# **Chapter 4 - Trail Network Subarea Recommendations**

#### 4.1 Subarea Recommendations

The following pages discuss the distribution of trails within each of the 14 subareas identified in this plan. Each subarea represents the goal to have an open space and trail system in close proximity to the local population. The 14 subareas have also been summarized on Figure 4.1 "Trail Subarea Map".

#### **Challenges to Trail Development**

As a result of the gap analysis and community input, areas of potential trail connectivity have been identified. Further analysis of physical, environmental and behavioral characteristics of the site, allow to assess the suitability of the site for trail connectivity. A ranking methodology was developed to allow the GIS to sort through site records and identify factors, such as ownership, vegetation coverage, topography, sensitive habitat, preserve status, that are useful in identification of potential challenges to trail development. Table 4.1 "Methodology to Rank Challenges to Trail Development" illustrates the level of opportunities and challenges associated with each factor. The individual cells provide a description and point value for each factor, to determine if the site have potential for trail connection. Described methodology allows only for initial evaluation of the site suitability. If selected for further consideration, detailed environmental assessment may be required per the California Environmental Quality Act (CEQA) and the Environmental Protection Ordinance of the City of Carlsbad.



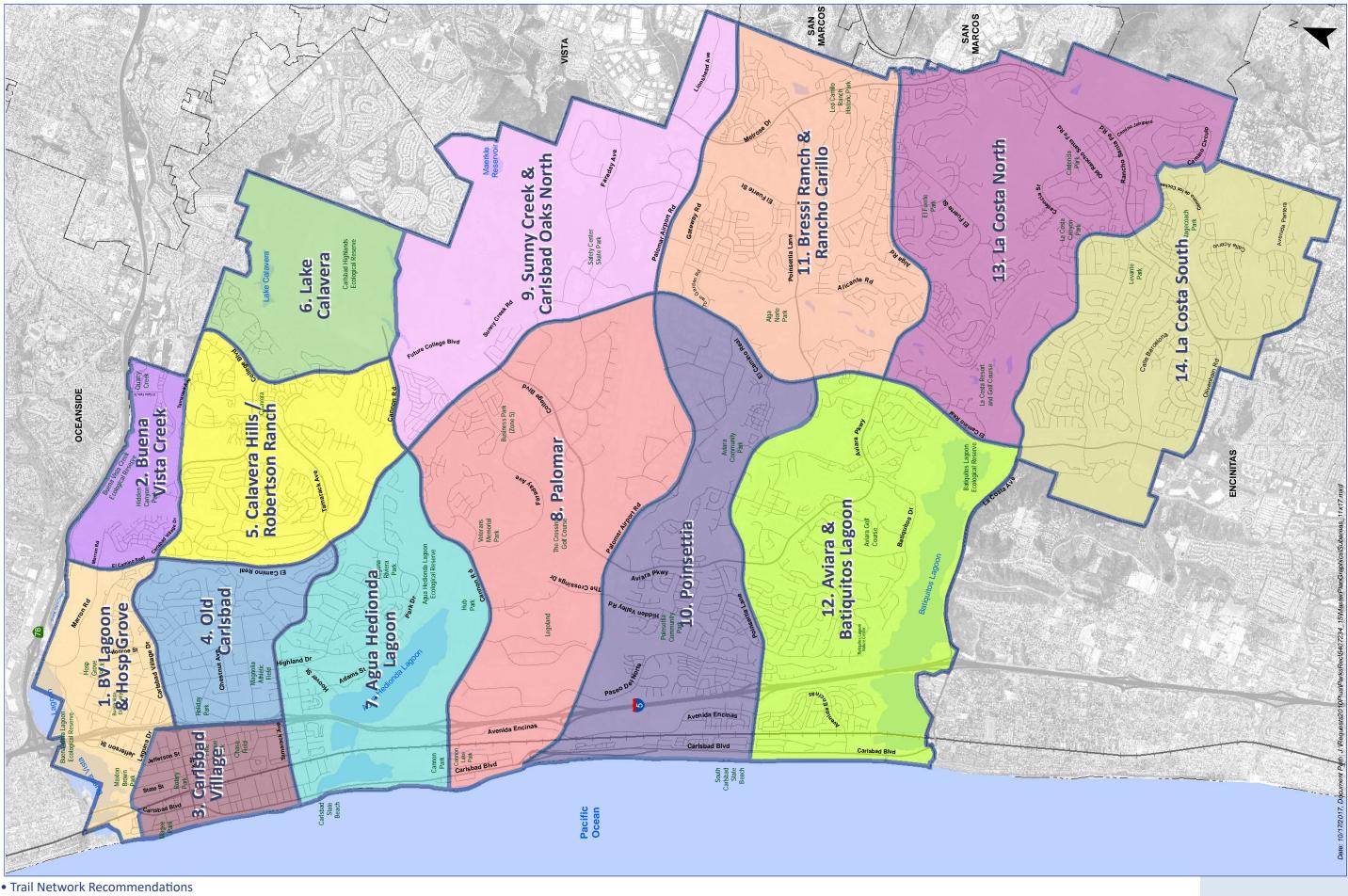
Lake Calavera Preserve



Harbor Drive Trail

	Importance	High Challenge	Moderate Challenge	Minor Challenge	Minor Opportunity	Moderate Opportunity	High Opportunity
		)	,	)			
Non-road Based Trails (Type 1, 2, 3 and 6)		Highly constrained with significant implementation challenges	Constrained with challenges for implementation	Slightly constrained but still implementable	Slight opportunity that helps implementation	Moderate opportunity for trail alignment & implementation	Great opportunity for trail alignment & ease of implementation
Raw Score:	0.5 to 1.5	-1.5	-1	-0.5	0.5	1	1.5
PROJECT OPPORTUNITY FACTORS	S						
1. Public Ownership of Lands	1.50				Publically owned lands by quasi-public agencies where primary use is not focused on public access	Publically owned undeveloped lands, easements and semi- developed ROW	Publically owned dedicated open space, parkland or undeveloped ROW
2. Private Property	1.50	Private residential property (<5 acres)	Private residential property (>5 acres)	Private commercial property	Subdivision or discretionary approval pending; trails have not been previously identified in OSCRMP or other plans	Pre-application review or application submitted where a trail has been identified in OSCRMP	Property identified as part of the I-5 PWP, or a granted easement exists (that has not been constructed)
3. General vegetation cover (within 12.5' of trail centerline)	1.00	Wetland, vernal pools, emergent wetlands, marshland, riparian scrub, open water, creekbed, & willow woodland	Riparian woodland, chaparral, oak woodland, coastal sage, maritime scrub & native grasslands	Non-native grasslands or natural areas that are disturbed	Next to agricultural areas, groves or agriculture being converted to trail use	Non-native and non- sensitive vegetation areas	Newly graded or cleared area or highly disturbed open areas
4. Topography	0.50	Excessively steep >45%	Steep slopes 20-45%	Moderately steep slopes 10- 20%	Flat 0-3%	Gentle slopes 3-5%	Moderate slopes 5- 8.3%
5. Preserve Status / Habitat	1.50	Level 1: Open space for preservation of sensitive wildlife species and supporting habitats (no trails allowed due to habitat destruction from new trails or edge effect)	Level 2: Open space for preservation of sensitive plant species, natural resources & general habitats (trails only allowed on existing trailbeds, roadbeds or other disturbed non-habitat areas; signage & mitigation required)	Level 3: Open space for general biodiversity with no sensitive plants or wildlife species (trails allowed through non- sensitive habitat areas)	Level 4: Natural open space, non-sensitive wildlife or disturbed vegetation not intended to be used for mitigation ( <i>trails encouraged</i> )	Level 5: Open space for unprogrammed recreation ( <i>trails encouraged</i> )	Level 6: Open space for aesthetic, cultural, active transportation development and educational purposes (trails required)

#### Table 4.1 Methodology to Rank Challenges to Trail Development



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Trails Master Plan

Figure 4.1: Trail Subarea Map

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### Subarea 1: Buena Vista Lagoon & Hosp Grove

Buena Vista Lagoon is a dominant element of this subarea. Hosp Grove, with its mature eucalyptus trees, creates a shaded grove habitat, inviting and comfortable for hiking and exercising (see Figure 4.2 "Trail Subarea 1 Map").

**Subarea 1 General Description:** Eucalyptus forest on the hills of Hosp Grove provides vistas to Buena Vista Lagoon. Recent major changes in this area include a roundabout at State Street, extensions of connections to the lagoon by way of a trail along Carlsbad Boulevard, Jefferson Street and trail connectivity to development in Oceanside.

**Destinations**: Buena Vista Lagoon, Maxton Brown Park, Hosp Grove, The Shoppes at Carlsbad Mall, Smerdu Community Garden, Cole Library, and the beach via public accesses at Ocean Street one block west of Carlsbad Boulevard.

**Range of Difficulties:** Moderate to steep trails leading through Hosp Grove. The rest of the trails in this subarea are relatively flat. Much of the trails n Hosp Grove are shaded with trees.

**Range of Surface Types:** Most of the trails in Hosp Grove are soft surface trails. The beach trails are compacted soil and sand.

**Connectivity/Possible Loops:** A loop can be made from Hosp Grove west to east using the proposed mid-block crossing at Monroe Street. Several miles of trails can be joined to make a longer trail experience. A loop will be possible in the future around The Shoppes at Carlsbad mall, north along Buena Vista Creek and then back along Marron Road. Jefferson and Laguna Drive sidewalks lead to the Buena Vista Lagoon overlook in Maxton Brown Park and Reach 1 Coastal Rail Trail along Carlsbad Boulevard, connecting north shore of the Buena Vista Lagoon and nature center in Oceanside with south shore in Carlsbad.



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Hosp Grove overlooking Buena Vista Lagoon

### Subarea 2: Buena Vista Creek

The Buena Vista Creek Subarea takes its name from the Buena Vista Creek running along the north edge of the city. The area is mostly arranged around landforms between housing developments to the south, the Quarry Creek Development and CDFW Buena Vista Creek Ecological Reserve in the center, and multi-family development to the west. Highway 78 is to the north (see Figure 4.3 "Trail Subarea 2 Map").

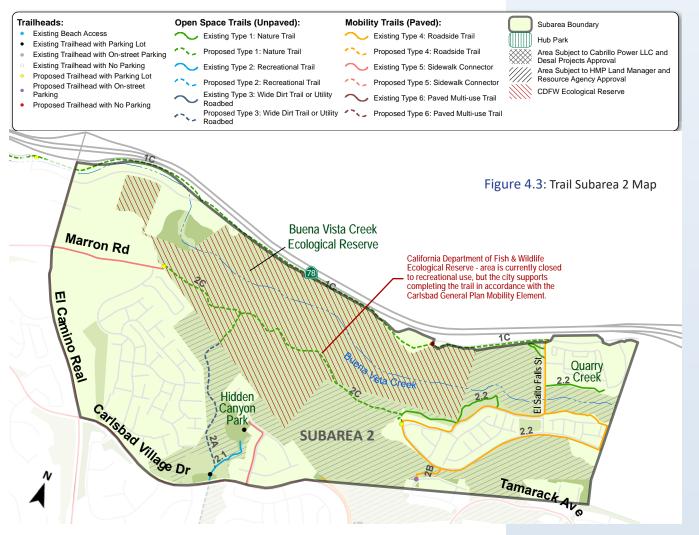
**Subarea 2 General Description:** Home of the Hidden Canyon Park, with panoramic views to the canyon and beyond. Quarry Creek Development is surrounded by the hardline preserve as defined by Habitat Management Plan. Network of trails through this area is focused on providing responsible passive recreation while preserving sensitive cultural and environmental resources. CDFW staff expressed concerns for potential impacts to habitat from recreational use, however the city supports completing the trail for connectivity and to be consistent with the Mobility Element of the City of Carlsbad General Plan

**Destinations**: Buena Vista Creek Ecological Reserve, El Salto Falls overlook and adjacent canyons and hillsides. Connections to The Shoppes at Carlsbad Mall and shopping centers at Marron Road and El Camino Real.

**Range of Difficulties:** Moderately steep trails leading up Carlsbad Village Drive. Mostly level trails proposed through the Quarry Creek Development.

Range of Surface Types: Most of the trails in this area are native soil or decomposed granite.

**Connectivity/Possible Loops:** Loop around the Quarry Creek Development and along northern edge of Buena Vista Creek Ecological Reserve. In the future trails will connect east and west terminus of Marron Road.



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Hidden Canyon Park Trail

# Subarea 3: Carlsbad Village

At the heart of Carlsbad, trails will provide access to downtown amenities. An important segment of the Coastal Rail Trail (CRT) is also at the center of this subarea (see Figure 4.4 "Trail Subarea 3 Map").

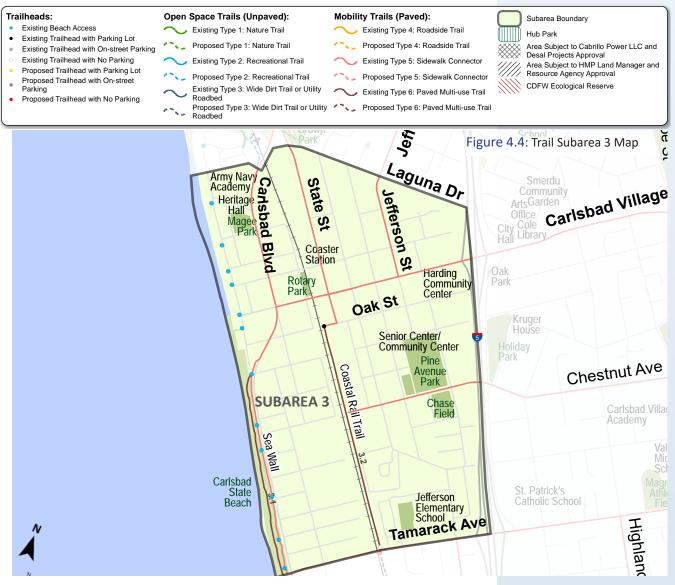
**Subarea 3 General Description:** Carlsbad Village is one of the main tourist and recreational destinations in the city. The CRT provides a safe pedestrian and bike connection from the Village to Tamarack State Beach. The Carlsbad Boulevard seawall attracts many residents and tourists on a daily basis, due to panoramic ocean views, various seating and picnic areas and opportunities for social interaction.

**Destinations**: Various destinations include the Coaster station, CRT, city parks and community centers, Senior Center, schools, hotels, shopping, restaurants, and the beach.

**Range of Difficulties:** All trails in this subarea are mostly flat with the exception of ramps leading to the lower seawall walk at Frazee and Tamarack beach.

Range of Surface Types: All trails in this area are hard surface: asphalt or concrete. Only pedestrians are allowed on the Seawall trail.

**Connectivity/Possible Loops:** Various loops are possible utilizing the CRT, sea wall and many urban sidewalk connectors.



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Coastal Rail Trail, Reach 2 - Oak Ave to Tamarack Ave

## Subarea 4: Old Carlsbad

This is one of the oldest parts of Carlsbad. It is home to Holiday Park, Carlsbad's first park and where grand community events such as the Oktoberfest and the Brew Fest take place. (see Figure 4.5 "Trail Subarea 4 Map").

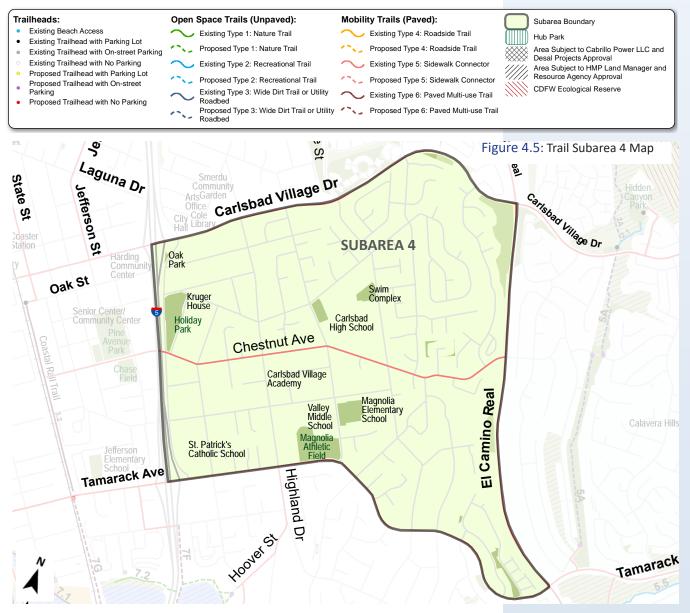
**Subarea 4 General Description:** Chestnut Avenue is a main east/west connector of Subarea 4. Carlsbad Active Transportation Strategies (CATS) program anticipates future improvements for the areas between Valley Street and Adams Street that will include street crossing and sidewalk enhancements, ADA ramps, wayfinding signage and traffic slowing enhancements. The trail system in this area relies on the sidewalk system and future mobility and Active Transportation planning through residential communities.

**Destinations**: Various destinations include Carlsbad High School, the swim complex, parks, and schools.

**Range of Difficulties:** All sidewalks in this subarea are mostly flat with some hills to the easterly areas of Old Carlsbad.

Range of Surface Types: All pedestrian facilities in this area are considered to be paved sidewalks.

**Possible Loops:** Various loops are possible via sidewalk.



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Chestnut Ave - Sidewalk and Bike Lane

# Subarea 5: Calavera Hills/Robertson Ranch

Calavera Hills and Robertson Ranch has well developed trail systems. This is a result of the well planned development that incorporated a local trail system into the master planning process over past decades (see Figure 4.6 "Trail Subarea 5 Map").

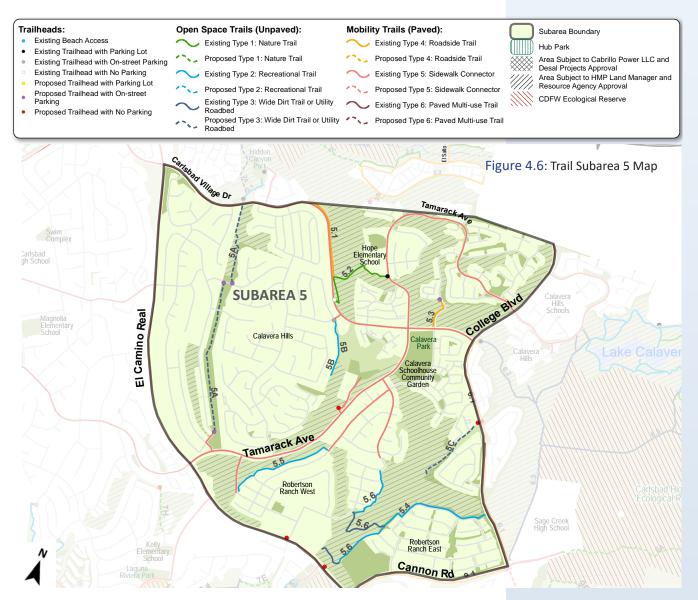
**Subarea 5 General Description:** Robertson Ranch development provides trail connection through the neighborhood with distant views to the open space to the north and west.

**Destinations**: Parks and schools are located in the area, along with Schoolhouse Community Garden and natural open space.

Range of Difficulties: Most of the trails follow the grade of the adjacent road and are moderately steep.

Range of Surface Types: Most trails are highly compacted decomposed granite.

**Possible Loops:** Trail from Hidden Canyon Park, through Village H to Calavera Hills Community Park. Also, proposed trails through Robertson Ranch connecting to the Calavera Hills residential community.





Robertson Ranch (East) Trail at El Camino Real

### Subarea 6: Lake Calavera

The Lake Calavera Subarea has the highest concentration of trails in the city. They provide access to many vista points, such as Lake Calavera, volcanic plug, and dam overlook (see Figure 4.7 "Trail Subarea 6 Map").

**Subarea 6 General Description:** The main focus of this subarea is maintainance of existing trails. The land managers, city staff and resource agencies aducate public and enforce trail use regulations such as authorized uses, staying on designated trails, and dogs on-leash. At Carlsbad Highlands Ecological Reserve recreational use is currently limited to segment 6.5, where only pedestrain use is allowed. CDFW staff expressed concerns for potential impacts to habitat from recreational use, however the city supports completing future trail for connectivity and to be consistent with the Mobility Element of the City of Carlsbad General Plan.

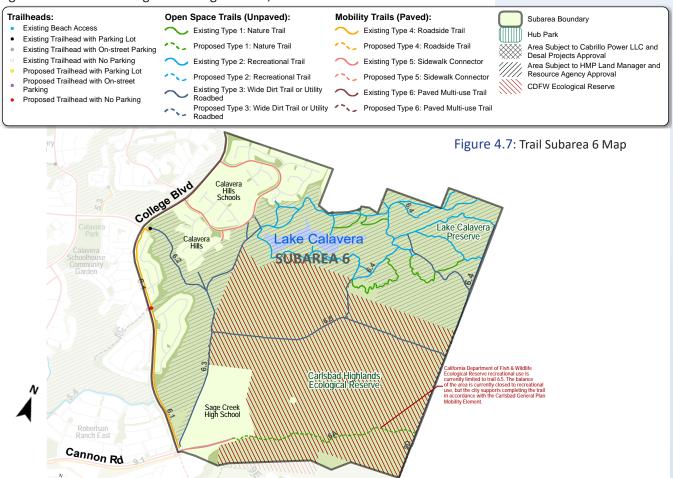
Lake Calavera Preserve is the largest of 13 city-owned, dedicated and managed nature preserves in Carlsbad, established in the city's Habitat Management Plan. The city has developed the Lake Calavera Trails Master Plan for a network of multi-use trails. In the process, some of the trails have been closed for safety reasons, to protect wildlife or due to unsustainable soils and slopes. In other areas, elevated boardwalks have been built to protect sensitive wetlands, and give users an opportunity to experience lush greenery of riparian plants. Eight acres of non-native vegetation have been restored to native sage scrub or riparian habitat. Other restoration activities are required as mitigation for impacts from city projects.

Destinations: Lake Calavera, the 22-million year old volcanic plug, riparian areas and schools.

Range of Difficulties: Wide range, from steep nature trails to relatively flat, wide utility roads.

Range of Surface Types: Compacted native soils, decomposed granite and gravel roadbeds.

**Possible Loops:** Loop trails around the lake, connection from the Oak Riparian Park in Oceanside along the College Boulevard to the Sage Creek High School, and future connection of east and west end of Cannon Rd.



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Calavera Hills Preserve Trail Overlooking Mt. Calavera

### Subarea 7: Agua Hedionda Lagoon

This is one of the rare recreation-based lagoons in Southern California. Although access to the water edge is open in several locations, trails along its northern and southern edges are limited. Future development of the Agua Hedionda south shore and proposed trails planned by I-5 Caltrans Public Works Plan will provide additional access to the lagoon (see Figure 4.8 "Trail Subarea 7 Map").

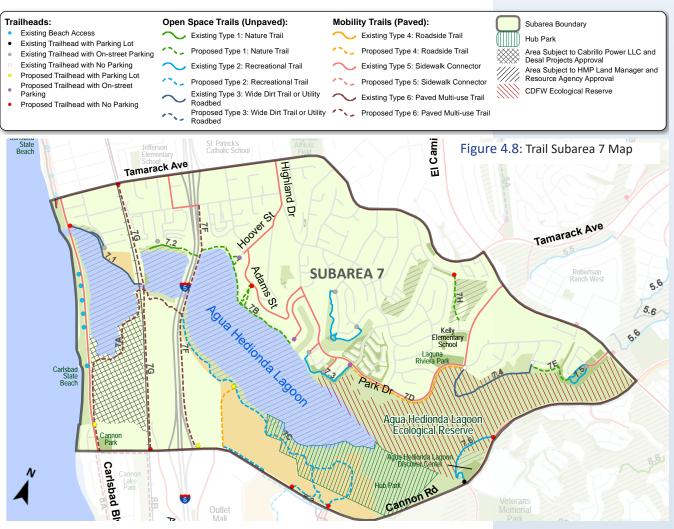
**Subarea 7 General Description:** Decommissioning of the Encina Power Station and future redevelopment of the site, the expansion of I-5 with new bridge across the lagoon, and development of the Coastal Rail Trail (Reach 3) will create an opportunity to connect people with the lagoon.

**Destinations**: Carlsbad beaches and bluffs, the recreational waters and beaches associated with Agua Hedionda Lagoon, Agua Hedionda Nature Center, parks and schools.

**Range of Difficulties:** Mostly level trails leading around parts of the lagoon. More difficult terrain on the lagoon's hillsides.

Range of Surface Types: Soft, native soil trails, and decomposed granite along streets.

**Possible Loops:** The variety of the proposed coastal and lagoon trails will create a major east-west regional recreational corridor, from the beach to the Agua Hedionda Lagoon Discovery Center, The Crossings golf course, future Veterans Memorial Park and east communities Robertson Ranch and Calavera Hills. On the south shore of the lagoon, the proposed trail will run from the future I-5 bridge (proposed as part of the CALTRANS widening project), through upper bluff, loop within the Hub Park lease area, and terminate at Cannon Road's underpass.



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Agua Hedionda Lagoon Trail - Bay Shore

### Subarea 8: Palomar

Subarea 8 contains many tourist destinations, retail, major employment center, and the Palomar Airport. All of this activity is located next to the natural areas of Agua Hedionda Lagoon. (see Figure 4.9 "Trail Subarea 8 Map").

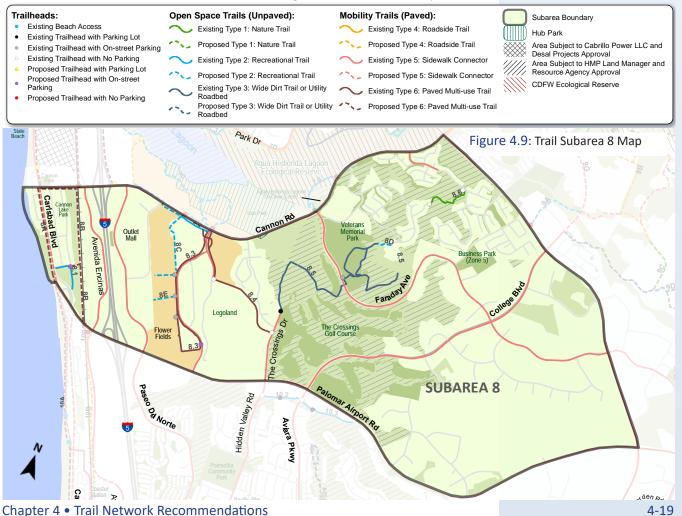
**Subarea 8 General Description:** The corridor along Cannon Road and Armada Drive are an important element of the citywide trail system. Roadside trails and sidewalks connect a variety of recreational amenities. Connecting trails on the north and south sides of the Cannon Road and Faraday Avenue through an existing underpass provides for an extensive walkable area for visitors and residents alike. Extensions of the Coastal Rail Trail and the Carlsbad Coastal Corridor Improvements including trail along the coast will make up the majority of the changes on the west side of I-5. Trails at the future Veterans Memorial Park provide panoramic views to the lagoon and the ocean.

**Destinations**: Legoland trail, The Crossings Golf Course trails, future Veterans Memorial Park and other parks, Agua Hedionda Lagoon Nature Center, the Flower Fields, the Carlsbad Outlet Mall, and the coastal bluff located west of Carlsbad Boulevard.

**Range of Difficulties:** Moderately steep trails leading up to the Veterans Memorial Park and south of The Crossings. Most other trails are level or have gentle slopes.

**Range of Surface Types:** Mostly firm and hard surface, with soft surface trails at Veterans Memorial Park and The Crossings.

**Possible Loops:** Loop around the Flower Fields and Legoland, also through The Crossings, under Faraday Avenue, to the future Veterans Memorial Park or to the Agua Hedionda Discovery Center.





Veterans' Park Trail

### Subarea 9: Sunny Creek/Carlsbad Oaks North

Proposed connections are part of the future housing development, which will incorporate a new trail network into its master plan. (see Figure 4.10 "Trail Subarea 9 Map").

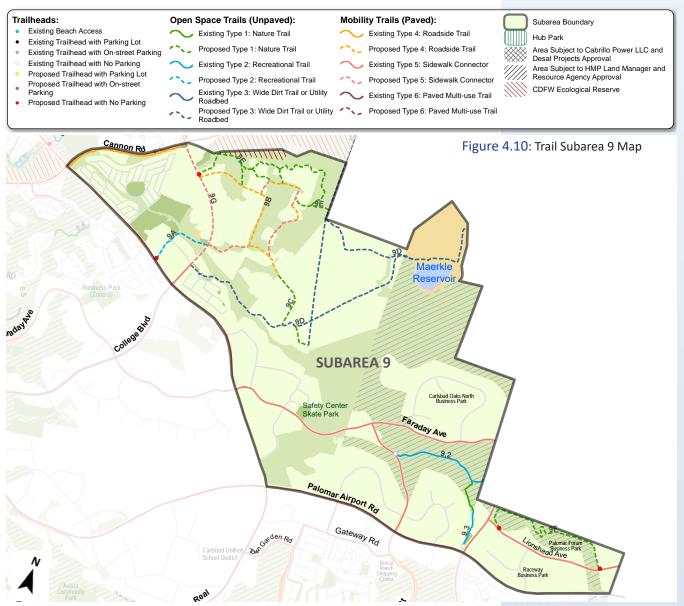
**Subarea 9 General Description:** Most of the improvements in the northwest corner of this subarea were dedicated as trail easements in the Carlsbad Oaks North Business Park and others will be built by the future Cantarini and Holly Springs developments. A connection to the residential neighborhoods in Vista and to the Lake Calavera Preserve would also be a benefit for the region. Discover some of the hidden canyons and old agricultural farms in the eastern part of Carlsbad.

**Destinations**: Maerkle Reservoir, Safety Center Skate Park, Carlsbad Oaks North Palomar Forum and Raceway Business Parks.

**Range of Difficulties:** Moderately steep trails leading up to Maerkle Reservoir, to fairly flat trails at Carlsbad Oaks North Business Park and Palomar Forum Business Park.

Range of Surface Types: Future trails will include a variety of surfaces that will allow bike and pedestrian uses.

**Possible Loops:** Several loops will be provided as part of the future Cantarini and Holly Springs developments.



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**Palomar Forum Business Park Trail** 

### Subarea 10: Poinsettia

The Poinsettia Subarea consists primarily of residential neighborhoods with some commercial sites along Palomar Airport Road (see Figure 4.11 "Trail Subarea 10 Map").

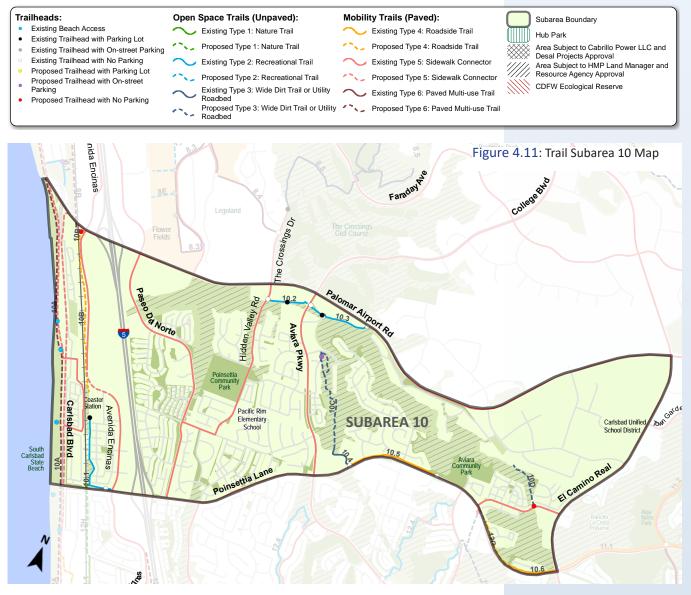
**Subarea 10 General Description:** Changes in this area include the extension of the Coastal Rail Trail (Reach 5) and the creation of the Coastal Bluff Trail associated with the Carlsbad Coastal Corridor Improvements, and some conversions of utility access roads into improved trails.

Destinations: Poinsettia and Aviara Community Parks, beaches and schools, Poinsettia Coaster Station.

Range of Difficulties: Moderate slopes exist on the east end of the subarea while leveled trails exist on the west.

**Range of Surface Types:** Many of the existing trails are firm surfaces, allowing most bikes to utilize the trails. The trails along the utility access roads are steep, composed of gravel and compacted native soils. Roadside trails along Poinsettia Avenue are firm surfaced comprised of stabilized decomposed granite.

Possible Loops: Various loops are possible utilizing trails and connecting sidewalks.



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Hidden Valley Trail

### Subarea 11: Bressi Ranch & Rancho Carrillo Ranch

Leo Carrillo Ranch Historic Park and Alga Norte Community Park and Acquatic Center anchors this subarea. The long east/west canyon that parallels Poinsettia Lane is a dominant landform for the area (see Figure 4.12 "Trail Subarea 11 Map").

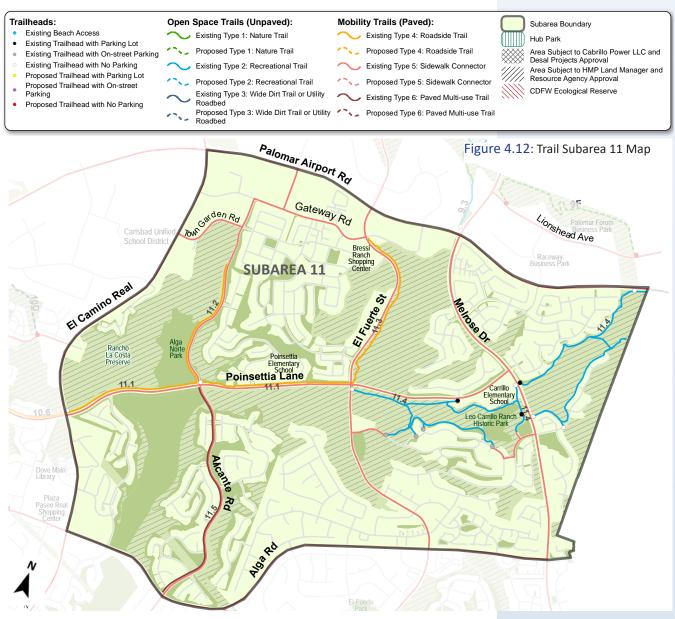
**Subarea 11 General Description:** The primary focus of this subarea is maintainance of the existing trails. Multiple trails exist around the new Alga Norte Community Park that lead you to vista points. Poinsettia Lane Trail serves as the backbone trail from El Camino Real eastward along the north side of this major city transportation route.

**Destinations**: Alga Norte Community Park and Swim Center, Leo Carrillo Ranch Historic Park, schools, and Bressi Ranch Shopping Center, commercial businesses and Tri-City Fitness Center.

Range of Difficulties: The trails vary from flat to moderatly steep.

Range of Surface Types: The trails include native soil, decomposed granite, concrete, and asphalt.

**Possible Loops:** Several existing loops can be taken around both Carrillo Ranch and Alga Community Norte Park.



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Carrillo Ranch Trail

### Subarea 12: Aviara/Batiquitos Lagoon

Batiquitos Lagoon is a valued visual asset as well as a great natural resource hosting many species of migrating birds, which forms the southern boundary of the city. Some of the heaviest used trails can be found in this subarea (see Figure 4.13 "Trail Subarea 12 Map").

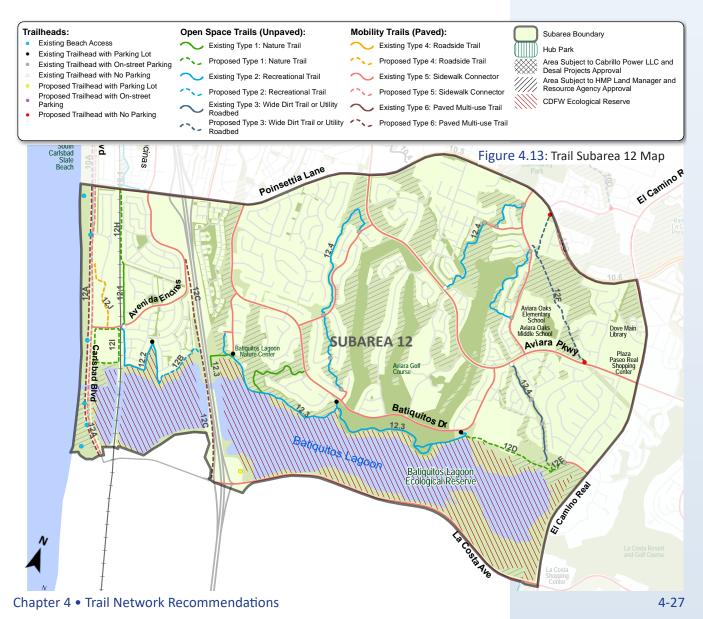
**Subarea 12 General Description:** This subarea contains a part of the Coastal Rail Trail on the east side of the railway, south of the Poinsettia Coaster Station. Serene views of Batiquitos Lagoon are available from several miles of trails on both sides of the lagoon or from the upper bluffs on the west side of I-5. Future connections will allow for continuous trail on the north shore, of the lagoon westward to Carlsbad State Beach and the Pacific Ocean and along the coast. Trail segment 12.3 Batiquitos Algoon North Shore does allow only pedestrian use.

Destinations: Batiquitos Lagoon, Nature Center, Dove Library, beach, schools, shopping centers, parks.

Range of Difficulties: Trails in this subarea vary from flat to moderately hilly.

**Range of Surface Types:** Most trails are compacted native soil or decomposed granite. Most of the existing trails on the west side of I-5 are paved.

**Possible Loops:** Several loops already exist through the area. Future coastal trail projects will allow connectivity along the beach and to the north shore of the lagoon.





**Batiquitos Lagoon Trail** 

### Subarea 13: La Costa North

La Costa North contains the second highest concentration of nature trails on steep hillsides. The Rancho La Costa Preserve comprises a large portion of the subarea. Another significant trail asset is related to the Old Rancho Santa Fe Road that has been re-purposed as a multi-use trail (see Figure 4.14 "Trail Subarea 13 Map").

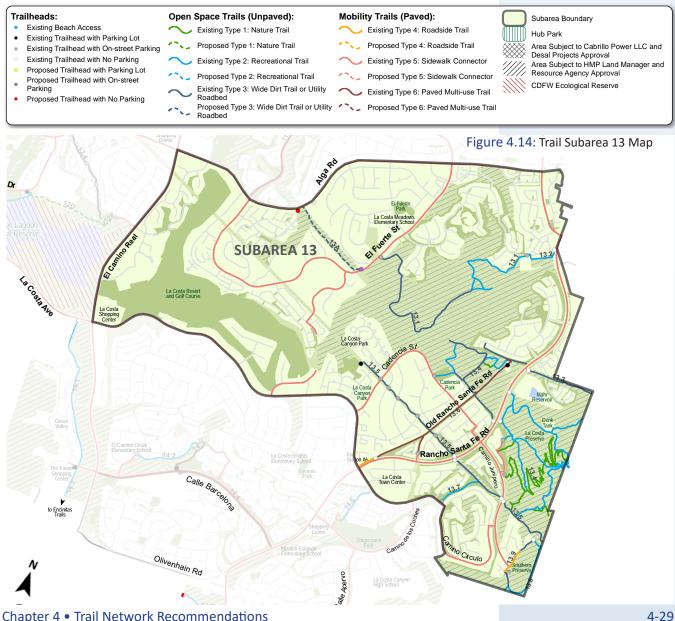
Subarea 13 General Description: Views over Batiquitos Lagoon from the hills around Denk Mountain and the Mahr Reservoir or into the dramatic Box Canyon are a major feature of this area. Due to the steep terrain and hazardous conditions of the canyon walls, the canyon itself is off limits to the general public. Hikers who deviate from the designated trails may be cited with trespassing and faced with a heavy fine.

Destinations: Mahr Reservoir, Denk Peak, La Costa Town Center, parks, schools.

Range of Difficulties: Moderately steep trails leading up to Denk Mountain.

Range of Surface Types: Most of the trails are compacted native, rocky soil.

Possible Loops: Several loops exist in the La Costa Preserve area.





**Ridgeline Trail** 

### Subarea 14: La Costa South

La Costa South includes several older developments scattered among rolling hills and canyons. Several trails connect to City of Encinitas trails making for valuable regional connections to the city's trail system (see Figure 4.15 "Trail Subarea 14 Map").

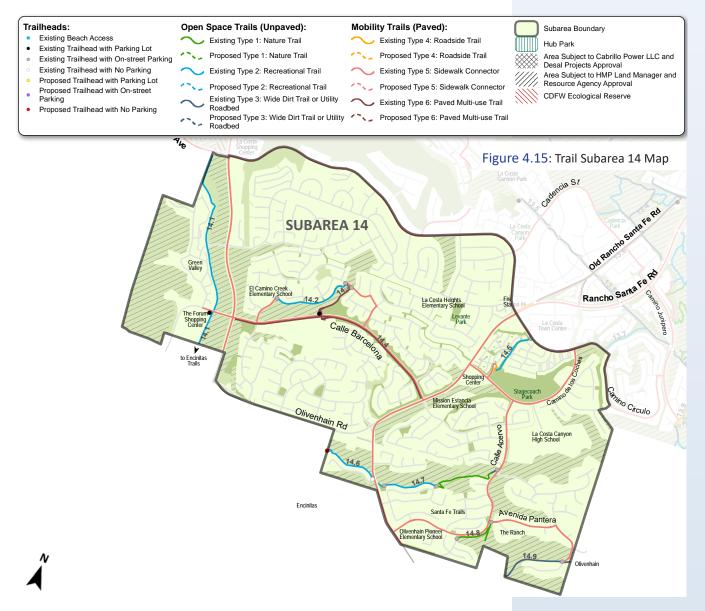
**Subarea 14 General Description:** Main focus of this area is to maintain existing trails. This subarea offers shade of mature trees and diverse vegetation.

**Destinations**: The Forum Shopping Center, schools, and parks, including Stagecoach Community Park. There is a regional connection to City of Encinitas trails at the Ranch and Santa Fe Trails with the Ranch offering an equestrian use connection to trails in Olivenhain. La Costa Glen trail is located in southwest Carlsbad adjacent to a linear open space corridor along Encinitas Creek. This recreation trail is easily accessible off El Camino Real at Calle Barcelona or Levante Street. This area is sometimes referred to as Green Valley

Range of Difficulties: Most trails in this area are flat.

Range of Surface Types: Most trails in this area have compacted decomposed granite surfaces or native soils.

**Possible Loops:** Loops utilize various connector streets.





Villagio Trail