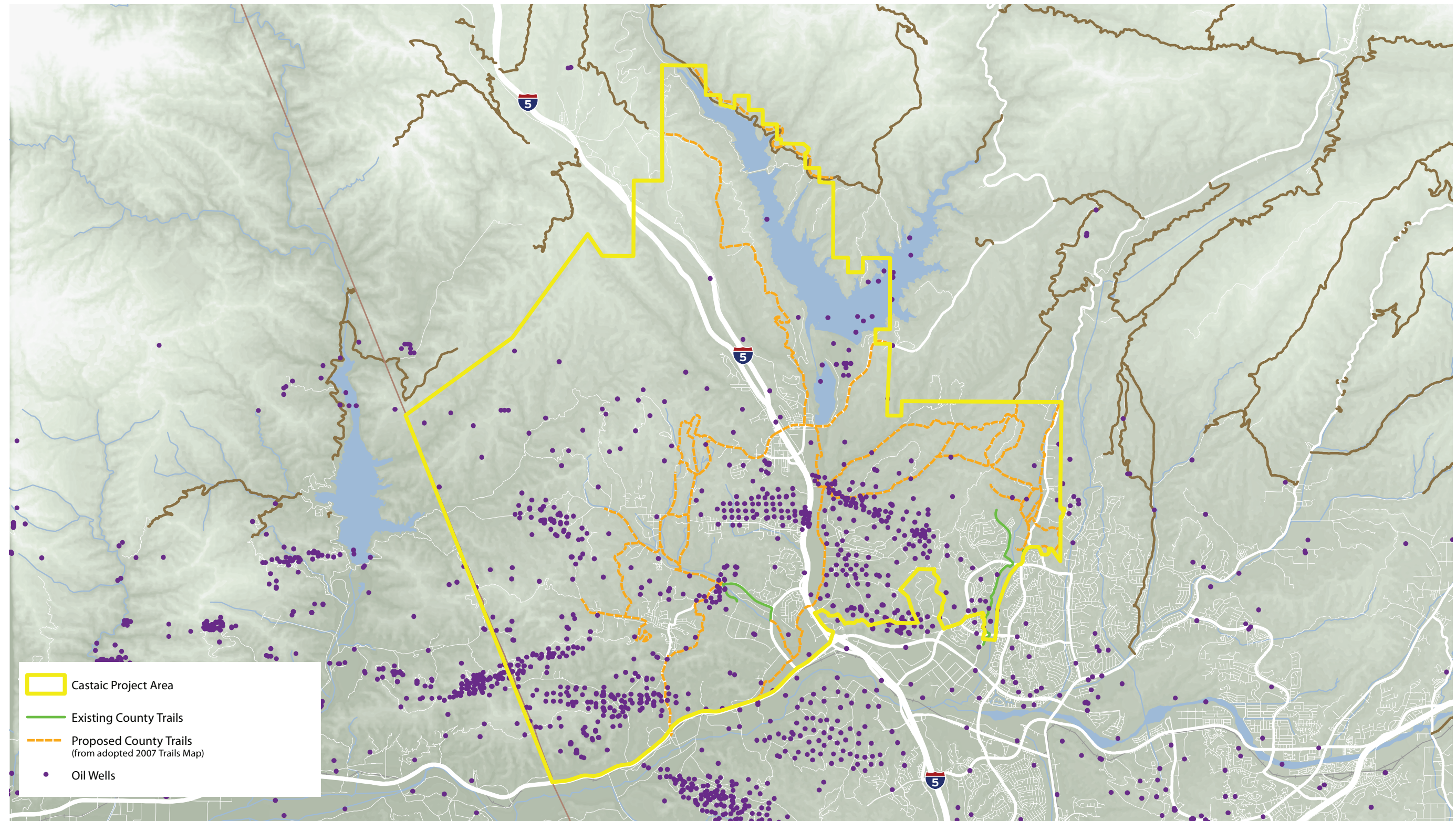


Figure 3-11 Slope Analysis



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 Data Sources: ESRI Streetmap NA 2013, Los Angeles County Enterprise GIS, California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR), 2/6/2016, California Recreational Trails Plan 2011, Los Angeles County General Plan 2007, USFS Road Core, City of Santa Clarita

Figure 3-12 Oil Wells

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SECTION 4.0 PROPOSED TRAILS & AMENITIES

4.1 TRAIL PLANNING AND DESIGN POLICIES AND STANDARDS

The Trails Manual clarifies the standards for the alignment and design of the trails that will comprise the County Parks' Castaic Project Area system. Adopted in 2011, the Trails Manual is a comprehensive guide for the planning, design and implementation of trails by Los Angeles County.

4.1.1 TRAIL TYPES DEFINED IN THE COUNTY TRAILS MANUAL

The Trails Manual includes Trail Design Guidelines (*Section 4.0*) that address methods of trail alignment and design to provide trails that are sustainable; controlling runoff and avoiding erosion; requiring limited maintenance; accommodating users well; and creating minimal environmental impact. It includes trail classifications to accommodate trails in different settings, summarized in **Table 4-1: Trails Manual Trail Classification Guidelines**. Natural Trails is the classification most relevant to the CAMUTP and can be seen in **Figure 4-1: Nature Trail Design Guidelines**. Examples of these classifications are shown in **Figure 4-2: Los Angeles County Multi-Use Trail Types from Trails Manual**.

It is County Parks' policy and objective that all trails will be multi-use whenever possible – accommodating pedestrians/hikers, people walking dogs, mountain bikers, and equestrians. To the extent feasible based on terrain and environmental constraints, the trails will also be designed to accommodate people with disabilities, as discussed in detail below.

Although the trail classifications include Urban Pedestrian Trails that may be paved, the objective for the CAMUTP is that all trails will be unpaved, except for short stretches that may cross or share driveways and service access points. *Section 4.2.8, Traffic Calming Design* of the Trails Manual includes guidelines to help control mountain bike speed, which can be a significant source of conflict on multi-use trails. These measures work in concert with the sustainable trail design principles of generally following contours, maintaining the natural smaller watersheds reflected in gradual rise and fall of the trail, and incorporating many turns to gain or lose elevation, while avoiding sharp switchbacks.

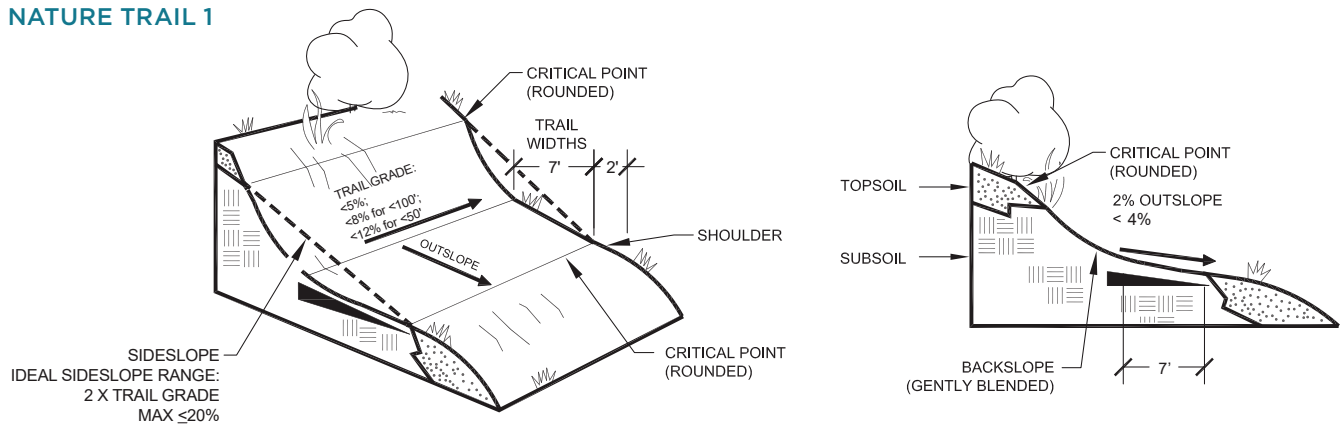
Though the trail classifications include trails as narrow as 2 feet, the Trails Manual advises that multi-use trails should be a minimum of 5 feet wide whenever possible,

TABLE 4-1 Trails Manual Trail Classification Guidelines

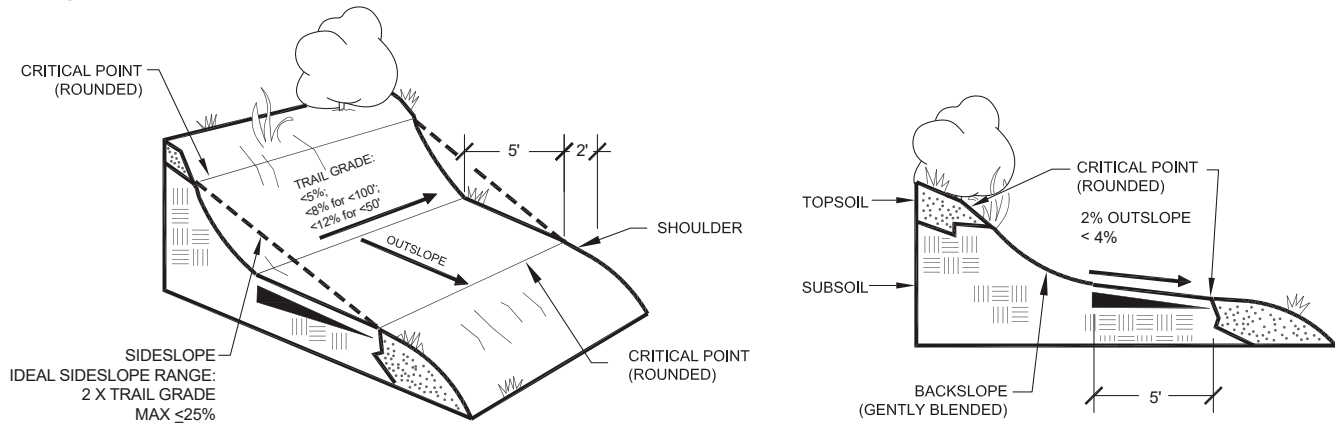
TRAIL CLASSIFICATION	TRAIL GRADE (PERCENT)	SURFACE	TREAD TRAIL WIDTH (FEET)	OUTSLOPE (PERCENT)
Urban Pedestrian Trail	< 5% < 8% for < 100' with rail	Asphalt* Crusher fines* Decomposed granite	10 to 11	2%
Recreational Trailway	< 5% < 8% for < 100' < 12% for < 50'	Natural surface	8 to 10	2% < 4%
Natural Trail 1	< 5% < 8% for < 150' < 12% for < 50'	Natural surface	7 to 10	2% < 4%
Natural Trail 2	< 5% < 8% for < 100' < 12% for < 50'	Natural surface	5 to 8	2% < 4%
Natural Trail 3	< 5% < 8% for < 200' < 12% for < 50' < 15% for < 20'	Natural surface	2 to 3	2% < 5%

NOTE: *Asphalt and crusher fines used in trail surfaces cannot be road based and cannot contain toxic chemicals.

NATURE TRAIL 1



NATURE TRAIL 2



NATURE TRAIL 3

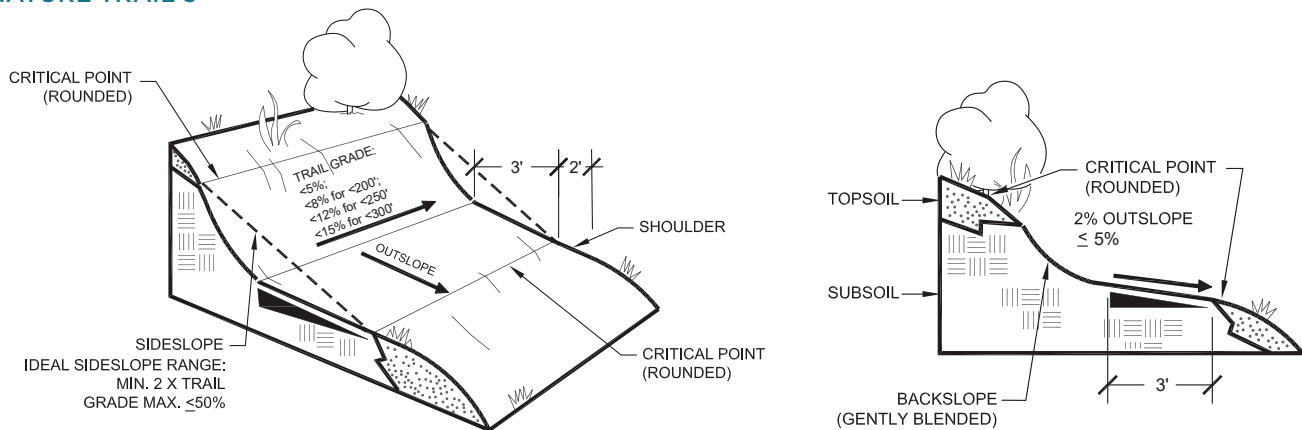


Figure 4-1 Nature Trail Design Guidelines



Figure 4-2 Los Angeles County Multi-Use Trail Types from Trails Manual

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provide turnout areas at regular intervals, and maintain maximum line-of-sight distances to minimize conflict between trail users:

It is the County's objective to have trails within the County be multi-use, which the County defines as including equestrians, hikers, and mountain bikers. In order to accommodate these users, it is recommended that trails be a minimum of 5 feet wherever possible; however, this does not preclude trails that are 3 feet wide from being designated a multi-use trail. Where trails are narrower than 5 feet or where 5-foot-wide trails will experience a high level of traffic, it is recommended that wider turnout areas of 6 to 10 feet be provided every quarter mile to allow for passage of trails users. In addition, it is recommended that where narrower trails cross terrain with excessive sideslope, typically greater than 45 degrees, the trail width be expanded to a minimum of 6 feet. It is recommended that trails that are multi-use allow users sufficient line of sight to react to other trail users. The following line of sight guidelines are recommended:

1. Minimum +/- 85 feet for trail grades of 5-10 percent'
2. Minimum +/- 50 feet for trail grades of 10- 12 percent and at blind turns

In order to address the concerns of all trail users, a design where soft-surface trails are located adjacent to hard surface trails for use of mountain bikes traveling at speeds in excess of equestrians may be considered (Section 4.3.2.1, page 4-14).

4.1.2 GUIDELINES FOR TRAIL CORRIDOR WIDTH

The objective for acquiring trail access should include securing a sufficient corridor for the trail to allow construction, use, and maintenance with little or no conflict with existing or potential future adjacent uses, as well as to provide a positive trail user experience, preferably of a natural or at least scenic setting.

The Trails Manual does not specify trail easement or corridor widths. The recommended minimum width for a trail easement or other corridor is 20 feet. Depending on the width of the trail and the steepness of the side slope it is to be constructed on, as well as adjacent uses, views and visibility, natural or scenic resources, and other opportunities and constraints,

the trail corridor and associated protected area or access points may need to be wider than 20 feet. Conversely, if site constraints or property owner willingness dictate, the trail corridor/easement could be as little as 10 feet-wide in a relatively level setting, but such narrow corridors should only be accepted as a last resort.

National, state, and regional trail systems have their own standards for the ideal and minimum width for a trail easement or alignment corridor. The California Coastal Commission and Conservancy Accessibility Standards for the California Coastal Trail¹ state that trail easements should be a minimum of 25 feet wide and should never be closer than 10 feet to an existing residence.

4.1.2.1 Trails in the Road Right-of-Way

Many of the trail routes adopted in the County of Los Angeles General Plan 2035 and on the route maps developed for this CAMUTP are along county roads, and in some cases pass through state highway right-of-way (ROW) at crossings of I-5. Although the publicly owned road ROW offers an opportunity to extend trail access, trails in the ROW are generally inconsistent with County Public Works Department policy. The Trails Manual has a detail for a Multi-use Front Yard Trail on Secondary Roadway (See **Figure 4-3, The Trails Manual Detail Multi-use Front Yard Trail on Secondary Roadway**) that shows a trail outside of the road ROW. This configuration would be easy to accomplish as a condition of approval of major development, but where trails are envisioned to follow roadways in areas that are already developed it would be very challenging – especially in denser residential or commercial areas with many parcels and significant built features.

A 20-foot easement or corridor parallel to the roadway would be an ideal way to accommodate access consistent with this detail. If there is sufficient undeveloped usable space in the road ROW, and the County Department of Public Works Survey/Mapping and Property Management Division, Right-of-way Engineering Section agrees that the ROW is not needed in the near term for roadway improvements, this may be an opportunity to construct a trail.

1. Coastal Access Standards Element of the California Recreation Plan, 1982 <https://www.gpo.gov/fdsys/pkg/CZIC-hd258-d47-1982/pdf/CZIC-hd258-d47-1982.pdf>

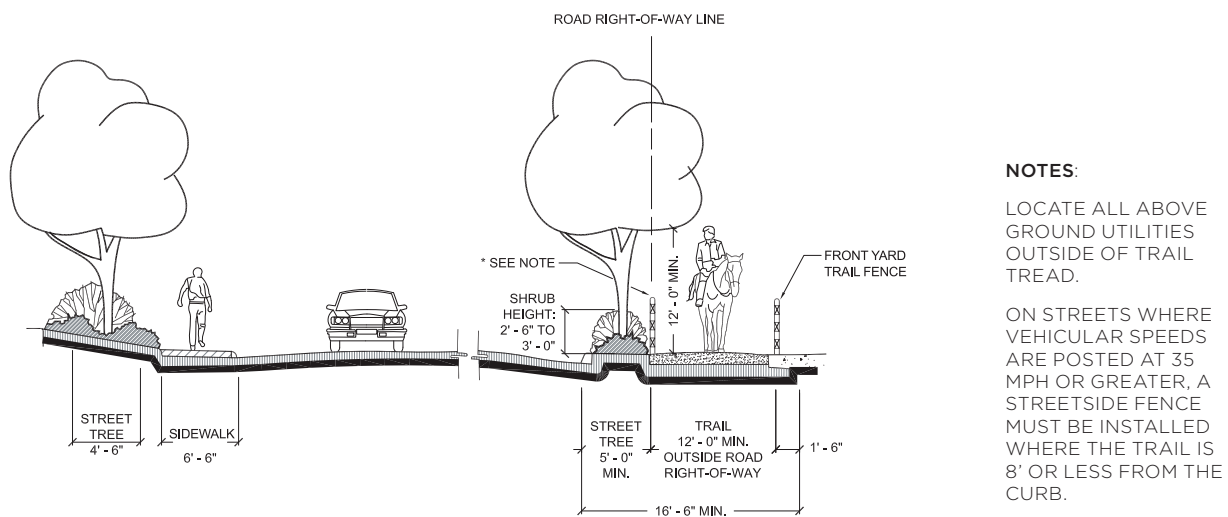


Figure 4-3 The Trails Manual Detail Multi-use Front Yard Trail on Secondary Roadway

(Source: Adapted by the Dangermond Group from Troy Scott Parker's *Natural Surface Trails by Design*)

Due to the barriers facing trail development in the Castaic Project Area, another variation of trail type may need to be considered for street adjacent trails that are in the public right-of-way (ROW) which is under the jurisdiction of the Department of Public Works. An example of this condition occurs within the Castaic Project Area where the I-5 crossing of Lake Hughes Road. An alternative trail standard will need to be developed in a partnership between County Parks, the Department of Public Works, and adjacent property owners in order to provide an appropriate trail width to accommodate a multi-use facility. An alternative would need to be designed on a case-by-case basis to develop a suitable multi-use trail for each unique situation.

4.2 GAPS AND BARRIERS IN THE EXISTING TRAIL NETWORK

Gaps and barriers within the existing trail network include those which cause a lack of connectivity between existing trails as well as to regional and local destinations. There are 9 major gaps and barriers to regional multi-use trail development shown in **Figure**

4-4: Gaps and Barriers to CAMUTP and described below.

1. ROUTE 126

Route 126 prevents easy recreational access to Santa Clarita, Newhall Ranch and the Santa Clara River Trail. Limited crossings exist along Route 126 that would easily connect multi-use trail users to these areas. This physical barrier limits:

- Connection between Hasley Canyon Trail and Santa Clara River Trail and it's connection to Ventura County
- Connection between Hasley Canyon Trail and Newhall Ranch Planned Trails

2. LOS ANGELES COUNTY FIRE FACILITY

The Los Angeles County Fire Department operates a ¼ square mile training facility in the south-west corner of the Castaic Project Area near Chiquito Canyon Road. This facility is used heavily by not only the fire department but also federal law enforcement agencies. The Battalion Chief of the Los Angeles County Fire Department advised that this training area and its operations are highly secure and trails should not approach the

area or follow ridgelines that provide visibility into the facility.

The access restrictions due to the Los Angeles County Fire Facility prevents southern trail connections to an existing Route 126 under-crossing and limits:

- Connection between Hasley Canyon Trail and Santa Clara River Trail and its connection to Ventura County
- Connection between Hasley Canyon Trail and Newhall Ranch Planned Trails

3. VENTURA CONNECTION PRIVATE PROPERTY

The private properties within the Castaic Project Area limit access to the western edge of the county and Castaic Project Area. The extent of private property across the county line in Ventura prevent any access to Ventura County destinations, such as Lake Piru. This gap limits:

- Connection between Hasley Canyon Trail and Ventura County destinations
- Connection between Hasley Canyon Trail and Los Padres National Forest

4. HASLEY/SLOAN CANYON PRIVATE PROPERTY

Private property located northwest of the Hasley Canyon Trail are inaccessible due to private roads that include locked gates which impeded access to the north and west. These barriers limit:

- Connection between Hasley Canyon Trail and Santa Felicia SEA
- Connection between Hasley Canyon Trail and Loma Verde Peak

5. I-5 CORRIDOR

The I-5 Corridor presents limited access between the east and west sides of the Castaic Project Area. Narrow roadways and restricted access along I-5 also present conflicts with users and vehicles. This barrier limits:

- Connection between Hasley Canyon Trail and Tapia Canyon
- Connection between Hasley Canyon Trail and Castaic Lake State Recreation Area

- Connection between Hasley Canyon Trail and the Castaic Sports Complex

6. LAKE ACCESS

The water controlling features and limited developed access corridors around the lake and lagoon create a large gap in access. Heavy traffic, small or no shoulders along Lake Hughes Road restrict its use as a multi-use trail. On the west side of the lake, a lack of developed road or corridors limit the access by all modes of transportation. County Parks, in consultation with DWR and LADWP, has limited selected trail segments for special event use only, in light of perceived concerns related to security.

The hazardous crossing of the Castaic Power Plant powerhouse penstock, steep terrain, and the presence of the Castaic Power Plant and the critical components of the Castaic Power Plant (including the Elderberry Forebay shoreline and Elderberry Dam) within the boundary of the South SWP Hydropower, FERC Project No. 2426 along the western shore of Elderberry Forebay limit access to the National Forest due to safety and security needs.

This barrier limits:

- Connection between all existing trails and the northern portion of the lake
- Connection between all existing trails and National Forest entry
- Loop trail development around the lake

7. LOS ANGELES COUNTY SHERIFF FACILITIES

The Los Angeles County Sheriff's Department operates an equestrian training facility between Tapia Canyon Road and the Pitchess Detention Center. A public road passes through this facility, but the Sheriff's Department has indicated that this facility, also being used for homeland security training, is not open to trail users and visitors are discouraged from visiting the area.

The Peter J. Pitchess Detention Center and associated properties contain the largest contiguous county-owned parcels in The Castaic Project Area, with 16 parcels totaling 3.9 square miles. It occupies much of the land east of Interstate 5

south of Castaic Lake and includes a portion of Castaic Creek. These parcels are off-limits to trail development. Despite large open parcels without development, areas surrounding the prison are high-security and trail development is viewed as a potential risk to trail users and a potential escape route for prisoners.

The lack of access along the eastern side of the I-5 corridor and Tapia Canyon Road limits:

- Access to the Castaic Creek trail within the Los Angeles Sheriff's property limits
- Connections between planned subdivision trails and Hasley Canyon Trail to the Castaic Sports Complex and the Lake beyond
- Alternative trail alignments along the I-5 corridor

8. THE SOUTHERN CALIFORNIA GAS COMPANY

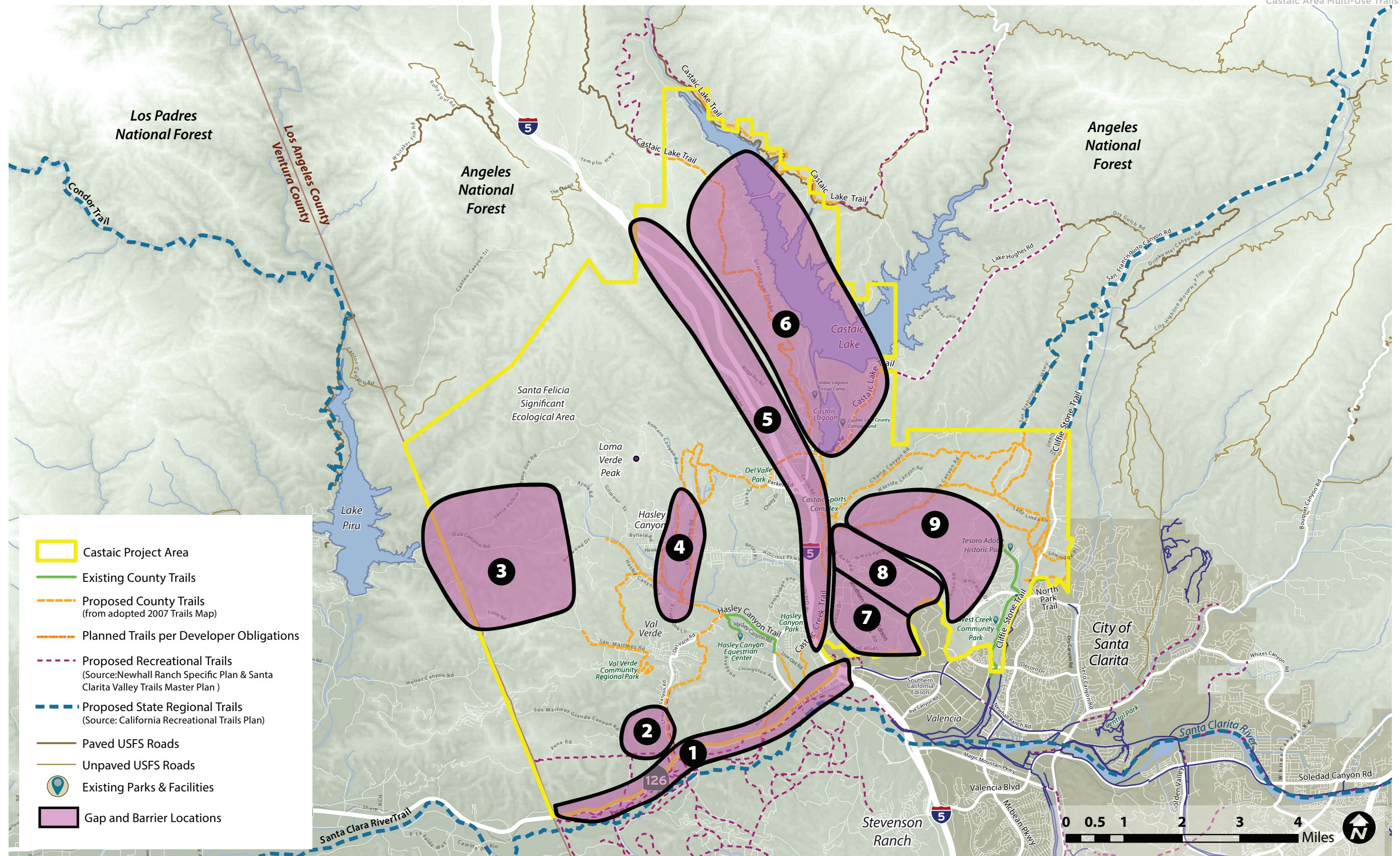
The Southern California Gas Company (SoCal Gas) operates a facility in the southeastern region of the Castaic Project Area, east of Interstate 5, which further limits trail connectivity in the area. A SoCal Gas representative informed the project team at a stakeholder meeting that trails directly adjacent to this facility would be considered a security concern. This private property barrier limits:

- Access to the Castaic Creek trail within the Los Angeles County Sheriff's property limits
- Connections between planned subdivision trails and Hasley Canyon Trail to the Castaic Sports Complex and Castaic Lake beyond
- Alternative trail alignments along the I-5 Corridor

9. TAPIA CANYON/TESORO AREA

Conflicts between landowners and trail users have occurred on Tapia Canyon Road and other areas where de-facto trails cross private property. The private property in Tapia Canyon and Tesoro on the eastern edge of the Castaic Project Area create barriers to connectivity with the other areas in the plan. These areas limit expansion of Cliffie Stone and North Park trails, as well as the connections to Castaic Lake from users in Santa Clarita. With future subdivisions, it is possible to alleviate the tension between users and property owners in this area and possibly lead to:

- A connection between Hasley Canyon Trail and Tapia Canyon Trails
- An expansion of Cliffie Stone and North Park Trails
- A connection between Cliffie Stone and North Park Trails and The Castaic Lake State Recreation Area
- A connection between Cliffie Stone and North Park Trails and the Castaic Sports Complex



DISCLAIMER: This map was created for trail planning purposes only. Some trails shown do not exist currently and are planned for the future, or they exist but are not officially designated. Permission to use trails shown on this map should not be assumed. Some trails may traverse private property and suggested alignments do not imply rights of public use.

MAP DATA SOURCES
 Date Map Created/Revised: 2/10/2015 Basemap: USGS 2006 LA County LIDAR 10ft DEM
 Data Sources: mtpbproject.org, ESRI Streetmap NA 2013, Los Angeles County Enterprise GIS, Santa Clarita Valley Master Plan of Trails 2015, California Recreational Trails Plan 2011, Los Angeles County General Plan 2007, USFS Road Core, City of Santa Clarita Map Author: James Powell

Figure 4-4 Gaps and Barriers to Castaic Area Multi-Use Trails Plan

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4.3 PROPOSED TRAILS

The CAMUTP envisions a total length of 93.8 miles of trails within the Castaic Project Area, including 67 trail segments, 4.6 miles of existing trails, 48.7 miles from the 2007 County Trails Map (including minor realignments), and 39.7 miles of newly-proposed trails. Alternative alignments from the previous proposed trail network were developed when necessary. Reasons for re-alignment of proposed trails include

- Where the proposed trails were located along roadways;
- Constraints due to the terrain of the trail locations;
- Taking advantage of easements provided by proposed development;
- Streamlining the trail alignments into a regional network, connecting to designated priority destinations;
- Minimizing impact on the environment.

Additional restrictions and guidelines for trail development in sensitive areas has been developed in accordance with local utility companies and include:

- When crossing within 100 feet of a transmission line tower right-of-way, a fence will be installed by County Parks (County Parks cost).
- Development of any trail segments that cross the MWD Foothill Feeder shall be undertaken consistent with the Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of the Metropolitan Water District of Southern California (See **Appendix E**).
- Further Requirements for trails planned in the LADWP Right-of-way as well as standards for construction can be found in **Appendix F**.

Trail categories for the CAMUTP are based on the Trails Manual classifications. **Table 4-2** shows the Castaic Multi-Use Trail category as it relates to the Trails Manual recommended trail classifications. The Trails Manual recommends that use of the 8-foot-wide Natural Trail 2 trail classification, which is intended for medium to high intensity use on a natural surface and supports multiple user groups, be utilized throughout the County where site conditions support its use, but for varying classes of natural trails may be recommended. The varied recommended width of the natural trail is based upon site and slope conditions and shown in **Figure 4-5: Natural Trail (varying widths)**. **Figure 4-6:**

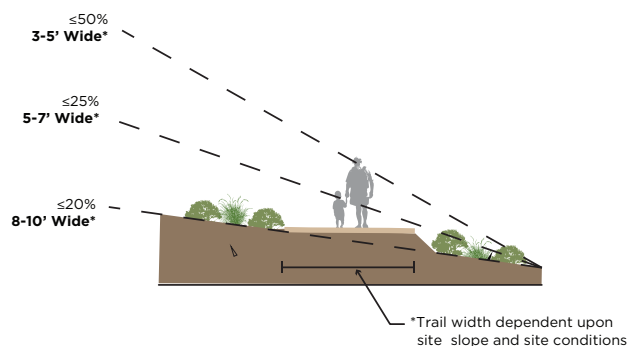


Figure 4-5 Natural Trail (varying widths)

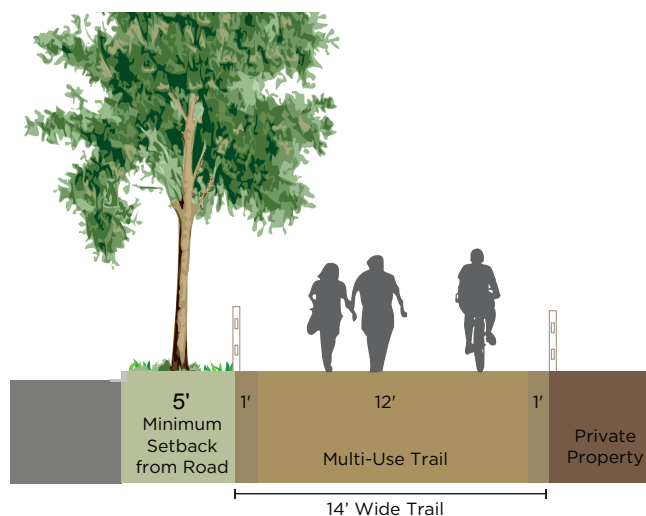


Figure 4-6 Multi-Use Trail, Option 1

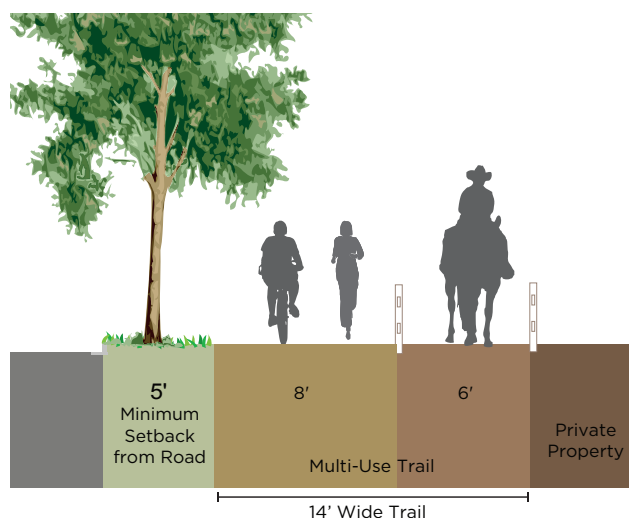


Figure 4-7 Multi-Use Trail, Option 2

TABLE 4-2: Trail Category Conversion

CASTAIC AREA MULTI-USE TRAIL CATEGORY	COUNTY TRAILS MANUAL TRAIL CLASSIFICATION
Natural Trail (NAT)	Natural Trail 1
	Natural Trail 2
	Natural Trail 3
Multi-Use Trail (MUT)	Urban Pedestrian Path
Multi-Use Trail on Adjacent Roadway (ROW)	NEW DESIGNATION-Future design to be determined on a case-by-case basis to develop a suitable multi-use trail for each unique situation.

Multi-Use Trail, Option 1 and **Figure 4-7: Multi-Use Trail, Option 2** show examples of multi-use trails that are included as conditions of approval through tentative subdivision parcel or tract maps. Consistent with the provisions of the County Trails Manual, the County normally seeks a 20-foot wide easement to support trails development.

As stated in Section 4.1.2.1 the Trails Manual currently does not include an on-street or street adjacent trail type for certain conditions in the Castaic Project Area. This Multi-Use Trail on Adjacent Roadway (ROW) alternative would need to be created on a case-by-case basis in order to develop the most suitable trail for each unique situation.

Trail segment alignments for the Castaic Project Area can be seen in **Figure 4-8: Proposed Trail Network**. Details of all trail segments can be found in **Table 4-3: Trails By Segments**. The trail categories are noted by segment in **Table 4-3** and include 3 trail categories: *Natural Trail, Multi-Use Subdivision Trail, and Multi-Use Trail on Adjacent Roadway*. Segment CD1 and CD2 of the CAMUTP is for special events use only due to safety concerns voiced by the State Department of Water Resources of public use of a dam crossing and is noted in **Figure 4-8** by a dashed line and highlighted in **Table 4-3**. Segment CD3 provides a connection the National Forest, but the existing width of Lake Hughes

Road, which is used as the connection, does not allow for the multi-use trail and will require heavy design to accommodate complete the segment. Additional negotiations and restrictions due to utility conflicts are noted in footnotes.

Consistent with Section 4.3.6, Way-finding Signs, of the Trails Manual, the proposed trails shall include regular trail signs at trailheads, trail amenity locations, street and trail intersections, and the boundaries of trail easements on private property and National Forest lands.¹ Trail related facilities are discussed further in Section 4.4, Proposed Trail Related Facilities, of this CAMUTP. Also consistent with the recommendations of the Trails Manual, reassurance marker signs shall be posted at eye level (62 inches above the ground surface) at every quarter (0.25) mile of trail that visually mark the trail line and identify the name of the trail and quarter milepost number in order to orient trail users and search and rescue services in the case of an emergency. As each trail segment is constructed, the County Department of Parks and Recreation shall be responsible for sending the Los Angeles County Fire Department and the Los Angeles County Sheriff's Department the location of each quarter milepost along the trail for emergency response purposes.

1. County of Los Angeles Department of Parks and Recreation. Revised June 2013. County of Los Angeles Trails Manual. Available at: <https://trails.lacounty.gov/Files/Documents/69/LA%20County%20Trails%20Manual%20%28Revised%2006-20-13%29.compressed.pdf>

TABLE 4-3: Trails By Segments

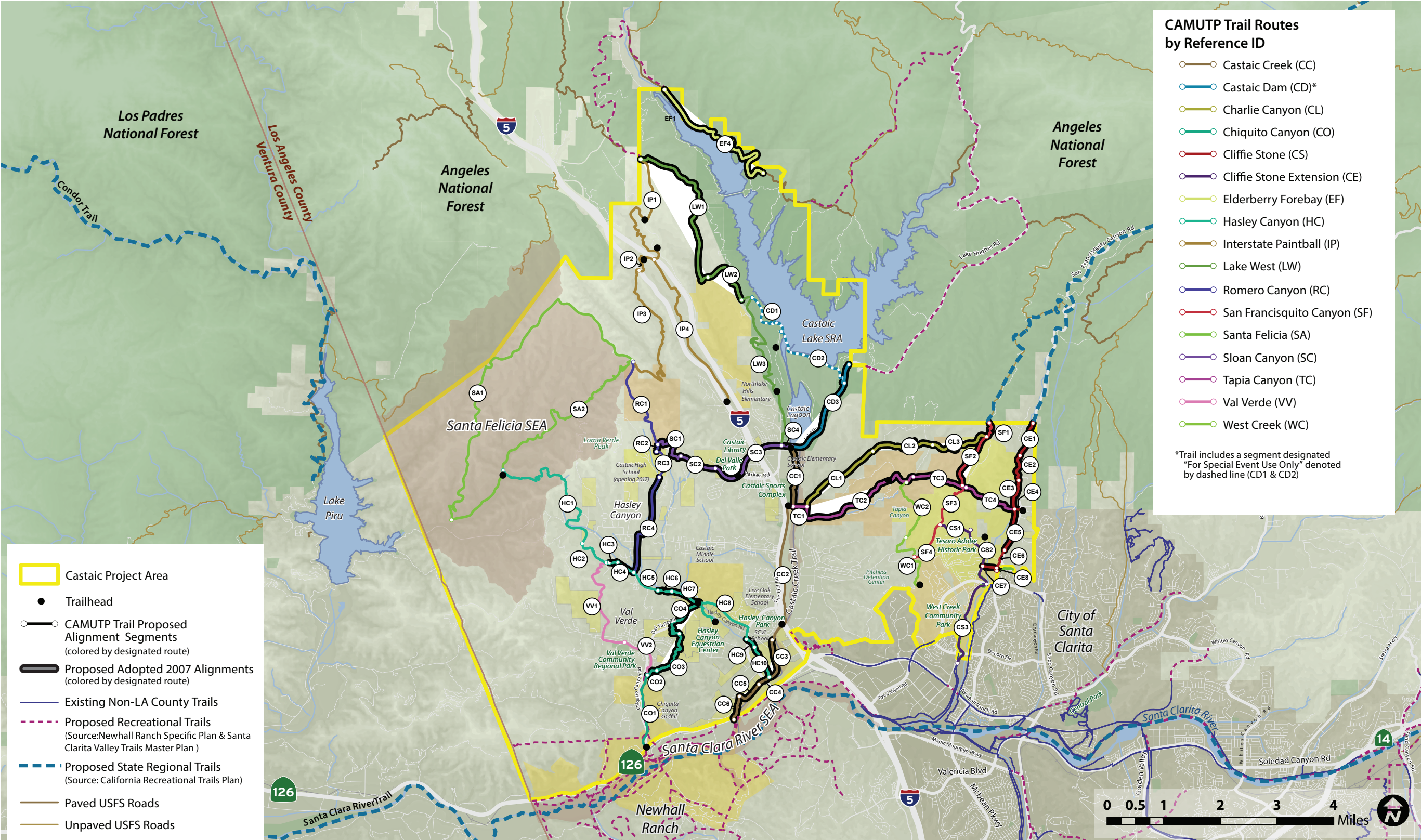
SEGMENT ID	ROUTE IDENTIFIER	SEGMENT NAME	LENGTH (MI)	SOURCE	EXISTING CONDITIONS OF TRAIL SEGMENT	TRAIL CATEGORY
CC1	Castaic Creek	Sports Complex	1.24	Follows 2007 Plan	De facto trail that does not cross private property. Crossing of drainage at RV park will wash out periodically unless an alternative crossing (bridge) is developed. Minor realignment to avoid drainage structure.	NAT
CC2	Castaic Creek	Pitchess	2.63	Realigned 2007 Plan	Moves previously planned route to west side of Castaic Creek, to follow the existing dirt road south from Tapia Canyon Rd along Interstate 5. Drops into the creekbed to cross under the interstate. Potential trailhead at south end.	NAT
CC3	Castaic Creek	Commerce Center East	0.76	Follows 2007 Plan	Generally follows county adopted alignment, updated to match subdivision plans.	MUT
CC4	Castaic Creek	Commerce Center Undercrossing	0.25	Follows 2007 Plan	Slightly modified to meet proposed subdivision trail.	NAT
CC5	Castaic Creek	Commerce Center Bike Trail	0.46	Follows 2007 Plan	Follows the subdivision plan indicating proposed bike trail with 10’ minimum equestrian trail.	MUT
CC6	Castaic Creek	Commerce Center - 126	0.48	Follows 2007 Plan	Follows the subdivision plan indicating proposed sidewalk and equestrian trail. Deviates from adopted alignment to follow roadway at northern end.	MUT
CD1	Castaic Dam	Castaic Upper Parking	1.39	New	Connection from previously adopted trail alignment to upper parking lot at Castaic Lake. <i>For Special Event Use Only.</i>	NAT
CD2	Castaic Dam	Castaic Dam Crossing	1.76	New	Dam crossing, bridging east and west sides of Castaic Lake. <i>For Special Event Use Only. Any Special Use Authorization for recreational use over the Castaic Dam service road shall incorporate a safety plan including security for SWP critical infrastructure and control structures. ¹</i>	NAT
CD3	Castaic Dam	Lake Hughes East	1.60	Follows 2007 Plan	On-street connection from potential lagoon trailhead to parking lot on the east side of the dam, as well as into the National Forest. 2007 adopted trail formally known as the Castaic. North of dam, existing street width does not allow for trail. ^{1,2}	ROW
CE1	Cliffie Stone Extension	San Francisquito Wash - Upper	0.63	Follows 2007 Plan	Passes from subdivision land into multiple private parcels. Runs adjacent to the street, but may need to enter street ROW. Minor realign-ment to follow de facto trails.	NAT
CE2	Cliffie Stone Extension	Tesoro Del Valle - SF Wash	0.52	Follows 2007 Plan	Minor realignment to follow de facto trails and more accurately follow topography. Passes through Tesoro Del Valle but is not included in subdivision plans.	NAT
CE3	Cliffie Stone Extension	San Francisquito Wash - Lower	0.55	Follows 2007 Plan	Minor realignment to avoid creek bed.	NAT
CE4	Cliffie Stone Extension	Lady Linda	0.13	New	Follows Lady Linda Lane to connect to proposed trailhead.	NAT
CE5	Cliffie Stone Extension	Cliffie Stone-From Lady Linda-Low Ridge	0.53	Follows 2007 Plan	Primarily follows Cliffie Stone Extension identified in subdivision alignment. Realigned at south end to provide continuity with other subdivi-sion trail segment.	ROW
CE6	Cliffie Stone Extension	Cliffie Stone-From Lowridge-Tesoro	0.26	Subdivision Agreement	Crosses road ROW but original ROW does not match existing street.	ROW
CE7	Cliffie Stone Extension	North Park - Cliffie Stone Extension	0.62	Follows 2007 Plan	Follows 2007 County adopted alignment through subdivision until south end, then branches west to meet Cliffie Stone Trail. Owned by MRCA but part of Tesoro subdivision.	NAT
CE8	Cliffie Stone Extension	North Park Trail Connector	0.08	Realigned 2007 Plan	Realigned adopted trail segment to provide connection to North Park Trail. Leaves subdivision property and enters Newhall Land parcel.	NAT
CL1	Charlie Canyon	Charlie Canyon Road	3.61	Follows 2007 Plan	Minor realignment to follow road on County property. ²	NAT
CL2	Charlie Canyon	Charlie Canyon - Tesoro Del Valle	0.37	Follows 2007 Plan	Trail enters subdivision parcels but is not on subdivision plans.	NAT
CL3	Charlie Canyon	San Francisquito connection	0.16	Follows 2007 Plan	Connection to San Francisquito Trail.	NAT
CO1	Chiquito Canyon	Chiquito Creek	1.39	Realigned 2007 Plan	Modified 2007 County adopted alignment to follow creek instead of the road.	NAT
CO2	Chiquito Canyon	Jackson St	0.21	Follows 2007 Plan	Follows existing street.	ROW
CO3	Chiquito Canyon	Chiquito Canyon and Creek - South	1.04	Follows 2007 Plan	Requires access beyond locked gate. Minor realignment to minimize parcel crossings.	NAT
CO4	Chiquito Canyon	Chiquito Canyon and Creek - North	1.05	Realigned 2007 Plan	Modified 2007 County adopted alignment to remain within subdivision parcels. Alignment not determined in subdivision agreement.	MUT
CS1	Cliffie Stone	Cliffie Stone - San Francisquito Motorway	0.68	New	Connects Cliffie Stone to San Francisquito. Tesoro Del Valle Property. Requires access along utility road.	NAT
CS2	Cliffie Stone	Cliffie Stone Trail (Tesoro)	1.16	Existing	Existing trail.	EXS
CS3	Cliffie Stone	Cliffie Stone Trail (San Francisquito)	1.73	Existing	Existing trail. ²	EXS
EF1	Elderberry Forebay	Castaic Lake Trail	4.57	Follows 2007 Plan	Northeast connection to USFS roads. Extends beyond study area. Minor realignments to follow existing roads and de facto trails.	NAT
HC1	Hasley Canyon	Hasley-Santa Felicia	3.48	New	Connects Hasley Canyon to Santa Felicia SEA. Requires passage beyond locked gate at Hasley Canyon Road.	NAT
HC2	Hasley Canyon	Hasley-Claremont	0.70	New	Trail falls within subdivision area but is not included in existing subdivision plans. Avoids using street ROW. Connects to 2007 adopted trails at either end.	NAT
HC3	Hasley Canyon	Hasley Canyon End	0.16	Follows 2007 Plan	Minor realignment to meet new proposed segment.	NAT
HC4	Hasley Canyon	Hasley Road West	0.33	Follows 2007 Plan	Follows 2007 County adopted trail along public ROW. Ends at road.	ROW

NOTES:
1. When crossing within 100 feet of a transmission line tower right-of-way, a fence will be installed by County Parks (County Parks cost). These segments will need to meet requirements for the LADWP ROW found in Appendix F.
2. Development of any trail segments that cross the MWD Foothill Feeder shall be undertaken consistent with the Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of the Metropolitan Water District of Southern California.

TABLE 4-3: Trails By Segments (continued)

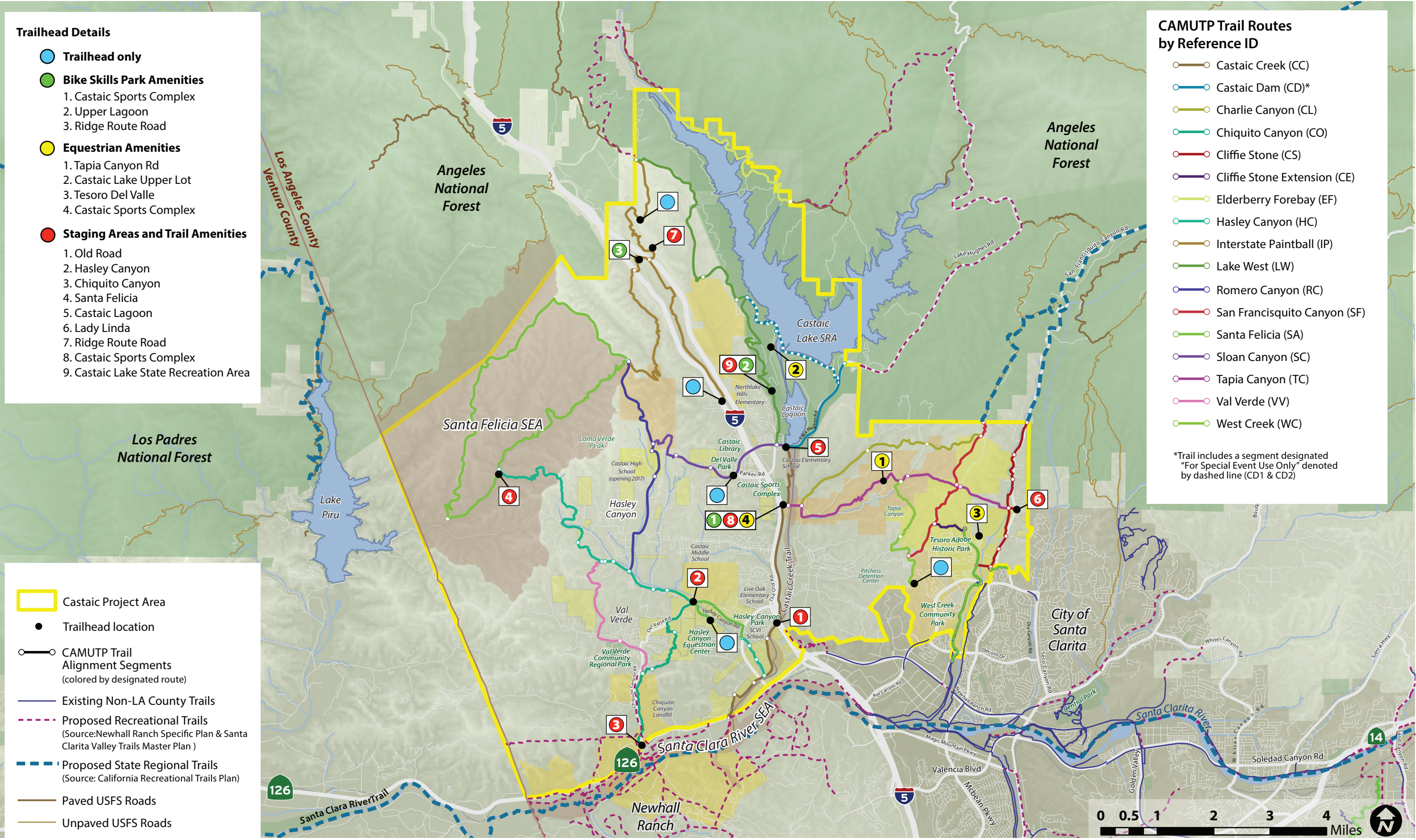
SEGMENT ID	ROUTE IDENTIFIER	SEGMENT NAME	LENGTH (MI)	SOURCE	EXISTING CONDITIONS OF TRAIL SEGMENT	TRAIL CATEGORY
HC5	Hasley Canyon	Hasley Road East	0.57	Realigned 2007 Plan	Realigned 2007 County adopted trail to avoid private parcel conflict, avoid a creek crossing, and to more directly connect to other trail segments.	ROW
HC6	Hasley Canyon	Hasley Creek	0.26	Follows 2007 Plan	Minor realignment to follow de facto trails.	NAT
HC7	Hasley Canyon	Hasley-Los Valles	0.56	Follows 2007 Plan	Minor realignment to follow de facto trails. Within subdivision area but a planned subdivision trail is not indicated.	MUT
HC8	Hasley Canyon	Hasley Canyon Trail	1.68	Existing	Existing trail.	EXS
HC9	Hasley Canyon	Hasley-Commerce Center	0.21	Follows 2007 Plan	Link to proposed subdivision trails. Crosses under Commerce Center Drive and uses maintenance road.	ROW
HC10	Hasley Canyon	Commerce Center NW	0.61	Follows 2007 Plan	Follows 2007 County adopted alignment but slightly realigned to avoid the creekbed where possible.	MUT
IP1	Interstate Paintball	Interstate 5 to Ridge Route	3.30	New	Follows utility access roads. Northern end will need switchbacks to drop to Ridge Route Rd. Connects Interstate Paintball to Lake West.	NAT
IP2	Interstate Paintball	Paintball Site	0.65	New	Connects through former paintball site and proposed bike skills park. Final alignment to be determined by future park design.	NAT
IP3	Interstate Paintball	Santa Felicia to 5 connection	3.67	New	Connection from former paintball site to Santa Felicia SRA. Undercrossing at Interstate 5 will need to be evaluated for safety and vehicular access, if any.	NAT
IP4	Interstate Paintball	Between Interstate 5	3.14	New	Picks up from the end of Castaic Road and continues to paintball site.	NAT
LW1	Lake West	Northlake North	3.28	Follows 2007 Plan	Minor realignment to more accurately follow existing de facto trails. 2007 adopted trail formally known as the Castaic Lake Trail ¹	NAT
LW2	Lake West	Northlake Central	1.10	Follows 2007 Plan	Minor realignment to more accurately follow existing roads and de facto trails. 2007 adopted trail formally known as the Castaic Lake Trail. ¹	NAT
LW3	Lake West	Lagoon-Lake	4.05	Realigned 2007 Plan	Realigned 2007 County adopted trail to minimize LADWP crossings and more accurately follow topography and de facto trails. 2007 adopted trail formally known as the Castaic Lake Trail. ¹	NAT
RC1	Romero Canyon	Romero-Santa Felicia	1.88	New	Connects Santa Felicia to Sloan Canyon. Portions follow narrow ridgelines.	NAT
RC2	Romero Canyon	North of High School	0.13	Follows 2007 Plan	Connection to Castaic High School path.	NAT
RC3	Romero Canyon	Castaic High School	0.56	Subdivision Agreement	Deviates from adopted alignment to match plans for high school. Final alignment tbd.	MUT
RC4	Romero Canyon	Romero Canyon Rd	1.89	Follows 2007 Plan	Minor realignment to follow existing roads.	NAT
SA1	Santa Felicia	Santa Felicia Upper Loop	7.59	New	Comprises the northern half of the loop around Santa Felicia SEA. Minimal constraints.	NAT
SA2	Santa Felicia	Santa Felicia Lower Loop	5.80	New	Covers the southern half of the loop around Santa Felicia SEA. Portions follow narrow ridgelines.	NAT
SC1	Sloan Canyon	Sloan Canyon West	1.14	Follows 2007 Plan	Portions follow narrow ridgelines.	NAT
SC2	Sloan Canyon	Homestead at Sloan Canyon	0.68	Follows 2007 Plan	Follows existing dirt road. Minor realignment for accuracy.	MUT
SC3	Sloan Canyon	Sloan Canyon Dr	1.52	Follows 2007 Plan	On-street connection. Crosses under Interstate 5. Requires coordination with Los Angeles County Public Works.	ROW
SC4	Sloan Canyon	Lake Hughes at Lagoon	0.19	Follows 2007 Plan	Connects Castaic Creek to Castaic Lake.	ROW
SF1	San Francisquito	San Francisquito Motorway	0.34	Follows 2007 Plan	Follows San Francisquito Mountainway to the edge of the study area. ¹	NAT
SF2	San Francisquito	San Francisquito Motorway Bypass	1.09	Follows 2007 Plan	Two parallel alternative routes. Single alignment pending further study. Partially inside Tapia Ranch.	NAT
SF3	San Francisquito	San Francisquito-Tapia	1.15	New	Passes through Tesoro Del Valle, not included in subdivision plans. Follows existing road, connects Cliffie Stone and Tapia Canyon trails.	NAT
SF4	San Francisquito	San Francisquito-West Creek	0.85	New	Follows utility road. Connects San Francisquito and Cliffie Stone Trails to West Creek. ²	NAT
TC1	Tapia Canyon	Sports Complex-Tapia	0.24	Follows 2007 Plan	Tapia Ranch development plans to build path to Castaic Rd.	MUT
TC2	Tapia Canyon	Tapia Bypass	2.74	Follows 2007 Plan	Part of Tapia Ranch development plan. Portions follow 2007 County adopted alignment. Deviates to avoid private property conflicts. ²	MUT
TC3	Tapia Canyon	Tapia-San Francisquito	1.11	Follows 2007 Plan	Partially within Tapia Ranch development.	NAT
TC4	Tapia Canyon	Tapia-Cliffie Stone	1.03	Follows 2007 Plan	Trail would need to traverse a significant elevation change over the ridge at northern end.	NAT
VV1	Val Verde	Kenington Rd	2.31	Realigned 2007 Plan	Requires access along private roads at either end of the alignment. Realigned to follow topography and de facto trails.	NAT
VV2	Val Verde	Chiquito-Val Verde	0.94	New	Provides connection to Chiquito Canyon. Follows drainage, marked as privately owned for portions but appears to be LA County Flood Control	NAT
WC1	West Creek	West Creek-Tapia	1.49	New	Requires connection through cul-de-sac in West Creek. Provides access to West Creek and San Francisquito trails. ²	NAT
WC2	West Creek	West Creek-Tapia-Tesoro	1.30	New	Within subdivision property, but alignment not included in subdivision. Connects West Creek development to Tapia Ranch area. Meets 2007 adopted trail at north end. ²	NAT

NOTES:
1.When crossing within 100 feet of a transmission line tower right-of-way, a fence will be installed by County Parks (County Parks cost).
2. Development of any trail segments that cross the MWD Foothill Feeder shall be undertaken consistent with the Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of the Metropolitan Water District of Southern California.



DISCLAIMER: This map was created for trail planning purposes only. Some trails shown do not exist currently and are planned for the future, or they exist but are not officially designated. Permission to use trails shown on this map should not be assumed. Some trails may traverse private property and suggested alignments do not imply rights of public use.

Figure 4-8 Proposed Trail Network



DISCLAIMER: This map was created for trail planning purposes only. Some trails shown do not exist currently and are planned for the future, or they exist but are not officially designated. Permission to use trails shown on this map should not be assumed. Some trails may traverse private property and suggested alignments do not imply rights of public use.

MAP DATA SOURCES
Date Map Created/Revised: 7/9/2016 Basemap: USGS 2006 LA County LIDAR 10ft DEM Map Author: James Powell
Data Sources: ESRI Streetmap NA 2013, Los Angeles County Enterprise GIS, California Protected Areas Database 2015a, Santa Clarita Valley Master Plan of Trails 2015, California Recreational Trails Plan 2011, Los Angeles County General Plan 2007, USFS Road Core, City of Santa Clarita, comments from public outreach.
*Tentative Tract Maps: Los Valles, Valencia Commerce Center, Entrada North, Claremont Homes, Castaic HS, Homestead at Sloan Canyon, and North Lake Hills Elementary

Figure 4-9 Proposed Trail Related Facilities and Trail Segment Details

4.4 PROPOSED TRAIL RELATED FACILITIES

Trail related or support facilities for the CAMUTP have been proposed for all trail users and include four categories, Staging Areas and Trail Amenities (9 designated), Equestrian Amenities (4 designated), Bike Skills Parks Amenities (3 designated), and Trailhead only (5 designated). Locations for facilities can be seen on **Figure 4-9: Proposed Trail Related Facilities and Trail Segment Details** Map. Facilities include on-trail, trail adjacent and beginning or end of trail amenities for equestrians, hikers and mountain bicyclists. On-trail amenities are dictated by the Trails Manual.

4.4.1 STAGING AREAS AND TRAIL AMENITIES

Staging areas are the primary access points to various trailsheds within the Proposed Castaic Area Multi-Use Trail system. Three of the staging area locations – Ridge Route Road, Castaic Sports Complex and Castaic Lake Upper Lot – are also candidate locations for Bike or

Equestrian Trailheads. **Table 4-4 Existing Conditions at Proposed Staging Areas and Trail Amenities** details each of the staging areas.

Proposed amenities at Staging Areas include:

- Trailheads
- Parking
- Restrooms
- Picnic Tables
- Wayfinding Signage
- Gathering Areas
- Shade Structures
- Drinking Fountains (for humans, equine, or pets)
- Horse Ties and Rails
- Bike Racks
- Benches/Seating
- Interpretive Signage

TABLE 4-4: Existing Conditions at Proposed Staging Areas and Trail Amenities

#	PROPOSED STAGING AREA OR TRAIL AMENITY LOCATIONS	POINTS OF INTEREST	EXISTING # OF PARKING SPACES	ADDITIONAL STANDARD SIZE PARKING SPACES	
				STREET	LOT
1	Old Road	Castaic Creek	0	0	24
2	Hasley Canyon	Ridgelines	67 Shoulder Spaces	20	8
3	Chiquito Canyon	Santa Clara River Trail	122+ Shoulder Spaces	0	20
4	Santa Felicia	Significant Ecological Area, National Forest	0	0	15
5	Castaic Lagoon	Castaic Lake State Recreation Area (SRA)	0	0	60
6	Lady Linda	Tapia Canyon	0	0	5
7	Ridge Route Road	Castaic Lake Area SRA	0	10	20
8	Castaic Sports Complex	Tapia Canyon	405	0	0
9	Castaic Lake State Recreation Area	Castaic Lake SRA	1320	0	0

4.4.2 EQUESTRIAN AMENITIES

Equestrian trailheads require parking suitable for equestrian trailers. Proposed equestrian trailheads are assumed to be equestrian spaces. The Hasley Canyon equestrian facility is the only current facility available and it is assumed that other equestrian trailheads will require less parking due to public comment during outreach meetings. Details on equestrian trailheads can be found in **Table 4-5 Existing Conditions at Proposed Equestrian Amenities**.

Proposed facilities at Equestrian Amenities include:

- Trailheads
- Parking
- Restrooms
- Picnic Tables
- Horse Arenas
- Gathering Areas
- Shade Structures
- Drinking Fountains (for humans, equine, or pets)
- Horse Ties and Rails



Image 4-1 Equestrian amenities at Hasley Canyon Equestrian Park



Image 4-2 Example bike skills park

4.4.3 BIKE SKILLS PARK AMENITIES

Bike skills parks can range from small pump tracks or balance skills areas to large facilities with a range of courses for users of different abilities. It can be assumed that larger Bike Skill Park areas have lower parking turnover rates as visitors have more options and stay longer. Therefore, the higher end parking range is recommended for bike skill parks 30 acres or over.

Table 4-6 Existing Conditions at Proposed Bike Skills Park Amenities identifies three possible locations for bike skills parks, the potential size (in acres), and parking estimates.

Proposed facilities at Bike Skills Parks Amenities include:

- Restrooms
- Drinking Fountains
- Resting Areas/Seating
- Shade Structures
- Pump tracks
(No pedaling required, as cyclists utilize body movement to push bike forward)
- Progressive jumps
(Natural soil with small, medium, & large height jumps constructed of compacted dirt)
- Balance skills features
(Typically, utilization of wooden features i.e. log with top cut off and/or wooden teeter-totter)
- Rock/technical features
(Rock garden with narrow width trails over undulating or a variety of terrain)
- Flow trails
(Start at higher elevation and ride downhill through various turns, and jumps)
- Trails
(Simple trails with turns over undulating or a variety of terrain and possible water crossings for all ages)
- Road handling skills areas
(Hard-packed soil course)
- Beginner, intermediate, and expert skills courses
(Courses for all ages and experience levels)
- Advanced downhill course
(Steep terrain with multiple jumps, turns and obstacles)
- Slalom course
(Two trails adjacent to each other for competition purposes)

TABLE 4-5: Existing Conditions at Proposed Equestrian Amenities

#	PROPOSED AMENITY LOCATION	PROPOSED PARKING	NOTES
1	Tapia Canyon Road	5	Area proposed by Tapia Ranch development.
2	Castaic Lake Upper Lot	10	At existing large parking lot. Existing trails connect to network.
3	Tesoro Del Valle	5	Existing park with standard-sized parking for current uses.
4	Castaic Sports Complex	10	Existing park.

TABLE 4-6: Existing Conditions at Proposed Bike Skills Park Amenities

#	PROPOSED AMENITY LOCATION	PROPOSED SIZE (ACRES)	PARKING	NOTES
1	Castaic Sports Complex	10	405 existing and 20-30 additional proposed spaces	
2	Upper Lagoon	5	920 existing and 10-15 additional proposed spaces	
3	Ridge Route Road	30	60-90 proposed spaces	Opportunity for development of a large bike skills park with regional draw.

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SECTION 5.0

TRAIL IMPLEMENTATION APPROACH

5.1 TRAIL ACCESS THROUGH PARTNERSHIP

Partnering with Federal, State, and local agencies can help the County to expedite the process of developing trails on land that is currently not owned by the County. Multiple agencies would need to be consulted to implement the CAMUTP.

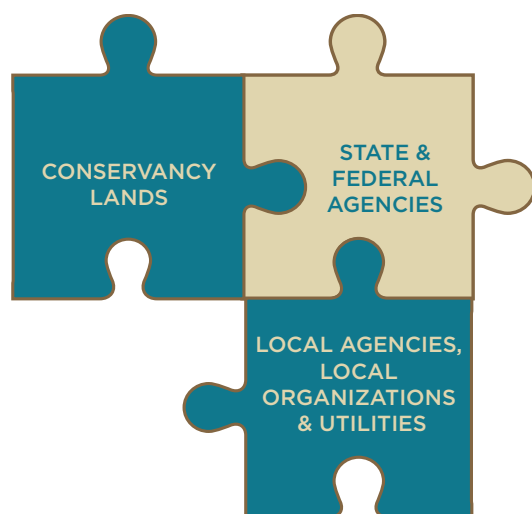


Figure 5-1 Potential partners for land acquisition

5.1.1 CONSERVANCY LAND

- Santa Monica Mountains Conservancy (SMMC)
- Mountains Recreation and Conservation Authority (MRCA)

5.1.2 FEDERAL AND STATE AGENCIES

- U.S. Forest Service
- State Department of Water Resources
(**NOTE:** *The State Department of Water Resources would not fund any trail construction costs or continuing maintenance costs for the proposed trails*)

5.1.3 LOCAL AGENCIES, ORGANIZATIONS AND UTILITIES

- Los Angeles County Sheriff's Department
- Castaic Union School District
- Los Angeles County Department of Public Works
- Southern California Gas Company
- Southern California Edison (SCE)

- Los Angeles Department of Water and Power (LADWP)
- Metropolitan Water District of Southern California (MWD)
- Local Municipalities
- Equestrian Organizations
- Mountain Bike Organizations
- Hiking Organizations

5.2 TRAIL ACCESS THROUGH ACQUISITION

5.2.1 INTRODUCTION

Implementation of the CAMUTP requires that the County secure the right of public access for the identified trail routes. This Trail Access Acquisition Strategy provides tools and guidance to help County Parks staff and their partners in other County departments, and potentially allied trail, parks, open space, and conservation agency and organization partners, to achieve the acquisition goals.

The most basic part of the acquisition strategy is to act on opportunities to obtain trail easements or open space area dedications that accommodate trails in conjunction with development entitlement through the Los Angeles County Regional Planning Department. Some easements have previously been acquired for the envisioned trails, as identified below.

In some cases, the property in question is already developed, and there is no longer an opportunity to acquire trail access as a condition of approval. In other cases, there may be a desire to implement the trail without waiting for an eventual development application. In the latter case, the County would be in a position of acquiring an easement or potentially fee (outright) ownership of a parcel through a willing seller basis. This may be accomplished through one or more of the acquisition methods outlined below.

5.2.2 TRAIL ACCESS MAP AND DATABASE

The Trail Access Map and Database is a tool that County Parks staff can use to track and coordinate opportunities to acquire trail access. It may also be useful to coordinate with other agencies and organizations that

are active in trail or open space planning and acquisition in the area.

The Geographic Information System (GIS) computer-based map shows the parcels along the routes of the proposed trails, the applicable General Plan and zoning designations, and the development status relative to development potential based on the General Plan and zoning (“built-out” or otherwise). It shows the existing trail easements and public lands that provide access for existing and proposed trails.

The database lists:

- Assessor’s Parcel Numbers (APNs) for parcels along the route (and within a buffer of one-half mile), the owners, and contact information.
- Active development applications and in-progress development projects with associated parcels.
- APNs for existing trail easements and public lands that provide access for existing and proposed trails, associated owner of the easement or site with contact information, and status of the access right.

The map and database will be useful for site-specific planning and acquisition studies, supplemented by more detailed survey maps and plats and site information. Detailed information on the GIS Database and trail segments can be found in **Appendix D**.

5.2.2.1 How to Use the Map and Database

The map and accompanying tables will identify parcels that intersect the trail routes proposed in the CAMUTP so that Trails Planning Staff will know that County Parks would like to pursue acquisition of trail access in conjunction with a development proposal on that property. The map and list do not establish any right of access or commitment to acquire access. The CAMUTP, once adopted, establishes the County’s goal of implementing the trail system.

Acquisition of rights for an extensive trail system over multiple properties is driven by both need (the priority for/benefits of closing a gap) and opportunity (there is a development occurring through which access could be obtained, or there is a willing seller, potential donation or other opportunity, such as a grant). Successful acquisition takes perseverance and teamwork, as well as awareness of priorities for trails and other potential mutual protection/acquisition goals, and current opportunities. The acquisition of trail access should

be coordinated with designations, plans, and efforts to protect natural resources, respond to natural hazards, and secure and maintain access for other public purposes, such as utility corridors.

The following actions are recommended to pursue the Trail Access Acquisition Strategy:

1. Potentially include other partner agencies and organizations in the same or separate MOU and same or separate initial review and check-in communications and meetings, with similar specification of steps and responsibilities. Potential partner agencies may include:
 - Mountains Recreation and Conservation Authority
 - The City of Santa Clarita
 - Ventura County
 - Santa Monica Mountains Conservancy
 - U.S. Forest Service
 - Equestrian organizations
 - Mountain bike organizations
2. Update the Trail Access Map and Database quarterly based on progress.

5.2.3 TRAIL ACCESS ACQUISITION METHODS

An overview of property rights and information on the land use designation in the Castaic Project Area can be found in **Section 3.4.1**. The following tools and techniques can be used for trail access acquisition and related open space conservation. Their applicability depends very much on the property owner and setting and needs to be determined on a case-by-case basis:

5.2.3.1 Trail Easement or Parkland Dedication

As specified in P/R Policy 3.1 of the Parks and Recreation Element of the County of Los Angeles General Plan 2035, the County standard for the provision of parkland is 4 acres of local parkland per 1,000 residents of the population in the unincorporated areas, and 6 acres of regional parkland per 1,000 residents of the total population of Los Angeles County. Under the Quimby Act, the County requires developers to dedicate park/trail lands in fee or as an easement, or pay a fee that is used to acquire and develop park and trail facilities. This exaction fee is a way to offset increased demand for parks or trails created by population growth anticipated as a result of the development.

The Quimby Act, part of the Subdivision Map Act applies to residential subdivisions and permits the County, by ordinance, to require the dedication of land or payment of fees for park and recreational purposes. As part of its approval of a subdivision, the County may require the subdivider to provide land to serve the park and recreational needs of future residents of the subdivision, with standard of 3 acres of parkland per 1,000 residents. Quimby fees may be used to acquire land for local park purposes, improve local parkland (including existing local parks), or both acquire and develop local parkland. A developer may also apply to the County to form a Mello-Roos District pursuant to the California Mello-Roos Community Facilities Act of 1982 to develop and maintain park improvements. Pursuant to County guidelines, the parks should be regional in nature, and have an impact or benefit beyond the associated subdivision.

5.2.3.2 Trail Easement Acquisition

A partial interest in a property is purchased from a willing seller to allow public trail access, typically within designated limits. Easement acquisition is usually cheaper than outright purchase of land. It is a way of defining a legal corridor for the trail when parcel subdivision codes may not allow a corresponding separate legal parcel.

Fee Simple Purchase

Fee simple purchase is the trail access acquisition method used when property owners would rather sell their property outright than sell an easement. Purchase of the land “in fee” can be significantly more costly than an easement. Typically the County would not want to own the entire parcel unless it had value as park land or other public purpose. There may be parcels that have open space or natural resource values, in addition to trail opportunities, that would warrant purchase by a conservation agency or organization, in which case the County may be able to acquire a trail easement.

Purchase and Sale with Easement

One approach used by land trusts and other conservation organizations is to purchase the land outright, place conservation and trail easements over the property, and sell it at a reduced price to another party who wants to live on and/or continue agricultural use on the property.

Lease or License

In the case of a lease or license, the access right is acquired from the landowner for a set amount of time. Property owners that may be unwilling to grant permanent access, such as railroads, utility companies, and public entities, may be willing to allow access for a long, but limited, time period.

Land Donations

A landowner can donate property or an easement to an agency or organization. Tax credits may be available for land donated for trail or conservation purposes. The tax deduction would depend on the permanent conservation of the property, or a significant portion of it. Thus, this method may require partnership with a conservation agency or organization that would own the land and grant a trail easement to the County.

Bargain Sale

The landowner sells property to a conservation agency or organization at less than full market value and donates the remaining value. The difference between full market value (as determined by a professional appraisal) and the sale price can be treated as a charitable contribution and can significantly reduce any capital gains taxes payable on the sale. The tax deduction would depend on the permanent conservation of the property, or a significant portion of it. Thus, this method may require partnership with a conservation agency or organization that would own the land and grant a trail easement to the County.

Bequest or Living Trust

A landowner can donate property or an easement through their will. A bequest is a provision in a will or codicil that instructs the estate’s executor to convey the land or a conservation easement to the County or a partner organization. This allows a landowner maximum usage of their property during their lifetime, with eventual preservation – another method that would likely require a conservation agency or organization partner. A living trust can achieve the same result but avoids the probate process.

Purchase Option

A purchase option is a legal document conveying the right to buy. The document outlines the required price and applicable period, with a fee (often 10 percent of land value). If the property is bought, the fee is

deducted from the purchase price; if the purchase does not proceed, the fee is nonrefundable. This option may be a good approach if the County is interested in purchasing land or an easement but needs to secure funds for the purchase.

Right of First Refusal

Based on agreement with the property owner, this agreement gives the County or a partner organization the opportunity to match a purchase offer received by the owner at a future time if and when the owner elects to sell the property. The owner retains property rights until such time as a purchase is amenable to the owner.

5.3 PHASING

The primary purpose for a trail phasing is to ensure a logical sequence of implementation that provides a high degree of success as each phase is built, thereby building momentum for future phases and trail network expansion. Success is directly correlated with a substantial level of use, strong public and political support, and proven effective management of the trail as each phase is implemented.

A trail phasing strategy is based upon four factors: 1.) Available land and costs, 2.) Overall connectivity 3.) Improved safety, and 4.) User input and experience. Together, these factors can help guide trail development in the Castaic Project Area. **Table 5-1 Trails Segment Phasing Data** shows detailed information on Trail phasing by segment. Segment CD2 of the CAMUTP is for special events use only and is highlighted in the table.

5.3.1 Available Land and Costs

Immediate projects should focus on opportunities on property currently owned or managed by the County.

To acquire the land for further trail development, the acquisition strategies and approaches identified in **Section 5.1** should be followed.

Land owner information and how it relates to each segment can be seen in **Table 5-1**, under the columns:

- *Parcel Crossings;*
- *Owners Involved;*
- *Negotiating Agency; and*
- *Oil Leases Crossed.*

5.3.2 Overall Connectivity

Overall connectivity is shown in **Table 5-2 Trails Segment Phasing Data** under the column *Destinations*, which refers to the number of priority destinations outlined in **Section 3.2.2** with which the trail segment connects to. The connection to existing trail is also important in overall connectivity. Segments that are already part of the trail system are noted in the Source column as “Existing”.

5.3.3 Improved Safety

Safety issues that currently exist in the trails area are known by County Staff. The CAMUTP will follow the Trails Manual guidelines to dictate what areas are feasible for trails. The planning of trails in many areas that are currently being utilized without designated facilities will provide improved safety to the users.

5.3.4 User Input and Experience

As noted in **Section 2.2**, the CAMUTP planning process included community outreach, details of which can be found in **Appendix A**. Public comment has dictated areas of increased desire and need for trails development. These comments were noted by trail segment and the number of comments advocating these trail segments can be seen under the *Public Comment* column in **Table 5-1**.

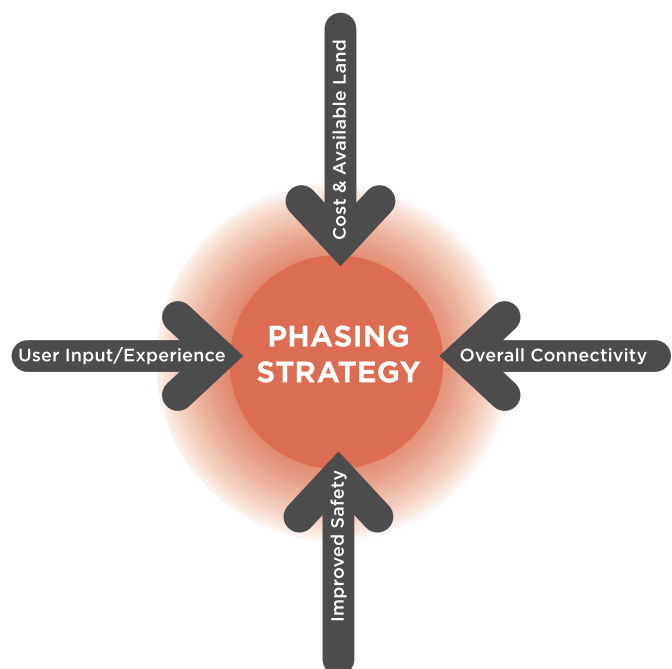


Figure 5-2 Phasing Strategy

TABLE 5-1: Trails Segment Phasing Data

SEGMENT ID	ROUTE NAME	SEGMENT NAME	SOURCE	LENGTH (MI)	PUBLIC COMMENT	DESTINATIONS	PARCEL CROSSINGS	OWNERS INVOLVED	NEGOTIATING AGENCY	OIL LEASES CROSSED	TRAIL TYPE
CC1	Castaic Creek	Sports Complex	Follows 2007 Plan	1.24	12	4	7	3	Private	0	NAT
CC2	Castaic Creek	Pitchess	Realigned 2007 Plan	2.63	20	5	11	4	Los Angeles County Sheriff	4	NAT
CC3	Castaic Creek	Commerce Center East	Follows 2007 Plan	0.76	9	2	1	1	Subdivision	1	MUT
CC4	Castaic Creek	Commerce Center Undercrossing	Follows 2007 Plan	0.25	5	1	5	3	Subdivision	1	NAT
CC5	Castaic Creek	Commerce Center Bike Trail	Follows 2007 Plan	0.46	2	1	5	2	Subdivision	2	MUT
CC6	Castaic Creek	Commerce Center - 126	Follows 2007 Plan	0.48	0	2	5	1	Subdivision	1	MUT
CD1	Castaic Dam	Castaic Upper Parking*	New	1.39	5	1	2	1	State Dept Water Resources	0	NAT
CD2	Castaic Dam	Castaic Dam Crossing* ¹	New	1.76	8	1	4	2	State Dept Water Resources	0	NAT
CD3	Castaic Dam	Lake Hughes East ^{1, 2}	Follows 2007 Plan	1.60	10	2	0	0	State Dept Water Resources	0	ROW
CE1	Cliffie Stone Extension	San Francisquito Wash - Upper	Follows 2007 Plan	0.63	2	2	14	9	Private/LADWP	0	NAT
CE2	Cliffie Stone Extension	Tesoro Del Valle - SF Wash	Follows 2007 Plan	0.52	2	1	3	3	Subdivision	0	NAT
CE3	Cliffie Stone Extension	San Francisquito Wash - Lower	Follows 2007 Plan	0.55	2	1	5	4	Private	0	NAT
CE4	Cliffie Stone Extension	Lady Linda	New	0.13	2	1	1	1	Private	0	NAT
CE5	Cliffie Stone Extension	Cliffie Stone-From Lady Linda-Low Ridge	Follows 2007 Plan	0.53	2	1	1	1	Private	0	ROW
CE6	Cliffie Stone Extension	Cliffie Stone-From Lowridge-Tesoro	Subdivision Agreement	0.26	2	1	3	3	Subdivision	0	ROW
CE7	Cliffie Stone Extension	North Park - Cliffie Stone Extension	Follows 2007 Plan	0.62	4	3	7	3	Conservancy/Trust	0	NAT
CE8	Cliffie Stone Extension	North Park Trail Connector	Realigned 2007 Plan	0.08	0	3	3	3	Private	0	NAT
CL1	Charlie Canyon	Charlie Canyon Road ²	Follows 2007 Plan	3.61	12	3	17	14	Private/MWD	0	NAT
CL2	Charlie Canyon	Charlie Canyon - Tesoro Del Valle	Follows 2007 Plan	0.37	5	1	4	3	Subdivision	0	NAT
CL3	Charlie Canyon	San Francisquito connection	Follows 2007 Plan	0.16	5	1	1	1	Private	0	NAT
CO1	Chiquito Canyon	Chiquito Creek	Realigned 2007 Plan	1.39	5	7	5	2	Private	3	NAT
CO2	Chiquito Canyon	Jackson St	Follows 2007 Plan	0.21	2	1	0	0	Private	0	ROW
CO3	Chiquito Canyon	Chiquito Canyon and Creek - South	Follows 2007 Plan	1.04	4	1	3	2	Private	1	NAT
CO4	Chiquito Canyon	Chiquito Canyon and Creek - North	Realigned 2007 Plan	1.05	7	3	4	2	Subdivision	4	MUT
CS1	Cliffie Stone	Cliffie Stone - San Francisquito Motorway	New	0.68	13	2	5	2	Subdivision	1	NAT
CS2	Cliffie Stone	Cliffie Stone Trail (Tesoro)	Existing	1.16	8	4	65	58	Subdivision	0	EXS
CS3	Cliffie Stone	Cliffie Stone Trail (San Francisquito) ²	Existing	1.73	3	4	8	4	Private	1	EXS
EF1	Elderberry Forebay	Castaic Lake Trail	Follows 2007 Plan	4.57	3	2	7	2	LADWP	0	NAT
HC1	Hasley Canyon	Hasley-Santa Felicia	New	3.48	8	1	12	9	Private	0	NAT
HC2	Hasley Canyon	Hasley-Claremont	New	0.70	5	0	5	4	Subdivision	0	NAT
HC3	Hasley Canyon	Hasley Canyon End	Follows 2007 Plan	0.16	1	0	2	2	Private	0	NAT
HC4	Hasley Canyon	Hasley Road West	Follows 2007 Plan	0.33	3	0	0	0	Private	0	ROW
HC5	Hasley Canyon	Hasley Road East	Realigned 2007 Plan	0.57	4	0	0	0	Private	0	ROW
HC6	Hasley Canyon	Hasley Creek	Follows 2007 Plan	0.26	2	0	5	5	Private	1	NAT
HC7	Hasley Canyon	Hasley-Los Valles	Follows 2007 Plan	0.56	6	3	2	2	Subdivision	1	MUT
HC8	Hasley Canyon	Hasley Canyon Trail	Existing	1.68	12	5	17	8	Subdivision	2	EXS
HC9	Hasley Canyon	Hasley-Commerce Center	Follows 2007 Plan	0.21	3	3	2	2	Private	0	ROW
HC10	Hasley Canyon	Commerce Center NW	Follows 2007 Plan	0.61	6	2	1	1	Subdivision	1	MUT
*Any Special Use Authorization for recreational use over the Castaic Dam service road (Segment CD1 & CD2) shall incorporate a safety plan including security for SWP critical infrastructure and control structures.											

NOTES:
1. When crossing within 100 feet of a transmission line tower right-of-way, a fence will be installed by County Parks (County Parks cost). These segments will need to meet requirements for the LADWP ROW found in Appendix F.
2. Development of any trail segments that cross the MWD Foothill Feeder shall be undertaken consistent with the Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of the Metropolitan Water District of Southern California.

TABLE 5-1: Trails Segment Phasing Data (continued)

SEGMENT ID	ROUTE NAME	SEGMENT NAME	SOURCE	LENGTH (MI)	PUBLIC COMMENT	DESTINATIONS	PARCEL CROSSINGS	OWNERS INVOLVED	NEGOTIATING AGENCY	OIL LEASES CROSSED	TRAIL TYPE
IP1	Interstate Paintball	Interstate 5 to Ridge Route	New	3.30	4	1	13	11	Private	0	NAT
IP2	Interstate Paintball	Paintball Site	New	0.65	5	0	3	3	Private	0	NAT
IP3	Interstate Paintball	Santa Felicia to 5 connection	New	3.67	5	1	10	6	Private	0	NAT
IP4	Interstate Paintball	Between Interstate 5	New	3.14	6	0	16	7	Private	0	NAT
LW1	Lake West	Northlake North ¹	Follows 2007 Plan	3.28	7	1	17	11	Federal/LADWP	0	NAT
LW2	Lake West	Northlake Central ¹	Follows 2007 Plan	1.10	5	1	6	3	Private/LADWP	0	NAT
LW3	Lake West	Lagoon-Lake ¹	Realigned 2007 Plan	4.05	9	2	14	5	State/LADWP	0	NAT
RC1	Romero Canyon	Romero-Santa Felicia	New	1.88	5	1	16	5	Private	0	NAT
RC2	Romero Canyon	North of High School	Follows 2007 Plan	0.13	2	1	5	2	Private	0	NAT
RC3	Romero Canyon	Castaic High School	Subdivision Agreement	0.56	5	1	2	1	School District	0	MUT
RC4	Romero Canyon	Romero Canyon Rd	Follows 2007 Plan	1.89	7	0	28	28	Private	0	NAT
SA1	Santa Felicia	Santa Felicia Upper Loop	New	7.59	10	1	12	2	TPL/MRCA	0	NAT
SA2	Santa Felicia	Santa Felicia Lower Loop	New	5.80	8	1	7	2	TPL/MRCA	1	NAT
SC1	Sloan Canyon	Sloan Canyon West	Follows 2007 Plan	1.14	2	1	24	2	Private	0	NAT
SC2	Sloan Canyon	Homestead at Sloan Canyon	Follows 2007 Plan	0.68	3	0	4	3	School District	0	MUT
SC3	Sloan Canyon	Sloan Canyon Dr	Follows 2007 Plan	1.52	5	4	7	6	Private	0	ROW
SC4	Sloan Canyon	Lake Hughes at Lagoon	Follows 2007 Plan	0.19	3	2	0	0	State	0	ROW
SF1	San Francisquito	San Francisquito Motorway ¹	Follows 2007 Plan	0.34	5	1	4	4	Private/LADWP	0	NAT
SF2	San Francisquito	San Francisquito Motorway Bypass	Follows 2007 Plan	1.09	7	1	10	3	Subdivision	1	NAT
SF3	San Francisquito	San Francisquito-Tapia	New	1.15	14	1	7	1	Subdivision	1	NAT
SF4	San Francisquito	San Francisquito-West Creek ²	New	0.85	10	0	8	4	Subdivision	2	NAT
TC1	Tapia Canyon	Sports Complex-Tapia	Follows 2007 Plan	0.24	9	3	2	1	County	0	MUT
TC2	Tapia Canyon	Tapia Bypass ²	Follows 2007 Plan	2.74	8	3	14	4	Subdivision	2	MUT
TC3	Tapia Canyon	Tapia-San Francisquito	Follows 2007 Plan	1.11	9	1	4	2	Subdivision	1	NAT
TC4	Tapia Canyon	Tapia-Cliffie Stone	Follows 2007 Plan	1.03	6	2	7	5	Private	1	NAT
VV1	Val Verde	Kenningston Rd	Realigned 2007 Plan	2.31	5	1	31	23	Private	0	NAT
VV2	Val Verde	Chiquito-Val Verde	New	0.94	6	2	29	24	County	0	NAT
WC1	West Creek	West Creek-Tapia ²	New	1.49	2	0	9	5	County	2	NAT
WC2	West Creek	West Creek-Tapia-Tesoro ²	New	1.30	4	1	9	3	Subdivision	1	NAT

NOTES:
1. When crossing within 100 feet of a transmission line tower right-of-way, a fence will be installed by County Parks (County Parks cost).
2. Development of any trail segments that cross the MWD Foothill Feeder shall be undertaken consistent with the Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of the Metropolitan Water District of Southern California.

5.4 IMPLEMENTATION STEPS

There are seven basic project steps to construction, proceeding from this plan.

1. Base Information for Design

Implementation will begin with preparation of detailed base mapping and related information for design. Aerial imagery will be obtained to provide high resolution photos and topography in the form of contours and spot elevations, as well as approximate property and easement boundaries. Existing topographical and boundary surveys can be used where available, but some areas will need field surveys to provide accurate information. Field studies will also address environmental resource conditions to inform the environmental review step below.

2. Preliminary Design

The preliminary design will define the precise location, configuration and materials of the trail and the trail amenities. This will be based on designer and agency staff meetings to walk the trail alignment and resolve specific details. This is also the stage at which access rights would need to be negotiated and secured for private property along the route.

3. Environmental Review

Following preparation and agency approval of the preliminary design plans, at a point when no major revisions to the proposed project are anticipated, California Environmental Quality Act (CEQA) environmental documentation can begin, including biological resource assessment, cultural resources assessment, and jurisdictional policies and standards assessment. There will be at least a 30-day period for public and agency review of the draft environmental document, after which the preparers would respond to comments, and the responsible agency would review and certify the document as complete. Any environmental impacts of the project would be addressed in mitigation measures identified in the environmental document, and a monitoring plan will specify follow-up responsibilities.

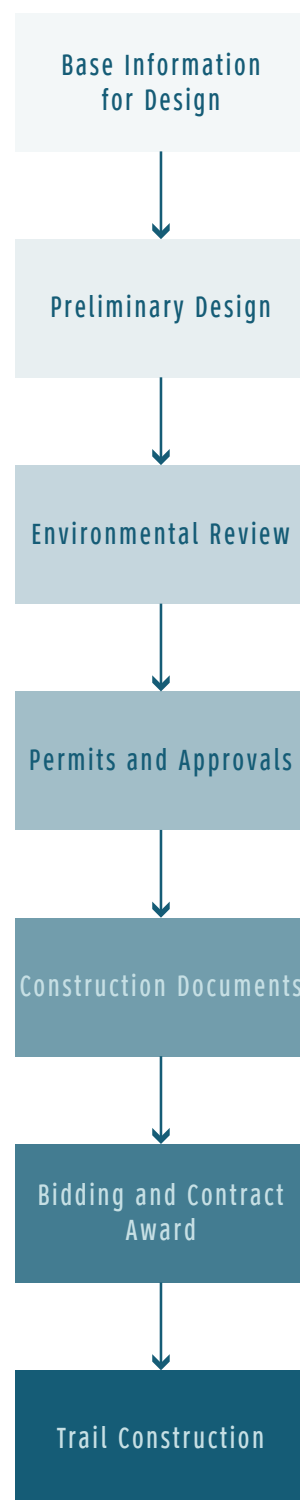


Figure 5-3 Implementation Steps.

4. Permits and Approvals

A number of permits are required to construct trails, based on the anticipated features and environmental setting of various segments. In addition to the preliminary plans and the CEQA document, some of these applications will require more detailed studies and design calculations. Some of the permits cannot be obtained until nearly complete construction plans are provided, as described below.

5. Construction Documents

Final construction plans, specification and cost estimates, along with construction contracts and bid documents, will be prepared to provide the basis for putting the project(s) out to bid. These documents are typically prepared and then reviewed and approved by the responsible agencies at progress stages – e.g. 60%, 95%, and 100%.

6. Bidding and Contract Award

Where the bid documents are advertised, meetings will be held for prospective bidders, to clarify project and bid requirements. Bids will be received, reviewed and a winning responsive bid will be recommended to the County for approval and contract award.

7. Construction and Construction Period Services

Construction can then go forward, subject to the constraints of environmental limits on work during the wet season and seasonal limits regarding locations of sensitive wildlife or plant species. Agency staff will monitor and manage the construction project through completion and final acceptance, with assistance from the designers and environmental consultants.

5.5 PLANNING-LEVEL COST SUMMARY

Cost estimation relies on a variety of factors that are related to the complexity of ownership along the trail corridor, as well as design challenges. The following factors play a role in cost estimation:

Hard Costs

Hard costs account for the costs to build the recommended trail improvements including:

- Construction costs
- Contingency for unanticipated work items
- Construction overhead (costs the contract typically includes over and above the individual work items, such as mobilization and general conditions)
- Mitigation and monitoring

Soft Costs

Soft costs cover a variety of professional services, including:

- Survey
- Preparation of Construction Documents
- Public Participation
- Permitting (Local, State and Federal as required)
- Bid Assistance
- Construction Observation and Contract Administration

Cost Considerations

Many factors can affect trail construction costs. Land acquisition can be the largest cost variable if purchasing property is required. Project scoping and phasing is another consideration that can affect cost. Larger trail projects see economies of scale than constructing short/small trail segments. Additional factors can affect construction costs, including:

- Final construction phasing
- Revisions to the design as required by local, state and federal permitting agencies
- Additional requirements imposed by property owners as a condition of granting property rights (e.g., fencing, vegetated buffers, etc.)
- Fluctuations in commodity prices during the design and permitting processes
- Selected construction materials
- Type and quantity of amenities (e.g., benches, lighting, bike racks, etc.)
- Extent of landscaping desired

5.5 OPERATION AND MAINTENANCE STRATEGIES

Management policies and practices for the CAMUTP would be undertaken consistent with the provisions of the Trails Manual Section 5.0, Trail Operation and Maintenance. Such policies and practices for trail maintenance and use management are intended to facilitate safety.

OPERATION STRATEGIES

There are several operation strategies to improve trail sustainability and public safety that may be considered:

- Maintaining pre-defined hours of operation
- Designing trails for all users and enforcing safe trail behavior,
- Protection of physical resources,
- Accommodation and enforcement of parkland uses,
- Emergency response protocol, and
- The Trails Manual closure policy.

TRAIL ASSESSMENT

Prior to conducting maintenance, an assessment may be undertaken, in accordance with the provisions of the Trails Manual:

1. Create trail assessment and repair sheet
2. Walk or ride the trail
3. Confer with the land manager
4. Assign work crews

MAINTENANCE ACTIVITIES

Consistent with the provisions of the Trails Manual guidelines, a variety of maintenance activities may be considered over a multi-year trail maintenance schedule:

- Mowing and spraying
- Tree and brush trimming
- Debris removal
- Removal of trash and debris in culverts
- Culvert upgrades due to deterioration or storm water flow changes
- Removal of trash and debris from water crossing and bog areas
- Re-grading from erosion areas in water crossings and bog areas
- Sign and amenity upgrades and repair
- Graffiti removal
- Fire mandated brush clearance
- Pumping out flooded tunnel ways.

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Castaic Area Multi-Use Trails Plan

APPENDICES

APPENDIX A: PUBLIC COMMENT

APPENDIX B: RELATED PLANS, PROJECTS, AND POLICIES

APPENDIX C: ADDITIONAL DESIGN STANDARDS

APPENDIX D: GIS DATA DICTIONARY

**APPENDIX E: METROPOLITAN WATER DISTRICT
GUIDELINES FOR DEVELOPMENT**

**APPENDIX F: LOS ANGELES DEPARTMENT OF WATER AND
POWER RIGHT-OF-WAY REQUIREMENTS**

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APPENDIX A: PUBLIC COMMENT

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Public comment was collected through mapping exercises during a series of community outreach meetings, written surveys and an online mapping application made available on the trail plan website. Data collected provided user input on the needs of the individual users as well as the community as a whole. The final information provided was implemented into the Castaic Multi-Use Trails Plan (CAMUTP) and included aspects such as trail alignment locations, destinations to connect to, proposed locations of trail features and areas the were not compatible with trail development.

A.1 COMMUNITY MEETING PUBLIC COMMENT

The initial run of public outreach included four meetings with trail users and the community at-large. The purpose of the outreach was to gather information about where people wanted to ride/hike, and where trail connections and amenities are needed. The information collected was used to inform the proposed trail network that was developed as part of the CAMUTP and CEQA process.

All four meetings were held in the Community Room of the Castaic Branch of the Los Angeles Public Library, 27971 Sloan Canyon Road, Castaic, CA 91384. Although three of the meetings were focused on specific user groups, they were made public and all users and community members were invited to participate.

Meetings were held on:

August 20, 2015 / General Stakeholders
Community Workshop

September 17, 2015 / Mountain Bike User Focused
Community Workshop

September 24, 2015 / Equestrian User Focused
Community Workshop

October 1, 2015 / Hiking Community User Focused
Workshop

The following notes were collected during these meetings.

MEETING 1: AUGUST 20, 2015

Project Goals:

- Protect private property access
- Controlled/planned access to prevent trespass
- Recognize/respect constraints related utilities
- Access to use the Dam Road

- Provide connection between west and east side trails/State Dept of Water Resources Federal energy regulatory commission
- Witherspoon-Commerce Center Development
 - Resulted in loss of heavily used local trails-equestrians, mountain bikers, hikers
 - Chiquito Canyon Road (Near 126)
- Achieve links to Ventura, city of Santa Clarita, Tapia Canyon, USFS- Angeles National Forest
- Ensure trail access to USFS-ANF
- Create the ground work for a destination mountain bike skills park

Use Areas Consideration:

- Bike Parks
 - Way of skate parks
 - Need in community
 - Jr high & high school level (competitions)
 - Huge asset for community
 - Locations: near/at sport complex at lower lake b/c more topo, additional trail network
 - Valmont example exceptional: Boulder, CA
 - Exciting to see
- Horse trail wanted through Castaic bicycle site or by the site.
 - Up Romero Canyon-existing site graded
 - North of Baringer & Romero has been severely graded (can't get by)
 - School promised a horse trail-not building yet
 - Castaic High School on hold (not enough students) links access to several trails
 - Grading continuing-severely graded area, 250' embankment
- Access Points
 - Santa Clarita to Valencia
 - Several mountain bikes through Tesoro into Tapia Canyon
 - Trail starts at Sports Complex
 - Need a proper access point
 - (Motion seconded)
 - Opportunity for gathering area @ Tesoro Canyon Recreation Area
 - Need marked public areas
 - Need to connect to Santa Clarita

- Events staging area in trails-sections to go past recreation center
- Trail running event staging area
- Access from Hasley Canyon through Valencia Commerce Center (existing trail) to Entrada North Project in Newhall Ranch
 - Need connection
 - Unfortunately Highway 126-Bridge? Trail under bridge for pedestrians and cycles walking center to there (potential collaboration with DPW there?)
 - Nice trail by Santa Clara River would be nice to walk
 - Interested in trails through Hathaway Ranch Property and Piru Creek to Piru Lake
- Barbed wire fences and horses don't mix (concern).
- New trail Hasley Canyon 10 mile loop opened (will probably connect to city)
- Staging areas to ANF from Tapia Canyon area and Tesoro area and easements (concern about losing access by public)
- Rec Grasshopper Canyon @ Castaic Lake for Bike skills park
 - Greater variety of features near lower lake (pocket cama)
 - Steve Shessner already on radar
 - Backup: sports complex
- Hasley Canyon Arena Access
 - Have to ride along Del Valley (unsafe-cars) for equestrian
 - Castaic HS concern
 - Will they add bridle path?
- HS - new trail alignment plans
- Landfill adjacency concerns for trails
- CBRE Craig Peters Doug Sondereger, Developer
 - @ top of Witherspoon?
- Grading concerns
- Top of Romero Canyon and Romero Canyon graded out due to development
- Can't access hometown trails (equestrian trail access)
- Note: proposed land fill expansion to south
 - Witherspoon - significant ridgelines
 - Will send map
 - Chiquito Landfill Corporation (Chicago based company)
- Asthma problem in area - Absentee in school district

- Check AQ baseline
- Hathaway Ranch
 - Awesome place to ride (equestrians)
 - Don't mind horses
 - Wouldn't tolerate cattle b/c of bikes & cattle conflicts
 - Would attach to Ventura County
 - Amenities with stickers:
- Trailhead
- Bike skills park

Map Comments (not place specific):

- Disperse Riders away from private property
- Beginner friendly trails (like Tapia)
 - More in Castaic- Family friendly (Flat and dirt)
- Black and White-way to display trails on private property
- Signs- provide clarification of where jail property is
- Bottom of *G-out* - Shooting range, need signs to warn riders
- Trails have been destroyed by development
- "Adopted proposed LA County Trails" in legend
 - Private property "not open to public"...
 - Public property
- Bike-Horse conflicts
 - Bikes give way to horses signs
 - Separated treads
- Advertise on next door for more meetings
- Trailheads to accommodate horse trailers

MEETING 2: SEPTEMBER 17, 2015

Map Comments (not place specific)

- One way level
- One direction signage
- Long distance Castaic Loop trails is a priority
- End of San Martino's property for sale
- Include bike paths on map
- Bike path to Val Verde
- Houses in area (near the southern edge of Lake Piru)
 - Private Road- Oak Canyon
 - Consider private properties
- Hathaway property for sale? In escrow? Conservancy?

- Need trailhead at trail entrance (don't want to ride 10 miles to get on a single track)
- New mountain biking trails, single track
- Improve recreational amenities at the Lake
- Focus resources to improve land already in ownership
- Create a mountain bike system of varying degree of difficulty
- Alternate route to Tapia to avoid private property concerns
- Mix of user experience within one loop system
- One stop area
- Very popular increased use at Tapia
- Mountain bikes with flow
- Would like one-way trails
- Does the multi-trail policy address one-way trails?
- Worse areas
 - Tapia
 - Most of NW
 - Landfill area
 - Sheriff equestrian
- Hasley Golf Course out
 - Will be all homes
 - Catch for an easement?
- Bike skills parks at schools?
- Old oil access roads in NW
- Hiking trails along streams
- Castaic as the off-road bike attraction for SCV
- Tapia already getting a wide draw
 - County survey those users
- Rec center is big park area – Tapia
- De facto park and ride south of Henry May at the 5
- Make the lake more of a destination
 - Focus there-put major amenities there
- Space for events- draw to the area. Races, etc.
 - In the past, some shut down
- Allow more existing resources to be used
- More access into lake without parking
- Park at the lake-consider reinvestment- refresh this area
- Reincorporate lake area
- Wilderness area possibility to exclude mountain bikers
- Seems local area riding, not so many people trucking in

- Open prison land was their farmland – was self-sustaining
- All the ridgelines have trails
- Tapia area has many more
- Loop the lake
- Trails in 5C area
- EQ in Sheriff area encouraged
- Tesoro resistance to make connections to mountains
- Ventura connection to Santa Clarita
- Equestrians on east side of SF Wash
- Cross the 5!
- Old Road is only SB route to town
- Bridge from SF Wash
- Tesoro Developer – Fire roads, dirt roads, unclear what's accessible
- Cross the 5 at Hillcrest
- More agreement with county to park at lake without fee
- Need lateral connections to Ventura County, a lot of equestrians in this area
- Trails around lakes would be great, connection to beach areas and horse ties

MEETING 3: SEPTEMBER 24, 2015

- Flooding down Hasley Canyon, no way out if it rains.
- Blind curves
- Vehicles
- Education
- Demand for equestrian trails
- Crossing over/under the 5
- Dirt trails
- DG
- Variety of experiences (hills/flat/etc)
- Preferred trails without bikes/motorcycles
- Hasley Canyon under the freeway used to be used to ride on this trail, but lots of mountain bikers
- Ride from ranch
- Trailer access for long/nice trails
- Destination trails
- Would like to see trails built in 5 years
- Hasley Canyon trail mostly hikers and joggers
- Amenities: watering troughs, restaurants
- There is lots of illegal dirt-biking on trails
- Signals at street crossing for equestrians
- No moto signage

- Signage yield etiquette trailhead
- Need trails to lake Piru and forest area
- Trail from Val Verde park to lake
- Need multi-use off road trail for Val Verde, close to road and parallel, narrow roads safer

MEETING 4: OCTOBER 1, 2015

- Trails should be pet friendly, possible dog park as an amenity
- Hasley Canyon loops are popular (good parking and easy access)
- East Canyon Trail a to b trail (not used as much)
- Loop trails preferred by hikers
- POSTING TRAIL ETIQUETTE IS IMPORTANT
- Better promotion of ex. Resources to Castaic Lake Recreation Area
- County maybe installed a sign and started a trail by the library
- Connect communities east of the 5 to each other
- Sand Canyon @ Bear(?) Santa Clara divide + 4 miles up Dagger Flat
- Safety (Diane Hellrigel) Two major mb/hike accidents + kids on the canyon trail (Placerita Canyon)
- Rocks/diverters help slow
- Another collision on middle mtn trail with equestrian/mb (Manzanita)
- Signs/speed limits
- Plan locations for trees along trails
- Hayward will connect to Hasley Canyon
- Chatsworth-not good, Moorpark and Calabasas are models for equestrian

A.2 COMMENT SHEETS

Comment sheets were provided during community meetings to include more information to assist in the trails planning process. An example of the Comment Sheet is shown in **Figures A-1 and A-2**. A compiled table of all survey comments is shown in **Table A-1** and more details can be found in **Section A.2.1**.



COMMENT SHEET

Castaic Area Multi-Use Trails Plan

Community Workshop

Castaic Library – Community Room
27971 Sloan Canyon Road, Castaic, CA 91384
Thursday, September 24, 2015
6:30 p.m. – 8:30 p.m.

Please use this form to make comments regarding the Castaic Area Multi-Use Trails Plan. The County is soliciting comments from the public and agencies. You may submit your comments at this community workshop, by U.S. mail, or e-mail to the Los Angeles County Department of Parks and Recreation (contact information listed on the other side). Written comments will be accepted until **October 31, 2015**.

Name: _____

Organization (if applicable): _____

Address: _____

City/State/ZIP: _____

Phone: _____

Email: _____

Comments: _____

Please see trail facilities & amenities survey on other side of this comment sheet. → →

Please circle your interest level in the following facilities & amenities from 1 to 10.

Bike Skills Park Amenities

	Lowest Interest					Highest Interest				
Bike racks	1	2	3	4	5	6	7	8	9	10
Drinking fountains	1	2	3	4	5	6	7	8	9	10
Resting areas/seating	1	2	3	4	5	6	7	8	9	10
Restrooms	1	2	3	4	5	6	7	8	9	10
Shade structures	1	2	3	4	5	6	7	8	9	10
Other amenities	1	2	3	4	5	6	7	8	9	10

Equestrian Amenities

	Lowest Interest					Highest Interest				
Drinking fountains	1	2	3	4	5	6	7	8	9	10
Gathering areas	1	2	3	4	5	6	7	8	9	10
Horse arenas	1	2	3	4	5	6	7	8	9	10
Horse ties/rails	1	2	3	4	5	6	7	8	9	10
Parking	1	2	3	4	5	6	7	8	9	10
Picnic tables	1	2	3	4	5	6	7	8	9	10
Trailheads	1	2	3	4	5	6	7	8	9	10
Restrooms	1	2	3	4	5	6	7	8	9	10
Shade structures	1	2	3	4	5	6	7	8	9	10
Other amenities	1	2	3	4	5	6	7	8	9	10

Staging Areas / Trail Features

	Lowest Interest					Highest Interest				
Bike racks	1	2	3	4	5	6	7	8	9	10
Drinking fountains	1	2	3	4	5	6	7	8	9	10
Gathering areas	1	2	3	4	5	6	7	8	9	10
Horse ties/rails	1	2	3	4	5	6	7	8	9	10
Parking	1	2	3	4	5	6	7	8	9	10
Picnic tables	1	2	3	4	5	6	7	8	9	10
Trailheads	1	2	3	4	5	6	7	8	9	10
Restrooms	1	2	3	4	5	6	7	8	9	10
Shade structures	1	2	3	4	5	6	7	8	9	10
Wayfinding	1	2	3	4	5	6	7	8	9	10
Other amenities	1	2	3	4	5	6	7	8	9	10

Thank you for taking the time to complete this comment sheet! We value your input!

Send Comments to: County of Los Angeles Department of Parks and Recreation
 Attention: Ms. Olga Ruano or Mr. Zachary Likins
 Castaic Area Multi-Use Trails Plan Comments
 510 South Vermont Avenue
 Los Angeles, California 90020
 oruano@parks.lacounty.gov or zlikins@parks.lacounty.gov

TABLE A-1 Public Comment Compiled Survey Responses

	August 13, 2015 Agency Meeting	August 20, 2015 General Community Meeting	September 17, 2015 Mountain Bicyclist User Group Community Meeting	September 24, 2015 Equestrian User Group Community Meeting	October 1, 2015 Hiking User Group Community Meeting
Total Number Of Attendees	10	52	45	31	21
Biking Group Top 3 Amenities (From Comment Sheet Survey)	N/A	N/A	1. Restrooms 2. Drinking Fountains 3. Shade Structures	1. Bike Racks 2/3/4. Tie Between Resting Areas/Seating, Restrooms, and Drinking Fountains	1. Drinking Fountains 2/3. Tie Between Resting Areas/Seating and Restrooms
Equestrian Group Top 3 Amenities (From Comment Sheet Survey)	N/A	N/A	1/2. Tie Between Drinking Fountains Aand Restrooms 3. Parking	1/2. Tie Between Horse Ties/Rails and Trailheads 3. Restrooms	1/2/3. Tie Between Drinking Fountains, Restrooms, Trailheads, and Picnic Tables
Hiking Group Top 3 Amenities (From Comment Sheet Survey)	N/A	N/A	1. Restrooms 2. Drinking Fountains 3/4/5. Tied Between Parking, Shade Structures, Trailheads, and Wayfinding	1/2/3. Tie Between Horse Ties/Rails, Trailheads, and Restrooms	1/2. Tie Between Wayfinding and Bike Racks 3/4. Tie Between Drinking Fountains, Trailheads, Gathering Areas, Shade Structures, and Parking
Property Owners – For the Project	n/a	n/a	1. Leo		
Property Owners – Against the Project	n/a	n/a	2. Linda 3. Christine Kelly 4. Janine Greenhill 5. John Shepard, representing Terry Shepard and Marian Dee		

A.2.1 PUBLIC COMMENT SURVEY DETAILS

TABLE A-2 Public Meeting 1 Detailed Survey Responses

MEETING 1-MTB User Focused (8)												Totals Weighted
Bike Skills Amenities	1	2	3	4	5	6	7	8	9	10	N/A	
Bike Racks			2		4				1			35
Drinking Fountains					1			2		4		61
Resting areas/seating					2		1	2	1	1		52
Restrooms							2			5		57
Shade Structures	1				1		1	1	1	2		50
Other (Added by respondent):				1	3				1	1		38
<i>Parking+</i>												
Equestrian Amenities	1	2	3	4	5	6	7	8	9	10	N/A	
Drinking fountains										4	3	40
Gathering Areas					1		1		2		3	30
Horse Arenas		1			1					1	3	17
Horse Ties/Rails					1		2			1	3	29
Parking					1				1	2	3	34
Picnic Tables					1	1	1	1			3	26
Trailheads					1				2	1	3	33
Restrooms										4	3	40
Shade Structures					1			2		1	3	31
Other (Added by respondent):					2			1			3	18
<i>Horse Drinking Areas</i>												
Staging Areas/Trail Features	1	2	3	4	5	6	7	8	9	10	N/A	
Bike Racks			1		2				1	1	2	32
Drinking Fountains								1	1	4	1	57
Gathering Areas					1		3		2		1	44
Horse Ties/Rails	2				1		1			1	2	24
Parking					1				3	2	1	52
Picnic Tables					2	1	3				1	37
Trailheads					1		1		2	2	1	50
Restrooms									1	5	1	59
Shade Structures					1			2	1	2	1	50
Wayfinding					1			1	2	2	1	51
Other:				1	1				1		1	18

Additional Comments:

- Excited to see project implementation. Projects need to connect communities and provide benefit to residents
- The Multi-use trail from Hasley Canyon Rd to Del Val Rd may be too narrow for horses and MTBs at same time. Parking at Trail head at Hasley and Del Val is very limited, but there are other place to park not far. Also gate is locked at equestrian center and its restrooms are locked during open hours. MTB skills park should be in Castaic Park. Also Castaic Park should have trails that go around both lakes please!
- I think combining Equestrian trails and MTB trails is difficult due to the competing desires. Very different sports.
- Very glad to see planning for this area discussed overall. Would like to see the County Park at the lake be the focal point of planning and highlighted as a desired destination. Also heavily discussed good connectivity between Santa Clarita and Castaic both off road and on road so that residents can share resources without having to drive. Overall connectivity = better sharability and bikeability for all.
- The proposed bike skills park is fantastic!! (wherever it will be located)

TABLE A-3 Public Meeting 2 Detailed Survey Responses

MEETING 2 –Equestrian User Focused (14)													Totals weighted
Bike Skills Amenities	1	2	3	4	5	6	7	8	9	10	N/A		
Bike Racks	2		1			1					7	11	
Drinking Fountains	2		1				1				7	12	
Resting areas/seating	2	1			1						7	9	
Restrooms	2				1	1					7	13	
Shade Structures	3		1								7	6	
Other:	3										7	3	
Equestrian Amenities	1	2	3	4	5	6	7	8	9	10	N/A		
Drinking fountains			1		2		1	2	2	3		84	
Gathering Areas			1		2		1	1	1	2	3	57	
Horse Arenas			1	2	1	1			2	4		80	
Horse Ties/Rails									4	7		106	
Parking					1	3		2		5		89	
Picnic Tables					1	2	1	3	1	2		77	
Trailheads								1	2	7	1	96	
Restrooms					1		1	2	2	5		96	
Shade Structures				1	1		1	1	2	5		92	
Other (Added by respondent):					1			1	1	2		42	
High priority for horse troughs													
Staging Areas/Trail Features	1	2	3	4	5	6	7	8	9	10	N/A		
Bike Racks	3		2								6	9	
Drinking Fountains			1			1	1	1	1	2	4	53	
Gathering Areas				1	2		1				5	21	
Horse Ties/Rails									4	3	4	66	
Parking				1				1	2	2	5	50	
Picnic Tables					2			2	2	1	4	54	
Trailheads									4	3	4	66	
Restrooms					1			2	1	3	4	60	
Shade Structures							1	1	3	1	4	52	
Wayfinding							1	1	1	1	5	34	
Other:									1			9	

Additional Comments:

- Multi-use trails in Val Verde needed from Hasley Canyon Rd to Del Valle Rd, along Del Valle Rd to Chiquita Cyn Rd, and out to HWY 126. Multi-use trail should parallel these roads mentioned
- Bicycle speeding: scaring horses and injuring pedestrians
- Hitching posts
- Horses and Bicycles do not mix. The needs are too different
- Problems with Horses and Bikes – Bikes go too fast & do scare the horses – possible accidents for both
- Hitching post would be great too!
- Check out Agoura Hills and the SMM Range. They have the most excellent trails. Simple, no rails, no gates just easy access, small trail and a few signs to navigate by maps where you are. Hundreds of miles of trails, get a map and see, \$9.95 at the visitor's center
- Please see the Castaic CSD Region 3 the Hasley Area & Region 2 Val Verde are designated Horse areas. They are for no off road restrictions.
- Need equestrian sign @ Hasley & Del Vale / no motor cycles
- People moved to this area for the natural beauty of the area including trail riding horses. I'm here to support preserving these trails for current and future members of this community. Horses and hikers may be able to share trails, however horses and mountain bikers on the same trail will be dangerous.
- My biggest problem is that bikes frighten horses. You must come up with a plan that allows room for both.
- I'm in favor of the multi-use trails plan, I'm a horse owner and also enjoy bike riding. Would like to see trail conditions that can be used safely and by large groups. I have enjoyed group ride organized by M.D. Antonovich. I would like to see basic amenities for Horses
- Trail connectivity is key
- For the Horse trails-water for horses!!

(Continued on next page)

- I applaud the planning efforts undertaken for the Castaic Area Trails Plan. If not accomplished now, the opportunity may be lost forever. That Said, I am recovering from a broken ankle caused when my horse spun around when a speeding mountain bike crashed at a blind curve to avoid us. Multi-use isn't for every trail. Please take into consideration and plan some trails for equestrian/hikers separately from mountain bikes.
- Keep bikes off the horse trails please! Mountain bikes scare us and our horses because their aim is to go fast. This causes our horses to spook and spin and throw the rider. I was involved in an accident which could have been very deadly but I ended up with a sprained hand. The dirt bikers apologized but too late, they made my horse spin on a very steep hill. I was going up they were going down Full Speed. We need switchbacks on horse trails, railroad ties to limit erosion ruts caused by bikes which would discourage bikers.

TABLE A-4 Public Meeting 3 Detailed Survey Responses

MEETING 3 –Hiking User Focused (6)												Totals weighted
Bike Skills Amenities	1	2	3	4	5	6	7	8	9	10	N/A	
Bike Racks	1							1	2		2	27
Drinking Fountains	1						1		1	1	2	27
Resting areas/seating						1			3		2	33
Restrooms						1			2	1	2	34
Shade Structures						1		1	1	1	2	33
Other:						1			1		4	15
Equestrian Amenities	1	2	3	4	5	6	7	8	9	10		
Drinking fountains										1	5	10
Gathering Areas								1			5	8
Horse Arenas								1			5	8
Horse Ties/Rails								1			5	8
Parking							1				5	7
Picnic Tables							1		1		4	16
Trailheads								1		1	4	18
Restrooms								1	1		4	17
Shade Structures								1			5	8
Other:									1		5	9
Staging Areas/Trail Features	1	2	3	4	5	6	7	8	9	10		
Bike Racks								1	1	1	3	27
Drinking Fountains							1		1	1	3	26
Gathering Areas								1		1	4	18
Horse Ties/Rails							1	1			4	15
Parking							1	1		1	3	25
Picnic Tables							1		2		3	25
Trailheads								1	1	1	3	27
Restrooms								1	2		3	26
Shade Structures								1	1	1	3	27
Wayfinding								1		2	3	28
Other:									1		5	9

Additional Comments:

- We need a real road along the east side of the 5 fwy from the Castaic Sports Complex south to Newhall Ranch Road, with bike lanes and/or trails along the side. This is needed from emergency access and alternative routes. It would also help to improve the connection of Castaic to the rest of Santa Clarita
- A paseo system should connect existing communities of Bravo to Lakeview
- Bike lane on old road from Parker to Hillcrest-safety hazard road turns and narrows
- Trail (road) to Santa Clarita from Castaic Road to Newhall Ranch
- I would like to see a link-up to the Santa Clarita trails that are paved and divided for bike/hike. I would like to walk from my house (Hillcrest) to the mall in Valencia
- The Sheriff's B.E.A.R. program would be perfect to offer at this site. (Bicycle education and registration)
- My concern is whether my property (APN: 3272-001-088) will be affected

A.3 WIKIMAP

On the trails website a Wikimap was available for interactive mapping by users outside of public meetings. The comments included suggested trail alignments, current destinations of interest and proposed bike skills parks, trailheads and equestrian amenities.

The final map is shown below and data collected from the map are shown on the following pages.

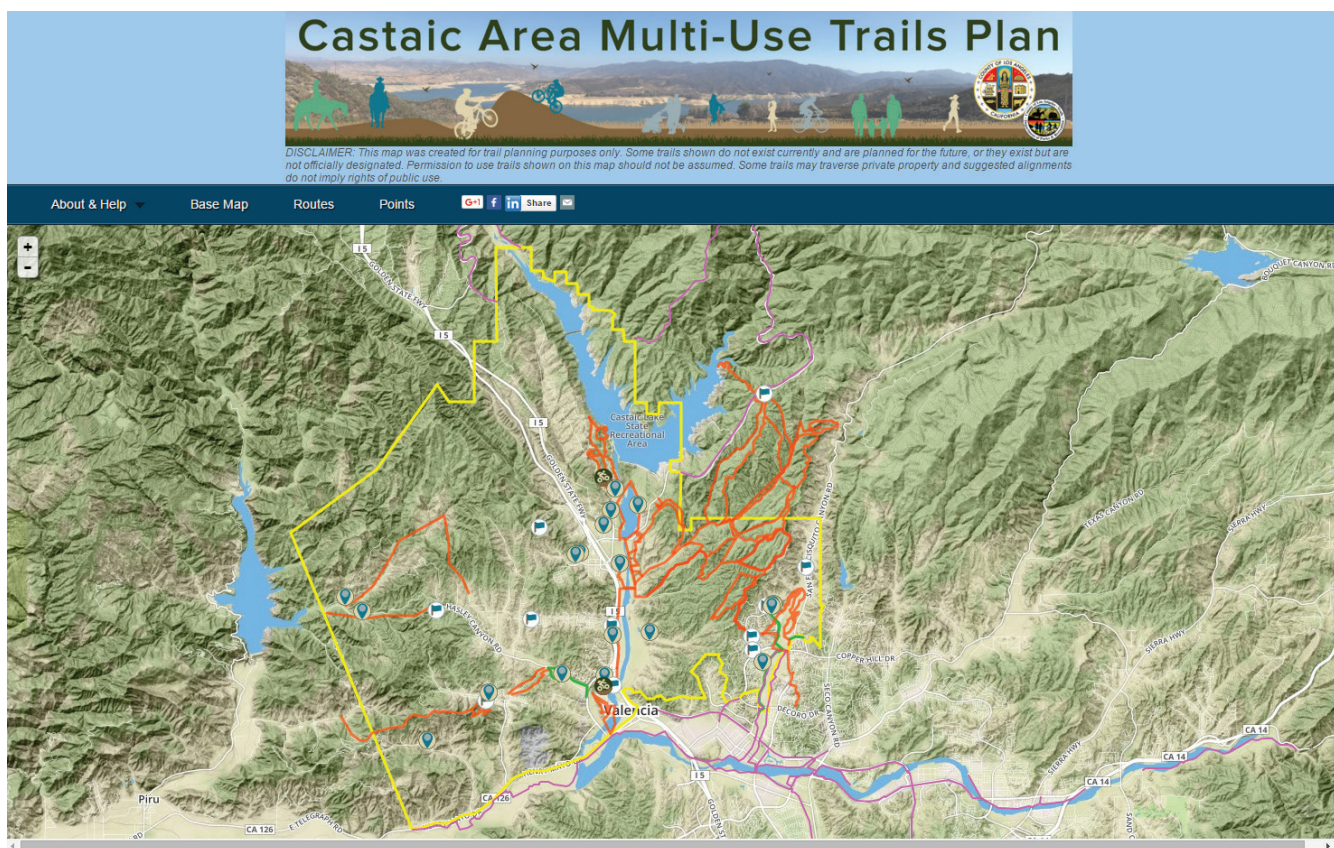


Figure A-3 Wikimap Results

TYPE OF TRAIL USE

(CHECK ALL THAT APPLY)

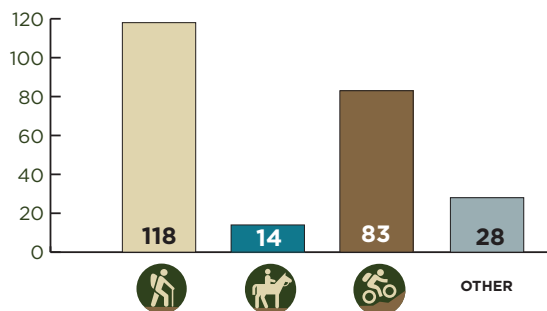


Figure A-4 Wikimap Results: Type of Trail Users

AMENITY LOCATION INPUT

(PUBLIC MEETINGS AND WIKIMAP)

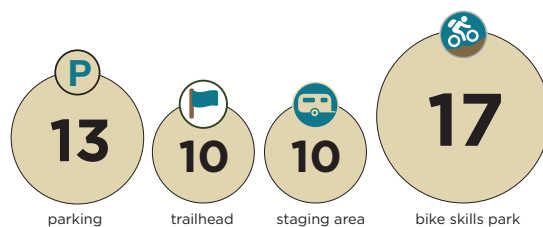


Figure A-5 Wikimap Results: Number of Amenity Locations

PUBLIC MEETING INPUT

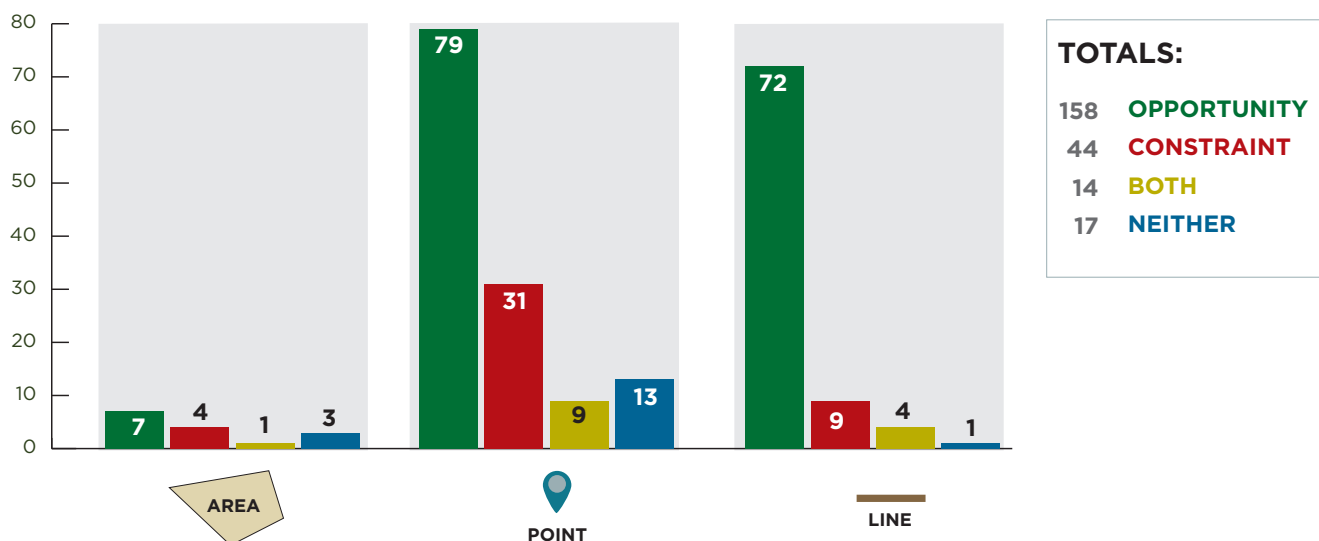


Figure A-6 Number of Opportunities and Constraints by Area, Point and Line from Public Meetings

WIKIMAP INPUT

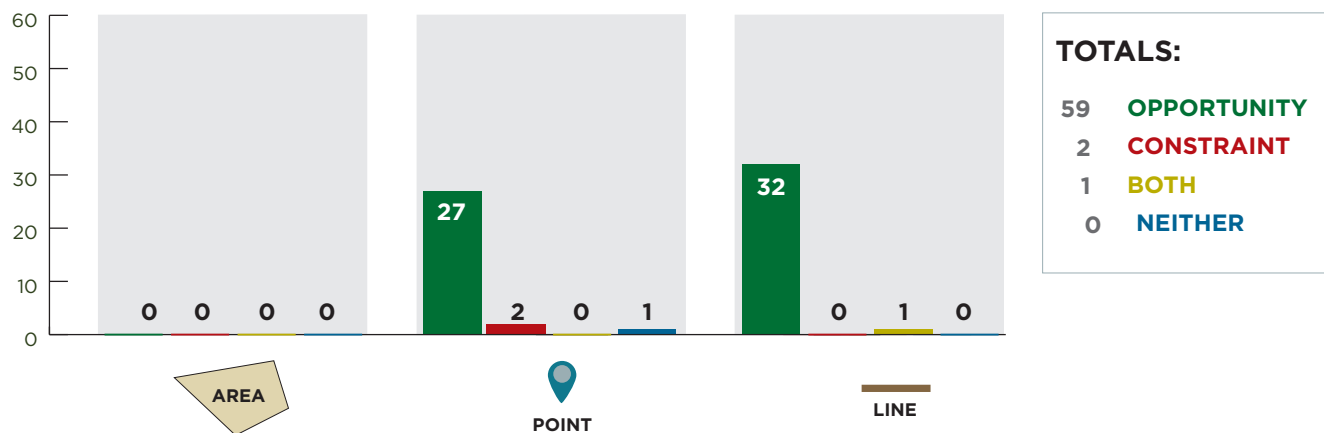


Figure A-7 Number of Opportunities and Constraints by Area, Point and Line from Wikimap

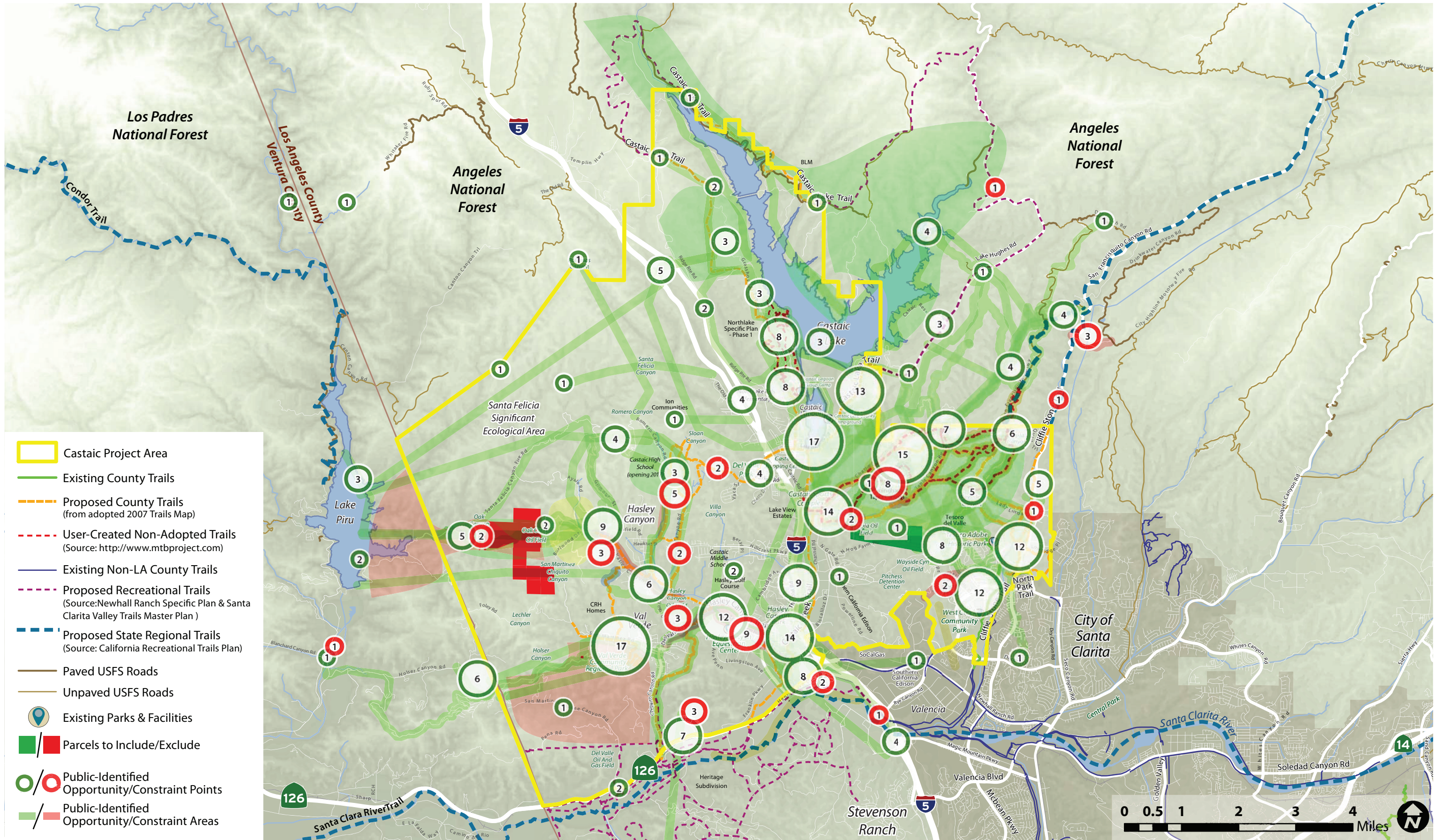


Figure A-8 Final Public Comment Map from Public Meetings and Wikimap

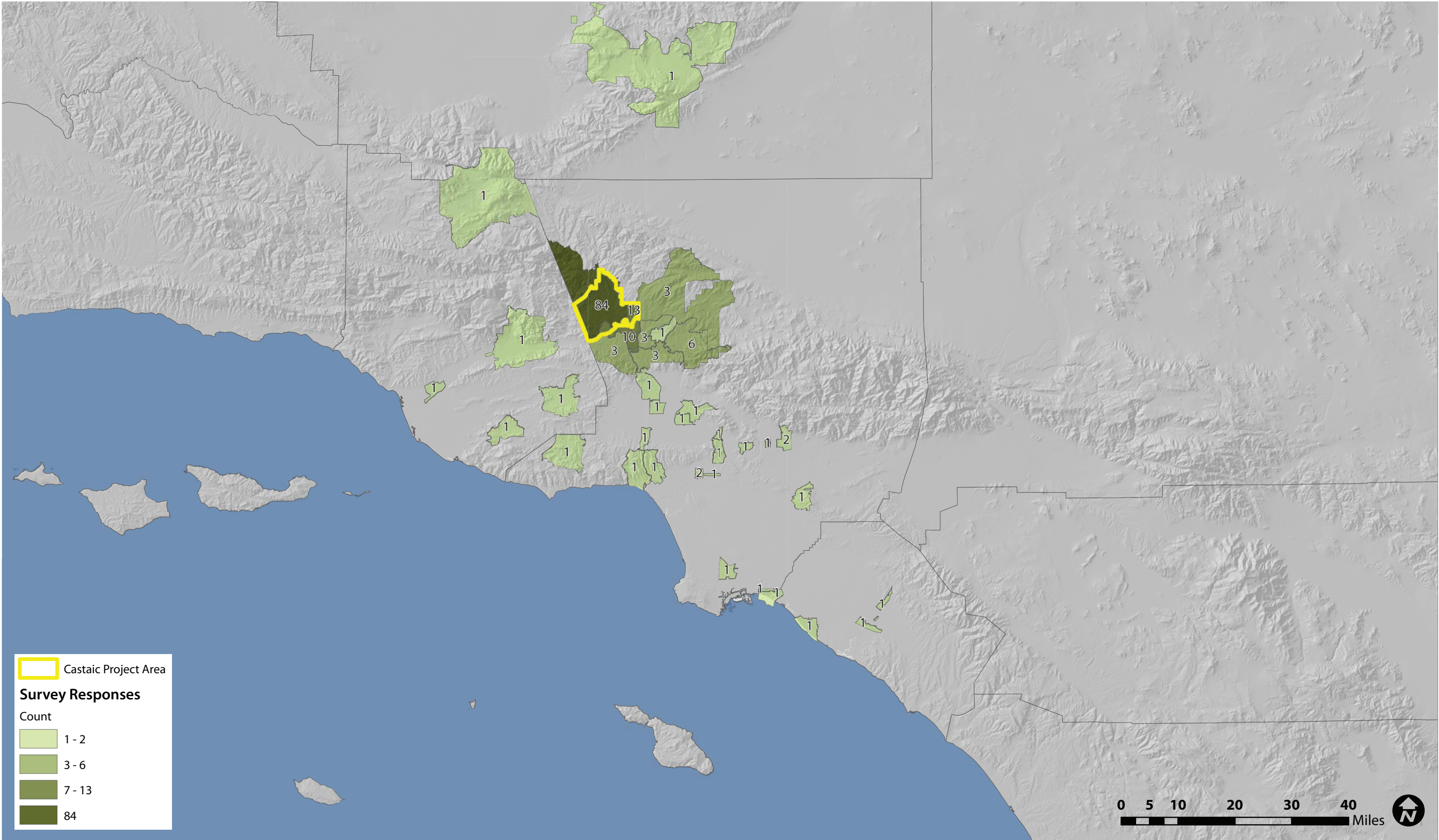


Figure A-9 Wikimap Survey Respondents Location Information

APPENDIX B: RELATED PLANS, PROJECTS, AND POLICIES

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There are 4 Federal, 2 State, 15 regional and local planning documents that address recreational trails at the regional and local levels in the vicinity of the Castaic Project Area, as shown in **Table B-1**.

TABLE B-1 Relevant Existing and Proposed Regional and Local Plans and Policies

DOCUMENT	AGENCY	RELEVANCE TO PLAN
FEDERAL		
Rim of the Valley Draft Special Resource Study and Environmental Assessment (2015)¹	<i>National Parks Service</i>	Connections to regional trails
Santa Monica Mountains National Recreation Area (SMMNRA) General Management Plan (2002)²	<i>National Parks Service</i>	Connections to regional trails
Pacific Southwest Region Land Management Plan (2005)³	<i>United States Department of Agriculture, Forest Service</i>	Connections to regional trails and land conservation
16 U.S. Code § 1131 - National Wilderness Preservation System⁴	<i>United States Department of Agriculture, Forest Service</i>	Connections to regional trails and national land preservation as it pertains to trail use
STATE		
California Recreational Trails Plan (2002)⁵	<i>California Department of Parks and Recreation</i>	Connection to regional trails
Statewide Comprehensive Outdoor Recreation Plan (SCORP) (2015)⁶	<i>California Department of Parks and Recreation</i>	Strategies for outdoor recreation leadership and action including tools for assessing park needs and ways to improve and fund parks in California
Castaic Lake State Recreation Area Operating Agreement (1969, amended 1990)⁷	<i>State of California Department of Parks and Recreation and County of Los Angeles Department of Parks and Recreation</i>	Proposed trail around Castaic Lake
REGIONAL AND LOCAL		
Ventura County General Plan (2011)⁸	<i>County of Ventura Resource Management Agency, Planning Division</i>	Connections to regional trails
Rim of the Valley Trail Corridor Master Plan (1990)⁹	<i>Santa Monica Mountains Conservancy</i>	Connections to regional trails
Santa Felicia Project Recreational Trail Plan (2015)¹⁰	<i>United Water Conservation District</i>	Connections to regional trails
Ventura County Regional Trails and Pathways Final Master Plan Report (1995)¹¹	<i>Ventura County Board of Supervisors</i>	Connections to regional trails

1. National Park Service, *Rim of the Valley Corridor Draft Special Resource Study and Environmental Assessment* (Spring 2015) http://parkplanning.nps.gov/rimofthevalley_draftreport
2. National Park Service, *Santa Monica Mountains National Recreation Area (SMMNRA) General Management Plan* (2002). Available at: <http://www.nps.gov/samo/learn/management/upload/samofgmpla.pdf>
3. United States Department of Agriculture, *Forest Service, Land Management Plan, R5-MB-075, -076, -078 and -080, September 2005* (2005) <http://www.fs.usda.gov/main/r5/landmanagement/planning>
4. United States Department of Agriculture, *16 U.S. Code § 1131 - National Wilderness Preservation System* (1964) Available at: <https://www.gpo.gov/fdsys/granule/USCODE-2011-title16/USCODE-2011-title16-chap23-sec1131>
5. California Department of Parks and Recreation, *2002. California Recreational Trails Plan*. Available at: http://www.parks.ca.gov/?page_id=23443
6. Los Angeles Department of Regional Planning. 2015. *Statewide Comprehensive Outdoor Recreation Plan (SCORP)*. Available at: http://www.parks-forcalifornia.org/data/Calif_SCORP2015_ScreenRes.pdf
7. State of California Department of Parks and Recreation and County of Los Angeles Department of Parks and Recreation. *Original Agreement Made 18 November 1969. Amendment No. 5 Approved 10 August 1990. Castaic Lake State Recreation Area Operating Agreement*. Available at County of Los Angeles Department of Parks and Recreation Headquarters, 510 S. Vermont Avenue, Los Angeles, California.
8. County of Ventura Resource Management Agency, Planning Division, 2011. *Ventura County General Plan*. Available at: <http://www.countyofventura.org/rma/planning/pdf/plans/Goals-Policies-and-Programs-6-28-11.pdf>
9. Santa Monica Mountains Conservancy, *Rim of the Valley Trail Corridor Master Plan* (1990) Available at: <http://smmc.ca.gov/ROV%20Master%20Plan.pdf>
10. United Water Conservation District, *Santa Felicia Project Recreational Trail Plan* (2015)
11. Ventura County Board of Supervisors. *Ventura County Regional Trails and Pathways Final Master Plan Report*, 1995.
12. Ventura County Transportation Commission. *Santa Paula Branch Line Recreational Trail*

TABLE B-1 Relevant Existing and Proposed Regional and Local Plans and Policies (continued)

DOCUMENT	AGENCY	RELEVANCE TO PLAN
Santa Paula Branch Line Recreational Trail¹²	<i>Ventura County Transportation Commission</i>	Connections to regional trails
County of Los Angeles General Plan 2035 (2015)¹³	<i>County of Los Angeles Department of Regional Planning</i>	Standards for active trans. facilities, sustainability, land conservation, multi-use trail development, design and maintenance in LA County
City of Santa Clarita General Plan (2011)¹⁴	<i>City of Santa Clarita</i>	Connections to local trails and destinations
Santa Clarita Valley Area Plan (One Valley, One Vision) (2012)¹⁵	<i>County of Los Angeles Department of Regional Planning</i>	Connections to local trails
Santa Susana Mountains Final Trails Master Plan (2015)¹⁶	<i>County of Los Angeles Department Parks and Recreation</i>	Connection to regional trails
LACMC 22.44 Part 9–Rural Outdoor Lighting District Ordinance (2012)¹⁷	<i>County of Los Angeles Department of Regional Planning</i>	Trail design and amenities standards and guidelines
LACMC 22.44.144–San Francisquito Canyon Community Standards District (2009)¹⁸	<i>County of Los Angeles Department of Regional Planning</i>	Trail design and amenities standards and guidelines
LACMC 22.44.137–Castaic Area Community Standards District (2004)¹⁹	<i>County of Los Angeles Department of Regional Planning</i>	Trail design and amenities standards and guidelines
Newhall Ranch Specific Plan (2003)²⁰	<i>County of Los Angeles Department of Regional Planning</i>	Connections to local trails
Northlake Specific Plan (1992)²¹	<i>County of Los Angeles Department of Regional Planning</i>	Connections to local trails
TABLE B-1 Relevant Existing and Proposed Regional and Local Plans and Policies County of Los Angeles Trails Manual (2011)²¹	<i>County of Los Angeles Department of Parks and Recreation</i>	Trail design and amenities standards and guidelines

13.. California Department of Parks and Recreation. 2015. County of Los Angeles General Plan 2035. Available at: http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan.pdf

14. City of Santa Clarita. City of Santa Clarita General Plan, 2011. Available at: <http://cdm16255.contentdm.oclc.org/cdm/ref/collection/p266301ccp2/id/698>

15.. Los Angeles County Department of Regional Planning. 2012. Santa Clarita Valley Area Plan (One Valley One Vision). http://planning.lacounty.gov/assets/upl/data/pd_santa-clarita-area-plan-2012.pdf

16. Los Angeles County Department of Parks and Recreation. May 2015. Santa Susana Mountains Final Trails Master Plan. Available at: <https://trails.lacounty.gov/Files/Documents/115/FINAL%20Santa%20Susana%20Mountains%20Final%20Trails%20Master%20Plan%20May%202015.pdf>

17. Los Angeles County Department of Regional Planning. 2012. Los Angeles Municipal Code 22.44 Chapter 9 - Rural Outdoor Lighting District Ordinance. Available at: https://www.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT22PLZO_DIV1PLZO_CH22.44SUDI_PT9RUOULIDI

18. Los Angeles County Department of Regional Planning. November 2004. Los Angeles Municipal Code 22.44.137 - Castaic Community Standards District. Available at: https://www.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT22PLZO_DIV1PLZO_CH22.44SUDI_PT2COSTDI_22.44.137CAARCOSTDI

19. Los Angeles County Department of Regional Planning. November 2009. Los Angeles Municipal Code 22.44.144- San Francisquito Canyon Community Standards District. Available at: https://www.municode.com/library/ca/los_angeles_county/codes/code_of_ordinances?nodeId=TIT22PLZO_DIV1PLZO_CH22.44SUDI_PT2COSTDI_22.44.144SAFRCACOSTDI

20. County of Los Angeles. Newhall Ranch Specific Plan. May, 2003. Available at: http://planning.lacounty.gov/assets/upl/data/pd_sp_newhall-ranch.pdf

21. County of Los Angeles. Northlake Specific Plan. June 1992. Available at: http://planning.lacounty.gov/assets/upl/data/pd_sp_northlake.pdf

21. Los Angeles County Department of Parks and Recreation. June 2013. County of Los Angeles Multi-Use trails Plan. Available at: [https://trails.lacounty.gov/Files/Documents/69/LA%20County%20Trails%20Manual%20\(Revised%2006-20-13\).compressed.pdf](https://trails.lacounty.gov/Files/Documents/69/LA%20County%20Trails%20Manual%20(Revised%2006-20-13).compressed.pdf)

B.1 FEDERAL PLANS, POLICIES AND CODES

The federal planning documents and policies that address recreation resources in the vicinity of the CAMUTP include *Rim of the Valley Draft Special Resource Study and Environmental Assessment*, *Santa Monica Mountains National Recreation Area (SMMNRA) General Management Plan*, *Pacific Southwest Region Land Management Plan*, 16 U.S. Code § 1131 - *National Wilderness Preservation System*. More detailed information on each plan and how it relates to the Plan Area can be found in this section.

B.1.1 Rim of the Valley Trail Corridor Special Resources Study, 2015

A study conducted by the National Park Service to determine if the Rim of the Valley met the criteria for National Park inclusion was conducted in 2015. The study also sought to evaluate the potential to include all or a portion of the Study Area as part of SMMNRA by extending the SMMNRA Boundary, as opposed to a new stand-alone park. The study concluded that it was most effective to adjust the SMMNRA boundary, which was feasible using the collaborative partnership-based management model, which “respects the complex mix of existing land-use, ownership and regulatory authorities. They provided four management alternatives being considered.

- Alternative A: Continuation of Current Management (No Action) serves as a baseline for evaluating the action alternatives;
- Alternative B: Cooperative Conservation Partnership would foster cooperative planning and funding tools for the NPS, partner agencies and landowners in the Study Area and conserve key habitat linkages to the Los Padres and Angeles national forests;
- Alternative C: Rim of the Valley Boundary Adjustment (Preferred Alternative) includes a SMMNRA boundary adjustment (approximately 173,000-acre addition) that would provide more recreational opportunities and protect habitat linkages, with an emphasis on creating more opportunities near urban areas; and
- Alternative D: Regional Rim of the Valley Boundary Adjustment and Cooperative Conservation Areas includes a SMMNRA boundary adjustment (approximately 313,000-acre addition) with an

emphasis on protecting regional wildlife corridors that would include most areas within the Rim of the Valley Corridor (excluding U.S. Forest Service managed areas). Cooperative conservation approaches are recommended for key habitat linkages between the Rim of the Valley Corridor Study Area and the Los Padres and Angeles National Forests.

Alternative D was found to meet all the criteria set forth by the NPS. Following public comment the draft study will determine a final decision. The findings of the study will serve as a reference for potential boundary adjustments and park maintenance. A map of the Study Area and more information can be found in **Figure B-1**.

B.1.2 Santa Monica Mountains National Recreation Area (SMMNRA) General Management Plan, 2002

An update to the first General Management Plan from 1982, the 2002 SMMNRA General Management Plan was revised to include the dramatic changes in use and environmental impacts. The Plan document provides an approved plan for managing the national recreation area during the next 15 to 20 years.

The management plan looks into the conceptual visions for several levels of management areas: low intensity areas, moderate intensity areas, and high intensity areas, as well as the communities of landscapes and scenic corridors. The recommended management plan may differ from local and regional plans, and ultimately the General Management plan has no authority of local land use decisions, and includes only conceptual level development of facilities.

The approved plan designates nearly 80 percent of the total acreage for preservation, with 15 percent defined as moderate intensity use and 5 percent as high intensity use. New facilities will be developed within in high intensity use areas to limit use in sensitive areas. A map of the area can be seen in **Figure B-2**.

B.1.3 USDA Forest Service Angeles State Forest and Los Padres State Forest Land Management Plans, 2005

The USDA Forest Land Management Plan is part of the revised land and resource management plans for the southern California national forests and includes direction for managing the land and its resources consistent with the concept of adaptive management and

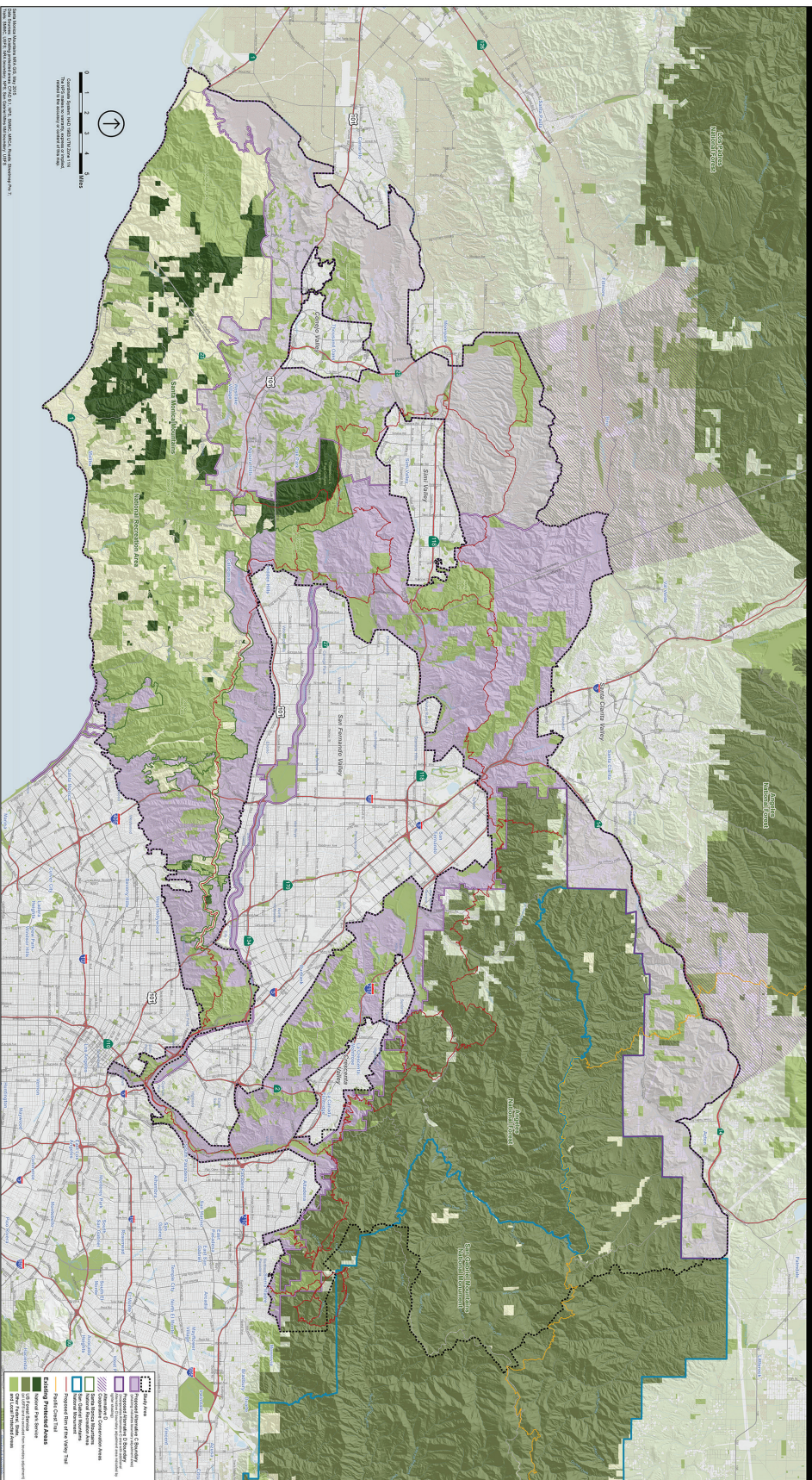


Figure B-1 Rim of the Valley Corridor Draft Special Resource Study Area

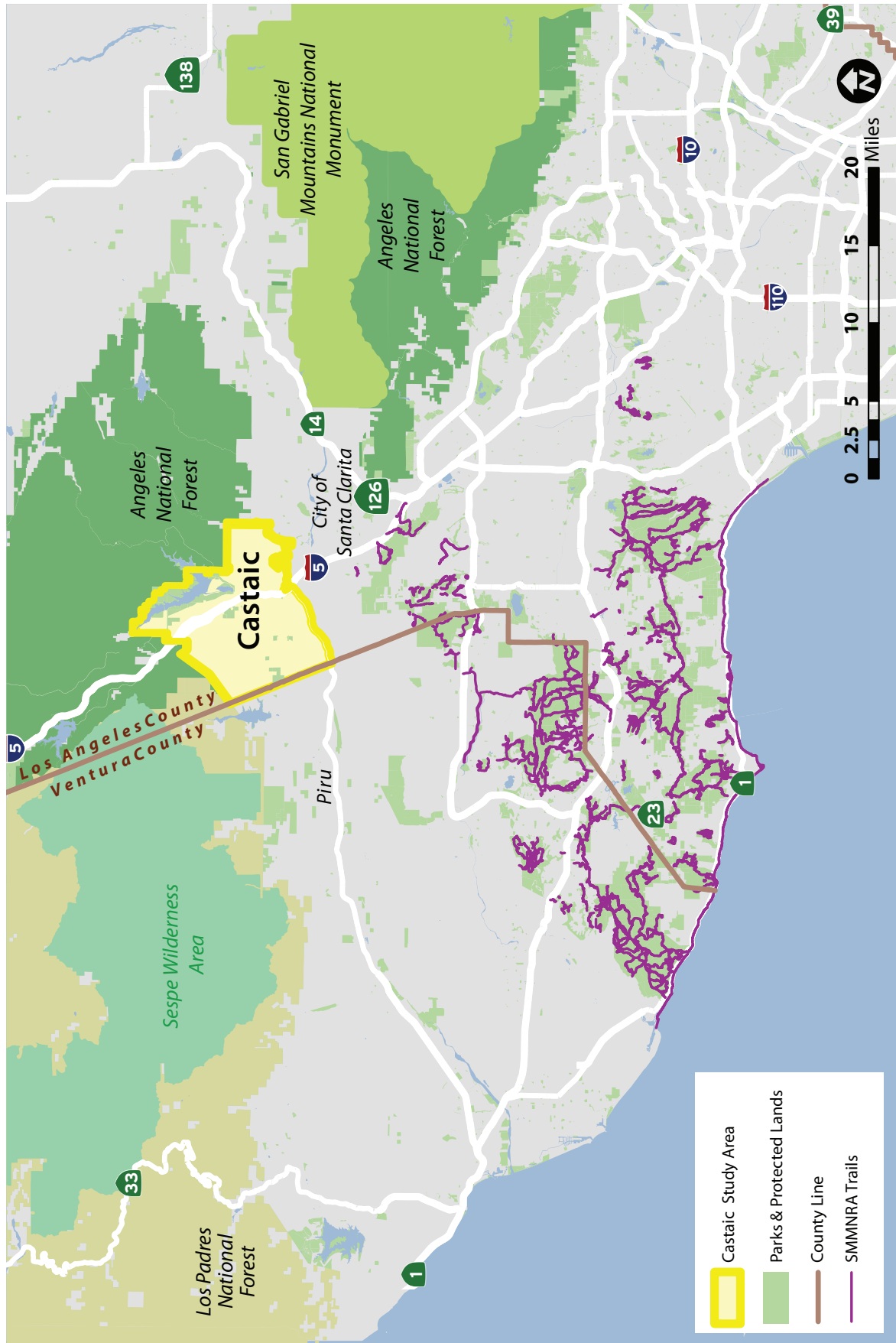


Figure B-2 Santa Monica Mountains National Recreation Area Proposed Regional Trails

sustainable resource use for the 10-15 years following its implementation. While no part of the Castaic Area Multi-Use Trail Plan Area is within the National Forest Areas, these plans are of importance to provide compatible uses within the National Forest adjacent areas.

The revised forest plans were developed due to a shift in perceptions of forest management since the mid-80's, including: "the NFMA requirement to revise forest plans every 10 to 15 years; the results of analysis initiated because of numerous changes that have occurred relative to forest health (including biological and ecological systems), fire (including community protection, fuels treatment, and suppression), the anticipated demand for human use of the national forests (including recreation opportunities, access and resource development), since the original forest plans were approved for implementation; response to new information from recent assessments; and discussion to address the issues identified through public involvement with a series of seven possible alternatives for resolution."

The goals of the Forest Management Plans address the issues of offering a variety of opportunities, experiences, uses and access to a diverse population while providing resource protection; the restoration and maintenance of native species, especially those in need of conservation and recovery; the demand for uses and products which intensify human pressure on the forests; the expansion of urban development and its pressures on the natural resources of the forests; and special area designations. The goals include community protection (from wildfires), restoration of forest health, management of invasive species, management of recreation in a natural setting, maintenance of the a natural evolving character within the wilderness, balance of minerals and energy resource development while protection of ecosystem health, management of non-recreation special uses, improvement of watershed conditions, improvement of riparian conditions, improvement of rangeland conditions, and provision of ecological conditions to sustain viable populations of native and desired nonnative species. The Design Criteria section contains forest plan standards and guidelines, laws, policy or other direction that may be applicable to proposed activities.

Los Padres Forest Strategy

Part 2 of the Los Padres National Forest Strategy designates the area close to the CAMUTP as part of the Place-Based Program. Each Place designated in Los Padres NF has it's own landscape character which gives it an identity and "sense of place." There are two "Places" west of the CAMUTP Area, Ojai-Piru Front Country and Sespe.

Ojai-Piru Front Country Place serves as the entrance to the from the urban areas at the foot of the forest. It follows the San Cayetano Fault from Ojai to the eastern national forest boundary near the Los Angeles/Ventura County line and serves as a mountainous backdrop to Lake Casitas, Lake Piru and the Ojai and Santa Clara Valleys. The Place borders multiple communities, historic oil fields and extensive farmlands, and serves as an entry to the Matilija and Sespe Wilderness. Major issues in the Ojai-Piru Front Country Place are those related to Wildland/Urban Interface, such as invasive and exotic species overtaking natives, human-caused fires and private land preventing access on both sides of the national forest boundary. Recreation opportunities in this Place are mountain biking, equestrian use, hiking, hang-gliding/paragliding, rock climbing, camping, water play, fishing, and limited OHV use. The Plan states that there is a demand for recreation in the area that this place is not meeting, with limitations of public access, lack of maintenance and conflicts between users, such as hunters, OHV users, private land owners and oil field developments.

The Place designated as Sespe is northwest of the Study Area. This is considered the most rugged and remote repository of wilderness in the Southern California ranges. The Place is habitat for many threatened and endangered species. It includes untouched landscapes and unique geological features, yet is still in close proximity to major urban populations. There is a large network of trails and access points by foot or by horse, with some areas, such as the Condor Sanctuary having limited public access.

The lack of urban interface hinders human made wildfires from becoming a large risk of this Place. Recreational opportunities include wildlife viewing, picnicking, camping, hiking, hunting and use of hot springs. Some water-play and fishing is allowed, but the mountain bike and OHV use is restricted in this area. Grazing occurs surrounding the wilderness area and oil and gas are pumped from beneath the wilderness via

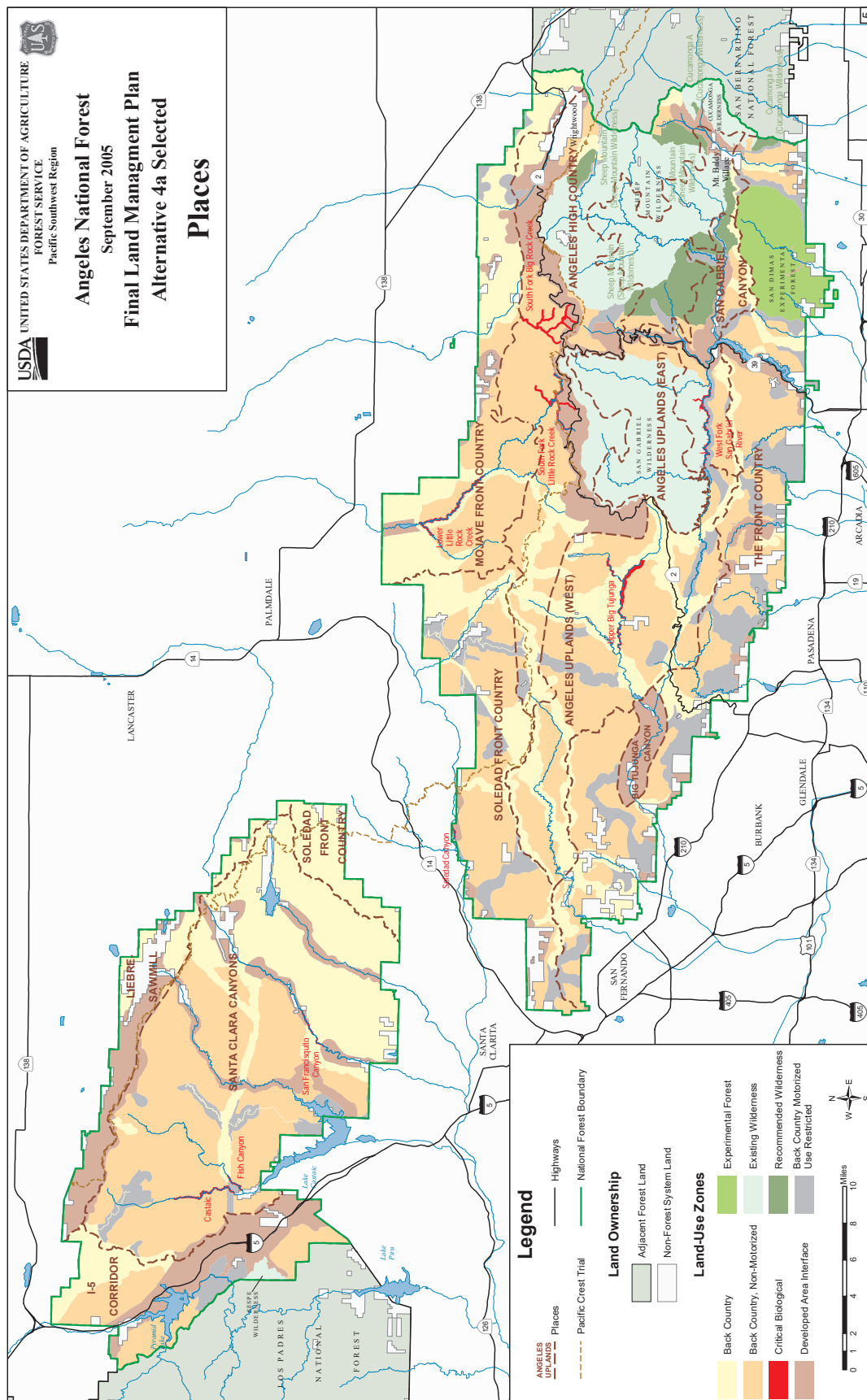


Figure B-3 Angeles National Forest Final Land Management Plan

directional drilling from wells located just outside the wilderness boundary.

The Sespe Wilderness is 218,507 acres and is part of the Sespe Place. It was established in 1992 and includes the Condor Sanctuary, Gene-Marshall-Piedra Blanca National Recreation Trail, the Sespe Creek and evidence of ancient Indians along the creek corridor. Information on designated Wilderness Areas can be found in the **The Wilderness Act of 1964** section.

Angeles Forest Strategy

Like the Los Padres Forest Strategy section, the Angeles Forest Strategy also designates Place-Based Programs. The area of the Forest Plan within the Castaic Lake Regional Multi-Use trail plan is the Santa Clara Canyons, located northeast of the project area, and the I-5 corridor located next to that, northwest of the project area. **Figure B-3** shows the Santa Clara Canyon Place within the Angeles National Forest Final Land Management Plan.

The Santa Clara Canyons are a low elevation remote open space area for the greater Los Angeles and Antelope Valley. The Pacific Crest Trail is considered one of the “Key Places” representing “the most picturesque national forest locations” providing visitors access to remote and semi-primitive experiences.

Issues related to this Place include mistletoe infestations, degradation of air quality and noxious weed infestations which affect the health of the forest. There are inconsistent designed conditions to promote the protection of improvements from fire. There are several sensitive plants and animals in this Place. Human influences is most apparent in the developed and dispersed recreation facilities, which are limited, focusing on remote camping, day-use, backpacking, equestrian, bicycling, mountain biking, hunting and OHV (OHV is in designated areas only).

Critical biological zones include Castaic/Fish Canyon and San Francisquito Canyon, both found adjacent to the CAMUTP Area. The Santa Clara Canyons Place is a “Key Place” for natural appearing and pastoral landscape. The management emphasis for this Place focuses on “community protection, recreation use and urban and forest infrastructure that is that is sustainable, sympathetic to the natural setting and integrity, and has minimal effects to species of management concern and their habitat, as well as heritage resources.”

B.1.4 The Wilderness Act of 1964 (Public Law 88-577 (16 U.S. C. 1131-1136))

The Wilderness Act of 1964 was created to “establish a National Wilderness Preservation System for the permanent good of the whole people, and for other purposes.” Surrounding the CAMUTP Area there is the Sespe Wilderness Area located northwest in the Los Padres National Forest shown in **Figure B.4**, as well as a potential area north and east of the project area introduced in July of 2015 and currently being referred to the Subcommittee on Federal lands, the Castaic Wilderness area (HR-3153–114th Congress) **Figure B.5**.

According to 16 U.S. Code § 1131 - National Wilderness Preservation System:

“In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness. For this purpose there is hereby established a National Wilderness Preservation System to be composed of federally owned areas designated by Congress as “wilderness areas”, and these shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness; and no Federal lands shall be designated as “wilderness areas” except as provided for in this chapter or by a subsequent Act.”

The areas exclude the use of “motorized equipment”, (Section 4.C.) restricting mountain bikers from using the trails in this area, while still allowing hikers and equestrians to use the Sespe Wilderness area. The proposed Castaic Area Wilderness have excluded those which have proposed multi-use trails, namely those located east of the Castaic Lake Recreational Area.

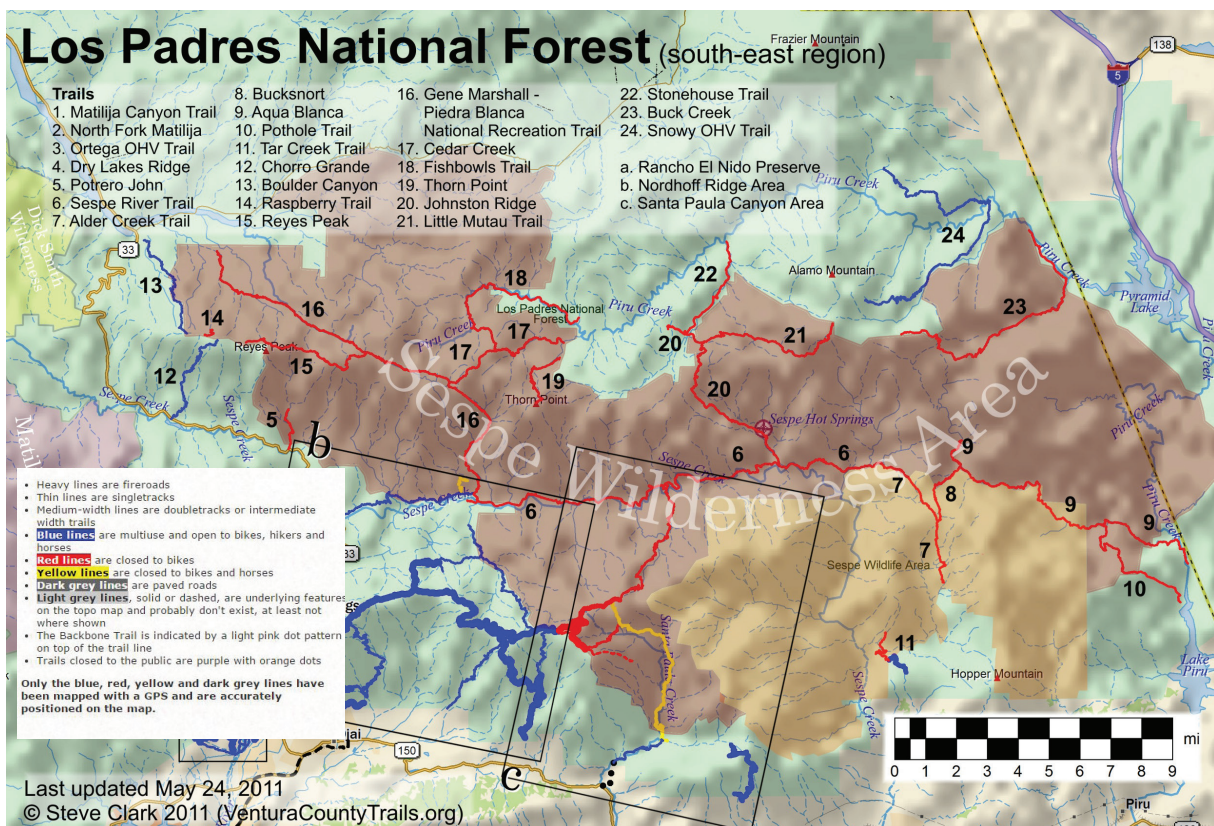


Figure B-4 Sespe Wilderness Area Trail Designations

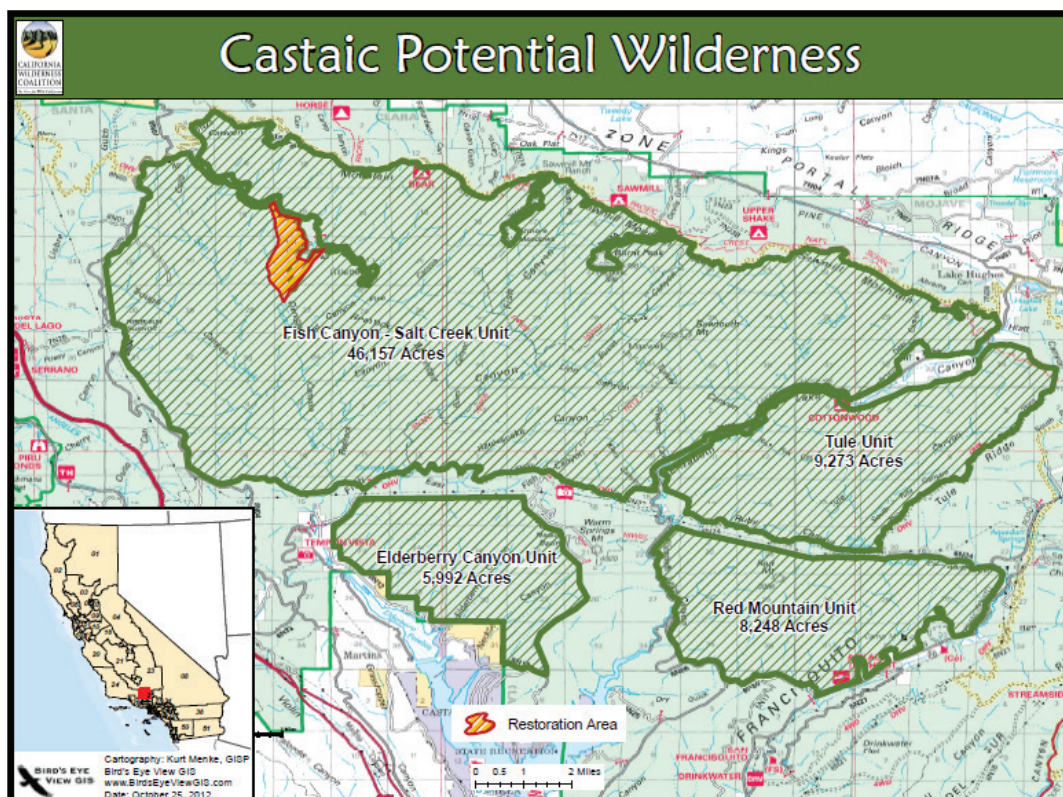


Figure B-5 Proposed Castaic Wilderness Area

B.2 CALIFORNIA STATE PLANS, POLICIES AND CODES

The California state planning documents and policies that address recreation resources in the vicinity of the CAMUTP include *California Recreational Trails Plan*, *Statewide Comprehensive Outdoor Recreation Plan (SCORP)*. More detailed information on each plan and how it relates to the Plan Area can be found in this section.

B.2.1 California Recreational Trails Plan, 2002

The California Recreational Trails Plan (Phase 1) “serves as a general guide for trail advocates and local trail management agencies and organizations in planning future trails and developing trails-related programs.” The second phase will focus on planning strategies and practices.

The Plan states that the “state’s trail systems must be designed to utilize resources in ways that benefit all users and their appropriate uses.” Provisions such as adequate accommodation and accessibility are emphasized, rather than focusing on individual user groups. The Plan both promotes access to natural and cultural resources while protecting the environment and habitats in the area of the trails. The plan lists goals for funding, trails inventory, land-use planning, trail advocacy & collaboration, trail research, trail stewardship, encouragement for use, accessibility, multi-use cooperation, cooperation with private property owners (including acknowledging incentives for property owners), program leadership, and the evaluation of the easements for the California Riding and Hiking Trail for potential continuance of the trails expansion.

The California State Park system currently includes 279 parks, beaches, trails, wildlife areas, open spaces, off-highway vehicle areas, and historic sites; it consists of approximately 1.59 million acres, including over 339

TABLE B-2 California Recreation Trails Relevant to the CAMUTP

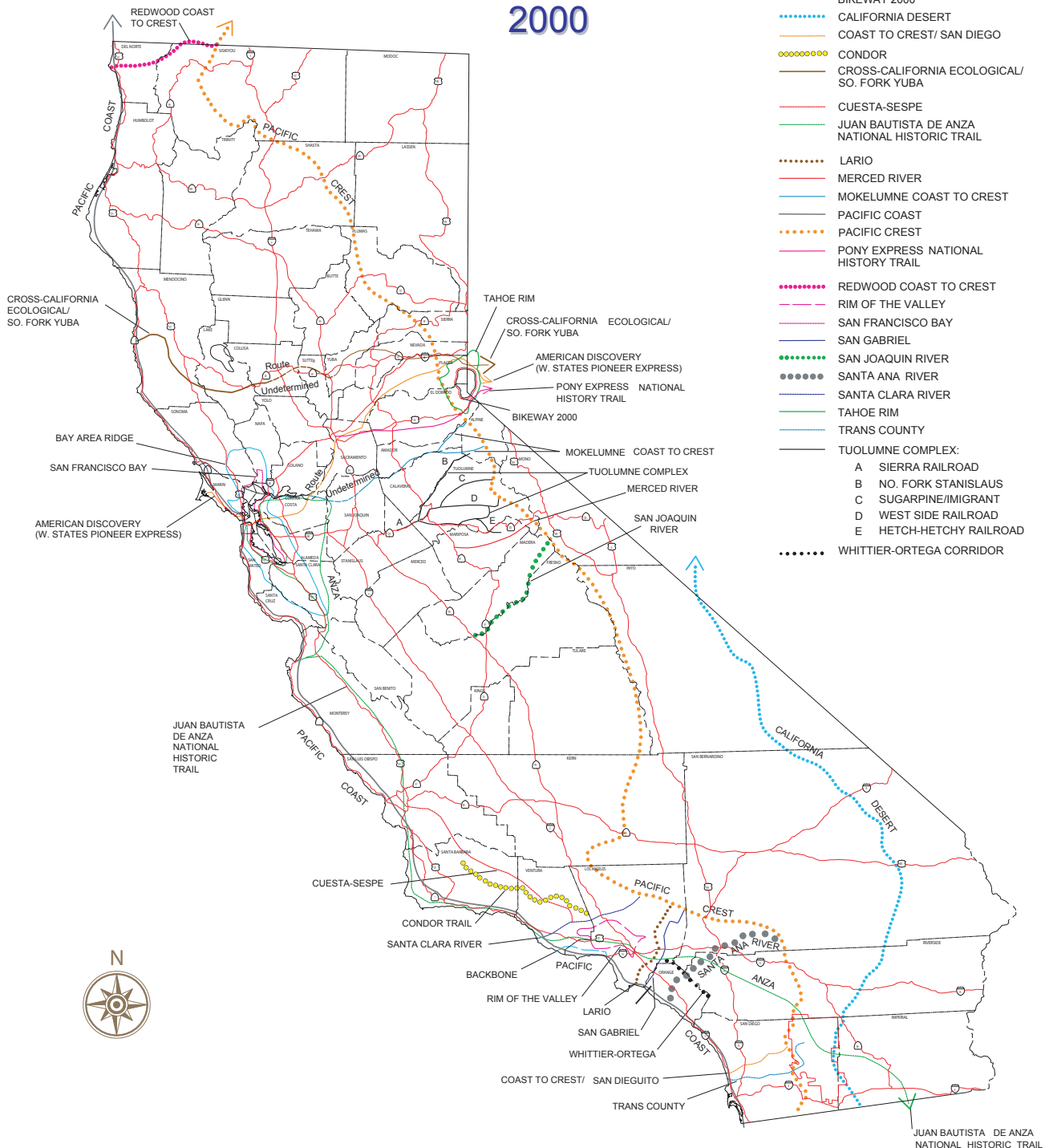
TRAIL	PROGRESS
<i>Adjacent to or within in 5 miles of Study Area</i>	
Condor Trail (near Study Area)	Managed by the Los Padres National Forest. Ten new miles of trail are open, making 75 percent of the Condor Trail available to the public. It travels through lower elevation areas in Santa Barbara and Ventura Counties.
Santa Clara River Trail (adjacent to Study Area)	Managed by the California Coastal Conservancy and the City of Santa Clarita. Planning for a trail along this corridor is in the preliminary stage. The trail has potential to run the entire 65-mile length of the Santa Clara River from its headwaters near Acton to the mouth at McGrath State Beach. The State Coastal Conservancy is helping to fund the acquisition of parkway lands for this trail.
<i>Not Adjacent to Study Area</i>	
Juan Bautista de Anza National Historic Trail	Managed by the National Park Service. This 1,200-mile heritage corridor traces the route of the Spanish explorer Juan Bautista De Anza in California and Arizona. The 220 miles of non-motorized, multi-use unpaved trail and 800 miles of the auto route component are open to the public. Progress on this trail includes the acquisition of 1.5 miles of new right-of-way, trail identification signs and new interpretive facilities.
Pacific Crest National Scenic Trail	Managed by the U.S. Forest Service. The Pacific Crest Trail spans the length of California and continues north. The total length is 2,650 miles with 1,692 miles of hiking and equestrian trail extending the length of California. Recent progress includes maintenance on all trail segments that traverse California, restoration of several multi-use trails on the Tahoe National Forest, and Tejon Ranch Company’s commitment to donate a trail right-of-way through the Tehachapi Mountains.
California Coastal Trails	Managed by the California State Coastal Conservancy, CSP, California Coastal Commission and Caltrans. Half of this 1,150-mile multi-use trail along the California coastline is open to the public. Many regional trails and river greenways connect to this jewel of the California coast. Twenty-five miles of new rights-of-way and five miles of new trails, along with trail identification signs, interpretive facilities and support facilities have been added over the past two years.
Cuesta to Sespe Trail	Managed by the Los Padres National Forest. This 250-mile hiking and riding trail runs on existing dirt trails and roads from the Cerro Alto campground west of Atascadero in San Luis Obispo County to the Sespe Condor Sanctuary near Fillmore in Ventura County. No recent progress has been reported.

CALIFORNIA TRAIL CORRIDORS



LEGEND

- AMERICAN DISCOVERY (W. STATES PIONEER EXPRESS)
- BACKBONE
- BAY AREA RIDGE
- BIKEWAY 2000
- CALIFORNIA DESERT
- COAST TO CREST/ SAN DIEGO
- CONDOR
- CROSS-CALIFORNIA ECOLOGICAL/ SO. FORK YUBA
- CUESTA-SESPE
- JUAN BAUTISTA DE ANZA NATIONAL HISTORIC TRAIL
- LARIO
- MERCED RIVER
- MOKELUMNE COAST TO CREST
- PACIFIC COAST
- PACIFIC CREST
- PONY EXPRESS NATIONAL HISTORY TRAIL
- REDWOOD COAST TO CREST
- RIM OF THE VALLEY
- SAN FRANCISCO BAY
- SAN GABRIEL
- SAN JOAQUIN RIVER
- SANTA ANA RIVER
- SANTA CLARA RIVER
- TAHOE RIM
- TRANS COUNTY
- TUOLUMNE COMPLEX:
 - A SIERRA RAILROAD
 - B NO. FORK STANISLAUS
 - C SUGARPINE/IMMIGRANT
 - D WEST SIDE RAILROAD
 - E HETCH-HETCHY RAILROAD
- WHITTIER-ORTEGA CORRIDOR



SOURCE: California State Parks. June 2002. *California Recreation Trails Plan*. Sacramento, CA.

Figure B-6 California Trail Corridors from CA Recreational Trails Plan, 2002

miles of coastline, 974 miles of lake, reservoir, and river frontage, approximately 15,000 campsites and alternative camping facilities, and 4,456 miles of non-motorized trails. **Table B-2** outlines the most recent progress report on the trails in the vicinity of the Trail Planning Area. Of the 14 Coastal Southern California Trail Corridors described in the California Recreation Trails Plan and shown in **Figure B-6**, six Southern California Trail Corridors are located in Western Los Angeles County or Eastern Ventura County: the Condor Trail, the Juan Bautista de Anza National Historic Trail, the Pacific Crest National Scenic Trail, California Coastal Trail, the Cuesta to Sespe Trail, and the Santa Clara River Trail (adjacent to the southern boundary of the Plan Area).

B.2.2 California Statewide Comprehensive Recreation Plan (SCORP), 2015

The California Statewide Comprehensive Recreation Plan is a document required of every state in order to be eligible for grants from the Land and Water Conservation Fund (LWCF) Act. The 2015 SCORP “provides a strategy for statewide outdoor recreation leadership and action to meet the state’s identified outdoor recreation needs.”

The SCORP reviews the historical context of parks in California, the relevance of park and recreation in the state, tools to assess park needs, ways to improve parks, success stories, parks funding and the State’s action plan. While no trails are discussed in the Plan, it does provide public comment on the need and desire for parks and recreation in the state. A majority of Californians agree that open space is needed where they live and of the benefits of recreation for youth, crime, health and the economy.

The Action Plan of the SCORP provides Statewide actions listed below:

1. Inform decision-makers and communities of the importance of parks.
2. Improve the use, safety, and condition of existing parks.
3. Use GIS mapping technology to identify park deficient communities and neighborhoods.
4. Increase park access for Californians including residents in underserved communities.
5. Share and distribute success stories to advance park and recreation services.

The Action Plan also provides Land and Water Conservation Actions listed below:

1. Give priority to projects that address unmet park and recreation needs, with emphasis on proposals to:
 - a. Create new parks within a half mile of underserved communities;
 - b. Expand existing parks to increase the ratio of park acreage per resident in underserved areas;
 - c. Renovate or create new outdoor facilities within existing parks not currently under 6(f)(3) protection;
 - d. Provide community space for healthy lifestyles, children’s play areas, environmental justice, cultural activities, historic preservation;
 - e. Engage community residents during the project concept and design process
 - f. Improve the use, safety, and condition of existing parks.
2. Increase the inventory of California Wetlands under federal 6(f)(3) protection that also meets public outdoor recreation needs through the efforts of multiple agencies.
3. Increase local demand for LWCF grants to utilize federal annual apportionments and Special Reapportionment Account funds in a timely manner.
4. Develop tools to enable easy identification of all California LWCF grant projects and their locations.

B.2.3 Castaic Lake State Recreation Area Operating Agreement)

In November 1969, an operating agreement was entered into between the State and County for the care, maintenance, development, and control of Castaic Lake State Recreation Area.[1] In September 1969, the Castaic Lake Recreation Plan was prepared by the State of California Department of Water Resources based on plans and information furnished by the State of California Department of Parks and Recreation presenting a development plan for the Castaic Project which described a proposed trail around Castaic Lake

“Equestrian and Trail Camps

A Riding and hiking trail would encircle Castaic Lake as shown on Plate 1, and would cross the Castaic arm on the Forebay dam. A section of trail would continue on north from Elderberry Mesa to the Castaic Canyon area and allow travelers to make connections with the camp area and the Fish Creek Service road. No trail would be located on the west shore of the Forebay because of the hazardous crossing of the powerhouse penstock on the steep terrain.”

B.3 REGIONAL AND LOCAL PLANS, POLICIES AND CODES

The regional planning documents and policies that address recreation resources in the vicinity of the CAMUTP include *Ventura County General Plan*, *Rim of the Valley Trail Corridor Master Plan*, *Santa Felicia Project Recreational Trail Plan*, *Ventura County Regional Trails and Pathways Final Master Plan Report*, *Santa Paula Branch Line Recreational Trail*, *County of Los Angeles General Plan 203*, *City of Santa Clarita General Plan*, *Santa Clarita Valley Area Plan (One Valley, One Vision)*, *Santa Susana Mountains Final Trails Master Plan*, *LACMC 22.44 Part 9–Rural Outdoor Lighting District Ordinance*, *LACMC 22.44.144–San Francisquito Canyon Community Standards District*, *LACMC 22.44.137–Castaic Area Community Standards District*, *Newhall Ranch Specific Plan*, *Northlake Specific Plan*, *County of Los Angeles Trails Manual*. More detailed information on each plan and how it relates to the Plan Area can be found in this section.

B.3.1 Ventura County General Plan, 2011-2015

The Ventura County General Plan was reviewed to assess opportunities to make regional trail connections between existing and proposed Ventura County trails that are located adjacent and immediately to the west of the Plan Area. While there are no direct linkages to current trails, there are goals within the plan document that could relate to future connections to the Ventura County trails system.

The goals for resource preservation, conservation, production, and utilization of resources in the Resources Appendix of the Ventura County General Plan are to inventory and monitor the County’s natural and man-made resources; plan for the preservation, conservation, efficient use of, enjoyment of, and

access to resources, as appropriate, within the County for present and future generations; and to identify and work with all entities responsible for the protection, management and enhancement of the County’s resources. The significant biological resources area in Ventura County provides wildlife habitat continuity with the existing and proposed SEAs along the County line in the Plan Area in Los Angeles County.

The Ventura County General Plan is applicable to the land directly west of the Plan Area, which is bound by the Ventura-Los Angeles County line. All of the land in Ventura County adjacent to the Area, noted as the Piru Area of Interest, has been classified in the Land Use section of the General Plan as Open Space. Ventura County’s goals for open space lands are to preserve the open space by limiting encroachment that would prematurely hamper or preclude the use or appreciation of the resources; acknowledge the presence of hazardous features where urban development should not occur; retain open space lands in a relatively undeveloped state to preserve future land use options; retain open space lands for outdoor recreational activities, parks, trails and for scenic lands; define urban areas by providing contrasting undeveloped areas; and recognize the intrinsic value of open space lands instead of regarding such lands as “areas waiting for urbanization.”

In the Parks and Recreation Subsection of the Public Facilities and Services Section of the General Plan, the County states that attempts have been made by the County and public and private organizations to establish an interconnected trail network throughout the County on both public lands and easements through private lands. One of the goals of the General Plan under Recreation is to “Establish or assist in the establishment of a Countywide network of trails which will meet the needs of equestrians, bicyclists, hikers and other trail user groups” which ties in with the CAMUTP goals.

B.3.2 Rim of the Valley Trail Corridor Master Plan, 1990

The Rim of the Valley Trail Corridor Master Plan was prepared to guide the Mountains Conservancy and the Legislature in preservation of resources within the Rim Corridor while providing public recreational facilities. Developed as a requirement of AB1516 with the goal of preparing an overall and coordinated plan of the Corridor area, the primary components were the

development of the Rim Valley Trail and corridor connections between the Santa Monica Mountains, Santa Susana Mountains and San Gabriel Mountains through an interlocking system of wildlife habitat and open space areas.

The Study Area of the plan is 492,674 acres in size and directly south of the Project Area. The objectives of the Plan were to have all trails in the Corridor provide opportunities for linear recreation in a natural setting and ensure continuity through the entire system for a range of users (hikers, bicyclists, and equestrians).

The plan identified existing general use trails and existing and proposed special use trails (for special population and user groups, such as mountain bicyclists); proposed open space and facilities for recreation and wildlife habitat; identified existing under-utilized public open space; adjusted the Valley Trail Corridor boundaries to support proposed wildlife habitat and recreation projects; and proposed programs that do not require land acquisition or facility development (such as park volunteer training or interpretation programming for young people).

The Rim of the Valley Trail Corridor encircles the San Fernando and La Crescenta Valleys. The SMMC describes the Rim of the Valley Trail as being intended to be an interesting and challenging long distance trail that provides a major physical linkage among the ecologically and aesthetically important areas in the Valley Trail Corridor system while facilitating multi-use trail recreation in a naturalistic setting. The definition criteria for the Rim of the Valley Trail involved connecting as many of the important parks and open spaces within the Rim of the Valley Trail Corridor as possible while remaining buffered by natural open space.

The Rim of the Valley Corridor Master Plan has defined three additional trail types to support the Rim of the Valley Trail: loop trails, which provide an opportunity to connect important natural or cultural resources (Santa Anita Canyon, Santa Clarita Woodlands, Placerita Canyon State/County Park, Happy Camp County Park and Santa Susana Mountains State Park) within the Corridor to the Rim of the Valley Trail without repeating a route; access trails, which provide a transition between developed, urban area and the natural open space of the Rim of the Valley Corridor area; and local trails, which provide trail access within and through the urban areas. The plan also

established a hierarchy of priority levels for the proposed projects, with the highest priority assigned to statewide significance, followed by those with regional significance, buffers and additions to existing public lands, and finally, projects that only serve local needs.

B.3.3 Santa Felicia Project Recreational Trail Plan, 2015

The Santa Felicia Project Recreational Trail plan was prepared to comply with the Santa Felicia Project, Federal Energy Regulatory Commission (FERC) License Number 2153-012. The project is located east of the project area in Ventura County. Article 411 by the United Water Conservation District (United). Article 411 of the FERC License required United to file a Plan for trail access provisions to the east side of Lake Piru, which would be adjacent to the CAMUTP Study Area. The Plan required United to identify existing trail sections along the east side of the lake. United confirmed that only private roadways existed on the east side of the lake, therefore United no longer intended to install the required trail link from the east. Without this connection, the Project and Lake Piru does not have a feasible link from the CAMUTP Area.

B.3.4 Ventura County Regional Trails and Pathways Final Master Plan Report, 1995

The Ventura County Regional Trails and Pathways Final Master Plan Report was developed to set the framework for non-motorized transportation in Ventura County. The plan includes details in the planning process for both local and regional trail systems, as well as information on organization and funding. This Report was the first step in an implementation process, providing recommendations as guidelines for preparing and implementation plan and managing the implementation process.

The Master Plan Report notes the Castaic/Santa Clarita areas as links to Los Angeles Community, specifically through planned trails along the Santa Clara River, with Lake Piru being the closest regional park connection to the CAMUTP Area.

Similar to the CAMUTP, The Committee came to a consensus that future trails should have multiple use designation, with a principle that shared use criteria be the standard of measurement. They state shared-use concepts include educational program and volunteer

efforts in promoting compatibility among users, and educational resources to disseminate the benefits and etiquette for shared use facilities.

The area connecting the CAMUTP Study Area to the rest of the Regional Trails and Pathways area is the Santa Clara River Corridor, specifically the area called out as the “Santa Clara River Valley Future Study Area. The Santa Clara River Corridor was, at the time the Report was published, the proposed rail/trail alignment that would be the backbone for the east/west travel of non-motorized transportation (NMT). The report does call out that portions of the trail may not be suitable for NMT facilities and that the land within agricultural areas would need to be studied to determine ways to minimize conflicts with operations. More information on that study can be found in the Santa Paula Branch Line Recreational Trail Master Plan section.

B.3.5 Santa Paula Branch Line Recreational Trail Master Plan, 1995

Stretching 32 miles from Highway 101 in the west to the Los Angeles County line in the east, the Santa Paula Branch Line (SPBL) rail corridor passes through the cities of Santa Paula and Fillmore as well as active agricultural areas. While 29 miles of track remain in active use, the future use of the corridor is to be determined. The Ventura County Transportation Commission (VCTC) purchased the corridor in 1995 from the Southern Pacific Transportation Company and manages the corridor with the potential to develop freight, commuter rail, utilities, and/or recreational trails and parks. The right-of-way averages 100 feet wide, but varies in places from 30 to 250 feet wide.

In the year 2000, VCTC adopted the Santa Paula Branch Line Recreational Trail Master Plan and certified the Santa Paula Branch Line Recreational Trail Master Plan Environmental Impact Report (EIR). The SPBL Recreational Trail Master Plan provides design guidelines, preliminary engineering, and a preferred alignment for the trail, traversing the cities of Ventura, Santa Paula, Fillmore, the community of Piru, and agricultural areas in unincorporated Ventura County. To date, three trail segments have been constructed in Santa Paula, Fillmore, and Piru. In response to significant concerns and protest from agricultural interests, trail construction in the agricultural areas of the unincorporated County was prohibited by a 15-year agreement between VCTC, the County, and property

owners adjacent to the SPBL. This agreement expires in February 2015.

The rail corridor is owned in fee by VCTC. Along much of the SPBL, agricultural operations line both the north and south sides of the VCTC right-of-way and in some areas encroach onto the 100-foot right-of-way, pursuant to existing lease agreements between VCTC and the agricultural operators. Many agricultural crossings are legally entitled; of these, some are location-specific while others are generally or vaguely located. Some farmers are traveling on the right-of-way laterally without the legal right to do so. Agricultural uses along the SPBL change in response to market demand and crop viability. Currently, the adjacent properties generally include row crops and orchards (e.g., avocados and lemons).

In 2013, the County prepared engineering plans and an EIR addendum for its Piru Commuter Bicycle Path Phase III Project, which proposed construction and operation for an approximately 1-mile segment of the larger SPBL Recreation Trail in the Piru area. The project was met with significant opposition from agricultural interests, including the Farm Bureau; the Ventura County Coalition of Labor, Agriculture and Business; and the County Agricultural Commissioner. Concerns expressed by agricultural landowners and interests included vandalism, litter, increased liability, trespassing, the potential loss of the ability to cross the SPBL corridor, and the potential loss of existing farmland to buffers between recreational and agricultural uses. No new updates have been made or further extensions developed to the SBPL Recreational Trail Plan that would connect the Trail to the Multi-Use Trails Study Area.

B.3.6 County of Los Angeles General Plan 2035, 2015

The County of Los Angeles General Plan 2035 is a guiding document for community based planning with an emphasis on sustainability. The CAMUTP can be directed by this document’s attention to designing for a sense of place, sustainable design, conservational efforts, the land use designation of public and semi-public land, and the parks and recreation requirements. The County designates the Plan Area as the Santa Clarita Valley Area and details of the area can be seen in **Figure B-7**.

Regional Trail System

Figure 10.1

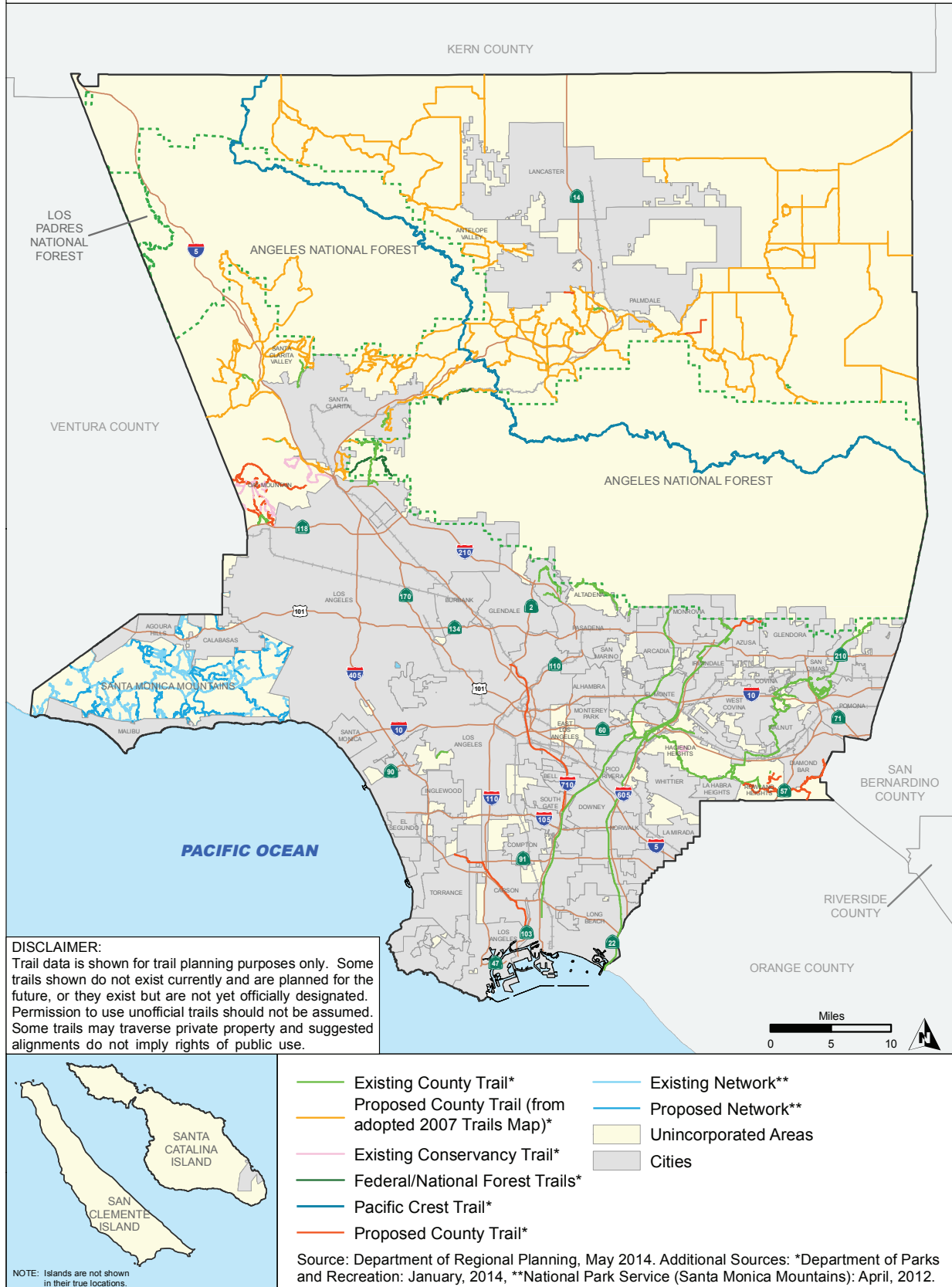


Figure B-7 Los Angeles County Regional Trail System from the County's General Plan 2035

Goal M 2 of the Mobility Element are interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use. Multiple policies reflect the County's desire to address this goals, including:

- Encourage the implementation of future designs concepts that promote active transportation, whenever available and feasible. (Policy M 2.6)
- Require sidewalks, trails and bikeways to accommodate the existing and projected volume of pedestrian, equestrian and bicycle activity, considering both the paved width and the unobstructed width available for walking. (Policy M 2.7)
- Connect trails and pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations. (Policy M 2.8)

Goal M 7 of the Mobility Element is to create transportation networks that minimizes negative impacts to the environment and communities. Multiple policies related to this goal include:

- Where the creation of new or the retrofit of roadways or other transportation systems is necessary in areas with sensitive habitats, particularly Significant Ecological Areas (SEAs), use best practice design to encourage species passage and minimize genetic diversity losses. (Policy M 7.4)
- In rural areas, require rural highway and street standards that minimize the width of paving and the placement of curbs, gutters, sidewalks, street lighting, and traffic signals, except where necessary for public safety. (Policy M 7.5)

The Air Quality Element of the General Plan includes Goal AQ 3, the Implementation of plans and programs to address the impacts of climate change. Policies related to this goal include:

- Facilitate the implementation and maintenance of the Community Climate Action Plan to ensure that the County reaches its climate change and greenhouse gas emission reduction goals. (Policy AQ 3.1)
- Reduce energy consumption in County operations by 20 percent by 2015. (Policy AQ 3.2)

- Reduce water consumption in County operations. (Policy AQ 3.3)
- Support rooftop solar facilities on new and existing buildings. (Policy AQ 3.6)

Chapter 9 of the document addresses Conservation and Natural Resources. In section 2, *Open Space Resources*, Private Open Space is addressed. The document states that open space dedications are defined as privately-owned lands that have been set aside for permanent open space as part of a larger land development proposal. The California Open Space Easement Act of 1969 sets forth general conditions governing the creation of recognized open space easements. Agreements or contracts establishing such easements specify the standards and conditions for uses and activities permitted within the area covered. Commitment of such lands to open space use in perpetuity is typically assured through deed-restrictions or dedication of construction rights secured at the time of development permit approval. Within dedicated open space areas, standards and conditions for use are specifically set forth as conditions of the zoning permit or subdivision tract map.

Section 3 of Chapter 9 discusses Significant Ecological Areas (SEAs) which the General Plan works to protect and enhance to "ensure that the legacy of unique biotic diversity is passed on to future generations." The Plan states that SEAs designation is given to land that contains irreplaceable biological resources and is detailed in Appendix E of the document. It states "each individual SEA is sized to support sustainable populations of its component species, and includes undisturbed or lightly disturbed habitat along with linkages and corridors that promote species movement." Two of the SEAs in the Plan Area are included as important linkages to ensure regional biodiversity as well as species and habitat connectivity. The Santa Felicia Creek and Santa Clara River SEAs along with other local SEAs and The Santa Monica Mountains link the habitats in Ventura County to the Tehachapi and San Gabriel Mountains.

Chapter 10 of the General Plan 2035 is the Park and Recreation Element. Though many goals relate to the use of open space and creation of recreation areas within the county, policies related to Goal P/R 4, "Improved accessibility and connectivity to a comprehensive trail system including rivers, greenways, and

community linkages” are most relevant to the CAMUTP. These include:

- Create multi-use trails to accommodate all users. (Policy P/R 4.1)
- Develop staging areas and trail heads at strategic locations to accommodate multi-use trail users. (Policy P/R 4.2)
- Develop a network of feeder trails into regional trails. (Policy P/R 4.3)
- Maintain and design multi-purpose trails in ways that minimize circulation conflicts among trail users. (Policy P/R 4.4)
- Collaborate with other public, non-profit, and private organizations in the development of a comprehensive trail system. (Policy P/R 4.5)
- Create new multi-use trails that link community destinations including parks, schools and libraries. (Policy P/R 4.6)

B.3.7 City of Santa Clarita General Plan, 2011

The City of Santa Clarita General Plan was prepared pursuant to California Government Code Sections 65300 et. seq., which require that each city and county within the state “adopt a comprehensive, long-term general plan for the physical development of the county or city, and of any land outside its boundaries which in the planning agency’s judgment bears relation to its planning.”

Along with the City of Santa Clarita, areas outside of the city boundary have been included in the “sphere of influence” for the General Plan. This plan was created concurrently with the Santa Clarita Valley Area Plan and Los Angeles County’s General Plan.

The Circulation element in the General Plan discusses the desire to incorporate multi-use trails and bike paths into the comprehensive transportation network. Within this section, An MTA study noted gaps in area bikeway within the Study Area along the Old Road, San Francisquito Creek and Castaic Creek.

B.3.8 Santa Clarita Valley Area Plan (One Valley, One Vision), 2012

The Santa Clarita Valley Area Plan is a long-range planning document that is a component of the County General Plan, which provides goals, objectives, policies and implementation actions that apply only to the unincorporated areas of the Santa Clarita Valley. The

Area Plan is also a component of “One Valley One Vision,” through a joint planning effort with the City of Santa Clarita and their General Plan, adopted in 2011 to provide a unified vision for development and conservation for the entire Santa Clarita Valley. The Area Plan encompasses several of the planning efforts previously outlined, including the Newhall Ranch Specific Plan and the Northlake Specific Plan, and fully encompasses the CAMUTP Area. The Area Plan outlines an objective to plan for integrated trail systems, including bikeways, walkways, and multi-purpose trails to provide access among Valley communities and to regional centers outside of the Valley. The Area Plan includes a Master Plan for Trails throughout the Santa Clarita Valley, as part of the Circulation and Open Space Element that highlights existing trails of the County Trail System and Newhall Ranch Specific Plan (**Figure B-8**).

B.3.9 Santa Susana Mountains Final Trails Master Plan, 2015

The Santa Susana Mountains Final Trails Master Plan (SSMFTMP) is a long-range planning document that is intended to guide the construction of proposed trails and the maintenance of existing trails in the SSMFTMP Area, 38 square miles of land in the unincorporated territory of Los Angeles County. The proposed trails in the SSMFTMP are included as part of the County’s General Plan 2035, which was approved in October 2015. Los Angeles County’s SSMFTMP Area is located southwest of the Plan Area. Trail alignments from the Master Plan have recently been adopted, but are not within or adjacent to the CAMUTP area.

B.3.10 LACMC 22.44 Part 9 Rural Outdoor Lighting District Ordinance, 2012

The Rural Outdoor Lighting District ordinance provides regulations that will permit reasonable uses of outdoor lighting for nighttime safety and security while promoting dark skies for the enjoyment and health of humans and wildlife and conserve energy and resources. The boundary of the Rural Outdoor Lighting District in Los Angeles County can be seen in **Figure B-10**.

The Ordinance applies to “all new lighting, major additions, replacement lighting, resumption of use after abandonment, and nonconforming lighting.” Nonconforming Lighting refers to existing nonconforming lighting which “includes all outdoor lighting on all residential or agriculture zoned properties and any

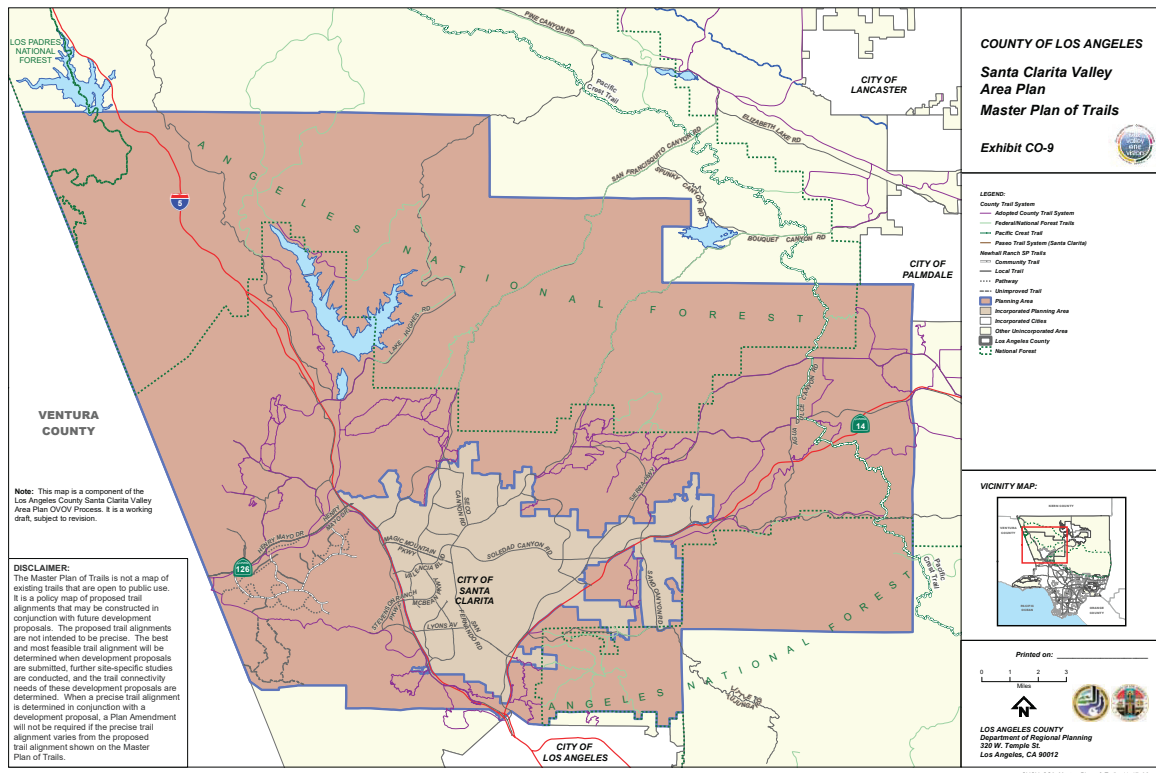


Figure B-8 Santa Clarita Valley Area Plan - Master Plan of Trails

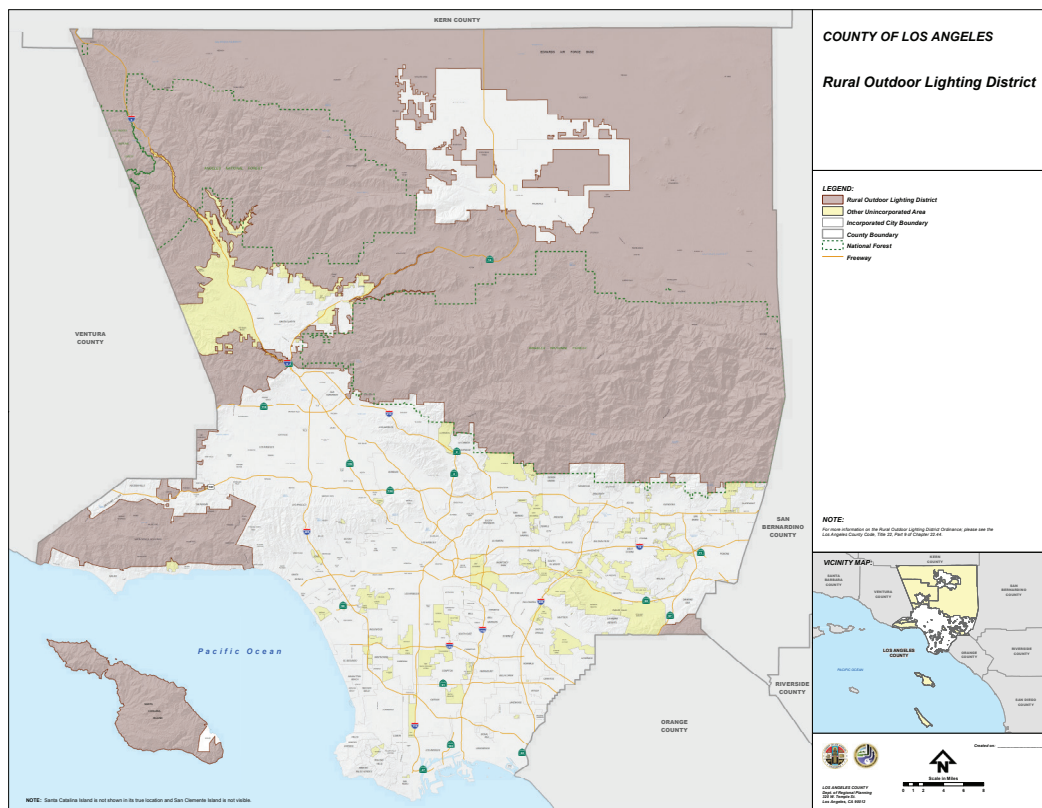


Figure B-9 County of Los Angeles Rural Outdoor Lighting District Boundary Map

nonresidential zone property where outdoor lighting causes light trespass onto a residential or agriculture zone property.” All outdoor lighting which did not meet the requirements of this ordinance was required to be removed or made to comply at the time of the documents release.

Requirements of lighting include:

- Shielding: All outdoor lighting shall be fully shielded. Fully-shielded means that the top of the fixture is covered and the sides are covered to a point where light is projected below a horizontal plane.
- Lighting Height Limits: Maximum height limits established to avoid light pollution and light trespass. Height limits for residential, agricultural, open space and watershed zones is 20 feet, except each outdoor light fixture installed above 15 feet shall have an output rating of less than 400 lumens. Height limit for commercial zones is 30 feet, and height limits for industrial zones is 35 feet. Exception for outdoor recreation fields in any zone, which may be mounted up to 75 feet in height.
- Hours of Operation for Commercial, Industrial and Mixed Uses: Outdoor lighting shall be turned off between the hours of 10 p.m. and sunrise. Where uses operate past 10 p.m. lighting shall be turned off within one hour after the close of business. If lighting is required after 10 p.m. for safety and security light levels shall be reduced a minimum of 50 percent between 10 p.m. and sunrise or motion sensors shall be used.
- Street Lighting: Street lights shall be installed at intersections on County roads where the Director of Public Works determines that street lighting would alleviate traffic hazards, improve traffic flow, and promote safety and security for pedestrians and vehicles. Street lights shall be placed the maximum distance apart with the minimum lumens allowable by Public Works.
- Outdoor Recreation Facilities: Lighting for playing fields shall be fully shielded and aimed so their beams fall within the primary activity area and not cause light trespass onto adjacent properties.
- Signs: Outdoor lighting for all new signs shall be mounted to the top of the sign, fully shielded, and be oriented downward.

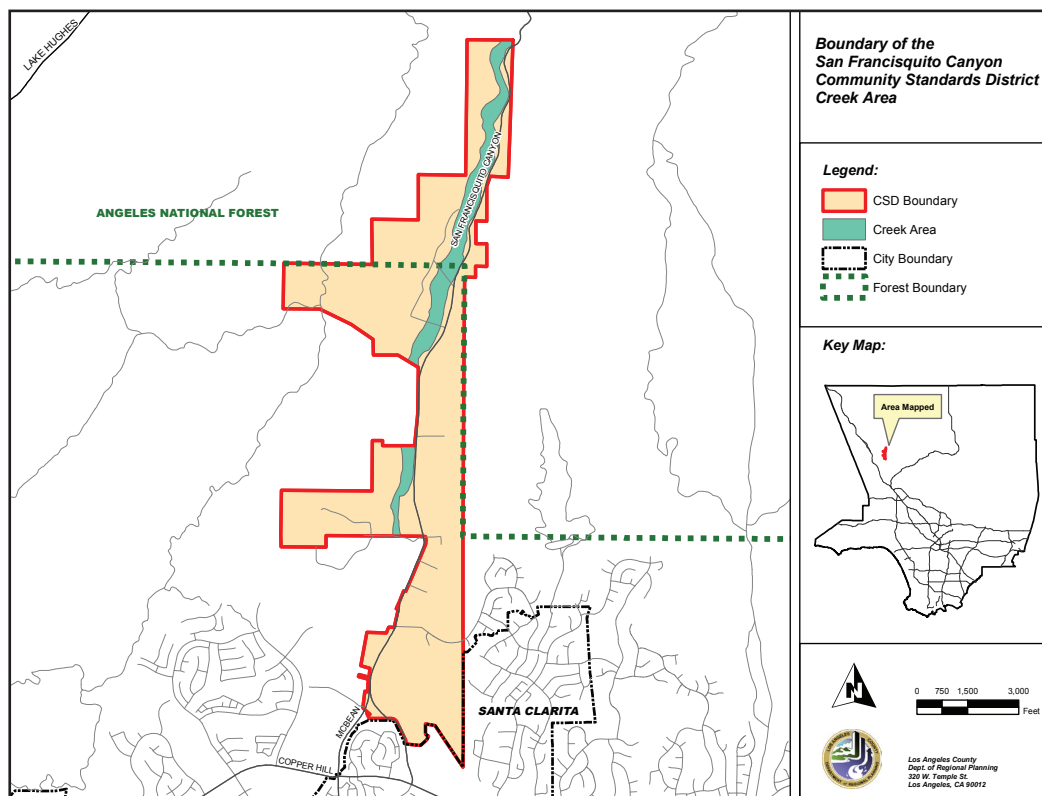


Figure B-10 San Francisquito Canyon Community Standards District Area

- **Prohibited Lighting:** These types of lighting are prohibited: drop-down lenses, mercury vapor lights, ultraviolet lights, and searchlights, laser lights, or any other lighting that flashes, blinks, alternates or moves.

Outdoor lighting exempt from the Rural Outdoor Lighting District requirements relevant to the CAMUTP includes:

- Lighting for a public facility operated by the Sheriff's Department, Probation Department, or similar department or entity, that keeps incarcerated persons, provided such lighting is needed for the security and/or operation of the facility.
- Outdoor lighting required for compliance with the federal Americans with Disabilities Act.

The Rural Outdoor Lighting Ordinance modifies the previous Community Standards Districts of Castaic Area, and San Francisquito Canyon that are part of the CAMUTP Area.

B.3.11 Los Angeles County Municipal Code 22.44.144 - San Francisquito Canyon Community Standards District, 2009

The San Francisquito Canyon Community Standards District (SFC CSD) was "established to protect and enhance the community's secluded rural, equestrian, and agricultural character as well as its natural features, including ridgelines, significant ecological areas, and flood plains. The standards are intended to ensure reasonable access to public riding and hiking trails, encourage the keeping of animals, minimize the need for urban infrastructure, and preserve the beauty of this natural gateway into the Angeles National Forest." The boundary of the SFC CSD can be seen in **Figure B-10**.

Outdoor lighting requirements of the SFC CSD fall under the previously mentioned Rural Outdoor lighting District ordinance.

Trail guidelines that are pertinent to the CAMUTP are

- When required by the LACDPR in accordance with the trails map in the Santa Clarita Valley Area Plan, all new land divisions, including minor land divisions, shall contain accessible multi-use trails for pedestrian hiking and walking, mountain bicycling, and equestrian uses. Where feasible, access to these trails must be in the vicinity of the subject land division. These trails shall provide connections, where feasible, to significant recreational

uses, including but not limited to, open space areas, parks, trail heads, bike paths, historical trails or sites, equestrian centers, equestrian staging areas, camp grounds, and conservation or nature preserve areas.

- Trail construction shall be completed in accordance with the conditions set forth by the LACDPR. All information pertaining to trail requirements shall be shown on tentative parcel or tract maps and the final parcel or tract map prior to final map recordation.
- In reviewing land divisions, the Hearing Officer or Commission shall consider input by the Santa Clarita Valley Trails Advisory Committee, if provided, regarding trail development.

For any areas that may require grading:

- A conditional use permit, as provided in Part 1 of Chapter 22.56, shall be required for any grading on a lot or parcel of land, or in connection with any project, that exceeds five thousand (5,000) cubic yards of total cut plus total fill material within any twenty-four (24)-month period. For purposes of computing the five thousand (5,000)-cubic-yard threshold amount, grading necessary to establish a turnaround required by the Fire Department shall be excluded, but not grading for any private street, right-of-way, or driveway leading to such turnaround.
- In approving a conditional use permit for grading, the Hearing Officer or Commission shall make the following findings in addition to those required by Section 22.56.090:
 - The grading will be performed in a manner that minimizes disturbance to the natural landscape and terrain through design features, including but not limited to, the location of building pads in the area of the project site with the least slope and/or near a paved street traveled by the public; and
 - The grading will be accompanied by other design features that maximize preservation of visual quality and community character, including but not limited to, reduced structural height, the use of shapes, materials, and colors that blend with the surrounding environment, and the use of native vegetation for concealment.

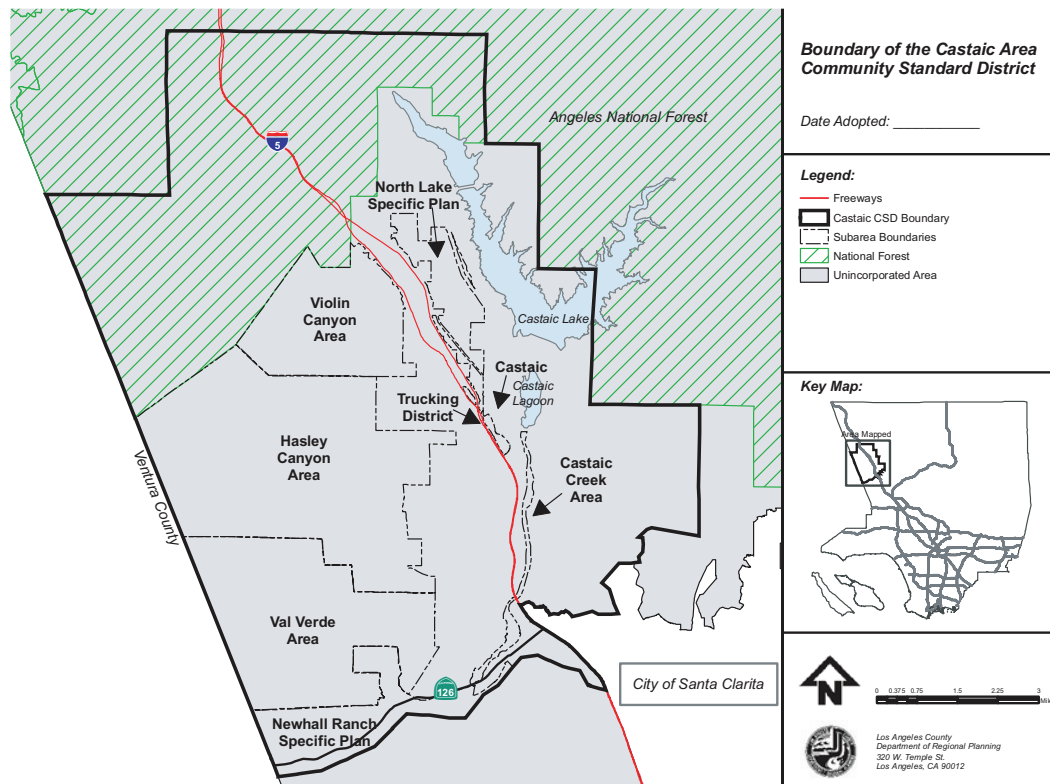


Figure B-11 Castaic Area Community Standards District Boundary

B.3.12 Los Angeles County Municipal Code 22.44.137 - Castaic Area Community Standards District, 2004

The Castaic Area Community Standards District (“CSD”) was established to protect the rural character, unique appearance, and natural resources of the Castaic Area communities. Along with ensuring that new development will be compatible with the Castaic Area’s existing rural neighborhoods the CSD also promotes the goals of the Santa Clarita Valley Area Plan and the establishment of “trucking-related businesses in locations where trucking activities presently occur, while ensuring that trucking businesses do not interfere with the community’s residential character, circulation, and traffic patterns”.

The Castaic CSD Area is shown in **Figure B-11**. Areas within the CSD area with specific plans, or development agreements that are legally valid and were created prior to the effective date of the CSD and have not terminated are excluded from the CSD, along with development proposals with building permits, tentative tracts and parcel maps, general plan and/or area plan amendments; and zoning permits, zone changes, conditional use permits, variances, site plan reviews,

or any other zoning permits, which were submitted or deemed complete prior to the November 30th, 2004 effective date.

The regulations for trails within the Castaic Area CSD include:

- Trails must be included in accordance to the Master Plans of Trails from the LACDPR and the Santa Clarita Valley Area Plan. Access routes must be provided, to the greatest extent possible to the Master Plan trails. All trails must accommodate both pedestrian and equestrian uses. Along with other trails required, lots with 75% of the residential lots equal or greater to 20,000 square feet in net area shall reserve equestrian trail that is eight feet in width, adjacent to public right of way and connecting to a network of equestrian trails.
- If trails are not required to be maintained by the LACDPR, they shall be maintained by a homeowner’s association or by a special district.
- The trails and access routes that must be constructed so as to be suitable for acceptance and maintenance by the parks department are those trails and access routes identified in the

Master Trail Plan and the Santa Clarita Valley Area Plan, and those trails and access routes located on private property for which a trail easement has been dedicated to the County.

- The Alternative trail proposal (D) states that If it is infeasible for a subdivider to provide trails in accordance with the Master Plan or Santa Clarita Valley Area Plan, alternative trail proposals may be developed subject to the minor variation provisions in subsection H, below. The alternative trail proposal shall, to the greatest extent possible, and without requiring off-site land acquisitions by the subdivider, be connected to a network of trails shown on the Master Plan and be approved by the parks department.

Other areas within the Ordinance that might assist the development of the CAMUTP are the Significant Ridgeline Protection, Locally indigenous vegetation and Fences. Regulations of note include:

- Open spaces, conservation areas, parks, recreation areas, and/or trails may be permitted on significant ridgelines, or within the respective 50-foot and 25-foot restricted areas surrounding such significant ridgelines provided an approval is obtained pursuant to subsection D.6.d (Section D.6.c.iv.)
- The removal or destruction of locally indigenous vegetation is prohibited on a parcel of land one acre or greater in size, where the area of removal or destruction is greater than ten percent of the parcel. For purposes of this subsection, locally indigenous vegetation is defined as the vegetation listed on the Castaic Area List of Indigenous Plants, prepared and maintained by regional planning. This subsection shall not apply to the removal or destruction of locally indigenous vegetation
- Fences along any public or private road shall comply with the applicable provisions of Section 22.48.160 and shall be made of split rail, open wood, rock, block, or iron. Chain link may be substituted for these materials but must be landscaped along the entire length of the fence to a height determined appropriate by the director. Such landscaping shall be maintained in the manner described in subsection G.1.c.iv.

B.3.13 Newhall Ranch Specific Plan, 2003

The Newhall Ranch Specific Plan is a comprehensive document intended to guide future development of

the Newhall Ranch community. The Specific Plan consists of approximately 11,963 acres located west of the City of Santa Clarita and the Community of Stevenson Ranch, north of the Santa Susana Mountains, on both sides of State Highway 126 and the Santa Clara River, and east of the Ventura County line within the trail planning area. The Plan Area is located southwest of the CAMUTP Area.

The Plan includes 20,885 residential units including 423 second units on the same lots as the 423 estates with a conditional use permit, and 629 acres of mixed-use development including 4,101 of the total 20,885 planned units. The Plan also includes 67 acres of commercial uses, 249 acres of business park uses, 37 acres of visitor serving uses, 1,010 acres of open area including 141 acres of parks. Approximately 5,159 acres are planned for special management areas that are designated as permanent open space. Additionally, the Plan includes 50 acres in 10 neighborhood parks, a public trail system, and an 18-hole golf course, two fires stations, a public library, and electrical substation, the reservation of five elementary school sites, one junior high school site, one high school site, and a 6.8 million gallon-per-day water reclamation plant. The Plan is proposed to be built out over a 25-year period.

Among other tasks, the Specific Plan provides plans, implementation programs, and development regulations and standards for the protection of open areas adjacent to development and two large special resource management areas (totaling approximately 6,170 acres). The Specific Plan identified portions of two Significant Ecological Areas (SEAs) within the Specific Plan Area (Santa Susana Mountains, #20, and Santa Clara River, #23); two County-proposed regional trails that traverse the Specific Plan Area (Pico Canyon Trail and Santa Clara River Trail); and the developable area within the Specific Plan Area, which extends to a portion of the boundaries of the proposed trail planning area. The Newhall Ranch Specific Plan identifies eight land use designations adjacent to the trail planning area:

- Open Area
- Estates development
- Low Density residential development
- Low-Medium Density residential development
- Medium Density residential development
- High Density residential development
- Mixed Use development

- Business Park

The Newhall Ranch Specific Plan was adopted in 2003 with a range of objectives, including establishing a Trails Master Plan of a diverse system of pedestrian and bicycle trails, segregated from vehicle traffic, to serve as an alternative to automobile use. According to the Newhall Ranch Specific Plan Trails Master Plan, one unimproved trail (dirt paths following existing utility roads or natural topography), one pathway (multi-purpose bicycle and pedestrian trail adjacent to local collector roadway), one local trail (joint pedestrian/bicycle route which may or may not follow a roadway and provides access to amenities, the Community Trail network, or links villages within the Plan Area), one community trail (unified pedestrian and bicycle route in landscaped parkway), and one equestrian trail component of a community trail will extend from the Newhall Ranch into the trail planning area. Equestrian use of unimproved trails adjacent to the trail planning area is restricted to the High Country zones south of SR 126, which are not located within the trail planning area. The homes in the Newhall Ranch Specific Plan are included in the County's RHNA housing allocation.

The Specific Plan's Master Trails Plan connects to a larger multi-use Regional River Trail that follows the Santa Clara River and State Route 126, creating a connection between the Santa Clarita Valley and Ventura County. Similarly, the Specific Plan trails can provide a connection to and from the CAMUTP Area and the rest of the region. The Newhall Ranch Specific Plan in an ongoing document that contains guidance, regulations and standards relating to aspects of multi-use trails, such as land use and site plan standards.

B.3.14 Northlake Specific Plan, 1992

The Northlake Specific Plan is a regulatory document that serves as the land use and zoning guidelines for the Northlake area, located in northwestern Los Angeles County. The Northlake Specific Plan consists of approximately 1,330 acres located north of the community of Castaic, east of Interstate 5, and west of Castaic Lake in the Castaic, Santa Clarita, Agua Dulce sub area. The Plan includes 2,337 single family dwellings on 504.8 acres, 1,286 multi-family units on 95.5 acres, a 166.9-acre golf course, 169,884 square feet of commercial uses, and 545,589 square feet of light industrial uses on 50.1 acres, a fire station, a dedicated public library site, two school/park sites and 476.4 acres of open space.

The Northlake Specific Plan was adopted in 1992. Particularly relevant components include a Policy of the Plan to develop a network of multi-use trails for biking, jogging and equestrian use, including a policy to plan and develop a network of bicycle routes and facilities as well as pedestrian walkways within the Specific Plan area that interconnect with other bicycle routes and transportation modes. The Plan does not specify the proposed locations of any trails.

B3.15 County of Los Angeles Trails Manual, 2011

The Los Angeles County Trails Manual (Trails Manual) clarifies the standards for the alignment and design of the trails that will comprise the County Parks Castaic Area system. Adopted in 2011, the Trails Manual is a comprehensive guide for the planning, design and implementation of trails by Los Angeles County.

The Trails Manual includes Trail Design Guidelines (*Section 4.0*) that address methods of trail alignment and design to provide trails that are sustainable; controlling runoff and avoiding erosion; requiring limited maintenance; accommodating users well; and creating minimal environmental impact. It includes trail classifications to accommodate trails in different settings. It is County Parks' policy and objective that all trails will be multi-use whenever possible – accommodating pedestrians/hikers, people walking dogs, mountain bikers, and equestrians.

The Trails Manual provides County staff and developers with guidelines and standards for trail planning, design, development, and maintenance of County Trails. The purpose of the Trails Manual is to provide guidance to County departments that interface with trail planning, design, development and maintenance of hiking, equestrian, and mountain biking recreational trails, while addressing physical and social constraints and opportunities associated with the diverse topographic and social conditions that occur in the unincorporated territory of the County.

The Trails Manual provides guidances in the areas of: Trail types by users, location, purpose and conditions; alignment layout based on topography, experience, environmental factors, costs and needs of the community; trail design standards; wayfinding; trail amenities and features such as parking, restrooms, landscaping, drinking water, bicycle racks, shade structures, equestrian amenities, and trailheads; and trail construction guidelines.

APPENDIX C: ADDITIONAL DESIGN STANDARDS

C.1 TRANSPORTATION STANDARDS AND GUIDELINES

Where a trail parallels the roadway or is in the right-of-way (ROW) and may serve transportation, as well as recreation functions, and where the trail receives state or federal funding for non-motorized transportation facilities, the following federal and state standards may apply.

From *Section 4.3.3.2 Urban Trails*:

“Urban trails, due to their locations in highly populated areas, are utilized by many people at different fitness levels for a range of reasons. Therefore, safety is the most important consideration in designing urban trails. It is important that urban trails are designed in accordance with traffic engineering standards. ***The Metropolitan Transportation Authority Congestion Management Plan (CMP) and the Transportation element of the County of Los Angeles General Plan should be consulted to determine the traffic impacts of a trail.*** In addition, way-finding signs ensure the safety of urban trails. The purpose of urban trail signs is to indicate the required change in traffic, the behavior required of the trail users, and the need to switch gears at intersections.¹

Fencing is also important in the design of urban trails. Fencing identifies the route of the trail as well as alerts motorists when trails are in the proximity of streets. Fencing should be shorter than 50 percent of the trail easement width and outside the trail tread and easement. Fencing over 30 inches in height should have a second rail to prevent ponies from ducking under a high top rail. Fencing should also be smooth to prevent injuries to trail users. An example of an urban trail is the Walk for Health Trail in Kenneth Hahn State Recreation Area (See *Figure 4.3.3.2-1, Walk for Health Urban Trail in Trails Manual*).

C.1.1 AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

The AASHTO Guidelines for the Development of Bicycle Facilities is the leading national document with guidelines for designing on-street bicycle and facilities and shared use paths. The most recent version of this nationally recognized document is the 4th Edition, dated 2012.

Rural Roads

The 2012 “AASHTO Guide for the Planning, Design, and Operation of Bicycle Facilities,” makes several recommendations to accommodate bicyclists and pedestrians on rural roadways. Adding or improving paved shoulders on rural roadways with higher speeds or traffic volumes has many safety benefits for motorists, bicyclists and pedestrians. Expanded shoulders provide space for maintenance operations, to escape potential crashes, or for temporary storage of disabled vehicles. They extend the service life of the road by reducing edge deterioration and further improve sight distances in areas with curves and cut sections. Paved shoulders can benefit pedestrians as well by providing a place for them to walk in locations where there is no sidewalk and the current roadside condition is unsuitable for walking.

Roadway retrofits for bicycle facilities are best accomplished as part of repaving or reconstruction projects. On uncurbed cross sections with no vertical obstructions immediately adjacent to the roadway, paved shoulders should be at least four feet (1.2 m) wide to accommodate bicycle travel. Rugged terrain and other physical features however, may impact the amount of horizontal space available for a roadway section. In retrofit situations where minimal right-of-way is available, a minimum width of three feet (0.9 m) of operating space is allowed between the edge line of the vehicle travel lane and the edge of pavement (where there is no curb). Where physical space is limited, additional real estate for shoulders may be gained by restriping roadways to decrease the width of vehicle travel lanes. The AASHTO Draft Guide states the following:

1. City of Los Angeles. Department of city Planning. February 2004. *Guide to Trail and Horsekeeping Specifications, New Construction, Private Property easements, and Public Right of Way. “Development of Trails.”* Prepared by the foothill Trails District Neighborhood Council Ad Hoc Trails Committee.

“Where the total width of the outside travel lane is 14 feet (4.3 m), it would be preferable to instead provide a 10-11 foot (3.0 - 3.4 m) travel lane and a 3 - 4 foot (0.9 - 1.2 m) shoulder. Re-striping a 14 feet (4.3 m) travel lane as a 12 foot (3.7 m) lane and a 2 foot (0.6 m) shoulder is not recommended. Since the paved shoulder would not accommodate bicycle operating width, and trying to avoid or repeatedly crossing an edge stripe is uncomfortable, bicyclists would need to ride in the travel lane instead. Even if a bicyclist manages to ride (partly or mostly) on such a narrow paved shoulder, this design may convey a misleading impression of adequate width to a motorist overtaking the bicyclist in the adjacent travel lane, when in fact it would be necessary for the motorist to be driven at least part way into the next lane in order to pass the bicyclist with adequate clearance.”

Signs should be used on rural roadways where non-motorized users are anticipated, to alert motorists that bicyclists may be encountered and that they should be mindful and respectful of them. Options available include the “Share the Road” sign assembly (W11-1 + W16-1P), shown in **Image C.1**.

The AASHTO Draft Guide further states that rumble strips create a potential hazard for bicyclists and are not recommended to be used on shoulders where cycling is anticipated. If they are to be used, a minimum clear path of four feet from the rumble strip to the outside edge of the paved shoulder should be provided.

AASHTO Design Guidelines

- Paved shoulders should be at least four feet wide
- In retrofit situations where minimal right-of-way is available, paved shoulder should be a minimum of three feet wide
- Where physical space is limited, additional width for shoulders may be gained by restriping roadways to decrease the width of vehicle travel lanes

Shared Use Paths

A shared use path allows for two-way, off-street bicycle and pedestrian use. These facilities are frequently found in parks, along rivers, beaches, and in greenbelts or utility corridors where right-of-way exists and there are few conflicts with motorized vehicles.



**Image C-1 “Share the Road” sign assembly
(W11-1 + W16-1P)**

AASHTO Design Guidelines

- Width: Minimum for a two-way shared-use path (only recommended for low traffic situations): 10 feet
 - Recommended for high-use areas with multiple users such as joggers, bicyclists, rollerbladers and pedestrians: 12 feet or greater
 - 8-foot-width may be used for a short distance due to physical constraint
- Lateral clearance: 2 feet or greater shoulder on both sides.
- Overhead clearance: 8 feet minimum, 10 feet recommended.
- Maximum design speed for shared-use paths: 20 mph. Speed bumps or other surface irregularities should not be used to slow bicycles.
- Grade:
 - Recommended maximum: 5%
 - Steeper grades can be tolerated for a maximum of 500 feet
- Railings
 - Protective railings, fences, or barriers should be a minimum of 42 inches
 - 48-inch railing height is recommended where there are hard corners or sharp curves on a

given path, particularly on bridge approaches. Vertical balusters are not recommended for railings designed to provide protection for bicycles to prevent snagging bicycle pedals or handlebars.

Sidepaths

A sidepath is a shared use path located immediately adjacent and parallel to a roadway. AASHTO provides guidelines for the appropriate use of sidepaths but states that a “pathway adjacent to the road is generally not a substitute for the provision of on-road accommodation such as paved shoulders or bike lanes.” Sidepaths can be considered under the following conditions:

- The path will generally be separated from all motor vehicle traffic.
- Bicycle and pedestrian use is anticipated to be high.
- To provide continuity with an existing path through a roadway corridor.
- The path can be terminated at each end onto streets with good bicycle and pedestrian facilities, or onto another well-designed path.

There is adequate access to local cross-streets and other facilities along the route.

AASHTO Design Guidelines

- A sidepath should satisfy the same design criteria as shared use paths in independent corridors.
- A minimum 5-foot separation between the sidepath and a high-speed roadway is recommended. Where the separation is less than 5 feet, a physical barrier or railing should be provided.

C.1.2 FEDERAL HIGHWAY ADMINISTRATION (FHWA)

The United States Department of Transportation (USDOT) FHWA has adopted a policy statement that bicycling and walking facilities will be incorporated into all transportation projects unless exceptional circumstances exist. FHWA references the use of the best currently available standards and guidelines such as AASHTO and the MUTCD. Furthermore, all federally

funded transportation enhancement (TE) projects must be in full compliance with ADA.

Manual of Uniform Traffic Control Devices (MUTCD)

The MUTCD defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bike-ways, and private roads open to public traffic. The MUTCD is published by the FHWA under 23 Code of Federal Regulations (CFR), Part 655, Subpart F. The MUTCD is a compilation of national standards for all traffic control devices, including road markings, highway signs, and traffic signals. It is updated periodically to accommodate the nation’s changing transportation needs and address new safety technologies, traffic control tools and traffic management techniques.

The MUTCD is the national standard, but state transportation agencies differ in how they comply with MUTCD standards. Some states adopt the MUTCD as their standard. Other states adopt the national MUTCD along with a state supplement that might prescribe which of several allowable options are selected for the state’s specific purposes. Still other states, California included, use the national MUTCD as the basis for developing their own State Traffic Control Device manuals, which must be in substantial conformance to the national MUTCD. Caltrans adopted the California MUTCD (CA MUTCD) in January 2012 (see Section 4.3 of this chapter).

Designing Sidewalks and Trails for Access, Part II of II: Best Practices Design Guide

The FHWA’s Designing Sidewalks and Trails for Access, Part II of II: Best Practices Design Guide (2001) is another key resource for ADA-compliant sidewalk and trail design. The Design Guide provides planning, assessment, and design guidance for trails. For the purposes of the guidebook, a trail is defined as a path of travel for recreation and/or transportation within a park, natural environment, or designated corridor that is not classified as a highway, road, street, or sidewalk. In Chapter 12 (planning) and Chapter 13 (assessment), recreation trails and shared-use paths are discussed as one unified topic. In the design chapters (Chapters 14

2. <http://www.fhwa.dot.gov/environment/sidewalk2/index.htm>

and 15), shared-use paths and recreation trails are discussed separately.²

C.1.3 CALIFORNIA DEPARTMENT OF TRANSPORTATION

Highway Design Manual (HDM)

The State of California, Department of Transportation (Caltrans) Highway Design Manual is used by Caltrans staff and non-Caltrans project managers and planners proposing designs for projects within the Caltrans right-of-way. The design standards cover a wide array of design focus areas including drainage, pavement, and basic design policies. Chapter 1000 specifically focuses on bikeway planning and design. Any trail designated to encroach into or travel within Caltrans right-of-way shall be designed per Chapter 1000 of the Caltrans Highway Design Manual.

To review information from all chapters of the design manual please see the entire document online at: www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm

Bikeway Design Standards

Caltrans has defined three types of bikeways in Chapter 1000 of the Highway Design Manual: Class I bikeway/shared use path, Class II bike lane, and Class III bike route.

Class I Bike Path

Class I bikeways are facilities with exclusive right-of-way for bicycles and pedestrians, with cross flows by motorists minimized. Experience has shown that if significant pedestrian use is anticipated, a completely separate facility for pedestrians is necessary to minimize conflicts. The anticipated range of users and forecast level of use by different user groups should dictate the design of each specific facility. At a minimum, Class I bikeways require a minimum 8-foot-wide paved surface and a minimum of 2-foot-wide clear, graded shoulders on both sides. For moderate to high-use segments, a wider paved surface of 10 to 12 feet (minimum) should be considered. In areas where a variety of users are expected, expanded unpaved shoulders should be included where possible. Class I bikeways immediately parallel and adjacent to highways must be separated from automobile traffic by a 5-foot horizontal separation or a 2-foot separation with barrier, per the Caltrans Highway Design Manual. Under certain circumstances, Caltrans may approve exceptions to the Class I bikeway design standards.

Class II Bike Lanes

A bike lane provides a striped lane for one-way bike travel on a street or highway. When bike lanes are adjacent to marked on-street parking, five feet is the minimum width of bike lane. When bike lanes are adjacent to on-street parking that is not marked with a parking stripe or stall marking, 11 feet or 12 feet (depending on the type of curb) is the minimum width of the bike lane where parking is permitted. Where parking is prohibited, the minimum bike lane width is four feet, if no gutter exists, and five feet, if a normal two-foot gutter is present. Wherever possible, the width of bike lanes should be increased six feet to eight feet to provide for greater safety.

Class III Bike Route

A bike route provides a right-of-way designated by signs or permanent markings and shared with pedestrians or motorists. Chapter 1000 does not present minimum widths for Class III bikeways, as the acceptable width is dependent on many factors, including the volume and character of vehicular traffic on the road, typical speeds, vertical and horizontal alignment, sight distance, and parking conditions.

California MUTCD (2012)

The California MUTCD (CA MUTCD) is published by Caltrans and is issued to adopt uniform standards and specifications for official traffic control devices in California. Traffic control devices are defined as all signs, signals, markings, and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, or bikeway by authority of a public agency or official having jurisdiction, or, in the case of a private road, by authority of the private owner or private official having jurisdiction. The CA MUTCD is not applicable to privately-owned and maintained roads or commercial establishments in California, unless the particular city or county enacts an ordinance or resolution to this effect.

The CA MUTCD incorporates the FHWA's MUTCD (2009 Edition) and all policies on traffic control devices issued by Caltrans that have been issued since January 21, 2010 and other editorial, errata, and format changes that were necessary to update the previous documents.

On state highways, the CA MUTCD shall not supersede Caltrans' Standard Plans, Standard Specifications or

the Special Provisions publications but all Standard statements of the CA MUTCD shall be met. On state highways, whenever there is a discrepancy between the specifications and requirements contained in the CA MUTCD, and those contained in Caltrans' Standard Plans, Standard Specifications or the Special Provisions publications, Caltrans' Standard Plans, Standard Specifications or the Special Provisions publications shall govern.

C.2 TRAIL AND ROADWAY CROSSINGS

The Castaic Area Trails will need to cross public roads. This section provides design guidelines for these crossings. Trail/roadway crossings generally will fit into one of four basic categories:

- Type 1: Marked/Unsignalized; Type 1A: Marked/Enhanced
- Type 2: Route Users to Existing Signalized Intersection
- Type 3: Signalized/Controlled
- Type 4: Grade-separated crossings

While at-grade crossings create a potentially high level of conflict between trail users and motorists, well-designed crossings have not historically posed a safety problem for trail users. This is evidenced by the thousands of successful trails around the United States with at-grade crossings. In most cases, at-grade trail crossings can be properly designed to a reasonable degree of safety and can meet existing traffic and safety standards.

Evaluation of trail crossings involves analysis of vehicular and anticipated trail user traffic patterns, including vehicle speeds, traffic volumes (average daily traffic and peak hour traffic), street width, sight distance and trail user profile (age distribution, destinations served). Crossing features for all roadways should, at minimum, include warning signs both for vehicles and trail users. The type, location, and other criteria for trail crossings are identified in the AASHTO's Guide for the Development of Bicycle Facilities and the MUTCD.

Consideration must be given for adequate warning distance based on vehicle speeds and line of sight. Visibility of any signing is absolutely critical. Catching the attention of motorists jaded to roadway signs may require additional alerting devices such as the installation of Rectangular Rapid Flashing Beacon (RRFB), roadway striping or changes in pavement texture. Signing for trail users must include a standard "STOP" sign and pavement marking, sometimes combined with other features such as bollards or a kink in the trail alignment to slow bicyclists. Care must be taken not to place too many signs at crossings lest they begin to lose their impact.

A number of striping patterns have emerged over the years to delineate trail crossings. A median stripe on the trail approach will help to organize and warn trail users. The actual crosswalk striping is a matter of local and State preference, and may be accompanied by pavement treatments to help warn and slow motorists. The effectiveness of crosswalk striping³ is highly related to local customs and regulations. In areas where motorists do not typically defer to pedestrians in crosswalks, additional measures may be required.⁴

Crossing types and descriptions are found in **Table C-1** and are described as follows:

Type 1: Marked/Unsignalized Crossings

A marked/unsignalized crossing consists of a crosswalk, signage, and often no other devices to slow or stop traffic. The approach to designing crossings at mid-block locations depends on an evaluation of vehicular traffic, line of sight, trail traffic, use patterns, vehicle speed, road type and width, and other safety issues such as proximity to schools. The following thresholds recommend where unsignalized crossings may be acceptable:

Maximum traffic volumes:

- ≤9,000-12,000 Average Daily Traffic (ADT) volumes
- Up to 15,000 ADT on two-lane roads, preferably with a median
- Up to 12,000 ADT on four-lane roads with median

3. Federal Highway Administration (FHWA) Report, "Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations."

4. In particular, the recommendations in this report are based in part on experiences in cities like Portland (OR), Seattle (WA), Tucson (AZ), and Sacramento (CA), among others

TABLE C-1 Crossing Type and Description

CROSSING TYPE	PHOTO	DESCRIPTION
I. Unprotected		Unprotected crossings include mid-block crossings of residential, collector, and sometimes major arterial streets.
II. Routed to Existing Intersection		Bikeways that emerge near existing intersections may be routed to these locations.
III. Signalized/Controlled		Bikeway crossings that require signals or other control measures due to traffic volumes, speeds, and trail usage.
IV. Grade Separated		Bridges or undercrossings provide the maximum level of safety but also generally are the most expensive and have right-of-way, maintenance, and other public safety considerations.

Maximum travel speed:

35 MPH

Minimum line of sight:

25 MPH zone: 155 feet

35 MPH zone: 250 feet

45 MPH zone: 360 feet

Well-designed, crossings of multi-lane higher-volume arterials over 15,000 ADT may be unsignalized with features such as a combination of some or all of the following: excellent sight distance, sufficient crossing gaps (more than 60 per hour), median refuges, and/or active warning devices like flashing beacons or in-pavement flashers. These are referred to as “Type 1 Enhanced” (Type 1+). Such crossings would not be appropriate; however, if a significant number of

schoolchildren used the trail. Furthermore, both existing and potential future trail usage volume should be taken into consideration.



Image C-2 At-grade crossing

On two-lane residential and collector roads below 15,000 ADT with average vehicle speeds of 35 MPH or less, crosswalks and warning signs (“Trail X-ing”) should be provided to warn motorists, and stop signs and slowing techniques (bollards/geometry) should be used on the trail approach. Curves in trails that orient the trail user toward oncoming traffic are helpful in slowing trail users and making them aware of oncoming vehicles. Care should be taken to keep vegetation and other obstacles out of the sight line for motorists and trail users. Engineering judgment should be used to determine the appropriate level of traffic control and design.

Type 2: Route Users to Existing Signalized Intersection

Crossings within 250 feet of an existing signalized intersection with pedestrian crosswalks are typically diverted to the signalized intersection for safety purposes. For this option to be effective, barriers and signing may be needed to direct multi-use trail users to the signalized crossings. In most cases, signal modifications would be made to add pedestrian detection and to comply with ADA.

Type 3: Signalized/Controlled Crossings

New signalized crossings may be recommended for crossings that meet pedestrian, school, or modified warrants, are located more than 250 feet from an existing signalized intersection and where 85th percentile travel speeds are 40 MPH and above and/or ADT exceeds 15,000 vehicles. Each crossing, regardless of

traffic speed or volume, requires additional review by a registered engineer to identify sight lines, potential impacts on traffic progression, timing with adjacent signals, capacity, and safety.

Multi-use trail signals are normally activated by push buttons, but also may be triggered by motion detectors. The maximum delay for activation of the signal should be two minutes, with minimum crossing times determined by the width of the street. The signals may rest on flashing yellow or green for motorists when not activated, and should be supplemented by standard advanced warning signs.

Type 4: Grade-separated Crossings

Grade-separated crossings may be needed where existing bicycle/pedestrian crossings do not exist, where ADT exceeds 25,000 vehicles, and 85th percentile speeds exceed 45 MPH. They are also used frequently to cross existing train tracks. Safety is a major concern with both overcrossings and undercrossings. In both cases, multi-use trail users may be temporarily out of sight from public view and may have poor visibility themselves. Undercrossings, have the reputation of being places where crimes occur. Most crime on multi-use trails, however, appears to have more in common with the general crime rate of the community and the overall usage of the multi-use trail than any specific design feature.

Design and operation measures are key to addressing multi-use trail user concerns. An undercrossing can be



Image C-3 Signalized crossing



Image C-4 Undercrossing path

designed to be spacious, well-lit, equipped with emergency cell phones at each end and completely visible for its entire length prior to entering. Other potential problems with undercrossings include conflicts with utilities, drainage, flood control, and maintenance requirements. Overcrossings pose potential concerns about visual impact and functional appeal, as well as space requirements necessary to meet ADA guidelines for slope.

Crosswalks

Crosswalk markings indicate to pedestrians the appropriate route across traffic, to facilitate crossing by the visually impaired and remind turning drivers of potential conflicts with pedestrians.

Crosswalks should not be installed at locations with poor sight distance, complex or confusing designs, or substantial heavy truck volume without first providing adequate design features and/or traffic control devices.

Controlled intersections:

- Marked crosswalks should be placed across all approaches that have adequate ADA and pedestrian accommodations/displays.
- At all-way stops, marked crosswalks should be placed across all roads where there is sidewalk, or any evidence of pedestrian movement.
- Uncontrolled intersections:

- At uncontrolled intersections, where only the side road is required to stop or yield, marked crosswalks should be placed across all side roads where there is sidewalk, or any evidence of pedestrian movement.
- At uncontrolled locations, marked crosswalks and/or additional crossing enhancements should be placed across the state route or main route in accordance with the table included in this section.
- Marked crosswalks may be used at non-signalized street crossing locations in designated school zones to delineate preferred pedestrian trails across roadways. Use of adult crossing guards, school signs and markings, and/or traffic signals with pedestrian signals (when warranted) should be considered in conjunction with the marked crosswalk, as needed.

At mid-block locations, crosswalks are marked where:

- There is a demand for crossing,
- There are no nearby marked crosswalks.

Additional considerations for marked crosswalks include:

- Where the Sidewalk Corridor is wider than 12 ft (3.7 m) crosswalks may be wider than the standard width to match the Sidewalk Corridor width.
- At mid-block locations, marked crosswalks are always accompanied by signing to warn drivers of the unexpected crosswalk.
- The crosswalk should be located to align as closely as possible with the Through Pedestrian Zone of the Sidewalk Corridor.
- Where traffic travel lanes are adjacent to the curb, crosswalks should be set back a minimum of 2 ft (610 mm) from the edge of the travel lane.
- Where there is poor motorist awareness of an existing crossing or at high-use locations, high-visibility crosswalks can increase safety for pedestrians and bicyclists. High-visibility crosswalks are particularly important along routes to school to improve visibility of school children.
- Pedestrian activated traffic signals can be used in high pedestrian usage areas.

RRFBs may be appropriate on undivided roadways in densely developed areas that do not offer median refuges for crossing pedestrians. This measure should be used at higher risk crossing areas such as mid-block



Image C-5 Raised Crosswalk

crossings or intersections with high traffic speeds or pedestrian volumes.

Raised Crosswalks

Raised crosswalks are similar to speed humps, but are installed at intersections to elevate crosswalks. Raised sidewalks eliminate grade changes from the pedestrian trail and give pedestrians greater prominence as they cross the street.

- Use detectable warnings at the curb edges to alert vision-impaired pedestrians that they are entering the roadway.
- May be designed so they do not have a slowing effect (for example, on emergency response routes)

C.3 EMERGENCY ACCESS AND RESPONSE

Emergency access to the trails is a concern typically expressed by public safety agency representatives, and specifically mentioned in agency coordination for this CAMUTP. Safety and security are also frequently mentioned as a concern of trail neighbors and users. Several specific measures are identified to address emergency response that are reflected at a conceptual level in the Trail Master Plan and will need to be resolved in detail in subsequent planning, design, implementation and management:

- Emergency responders will need special equipment such as ATVs, special stretchers, and fire apparatus.
- Identify and improve points of access at public trailheads and potentially at points that don't have public access but have more direct access for an emergency situation;
- Provide clear and consistent levels of vehicular access (e.g. if a trail segment is wide enough to accommodate a patrol or emergency vehicle, bridges, gates and other features are also designed to do so);
- Develop clear contacts, arrangements and public information for emergency response and support.
- A volunteer trail patrol is often an effective way to augment public agency information, coordination and support.

- Provide a clear shared system of designating trails and access points with names and/or alpha-numeric identification. This allows trail users to know and report their location, and both routine maintenance and patrol staff and emergency response staff to be able to use the same information. The trail segments identified in the GIS mapping for the Trail Master Plan lay the foundation for a well-organized system of trail and access designations, and a corresponding system of trail mapping, signage and wayfinding to guide users.

C.4 ADA – ACCOMMODATING PEOPLE WITH DISABILITIES

The U.S. Architectural Barriers Act (ABA), passed in 1968, is one of the first laws to address access to the built environment. The law applies to federal facilities and non-federal facilities built or altered with federal grants or loans.

Even more significant legislation, the Americans with Disabilities Act (ADA), was signed into law on July 26, 1990. ADA is one of America's most comprehensive pieces of civil rights legislation. It prohibits discrimination and guarantees that people with disabilities have the same opportunities as everyone else to participate in the mainstream of American life.

C.4.1 FEDERAL OUTDOOR DEVELOPED AREA GUIDELINES FOR TRAILS

The Architectural and Transportation Barriers Compliance Board (Access Board) is an independent federal agency that helps implement ADA and ABA through leadership in accessible design and the development of accessibility guidelines and standards. The guidelines ensure that the facilities are readily accessible to and usable by people with disabilities. The Access Board issued the current guidelines in 2004. The 2004 guidelines contain provisions for several types of recreation facilities. Trails were addressed for the first time in Draft Guidelines for Outdoor Recreation Facilities published by the Access Board in 2004. At the time of the 2011 publication of the Trails Manual, the available federal guidance regarding ADA compliance

for trails consisted of the Draft Final Guidelines for Outdoor Developed Areas dated December 18, 2009.

In 2013 The Access Board finalized the Outdoor Developed Area Guidelines, formally amending the 2004 guidelines by adding new provisions for trails, picnic and camping facilities, viewing areas, and beach access routes constructed or altered by Federal agencies or by non-federal entities on Federal land on behalf of a Federal agency pursuant to a concession contract, partnership agreement, or similar arrangement. Typically public agencies such as Los Angeles County follow these Guidelines as a “best practice” to ensure that they are in compliance with ADA. This is formalized in the County Trails Manual.

Both the draft Guidelines discussed in the Los Angeles County Trails Manual and the final Guidelines adopted in 2013 provide a more relaxed set of standards for design of recreational trails than the requirements for urban transportation routes or routes that connect developed facilities within a site. The final rule of the Guidelines made it easier to exempt an entire trail from the Guidelines. Importantly, the final Guidelines do not apply to shared use trails that accommodate horses or bicycles – only hiking/pedestrian trails – but the Trails Manual has specifically adopted them as guidelines for the County’s multi-use trail system.

The ADA Recreational Trail Design Guidelines are summarized in the Trails Manual and excerpts pertaining to trails from a summary prepared by the Access Board are included in *Appendix I* of the Trails Manual.

C.4.2 OVERALL TRAIL SYSTEM/ PROGRAM ACCESSIBILITY REQUIREMENTS

Los Angeles County and other public agencies, as well as private parties that provide public services, are subject to the broader requirements of ADA with regard to accommodation and non-discrimination for people with disabilities in their overall provision of programs and services, which includes trail opportunities. These requirements are contained in ADA Title II, Subpart D, which is excerpted below:

Americans with Disabilities Act Title II Regulations

Part 35 Nondiscrimination on the Basis of Disability in State and Local Government Services (as amended by the final rule published on September 15, 2010)

Subpart D—Program Accessibility

§ 35.149 Discrimination prohibited.

Except as otherwise provided in § 35.150, no qualified individual with a disability shall, because a public entity’s facilities are inaccessible to or unusable by individuals with disabilities, be excluded from participation in, or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any public entity.

§ 35.150 Existing facilities

- (a) General. A public entity shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.

This paragraph does not:

- (1) Necessarily require a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities;
- (2) Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
- (3) Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens.

The application of these program accessibility requirements to a trail system is not clarified by ADA or the Guidelines – it is up to each agency to interpret (although the implication of the Guidelines is that trails are the most flexible type of facility in terms of design standards and compliance).

The California State Parks Accessibility Guidelines

The California State Parks Accessibility Guidelines, 2015 edition, provide useful guidance on the subject of system or program compliance, in the chapter on Trails:

Trails

I. CONCEPT

- A. Unlike Exterior Routes of Travel (ERT) and Outdoor Recreation Access Routes (ORAR), trails provide the means for the activity of hiking. Trails provide access to remote locations and unique park features. They offer visitors the opportunity to experience various park settings.
- B. Whenever hiking is considered one of the primary activities offered, or where there is a large concentration of trails, every effort should be made to install and maintain accessible trails. The accessible trails should represent the most significant features and environmental experiences unique to the area.
- C. Although addressing accessibility is only required when constructing new trails or making trail alterations, there is always an opportunity to improve access during maintenance management activities (e.g. remove step bridge approach and provide ramped bridge approach during bridge replacement; allow pedestrian passing space through gate along a maintenance road used as a trail route).

State Parks Accessibility Guidelines go on to adopt both the federal trail guidelines and pertinent state codes, as the standard for design of State Park trails.

In this respect California building codes go a step farther than federal Guidelines in specifying the design of nature trails:

V. EDUCATIONAL NATURE TRAILS CBC 11B-246.8

- A. An educational nature trail is a trail in which the designated use is pedestrian only and is planned for the primary purpose of educating the public on the natural or cultural resources of the area. Educational nature trails also contain a series of informational panels or signs and often a printed informational brochure.
- B. Educational nature trails shall be made accessible to people with vision disabilities by the provision of tactile edging (such as rope guidelines) or cane detectable edging along at least one side of the trail.

1. This edging should use either elevation change (e.g., raised curb, railing, cut bank back slope, elevated trail) and/or texture change (e.g., transition from concrete to grass, transition from gravel to vegetation, knots in the rope guideline) capable of providing a clearly detectable trail route for cane use.
2. Distinctive tactile surface textures should call attention to informational displays, panels, site amenities, signs, and related guide and assistance devices. These tactile surface textures should be as wide as the trail and at least 30" long in the direction of travel to ensure sufficient length for detection.
3. Signs, posts, and panels which are sequentially numbered for the purpose of providing site specific written or audio information shall use raised Arabic numbers and symbols for identification.

County Parks Trail System Accessibility Goal and Objectives

Los Angeles County Parks' commitment to trail system accessibility mirrors that of California State Parks: with the particular goal of providing the same range of trail experiences (views, natural environments and amenities) for people with disabilities. To achieve this County Parks will:

- Design all trails to be accessible per the federal Guidelines/Trails Manual;
- Provide fully accessible trails meeting the more stringent standards for Outdoor Recreation Access (5% maximum grade, paved surface) designed to fully accommodate wheelchairs and other assistive devices where this would not be prohibitively expensive, fundamentally alter the nature of the trail experience for other users or damage the resource that was being accessed;
- Provide information about the accessibility-related conditions of the trails to allow users to make their own decisions about their ability to access them.

APPENDIX D: GIS DATA

D.1 GIS DATA DICTIONARY

PROPERTYRIGHTS	Parcels	Includes data for owner, zoning, and agency ownership where applicable.
		OwnerType – whether the parcel is owned by the following: <ul style="list-style-type: none"> • County • Private • Utility • Subdivision • School • State • Federal • Conservancy/Trust
		OilLease <ul style="list-style-type: none"> • Whether the parcel crosses or contains an oil lease (based on DOGGR data – details of oil lease are not available)
		OilWellsOnParcel <ul style="list-style-type: none"> • The number of oil wells (includes all well types, such as active, plugged, abandoned, etc) that fall within the parcel. DOGGR data: location accuracy is highly variable and should not be used alone to determine trail alignments.
		OwnerReceptive <ul style="list-style-type: none"> • Whether the owner has communicated that they would like trails on their property (Y) or that they would prefer trails avoided their property (N)
		SEA <ul style="list-style-type: none"> • Whether the parcel falls within an SEA
	Parcels_DissolveByOwnerType	<ul style="list-style-type: none"> • Aggregated parcels based upon the owner types listed above
EXISTINGCONDITIONS <i>(Existing condition data is also incorporated into the parcel files)</i>	Parcels_DissolveByOwner	<ul style="list-style-type: none"> • Aggregated parcels based upon the actual parcel owner
	Trails_Existing_Adopted_Subdivision	<ul style="list-style-type: none"> • Los Angeles County Existing and Proposed Trails • Trails identified within subdivision agreements and/or plans
	Destinations <i>(Lines, Points, Polygons)</i>	DestinationType <ul style="list-style-type: none"> • The general category of the destination ConnectionType <ul style="list-style-type: none"> • Whether the destination is considered Regional or Local
	Oil_Wells_DOGGRFeb2016	<ul style="list-style-type: none"> • Oil wells per DOGGR data released February 2016. • Wells of any status were included, as none will necessarily require trail realignment more than any other. • Location of wells is highly variable, and should not determine trail alignment until more precise well locations are determined.
	Oil_Leases_DOGGR_July2015	<ul style="list-style-type: none"> • Oil leases per DOGGR data released July 2015. • Details of lease, such as leaseholder or status of lease, are not provided by DOGGR.

TRAILSPLAN	CAMUTP_Trailheads CAMUTP_Trails	<ul style="list-style-type: none"> • Acres have only been estimated for bike skills parks. <p>Name</p> <ul style="list-style-type: none"> • The name of the overall trail corridor. These names are not intended to become the official name of any trail, or to replace the existing name of any trail. <p>Source</p> <ul style="list-style-type: none"> • The source of the alignment. <ul style="list-style-type: none"> • Existing: trail is already operated by LA County • New: alignment is new and proposed by this plan • Follows 2007 Plan: from LA County 2007 trails map • Realigned 2007 Plan: alignment is modified from the LA County 2007 trails map to avoid constraints or minimize impact on the environment • Subdivision Agreement: alignment originates from an existing subdivision plan <p>Notes</p> <ul style="list-style-type: none"> • Supplemental information for the particular segment. <p>Seg_Name</p> <ul style="list-style-type: none"> • Descriptive title for individual segments of the larger corridors. <p>Subdiv</p> <ul style="list-style-type: none"> • If the segment passes through a subdivision, it is listed here. <p>Trail_Type</p> <ul style="list-style-type: none"> • The general category of proposed trail <ul style="list-style-type: none"> • EXS: Existing • NAT: Natural surface • ROW: Within street right-of-way • SUB: Formalized paths within a subdivision/development <p>Number of the segment within the larger corridor.</p> <p>RouteCode</p> <ul style="list-style-type: none"> • A two-letter code identifying the larger corridor. Combined with SegNum to form a unique identifier for each segment. <p>Negotiator</p> <ul style="list-style-type: none"> • Party with whom negotiations must take place in order to gain access to property. Generally matches the owner type field in the parcels layer but is more specific where applicable. <p>PublicComment</p> <ul style="list-style-type: none"> • The number of positive public comment within ¼ mile of the segment, from both the wikimap and public meetings. <p>ParcelsCrossed</p> <ul style="list-style-type: none"> • The total number of parcels the segment traverses. <p>OwnersInvolved</p> <ul style="list-style-type: none"> • The total number of different parcel owners that are crossed by the segment. <p>OilLeases</p> <ul style="list-style-type: none"> • Number of oil leases crossed (per DOGGR July 2015) <p>Destinations</p> <ul style="list-style-type: none"> • The number of destinations within ¼ mile of the segment.
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APPENDIX E:

METROPOLITAN WATER DISTRICT GUIDELINES FOR DEVELOPMENT

Guidelines for Developments in the
Area of Facilities, Fee Properties, and/or Easements
of The Metropolitan Water District of Southern California

1. Introduction

a. The following general guidelines should be followed for the design of proposed facilities and developments in the area of Metropolitan's facilities, fee properties, and/or easements.

b. We require that 3 copies of your tentative and final record maps, grading, paving, street improvement, landscape, storm drain, and utility plans be submitted for our review and written approval as they pertain to Metropolitan's facilities, fee properties and/or easements, prior to the commencement of any construction work.

2. Plans, Parcel and Tract Maps

The following are Metropolitan's requirements for the identification of its facilities, fee properties, and/or easements on your plans, parcel maps and tract maps:

a. Metropolitan's fee properties and/or easements and its pipelines and other facilities must be fully shown and identified as Metropolitan's on all applicable plans.

b. Metropolitan's fee properties and/or easements must be shown and identified as Metropolitan's with the official recording data on all applicable parcel and tract maps.

c. Metropolitan's fee properties and/or easements and existing survey monuments must be dimensionally tied to the parcel or tract boundaries.

d. Metropolitan's records of surveys must be referenced on the parcel and tract maps.

3. Maintenance of Access Along Metropolitan's Rights-of-Way

a. Proposed cut or fill slopes exceeding 10 percent are normally not allowed within Metropolitan's fee properties or easements. This is required to facilitate the use of construction and maintenance equipment, and provide access to its aboveground and belowground facilities.

b. We require that 16-foot-wide commercial-type driveway approaches be constructed on both sides of all streets crossing Metropolitan's rights-of-way. Openings are required in any median island. Access ramps, if necessary, must be at least 16-feet-wide. Grades of ramps are normally not allowed to exceed 10 percent. If the slope of an access ramp must exceed 10 percent due to the topography, the ramp must be paved. We require a 40-foot-long level area on the driveway approach to access ramps where the ramp meets the street. At Metropolitan's fee properties, we may require fences and gates.

c. The terms of Metropolitan's permanent easement deeds normally preclude the building or maintenance of structures of any nature or kind within its easements, to ensure safety and avoid interference with operation and maintenance of Metropolitan's pipelines or other facilities. Metropolitan must have vehicular access along the easements at all times for inspection, patrolling, and for maintenance of the pipelines and other facilities on a routine basis. We require a 20-foot-wide clear zone around all above-ground facilities for this routine access. This clear zone should slope away from our facility on a grade not to exceed 2 percent. We must also have access along the easements with construction equipment. An example of this is shown on Figure 1.

d. The footings of any proposed buildings adjacent to Metropolitan's fee properties and/or easements must not encroach into the fee property or easement or impose additional loading on Metropolitan's pipelines or other facilities therein. A typical situation is shown on Figure 2. Prints of the detail plans of the footings for any building or structure adjacent to the fee property or easement must be submitted for our review and written approval as they pertain to the pipeline or other facilities therein. Also, roof eaves of buildings adjacent to the easement or fee property must not overhang into the fee property or easement area.

e. Metropolitan's pipelines and other facilities, e.g. structures, manholes, equipment, survey monuments, etc. within its fee properties and/or easements must be protected from damage by the easement holder on Metropolitan's property or the property owner where Metropolitan has an easement, at no expense to Metropolitan. If the facility is a cathodic protection station it shall be located prior to any grading or excavation. The exact location, description and way of protection shall be shown on the related plans for the easement area.

4. Easements on Metropolitan's Property

a. We encourage the use of Metropolitan's fee rights-of-way by governmental agencies for public street and utility purposes, provided that such use does not interfere with Metropolitan's use of the property, the entire width of the property is accepted into the agency's public street system and fair market value is paid for such use of the right-of-way.

b. Please contact the Director of Metropolitan's Right of Way and Land Division, telephone (213) 250-6302, concerning easements for landscaping, street, storm drain, sewer, water or other public facilities proposed within Metropolitan's fee properties. A map and legal description of the requested easements must be submitted. Also, written evidence must be submitted that shows the city or county will accept the easement for the specific purposes into its public system. The grant of the easement will be subject to Metropolitan's rights to use its land for water pipelines and related purposes to the same extent as if such grant had not been made. There will be a charge for the easement. Please note that, if entry is required on the property prior to issuance of the easement, an entry permit must be obtained. There will also be a charge for the entry permit.

5. Landscaping

Metropolitan's landscape guidelines for its fee properties and/or easements are as follows:

a. A green belt may be allowed within Metropolitan's fee property or easement.

b. All landscape plans shall show the location and size of Metropolitan's fee property and/or easement and the location and size of Metropolitan's pipeline or other facilities therein.

c. Absolutely no trees will be allowed within 15 feet of the centerline of Metropolitan's existing or future pipelines and facilities.

d. Deep-rooted trees are prohibited within Metropolitan's fee properties and/or easements. Shallow-rooted trees are the only trees allowed. The shallow-rooted trees will not be permitted any closer than 15 feet from the centerline of the pipeline, and such trees shall not be taller than 25 feet with a root spread no greater than 20 feet in diameter at maturity. Shrubs, bushes, vines, and ground cover are permitted, but larger shrubs and bushes should not be planted directly over our pipeline. Turf is acceptable. We require submittal of landscape plans for Metropolitan's prior review and written approval. (See Figure 3).

e. The landscape plans must contain provisions for Metropolitan's vehicular access at all times along its rights-of-way to its pipelines or facilities therein. Gates capable of accepting Metropolitan's locks are required in any fences across its rights-of-way. Also, any walks or drainage facilities across its access route must be constructed to AASHTO H-20 loading standards.

f. Rights to landscape any of Metropolitan's fee properties must be acquired from its Right of Way and Land Division. Appropriate entry permits must be obtained prior to any entry on its property. There will be a charge for any entry permit or easements required.

6. Fencing

Metropolitan requires that perimeter fencing of its fee properties and facilities be constructed of universal chain link, 6 feet in height and topped with 3 strands of barbed wire angled upward and outward at a 45 degree angle or an approved equal for a total fence height of 7 feet. Suitable substitute fencing may be considered by Metropolitan. (Please see Figure 5 for details).

7. Utilities in Metropolitan's Fee Properties and/or Easements or Adjacent to Its Pipeline in Public Streets

Metropolitan's policy for the alinement of utilities permitted within its fee properties and/or easements and street rights-of-way is as follows:

a. Permanent structures, including catch basins, manholes, power poles, telephone riser boxes, etc., shall not be located within its fee properties and/or easements.

b. We request that permanent utility structures within public streets, in which Metropolitan's facilities are constructed under the Metropolitan Water District Act, be placed as far from our pipeline as possible, but not closer than 5 feet from the outside of our pipeline.

c. The installation of utilities over or under Metropolitan's pipeline(s) must be in accordance with the requirements shown on the enclosed prints of Drawings Nos. C-11632 and C-9547. Whenever possible we request a minimum of one foot clearance between Metropolitan's pipe and your facility. Temporary support of Metropolitan's pipe may also be required at undercrossings of its pipe in an open trench. The temporary support plans must be reviewed and approved by Metropolitan.

d. Lateral utility crossings of Metropolitan's pipelines must be as perpendicular to its pipeline alinement as practical. Prior to any excavation our pipeline shall be located manually and any excavation within two feet of our pipeline must be done by hand. This shall be noted on the appropriate drawings.

e. Utilities constructed longitudinally within Metropolitan's rights-of-way must be located outside the theoretical trench prism for uncovering its pipeline and must be located parallel to and as close to its rights-of-way lines as practical.

f. When piping is jacked or installed in jacked casing or tunnel under Metropolitan's pipe, there must be at least two feet of vertical clearance between the bottom of Metropolitan's pipe and the top of the jacked pipe, jacked casing or tunnel. We also require that detail drawings of the shoring for the jacking or tunneling pits be submitted for our review and approval. Provisions must be made to grout any voids around the exterior of the jacked pipe, jacked casing or tunnel. If the piping is installed in a jacked casing or tunnel the annular space between the piping and the jacked casing or tunnel must be filled with grout.

g. Overhead electrical and telephone line requirements:

1) Conductor clearances are to conform to the California State Public Utilities Commission, General Order 95, for Overhead Electrical Line Construction or at a greater clearance if required by Metropolitan. Under no circumstances shall clearance be less than 35 feet.

2) A marker must be attached to the power pole showing the ground clearance and line voltage, to help prevent damage to your facilities during maintenance or other work being done in the area.

3) Line clearance over Metropolitan's fee properties and/or easements shall be shown on the drawing to indicate the lowest point of the line under the most adverse conditions including consideration of sag, wind load, temperature change, and support type. We require that overhead lines be located at least 30 feet laterally away from all above-ground structures on the pipelines.

4) When underground electrical conduits, 120 volts or greater, are installed within Metropolitan's fee property and/or easement, the conduits must be incased in a minimum of three inches of red concrete. Where possible, above ground warning signs must also be placed at the right-of-way lines where the conduits enter and exit the right-of-way.

h. The construction of sewerlines in Metropolitan's fee properties and/or easements must conform to the California Department of Health Services Criteria for the Separation of Water Mains and Sanitary Services and the local City or County Health Code Ordinance as it relates to installation of sewers in the vicinity of pressure waterlines. The construction of sewerlines should also conform to these standards in street rights-of-way.

i. Cross sections shall be provided for all pipeline crossings showing Metropolitan's fee property and/or easement limits and the location of our pipeline(s). The exact locations of the crossing pipelines and their elevations shall be marked on as-built drawings for our information.

j. Potholing of Metropolitan's pipeline is required if the vertical clearance between a utility and Metropolitan's pipeline is indicated on the plan to be one foot or less. If the indicated clearance is between one and two feet, potholing is suggested. Metropolitan will provide a representative to assist others in locating and identifying its pipeline. Two-working days notice is requested.

k. Adequate shoring and bracing is required for the full depth of the trench when the excavation encroaches within the zone shown on Figure 4.

l. The location of utilities within Metropolitan's fee property and/or easement shall be plainly marked to help prevent damage during maintenance or other work done in the area. Detectable tape over buried utilities should be placed a minimum of 12 inches above the utility and shall conform to the following requirements:

1) Water pipeline: A two-inch blue warning tape shall be imprinted with:

"CAUTION BURIED _____ PIPELINE"

2) Gas, oil, or chemical pipeline: A two-inch yellow warning tape shall be imprinted with:

"CAUTION BURIED _____ PIPELINE"

3) Sewer or storm drain pipeline: A two-inch green warning tape shall be imprinted with:

"CAUTION BURIED _____ PIPELINE"

4) Electric, street lighting, or traffic signals conduit: A two-inch red warning tape shall be imprinted with:

"CAUTION BURIED _____ CONDUIT"

5) Telephone, or television conduit: A two-inch orange warning tape shall be imprinted with:

"CAUTION BURIED _____ CONDUIT"

m. Cathodic Protection requirements:

1) If there is a cathodic protection station for Metropolitan's pipeline in the area of the proposed work, it shall be located prior to any grading or excavation. The exact location, description and manner of protection shall be shown on all applicable plans. Please contact Metropolitan's Corrosion Engineering Section, located at Metropolitan's F. E. Weymouth Softening and Filtration Plant, 700 North Moreno Avenue, La Verne, California 91750, telephone (714) 593-7474, for the locations of Metropolitan's cathodic protection stations.

2) If an induced-current cathodic protection system is to be installed on any pipeline crossing Metropolitan's pipeline, please contact Mr. Wayne E. Risner at (714) 593-7474 or (213) 250-5085. He will review the proposed system and determine if any conflicts will arise with the existing cathodic protection systems installed by Metropolitan.

3) Within Metropolitan's rights-of-way, pipelines and carrier pipes (casings) shall be coated with an approved protective coating to conform to Metropolitan's requirements, and shall be maintained in a neat and orderly condition as directed by Metropolitan. The application and monitoring of cathodic protection on the pipeline and casing shall conform to Title 49 of the Code of Federal Regulations, Part 195.

4) If a steel carrier pipe (casing) is used:

(a) Cathodic protection shall be provided by use of a sacrificial magnesium anode (a sketch showing the cathodic protection details can be provided for the designers information).

(b) The steel carrier pipe shall be protected with a coal tar enamel coating inside and out in accordance with AWWA C203 specification.

n. All trenches shall be excavated to comply with the CAL/OSHA Construction Safety Orders, Article 6, beginning with Sections 1539 through 1547. Trench backfill shall be placed in 8-inch lifts and shall be compacted to 95 percent relative compaction (ASTM D698) across roadways and through protective dikes. Trench backfill elsewhere will be compacted to 90 percent relative compaction (ASTM D698).

o. Control cables connected with the operation of Metropolitan's system are buried within streets, its fee properties and/or easements. The locations and elevations of these cables shall be shown on the drawings. The drawings shall note that prior to any excavation in the area, the control cables shall be located and measures shall be taken by the contractor to protect the cables in place.

p. Metropolitan is a member of Underground Service Alert (USA). The contractor (excavator) shall contact USA at 1-800-422-4133 (Southern California) at least 48 hours prior to starting any excavation work. The contractor will be liable for any damage to Metropolitan's facilities as a result of the construction.

8. Paramount Right

Facilities constructed within Metropolitan's fee properties and/or easements shall be subject to the paramount right of Metropolitan to use its fee properties and/or easements for the purpose for which they were acquired. If at any time Metropolitan or its assigns should, in the exercise of their rights, find it necessary to remove any of the facilities from the fee properties and/or easements, such removal and replacement shall be at the expense of the owner of the facility.

9. Modification of Metropolitan's Facilities

When a manhole or other of Metropolitan's facilities must be modified to accommodate your construction or reconstruction, Metropolitan will modify the facilities with its forces. This should be noted on the construction plans. The estimated cost to perform this modification will be given to you and we will require a deposit for this amount before the work is performed. Once the deposit is received, we will schedule the work. Our forces will coordinate the work with your contractor. Our final billing will be based on actual cost incurred, and will include materials, construction, engineering plan review, inspection, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice will be forwarded for payment of the additional amount.

10. Drainage

a. Residential or commercial development typically increases and concentrates the peak storm water runoff as well as the total yearly storm runoff from an area, thereby increasing the requirements for storm drain facilities downstream of the development. Also, throughout the year water from landscape irrigation, car washing, and other outdoor domestic water uses flows into the storm drainage system resulting in weed abatement, insect infestation, obstructed access and other problems. Therefore, it is Metropolitan's usual practice not to approve plans that show discharge of drainage from developments onto its fee properties and/or easements.

b. If water must be carried across or discharged onto Metropolitan's fee properties and/or easements, Metropolitan will insist that plans for development provide that it be carried by closed conduit or lined open channel approved in writing by Metropolitan. Also the drainage facilities must be maintained by others, e.g., city, county, homeowners association, etc. If the development proposes changes to existing drainage features, then the developer shall make provisions to provide for replacement and these changes must be approved by Metropolitan in writing.

11. Construction Coordination

During construction, Metropolitan's field representative will make periodic inspections. We request that a stipulation be added to the plans or specifications for notification of Mr. _____ of Metropolitan's Operations Services Branch, telephone (213) 250-_____, at least two working days prior to any work in the vicinity of our facilities.

12. Pipeline Loading Restrictions

a. Metropolitan's pipelines and conduits vary in structural strength, and some are not adequate for AASHTO H-20 loading. Therefore, specific loads over the specific sections of pipe or conduit must be reviewed and approved by Metropolitan. However, Metropolitan's pipelines are typically adequate for AASHTO H-20 loading provided that the cover over the pipeline is not less than four feet or the cover is not substantially increased. If the temporary cover over the pipeline during construction is between three and four feet, equipment must be restricted to that which

imposes loads no greater than AASHTO H-10. If the cover is between two and three feet, equipment must be restricted to that of a Caterpillar D-4 tract-type tractor. If the cover is less than two feet, only hand equipment may be used. Also, if the contractor plans to use any equipment over Metropolitan's pipeline which will impose loads greater than AASHTO H-20, it will be necessary to submit the specifications of such equipment for our review and approval at least one week prior to its use. More restrictive requirements may apply to the loading guideline over the San Diego Pipelines 1 and 2, portions of the Orange County Feeder, and the Colorado River Aqueduct. Please contact us for loading restrictions on all of Metropolitan's pipelines and conduits.

b. The existing cover over the pipeline shall be maintained unless Metropolitan determines that proposed changes do not pose a hazard to the integrity of the pipeline or an impediment to its maintenance.

13. Blasting

a. At least 20 days prior to the start of any drilling for rock excavation blasting, or any blasting, in the vicinity of Metropolitan's facilities, a two-part preliminary conceptual plan shall be submitted to Metropolitan as follows:

b. Part 1 of the conceptual plan shall include a complete summary of proposed transportation, handling, storage, and use of explosions.

c. Part 2 shall include the proposed general concept for blasting, including controlled blasting techniques and controls of noise, fly rock, airblast, and ground vibration.

14. CEQA Requirements

a. When Environmental Documents Have Not Been Prepared

1) Regulations implementing the California Environmental Quality Act (CEQA) require that Metropolitan have an opportunity to consult with the agency or consultants preparing any environmental documentation. We are required to review and consider the environmental effects of the project as shown in the Negative Declaration or Environmental Impact Report (EIR) prepared for your project before committing Metropolitan to approve your request.

2) In order to ensure compliance with the regulations implementing CEQA where Metropolitan is not the Lead Agency, the following minimum procedures to ensure compliance with the Act have been established:

a) Metropolitan shall be timely advised of any determination that a Categorical Exemption applies to the project. The Lead Agency is to advise Metropolitan that it and other agencies participating in the project have complied with the requirements of CEQA prior to Metropolitan's participation.

b) Metropolitan is to be consulted during the preparation of the Negative Declaration or EIR.

c) Metropolitan is to review and submit any necessary comments on the Negative Declaration or draft EIR.

d) Metropolitan is to be indemnified for any costs or liability arising out of any violation of any laws or regulations including but not limited to the California Environmental Quality Act and its implementing regulations.

b. When Environmental Documents Have Been Prepared

If environmental documents have been prepared for your project, please furnish us a copy for our review and files in a timely manner so that we may have sufficient time to review and comment. The following steps must also be accomplished:

1) The Lead Agency is to advise Metropolitan that it and other agencies participating in the project have complied with the requirements of CEQA prior to Metropolitan's participation.

2) You must agree to indemnify Metropolitan, its officers, engineers, and agents for any costs or liability arising out of any violation of any laws or regulations including but not limited to the California Environmental Quality Act and its implementing regulations.

15. Metropolitan's Plan-Review Cost

a. An engineering review of your proposed facilities and developments and the preparation of a letter response

giving Metropolitan's comments, requirements and/or approval that will require 8 man-hours or less of effort is typically performed at no cost to the developer, unless a facility must be modified where Metropolitan has superior rights. If an engineering review and letter response requires more than 8 man-hours of effort by Metropolitan to determine if the proposed facility or development is compatible with its facilities, or if modifications to Metropolitan's manhole(s) or other facilities will be required, then all of Metropolitan's costs associated with the project must be paid by the developer, unless the developer has superior rights.

b. A deposit of funds will be required from the developer before Metropolitan can begin its detailed engineering plan review that will exceed 8 hours. The amount of the required deposit will be determined after a cursory review of the plans for the proposed development.

c. Metropolitan's final billing will be based on actual cost incurred, and will include engineering plan review, inspection, materials, construction, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice will be forwarded for payment of the additional amount. Additional deposits may be required if the cost of Metropolitan's review exceeds the amount of the initial deposit.

16. Caution

We advise you that Metropolitan's plan reviews and responses are based upon information available to Metropolitan which was prepared by or on behalf of Metropolitan for general record purposes only. Such information may not be sufficiently detailed or accurate for your purposes. No warranty of any kind, either express or implied, is attached to the information therein conveyed as to its accuracy, and no inference should be drawn from Metropolitan's failure to comment on any aspect of your project. You are therefore cautioned to make such surveys and other field investigations as you may deem prudent to assure yourself that any plans for your project are correct.

17. Additional Information

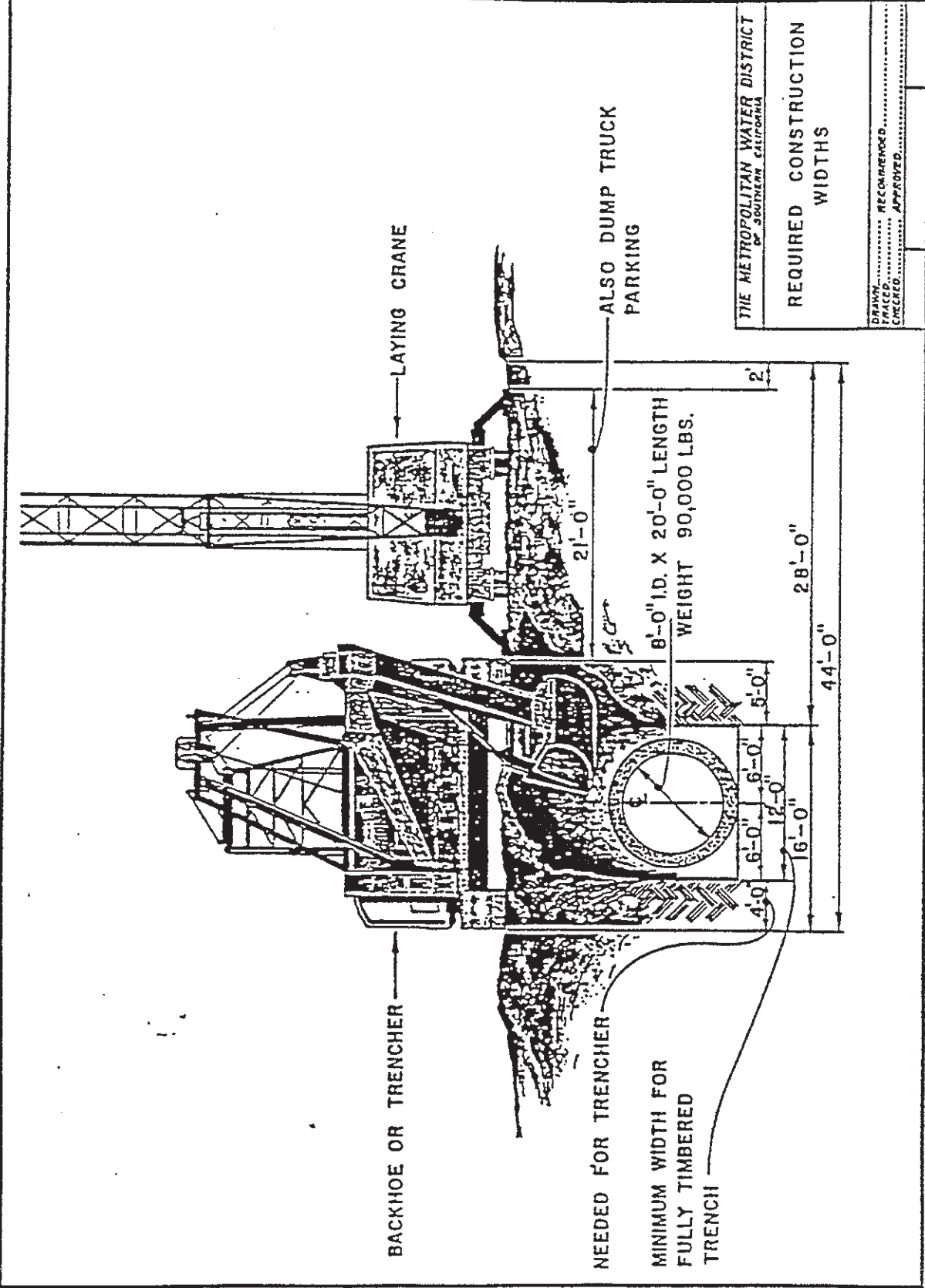
Should you require additional information, please contact:

Civil Engineering Substructures Section
Metropolitan Water District
of Southern California
P.O. Box 54153
Los Angeles, California 90054-0153
(213) 217-6000

JEH/MRW/lk

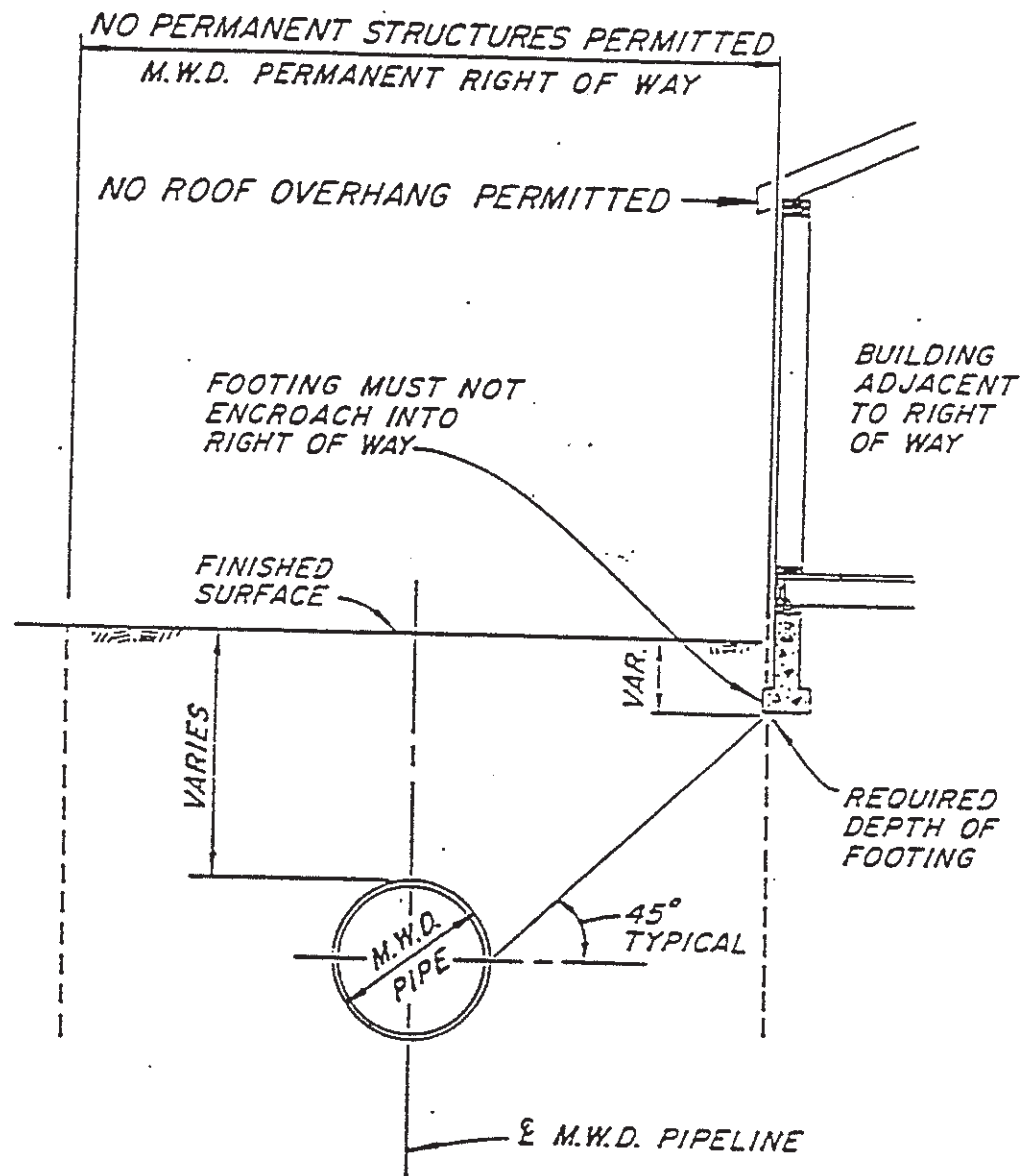
Rev. January 22, 1989

Encl.



THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
REQUIRED CONSTRUCTION WIDTHS
DRAWN.....
PLACED.....
CHECKED.....
RECOMMENDED.....
APPROVED.....

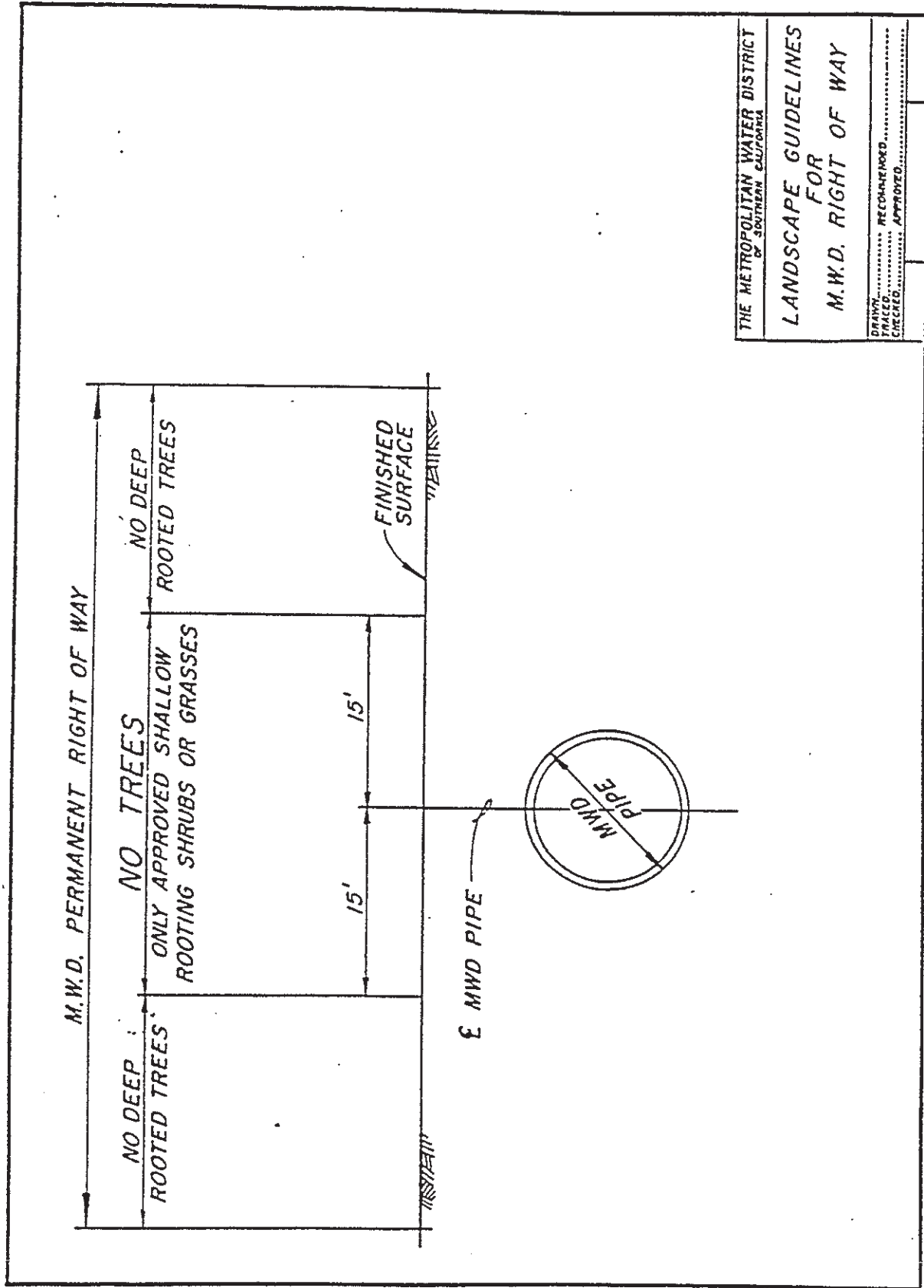
FIGURE 1



NOTE: M.W.D. PIPELINE SIZE, DEPTH, LOCATION AND WIDTH OF PERMANENT RIGHT OF WAY VARIES.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA	
REQUIREMENTS FOR BUILDINGS AND FOOTINGS ADJACENT TO M.W.D. RIGHT OF WAY	
DRAWN _____	RECOMMENDED _____
TRACED _____	APPROVED _____
CHECKED _____	

FIGURE 2



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

LANDSCAPE GUIDELINES
FOR
M.W.D. RIGHT OF WAY

DRAWN.....
TRACED.....
CHECKED.....

RECOMMENDED.....
APPROVED.....

FIGURE 3

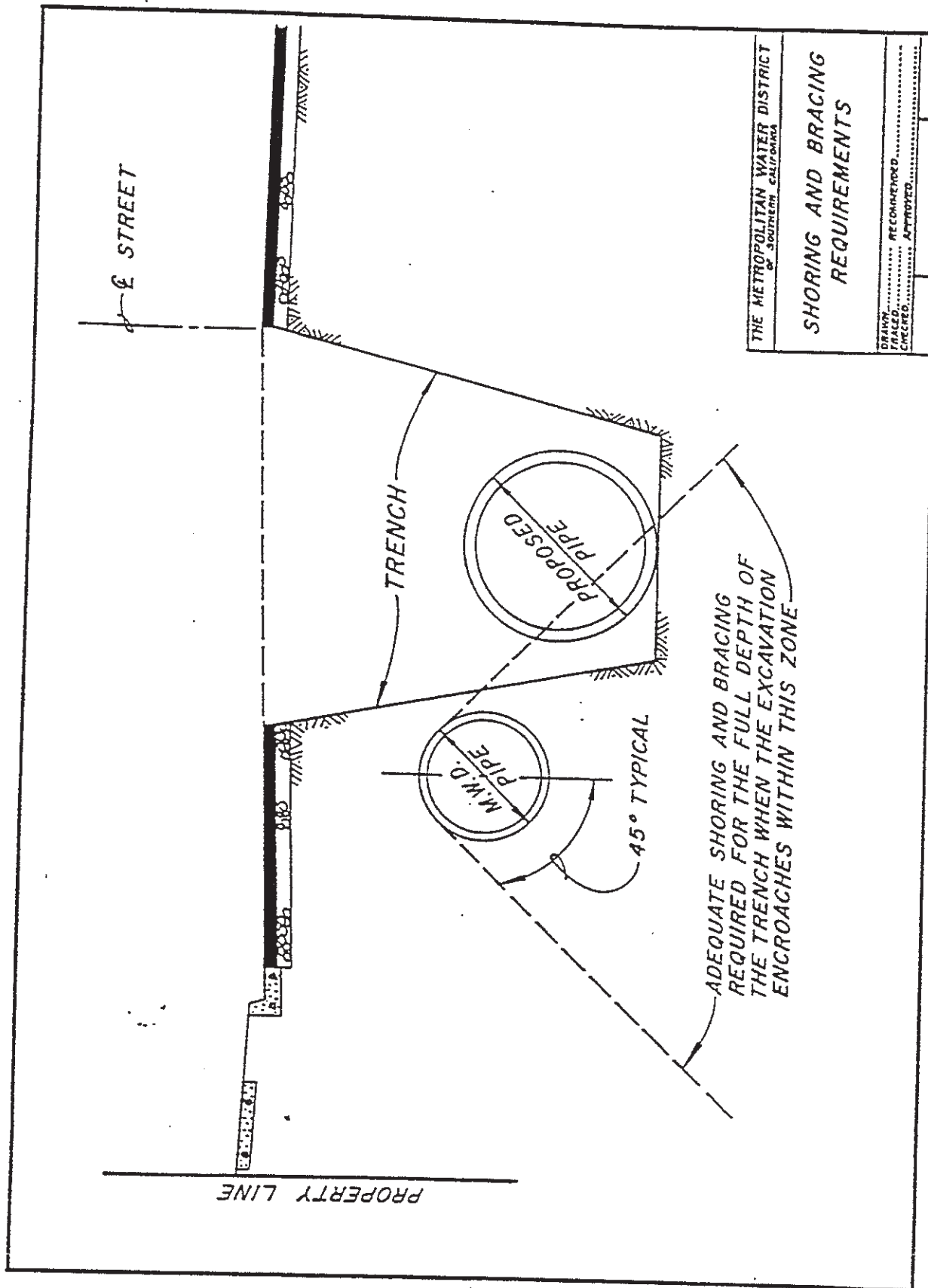
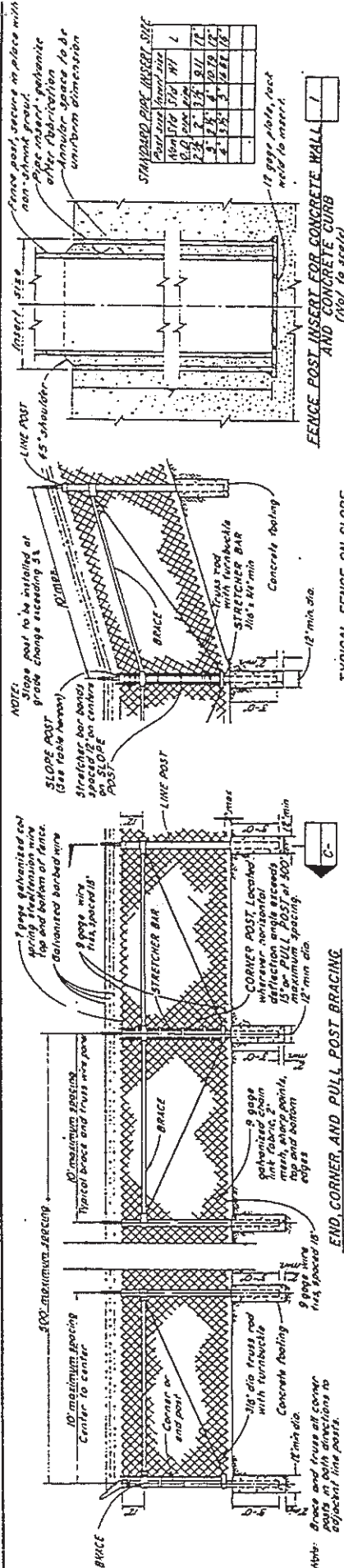
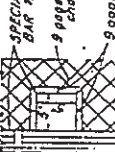
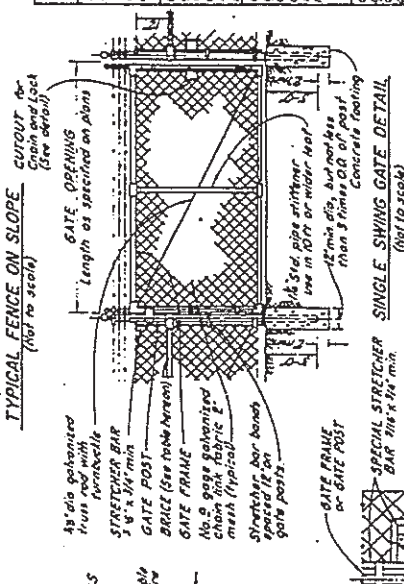


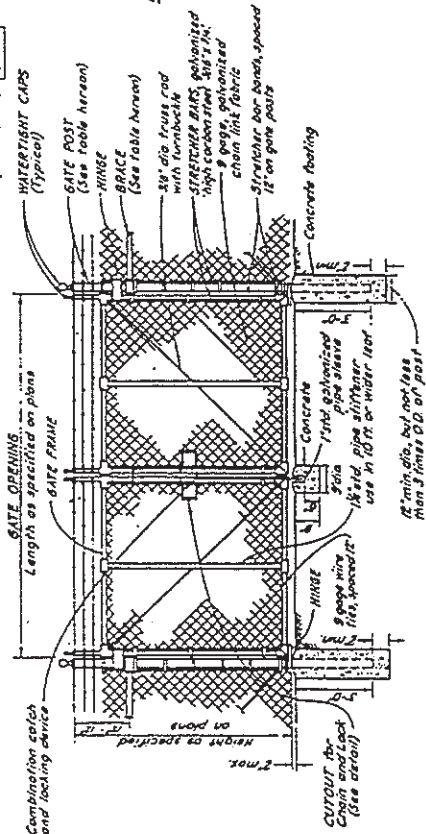
FIGURE 4

[illegible]

32104 7YR 2N 7.5

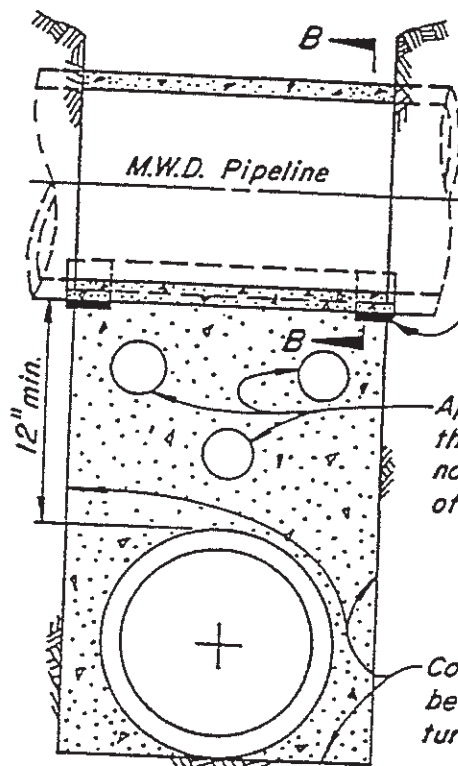
- 1 All corner parts and materials shall be galvanized after fabrication
- 2 Adjustable tighteners shall be turn-buckle or equivalent, having minimum 5-ton capacity
- 3 Flap-cup
- 4 Extension arms for barbed wire shall be steel, malleable iron or wrought iron and shall be attached to the top of the post with a 1/2 inch round head rivet. The extension arms shall cover three feet of approximately 15 inch center-to-center barbed wire, with the ends turned vertical.
- 5 All gate hinges shall be heavy duty malleable iron or steel, industrial service type, 270 degree swing or approved quality and design.
- 6 Secure cap to post with 1/2 inch round head rivet

DETAIL OF CUTOUT
FOR CHAIN AND LOCK



DOUBLE SWING GATE DETAIL

[illegible]

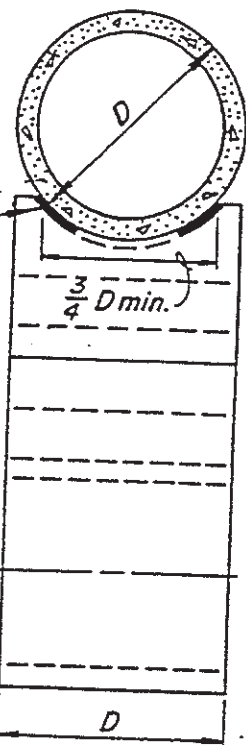


SECTION "A-A"

$\frac{3}{4}$ x 6" premolded expansion joint filler

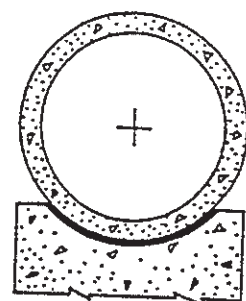
Apertures as directed by the Engineer, total volume not to exceed $\frac{1}{2}$ the volume of the supporting wall

Concrete support wall to be placed against undisturbed ground



CROSS SECTION

1. Supporting wall shall have a firm bearing on the subgrade and against the side of the excavation.
2. Premolded expansion joint filler per ASTM D-1751-73 to be used in support for steel pipe only.
3. If trench width is 4 feet or greater, measured along centerline of M.W.D. pipe, concrete support must be constructed.
4. If trench width is less than 4 feet, clean sand backfill, compacted to 90% density in accordance with the provisions of ASTM Standard D-1557-70 may be used in lieu of the concrete support wall.



SECTION "B-B"

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

TYPICAL SUPPORT FOR
M.W.D. PIPELINE

DRAWN _____ RECOMMENDED _____
TRACED _____
CHECKED _____ APPROVED _____

C-9547

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APPENDIX F:
**LOS ANGELES DEPARTMENT OF WATER AND
POWER RIGHT-OF-WAY REQUIREMENTS**

Requirements for use of Los Angeles Department of Water and Power Castaic Transmission Line Right-of-Way includes:

1. Provide plans illustrating the LADWP transmission line right of way boundaries within the trail improvements. Include towers and clearances from proposed improvements. Also, provide grading plans, including any other plans illustrating impacts to the LADWP transmission line right of way. The plans shall include APNs, state plane coordinates, or use of the Public Land Survey System to locate the trails impacting LADWP's Right of Way.
2. LA County shall acknowledge the LADWP transmission line rights of way are integral components of the transmission line system, which provides electric power to the City of Los Angeles and other local communities. Their use is under the jurisdiction of the Federal North American Electric Reliability Corporation (NERC). Safety and protection of critical facilities are the primary factors used to evaluate secondary land use proposals. The rights of way serve as platforms for access, construction, maintenance, facility expansion and emergency operations. Therefore, the proposed use may from time to time be subject to temporary disruption caused by such operations
3. To comply with NERC Standard FAC0031, the LADWP's Transmission Vegetation Management Program states that no trees shall be allowed anywhere within the LADWP transmission line right of way. The LADWP reserves the right to remove any trees from the right of way as part of the program with or without notice. Further, the LADWP shall suffer no liability for actions taken in furtherance of the Vegetation Management Program in order to preserve the integrity of the Transmission grid.
4. Conductor Clearances may be subject to the review and approval of the Transmission Engineering Group. The LADWP may need a copy of the conductor survey illustrating the cross sections showing our existing conductors and proposed improvements. See attached LADWP Conductor Survey Instructions. The Transmission Engineering Group will use the data to calculate and confirm conductor clearances adhere to the State of California, Public Utilities Commission, General Order No. 95 clearances.
5. Cut & fill slopes inside the LADWP transmission line right of way steeper than 2 horizontal to 1 vertical require retaining structures and geotechnical report approval.
 - Note: Grading activity resulting in a vertical clearance between the ground and the transmission line conductor elevation less than thirtyfive (35) feet or as noted in the State of California, Public Utilities Commission, General Order No. 95, within the LADWP transmission line rights of way is unacceptable. Ground cover for all below ground utilities shall not be less than four (4) feet.
6. When grading activity affects the transmission line access roads, LA County shall replace the affected access roads using LADWP's Access Road Design Criteria. See attached.
7. LADWP's patrol roads shall be designed to withstand the American Association of State Highway and Transportation Officials' vehicular loading H2044 or HL93. The design shall also comply with applicable design standards.
8. The right of way contains highvoltage electrical conductors; therefore, LA County shall utilize only such equipment, material, and construction techniques that are permitted under applicable safety ordinances and statutes, including the following: State of California Code of Regulations, Title 8, Industrial Relations, Chapter 4, Division of Industrial Safety, Subchapter 5, Electrical Safety Orders; and California Public Utilities Commission, General Order No. 95, Rules for Overhead Electric Line Construction.
9. All transmission line towers along the proposed multiuse trail shall require safety guards. The LA County shall be responsible for the costs to have LADWP install safety guards at a cost of up to \$3,200 per tower.
10. Under the State of California Code of Regulations, Title 8, the term "qualified electrical workers" pertains to individuals who

are familiar with working in and around high voltage conductors and understand minimum approach distances.

11. No equipment with a height or reach of over 14feetshall be allowed within the LADWP transmission line right of way.
12. No "hilift" vehicles shall be used under the LADWP transmission lines. It is LA County's responsibility to comply with all applicable standards and safety regulations while working near or under high voltage overhead transmission lines.
13. Vehicle parking on the LADWP transmission line right of way may not be used to satisfy any zoning demands, zoning variances, conditional use permits, open space, or parking requirements for building plans and permits, or governmental requirements.
14. No construction equipment shall be allowed to setup directly under the LADWP transmission lines.
15. .
16. LA County shall compact all fill slopes within the LADWP transmission line right of way. The soil compaction shall adhere to a minimum of 90% relative compaction. Compaction test results shall be provided to LADWP for approval.
17. AsBuilt plans shall be provided to LADWP for review and approval.
18. During construction of the proposed project, LA County shall perform reasonable and necessary dust abatement procedures using water trucks and readily available water when warranted due to excessive dust conditions.
19. Unscheduled washing of insulators by high-pressure water spray caused by LA County's use of the existing patrol roads, including LA County's construction efforts adjacent and within LADWP's transmission line right of way, shall be at the sole expense of LA County.
- 20.No structures shall be constructed within the LADWP transmission line right of way without prior written approval of the Los Angeles Department of Water & Power.
21. No kites, balloons, model airplanes or other recreational flying objects are allowed on or near the Transmission Line Right of Way.

22.No grading shall be conducted within the LADWP transmission line right of way without prior written approval of the Los Angeles Department of Water & Power.

23.LA County shall notify LADWP's Transmission Construction and Maintenance Business Group, Dominick Cerulle at (818)7715014 no earlier than 14 days and no later than two days prior to the start of any grading, paving, or construction work within the LADWP transmission line right of way.

24. Condition Nos. 1 to 11A, 12 to 17A, 18 to 23B, 25, 27, and 31A of the Standard Conditions for Construction shall apply. See attachment.

25. Additional conditions may be required following review of detailed site plans,

- grading/drainage plans, etc.

26. The LA County shall defend and hold LADWP harmless from any and all liabilities that may arise out of, or associated with, the use of the multiuse trail.

27. The LA County shall be responsible for keeping the multiuse trail free from trash and graffiti.

28.This reply shall in no way be construed as an approval of any project.

Further design guidelines and standards can be found in the documents that follow.

ACCESS ROAD DESIGN CRITERIA

1. When grading activity affects the Transmission Line access roads, the developer shall replace the affected access roads using the following access road design criteria. Typical Road Sections are illustrated in Attachment.
2. The access road right-of-way width shall be 50 feet minimum.
3. The access road drivable width shall be 20 feet minimum, and increased on curves by a distance equal to 400 divided by the radius of curve. Additional 2 feet on either side of the road shall be provided for berms and ditches, as detailed in the attached Typical Road Sections.
4. The minimum centerline radius of curves shall be 50 feet.
5. The vertical alignment grades shall be limited to 10 percent or paved at a maximum of 15 percent.
6. Roads entirely located on fills or with cross sections showing more than 30 percent fill along the drivable width of the road require paving.
7. Intersections or driveways shall have a minimum sight distance of 300 feet in either direction along the public street.
8. The developer shall provide a commercial driveway at locations where the replaced access roads terminate at, or cross public roads.
9. The developer shall provide lockable gates on LADWP property or easement at locations where access roads terminate or cross public roads.

STANDARD CONDITIONS FOR CONSTRUCTION

1. Energized transmission lines can produce electrical effects including, but not limited to, induced voltages and currents in persons and objects. Licensee hereby acknowledges a duty to conduct activities in such manner that will not expose persons to injury or property to damage from such effects.
2. The Los Angeles Department of Water and Power (LADWP) personnel shall have access to the right of way at all times.
3. Unauthorized parking of vehicles or equipment shall not be allowed on the right of way at any time.
4. Unauthorized storage of equipment or material shall not be allowed on the right of way at any time.
5. Fueling of vehicles or equipment shall not be allowed on the right of way at any time.
6. Patrol roads and/or the ground surfaces of the right of way shall be restored by the Licensee to original conditions, or better.
7. All trash, debris, waste, and excess earth shall be removed from the right of way upon completion of the project, or the LADWP may do so at the sole risk and expense of the Licensee.
8. All cut and fill slopes within the right of way shall contain adequate berms, benches, and interceptor terraces. Re-vegetation measures shall also be provided for dust and erosion control protection of the right of way.
9. All paving, driveways, bridges, crossings, and substructures located within the right of way shall be designed to withstand the American Association of State Highway and Transportation Officials' vehicular loading H20-44 or HL-93. The design shall also comply with applicable design standards.
10. The location of underground pipelines and conduits shall be marked at all points where they cross the boundaries of the right of way and at all locations where they change direction within the right of way. The markings shall be visible and identifiable metal post markers for underground pipelines. Utility markers flush with surface may be used on pavement.
- 11A. General Grounding Condition

All aboveground metal structures including, but not limited to, pipes, drainage devices, fences, and bridge structures located within or adjoining the right of way shall be properly grounded, and shall be insulated from any fencing or other conductive materials located outside of the right of way. For safety of personnel and equipment, all equipment and structures shall be grounded in accordance with State of California Code of Regulations, Title 8, Section 2941, and National Electric Code, Article 250.

~~11B. Grounding Condition for Cellular Facilities on Towers~~

~~All aboveground metal structures including, but not limited to, pipes, drainage devices, fences, and bridge structures located within or adjoining the right of way shall be properly grounded, and shall be insulated from any fencing or other conductive materials located outside of the right of way. For safety of personnel and equipment, all equipment and structures shall be grounded in accordance with American National Standards Institute of Electrical and Electronics Engineers Standard 487 latest edition, IEEE Guide for Safety in AC Substation Grounding.~~

12. Licensee shall neither hold the LADWP liable for nor seek indemnity from the LADWP for any damage to the Licensee's project due to future construction or reconstruction by the LADWP within the right of way.
13. Fires and burning of materials is not allowed on the right of way.
14. Licensee shall control dust by dust-abatement procedures approved by the LADWP, such as the application of a dust palliative or water.
15. The right of way contains high-voltage electrical conductors; therefore, the Licensee shall utilize only such equipment, material, and construction techniques that are permitted under applicable safety ordinances and statutes, including the following: State of California Code of Regulations, Title 8, Industrial Relations, Chapter 4, Division of Industrial Safety, Subchapter 5, Electrical Safety Orders; and California Public Utilities Commission, General Order No. 95, Rules for Overhead Electric Line Construction.
16. Licensee is hereby notified that grounding wires may be buried in the right of way; therefore, the Licensee shall notify the LADWP's Transmission Construction and Maintenance Business Group at (818) 771-5035, or (818) 771-5014, at least 48 hours prior to the start of any construction activities in the right of way.

17A. Vehicle Parking

An area within 50 feet around the base of each tower must remain open and unobstructed for maintenance and emergencies, including periodic washing of insulators by high-pressure water spray. Clearances of 100 feet may be required under circumstances where access is limited.

~~17B. Trucking Operations and Storage Operations~~

~~An area within 50 feet around the base of each tower must remain open and unobstructed for maintenance and emergencies, including periodic washing of insulators by high-pressure water spray. Clearances of 100 feet may be required under circumstances where access is limited.~~

~~17C. Permanent Structures~~

~~An area within 100 feet on all sides of each tower shall remain open and unobstructed for maintenance and emergencies, including periodic washing of insulators by high-pressure water spray.~~

18. Detailed plans for any grading, paving, and construction work within the right of way shall be submitted for approval to the Real Estate Business Group, Department of Water and Power, P.O. Box 51111, Room 1031, Los Angeles, California 90051-0100, no later

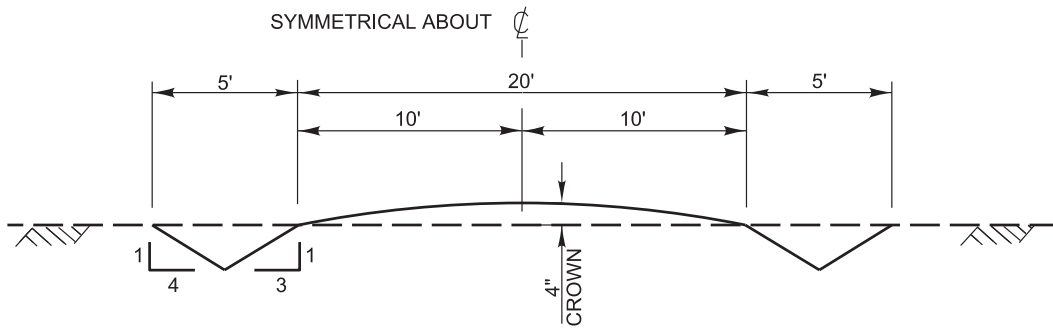
than 45 days prior to the start of any grading, paving, or construction work. Notwithstanding any other notices given by Licensee required herein, Licensee shall notify the LADWP's Transmission Construction and Maintenance Business Group at (818) 771-5035, or (818) 771-5014, no earlier than 14 days and no later than two days prior to the start of any grading, paving, or construction work.

19. "As Constructed" drawings showing all plans and profiles of the Licensee's project shall be furnished to the Real Estate Business Group, Los Angeles Department of Water and Power, P. O. Box 51111, Room 1031, Los Angeles, California 90051-0100, within five days after completion of Licensee's project.
20. In the event that construction within the right of way is determined upon inspection by the LADWP to be unsafe or hazardous to the LADWP facilities, the LADWP may assign a line patrol mechanic at the Licensee's expense.
21. If the LADWP determines at any time during construction that the Licensee's efforts are hazardous or detrimental to the LADWP facilities, the LADWP shall have the right to immediately terminate said construction.
- 22A. All concentrated surface water which is draining away from the permitted activity shall be directed to an approved storm drain system where accessible, or otherwise restored to sheet flow before being released within or from the right of way.
- 22B. Drainage from the paved portions of the right of way shall not enter the unpaved area under the towers. Drainage diversions such as curbs shall be used on three sides of each tower. The open side of each tower shall be the lowest elevation side to allow storm water which falls under the tower to drain. The area under the towers shall be manually graded to sheet flow out from under the towers.
- 22C. Ponding or flooding conditions within the right of way shall not be allowed, especially around the transmission towers. All drainage shall flow off of the right of way.
- 22D. Licensee shall comply with all Los Angeles County Municipal Storm Water Permit and Standard Urban Storm Water Mitigation Plan requirements.
- 23A. Fills, including backfills, shall be in horizontal, uniform layers not to exceed six inches in thickness before compaction, then compacted to 90 percent relative compaction in accordance with the American Society for Testing and Materials D1557.
- 23B. The top two inches to six inches of the concrete footings of the towers shall remain exposed and not covered over by any fill from grading operations.
- ~~23C. Licensee shall provide the LADWP with one copy each of the compaction report and a Certificate of Compacted Fill, for clean fill compaction within the LADWP's right of way in accordance with the American Society for Testing and Materials D1557, approved by a geotechnical engineer licensed in the State of California.~~
- ~~24. A surety bond in the amount to be determined by the LADWP shall be supplied by the Licensee to assure restoration of the LADWP's right of way and facilities, and compliance with all conditions herein.~~
25. The Licensee shall obtain and pay for all permits and licenses required for performance of the work and shall comply with all laws, ordinances, rules, orders, or regulations including, but not limited to, those of any agencies, departments, districts, or

commissions of the State, County, or City having jurisdiction thereover.

- ~~26. The term "construction", as used herein, refers only to that construction incidental to the maintenance or repair of the existing (requested facility) and shall not be construed to mean permission to construct any additional (requested facility).~~
27. Signs shall not exceed four feet wide by eight feet long, shall not exceed a height of 12 feet, shall be constructed of noncombustible materials, and shall be installed manually at, and parallel with, the right of way boundary.
- ~~28. Remote-controlled gates, or lock boxes containing the device or key for opening the remote-controlled gates, shall be capable of being interlocked with an LADWP padlock to allow access to the right of way by the LADWP. Licensee shall contact LADWP's Transmission Construction and Maintenance Business Group at (818) 771-5035, or (818) 771-5014, to coordinate the installation of an LADWP padlock.~~
- ~~29. Licensee's cathodic protection system, if any, shall have a design that does not cause corrosion to LADWP facilities. A detailed design of the Licensee's cathodic protection system shall be submitted for approval to the Real Estate Business Group, Department of Water and Power, P. O. Box 51111, Room 1031, Los Angeles, California 90051-0100, no later than 45 days prior to the start of construction or installation of the cathodic protection system.~~
- ~~30A. Licensee shall install K rails at a distance of ten feet from each side of the tower base for protection of towers. A distance of five feet from the tower base may be acceptable in locations where the patrol roads would be obstructed.~~
- ~~30B. Licensee shall install removable pipe bollards, spaced four feet apart, and at a distance of ten feet from each side of the tower base for protection of towers. A distance of five feet from the tower base may be acceptable in locations where the patrol roads would be obstructed.~~
- 31A Licensee shall provide and maintain a minimum 20-foot wide transition ramp for the patrol roads from the pavement to the ground surface. The ramp shall not exceed a slope of ten percent.
- ~~31B. Licensee shall provide and maintain a minimum 20-foot wide driveway and gate at all locations where the (road/street) crosses the LADWP's patrol roads. The designed gates must be capable of being interlocked with an LADWP padlock to allow access to the right of way by the LADWP.~~
- ~~32. Licensee shall post a sign on the entrance gate to the right of way, or in a visible location inside the entrance gate, identifying the contact person's name and telephone number for the prompt moving of (vehicles/trucks/trailers/containers) at times of LADWP maintenance or emergency activities, or any other event that (vehicles/trucks/trailers/containers) must be moved. In emergency conditions, the LADWP reserves all rights at any time to move or tow (vehicles/trucks/trailers/containers) out of specific areas for any transmission operation or maintenance purposes.~~

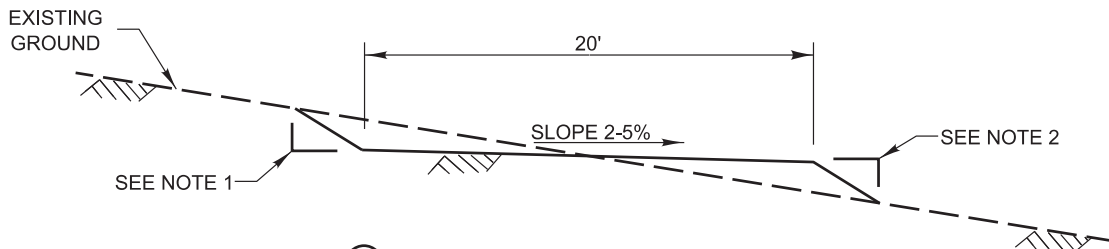
LOS ANGELES DEPARTMENT OF WATER AND POWER TRANSMISSION LINE ACCESS ROAD DETAILS



Ⓐ TYPICAL ROAD SECTION

EXISTING CROSS SLOPE ≤ 5%	PROPOSED ROAD GRADE ≤ 10%
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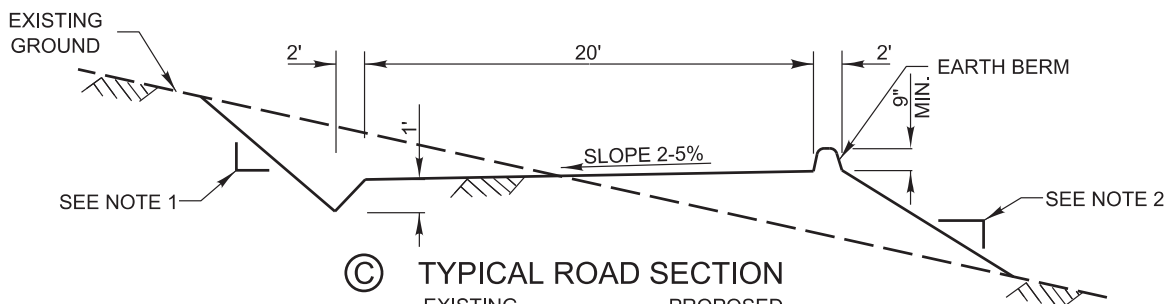
10-15% (PAVEMENT REQUIRED)



② TYPICAL ROAD SECTION

EXISTING CROSS SLOPE	PROPOSED ROAD GRADE
5-15%	≤ 10%

10-15% (PAVEMENT REQUIRED)



© TYPICAL ROAD SECTION

EXISTING CROSS SLOPE	PROPOSED ROAD GRADE
15-50%	≤ 10%

10-15% (PAVEMENT REQUIRED)

NOTES:

1. CUT SLOPE SHALL NOT EXCEED THE FOLLOWING:
 - A. 2 HORIZONTAL TO 1 VERTICAL IN LOOSE OR UNSTABLE MATERIAL.
 - B. 1 HORIZONTAL TO 1 VERTICAL IN COMPACTED MATERIAL.
 - C. 1/2 HORIZONTAL TO 1 VERTICAL IN SOLID ROCK.
2. ALL FILL SLOPES SHALL BE 2 HORIZONTAL TO 1 VERTICAL OR FLATTER.
3. WHERE SOLID ROCK IS ENCOUNTERED THE 4" CROWN AND, OR SIDE DITCHES MAY BE ELIMINATED WHERE DIRECTED BY THE ENGINEER.

CONDUCTOR SURVEY

DEPARTMENT OF WATER AND POWER

OVERHEAD TRANSMISSION ENGINEERING

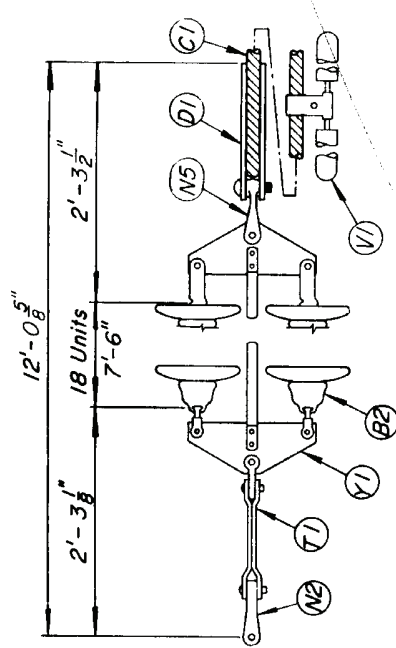
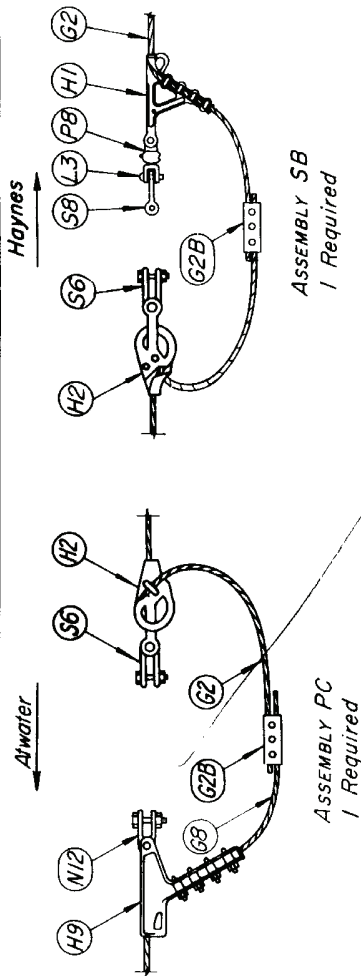
Please perform a survey of each Department transmission line affected by the project. For each span (the section of wire between two (2) towers) provide the following information:

1. The tower numbers of the Department transmission lines related to the span. The tower number is located near ground level on at least one (1) leg of each tower.
2. Survey the top-of-concrete of each footing of each tower related to this survey. For example, a survey involving one (1) span would involve two (2) towers, each with four (4) footings, for a total of eight (8) top-of-concrete shots.
3. Survey at least eight (8) points along the span – the two (2) points where the insulator attaches to the tower, the two (2) points where the wire attaches to the insulator, and four (4) additional points along the wire (preferred spacing of 200 – 300 feet). See attached Conductor Attachments Points for additional information. Include additional points where special features of the proposed improvements cross the transmission line (such as high points, street lights, signs, etc.). For each point provide the following information:
 - a. The northing and easting coordinates and elevations of conductor and ground points
 - b. The elevation of the wire
 - c. The existing ground coordinates and elevation
 - d. The proposed ground elevation
 - e. Date and Time
 - f. Temperature
 - g. Sunlight (sunny, partly cloudy, or cloudy)
 - h. Approximate wind speed

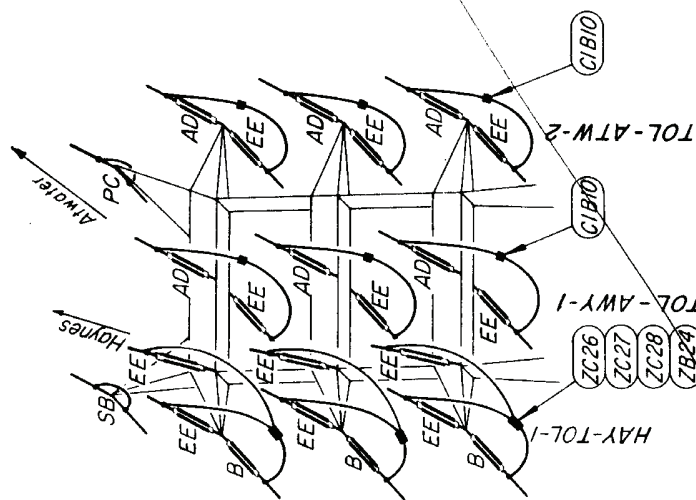
Important: All eight (8) wire shots on each individual span shall be completed within one (1) hour after the first wire shot is made. Failure to comply with this requirement will render data useless.

* See attached Data Sheet for sample of submittal document.

Updated:01/17/2013



ASSEMBLY EE
12 Required



ASSEMBLY AD
6 Required

ASSEMBLY B
3 Required

Note:
U-Bolts of D1, D7 and messenger cable of V1 and V11 coated with Alcoa No-Ox-Id-A Special compound

Assemblies identified by adjacent letter

Date 3 - 15 - 84

DRAWING NUMBER

TM 18-6-13H

INSULATORS AND HARDWARE See

DEAD END TOWER

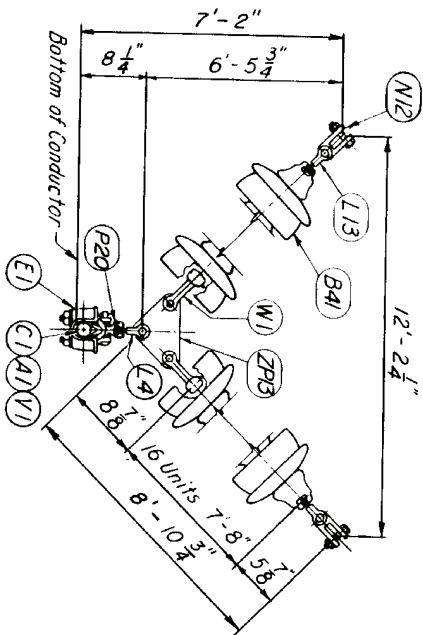
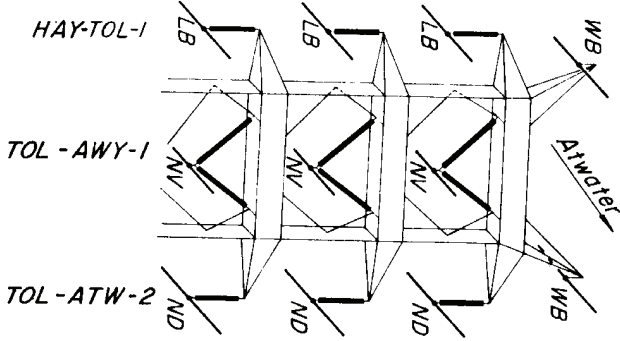
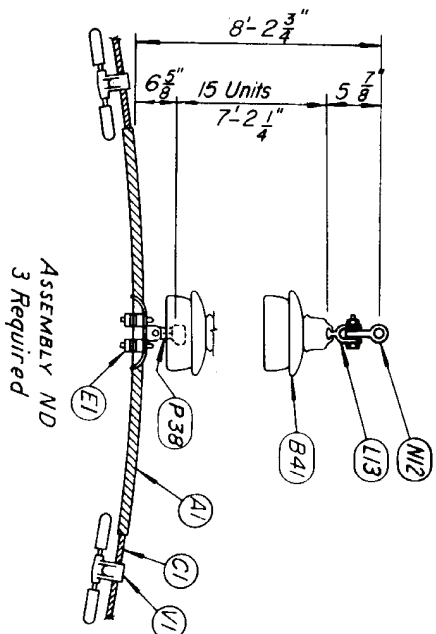
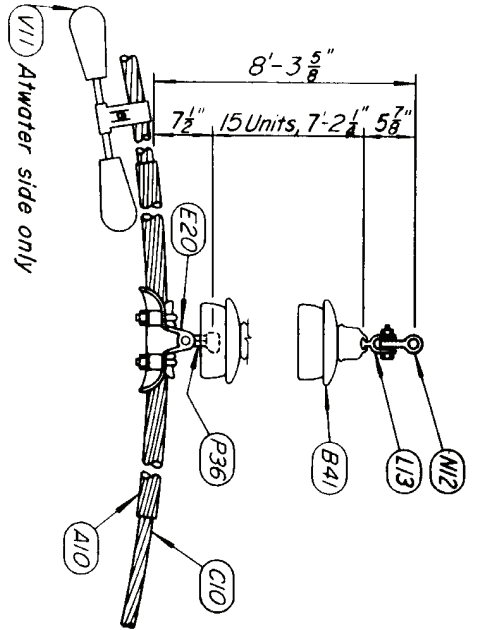
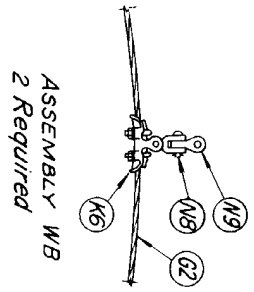
TOLUCA - ATWATER LINE 2

Sheet 1 of 2

Date 3 - 15 - 84

DRAWING NUMBER

TM 18-6-13H



Assemblies identified by adjacent letter

Note:
U-Bolts of E1, E20 and messenger cable of V1 and V11
coated with Alcoa No-Ox-Id-A Special compound

Date 3 - 15 - 84

DRAWING NUMBER

TM18-6-15H

INSULATORS AND HARDWARE

SUSPENSION TOWER

TOUCA - ATWATER LINE 2

SHEET 1 OF 2

Date 3 - 15 - 84

DRAWING NUMBER

TM18-6-15H

SURVEYED BY:

PAGE:

BENCHMARK:

TRANSMISSION LINE R/W:

[illegible]