Reach the Beach Trail Segment of the Coast to Crest Trail Feasibility Study







San Dieguito River Park Joint Powers Authority



This study was funded by a grant provided by the California Coastal Conservancy

February, 2012

Contents

1 Executive Summary.....7

- 2.1 Study Area.....8
- 2.2 Existing Trail.....10
- 2.3 Study Area Characteristics......10
- 2.3.1 Land Use.....10
- 2.3.2 Natural Resources.....13
- 2.3.3 Property Ownership......13
- 2.4 Project Description.....16
- 2.4.1 Governing Plans for the Study Area.....16
- 2.5 Design Criteria.....21

3 Opportunities and Constraints.....²³

- 3.1 Existing Trail Network23
- 3.1.1 Existing Coast to Crest Trail (CtCT)......23
- 3.1.2 Riverpath Del Mar.....23
- 3.1.3 California Coastal Trail.....23
- 3.2 Existing Roadways.....24
- 3.2.1 Jimmy Durante Blvd......24
- 3.2.2 Camino del Mar.....24
- 3.3 Del Mar Fairgrounds......24
- 3.3.1 Existing uses and activity......24
- 3.4 The Railroad.....25
- 3.4.1 Existing Railroad Bridge......25
- 3.4.2 Bridge Replacement and Second Track Project......25
- 3.4.3 Seasonal Rail Platform......27
- 3.5 Beach Access......28
- 3.6 Natural Resources......28
- 3.6.1 Tidal Wetlands......28
- 3.6.2 Stevens Creek......30
- 3.7 Sea Level Rise......30

- 4.1.4 (A-4) Camino del Mar to Beach......39
- 4.2 Alternative B.....41
- 4.2.1 (B-1) Existing CtCT to Jimmy Durante Boulevard......41

- 4.2.2 (B-2) Jimmy Durante Boulevard to the Railroad......42
- 4.2.3 (B-3) Railroad to Camino del Mar.....43
- 4.2.4 (B-4) Camino del Mar to Beach......43

5 Preferred Alignments and Design Details......45

- 5.1 Coast to Crest Trail Alignment......45
- 5.1.1 Existing CtCT to Jimmy Durante Boulevard......45
- 5.1.2 Jimmy Durante Boulevard to the Railroad Bridge......45
- 5.1.3 Railroad Bridge to Camino del Mar......48
- 5.1.4 Camino del Mar to Beach.....50
- 5.2 Alternate Pedestrian Access......52
- 5.2.1 Existing Coast to Crest Trail to Jimmy Durante Boulevard.......52
- 5.2.2 Jimmy Durante Boulevard to Camino del Mar......53
- 5.2.3 Camino del Mar to the Beach......53

6 Public Outreach......54

- 6.1 Outreach.....54
- 6.2 Public Workshop......54

7 Permitting......56

- 8.2 Project CEQA Compliance......57
- 8.2.1 Aesthetics......57
- 8.2.2 Biological Resources......58
- 8.2.3 Cultural Resources......58
- 8.2.4 Geology and Soils......58
- 8.2.5 Transportation / Traffic......58
- 8.2.6 Conclusion......59

List of Figures

Appendices

| Appendix A - Alternatives Matrix | 50 |
|--|-----------------|
| Appendix B - CEQA Initial Study | 54 |
| Appendix C - Jurisdictional Delineation | 80 |
| Appendix D - Summary of Probable Costs | 92 |
| Appendix E - Preliminary Layout of Preferred | d Alternative94 |

1 Executive Summary

Extending the planned 55-mile long Coast to Crest Trail to the "Coast" is a major goal for the San Dieguito River Park Joint Powers Authority and the focus of this Reach the Beach feasibility study. The challenges associated with the Reach the Beach segment are not the distance, only 0.5 miles, but a combination of developed land uses, transportation systems, and natural resources that occur within close proximity to each other. This study assesses a range of alternative alignments on both the north and south side of the San Dieguito River and identifies the opportunities and constraints associated with each. Based on this information and input gathered through a public outreach program, the most feasible alignments are recommended. The preferred alignment is assessed in more detail via: preliminary construction details and methods; preliminary analysis of potential environmental impacts; and probable design and construction costs. The feasibility study will be used by the SDRPJPA for future decisions to extend the trail.



See Section 5 for discussion of the Preferred Alignments (above) and design details

2 Project Location and Description



The project is to evaluate alternative trail alignments and issues associated with extending the San Dieguito River Park's Coast to Crest Trail (CtCT) to the beach from its current terminus just east of Jimmy Durante Boulevard in Del Mar, a distance of approximately 0.5 mile. This trail extension would represent the west end of the regional trail: to the beach in Del Mar or the "Coast" in Coast to Crest.

structed by Southern California Edison in 2010 as part of the San Dieguito Lagoon wetland restoration project. The access path provides an all-accessible trail from the sidewalk at Camino del Mar to the sand, and also represents the destination for this section of trail. However, getting there requires extending the existing trail at

An access path at the Del Mar beach (aka dog beach) was con-

Photo 1 - Westerly extent of the project study area at Del Mar Beach

Jimmy Durante Boulevard through a series of impediments that pose potential physical, technical and funding challenges. The purpose of this study is to explore the options, opportunities and constraints to completing the CtCT to the beach, to identify a preferred route(s), and develop a preliminary cost estimate to construct the trail segment.

2.1 Study Area

The Reach the Beach project is located in San Diego County at the northern limits of the City of Del Mar as shown in Figure 1. The study area represents the geographic area that is explored in this study, although the area or gap within which the "Reach the Beach" trail segment would travel is fairly short (approximately 0.5 mile as the crow flies). However, the series of formidable obstacles that exist along this short stretch may require the construction of a significantly longer trail. The study area, shown in Figure 2, is bounded by I-5 on the east; Via de la Valle to the north; a short distance south of the San Dieguito River to the south; and dog beach in Del Mar to the west. The study area is within the jurisdictions of the City of Del Mar and San Diego although the jurisdiction within which the trail would be extended is in Del Mar only.



Photo 2 -West toward Del Mar Beach across Camino Del Mar



Photo 3 - West toward Camino Del Mar across the tidal wetland



2.2 Existing Trail



Photo 4 - Existing terminus of CtCT and beginning of boardwalk trail

The CtCT extends through the San Dieguito Lagoon area for approximately two miles, and will be extended another one-half mile further east in 2012 through the 22nd District Agricultural Associations' (Ag District) Horse Park facility to El Camino Real. The CtCT is a planned 55-mile long regional multi-use trail along the San Dieguito River from the coast in Del Mar to the crest at Volcan Mountain just north of Julian. Approximately 34 miles of the trail have been built to date. The existing trail segments through the lagoon area are not entirely multi-use today but are planned to accommodate all three users (pedestrians, cyclists, and equestrians) to the beach in their final configuration. Currently horses are not permitted to travel on the trail west of Interstate 5 (I-5) per the Coastal Commission's permit condition for the existing lagoon trail until a plan is approved that gets all three users all the way to the beach. This plan is meant to accomplish that condition.

In addition, a 1,200-foot long segment of the existing trail between I-5 and Jimmy Durante Boulevard is a pedestrian boardwalk and does not accommodate horses or bikes (see photo 4). Thus, the final configuration of the CtCT in this area will need to include a separate trail for equestrians and bicyclists. This separate trail is currently being planned as part of the Ag District's restoration plans for the south overflow parking lot.

2.3 Study Area Characteristics

The following sections describe various characteristics of the study area that are relevant to the planning and design of this section of the CtCT.

2.3.1 Land Use

The study area is relatively urbanized especially in contrast with the rest of the San Dieguito River Park Focused Planning Area (FPA), which is mostly rural and natural open space. The exception to this is the river and lagoon itself which are the defining characteristics of the study area. The San Dieguito Lagoon covers an area of over 600 acres, much of which was recently restored and expanded to create new tidal wetlands. The restoration was done by Southern California Edison (SCE) as mitigation for impacts caused by the San Onofre Nuclear Generating Station. SCE completed the restoration in September 2011, and will continue monitoring and maintaining the project for another 30 years. The CtCT represents a recreational and public access component of the larger restoration project.



Photo 5 - View south of Del Mar Beach and river Inlet



Photo 6 - View east of Camino Del Mar, RR trestle and San Dieguito River







Photo 7 - View northwest from south riverbank to Fairgrounds

The dominant land use (in addition to I-5) is the Del Mar Fairgrounds which encompasses the vast majority of the northern side of the valley between the river and Via de la Valle west of I-5 (see Figure 3). The existing CtCT extends along the southern edge of the Fairgrounds just north of the river between I-5 and Jimmy Durante Boulevard.

Development in the City of Del Mar exists along the coast just south of the lagoon inlet and along the southern edge of the study area. This development is primarily residential, but also includes the Del Mar Public Works Yard and some commercial and office use at the corner of Jimmy Durante Boulevard and San Dieguito Drive. Residential development also exists along Via de la Valle just north of the study area within the City of Solana Beach.

Three major infrastructure elements cross the study area from north to south including Jimmy Durante Boulevard, the Burlington Northern Santa Fe railroad tracks and trestle (bridge) that cross the river channel, and Camino del Mar (Highway 101). These obstacles to east/west travel must be crossed by the CtCT to "reach the beach".

2.3.2 Natural Resources

The primary natural resource in the area is the San Dieguito Lagoon and associated tidal wetlands. The wetlands include the lagoon inlet, the river channel itself, the tidal marsh habitats, and adjacent upland habitats.

The tidal wetlands support a variety of fish and bird species that depend on the river and wetland habitats for food, shelter, reproduction, and nursery functions. The tides cause the water to fluctuate between approximately -1 and +5 feet mean sea level (MSL). Dramatic differences can be seen during extreme high and low tides that occur during the winter and spring months. This constant rise and fall in water elevation, including the more infrequent extreme high tides, are important to consider with regard to trail route placement and design.



Photo 8 - Low Tide at Study Area Wetland



Photo 9 - High Tide at Study Area Wetland

2.3.3 Property Ownership

Land within the study area is owned by a variety of mostly public entities. Figure 4 shows property ownership which includes the Ag District that owns the Del Mar Fairgrounds, the North County Transit District (NCTD) that owns and operates the railroad, and the City of Del Mar that owns right-of-way along Jimmy Durante Boulevard and Camino del Mar, as well as property along the south side of the San Dieguito River west of Jimmy Durante Boulevard. The Ag District also owns the property between the railroad and Camino del Mar on the north side of the river. The State Lands Commission also controls property in this area. Private property exists along the southern bank of the river between the railroad tracks and Camino del Mar.





2.4 **Project Description**

The project is to explore potential trail routes that would extend the CtCT to the beach and to identify a preferred alignment. The project identifies the opportunities and constraints for extending the trail in the study area and explores several potential alternative routes. Design concepts for the preferred alignment, potential funding sources, and cost estimates are also provided.

2.4.1 Governing Plans for the Study Area

Several land use plans and policies exist for this area that must be considered when evaluating possible trail routes. These plans and policies are described below with emphasis on how they influence a potential trail route.

San Dieguito River Park Concept Plan

The CtCT is a key component of implementing the San Dieguito River Park's Concept Plan adopted in 1994. The CtCT will extend from the ocean in Del Mar to Volcan Mountain - a distance of approximately 55 miles (see Figure 5). The Concept Plan defines a generalized corridor for the trail leaving it up to future master plans to define a more detailed alignment when funding becomes available for specific trail segments. The CtCT is multiuse for pedestrians, cyclists, and equestrians and generally consists of two trail types, a hard-surfaced path for bikes or wheelchairs and a more natural dirt surface for hikers and horses. Although much of the trail has been built as one alignment, the trail route may diverge in some places along different alignments to better accommodate user groups or avoid impacts. The "Reach the Beach" segment is located within Landscape Unit A, Del Mar Coastal Lagoon of the Concept Plan.

SDRP Park Master Plan for the Coastal Area

The Park Master Plan for the Coastal Area of the San Dieguito River Valley Regional Open Space Park (Park Master Plan) was adopted by the SDRPJPA in January 2000 to establish project structure and guidelines for the wetland restoration of the lagoon area as well as define plans for public access and interpretation. One of the components of the Park Master



(Above) - Standards established for the CtCT in the SDRP Park Master Plan for the Coastal Area

Plan was to define the trail alignment through the lagoon area. However, the Park Master Plan project area for the trail did not extend west of Jimmy Durante Boulevard and does not cover the "Reach the Beach" study area.

The "lagoon trail" segment was constructed in phases between 2006 and 2011, extending from Jimmy Durante Boulevard in the west to Horse Park in the east. However, the western most segment consists of a pedestrian



boardwalk on the edge of Fairgrounds property just east of Jimmy Durante Boulevard and does not accommodate bicycles or horses. Thus the official end of the CtCT exists approximately 1,500 feet east of Jimmy Durante Boulevard (see Figure 6).

The Park Master Plan also identified the future plan for a "side trail" in Del Mar along the south side of the river channel between Jimmy Durante and the railroad. The following section describes that trail, which has been completed (Riverpath Del Mar).



PARK MASTER PLAN FOR THE COASTAL AREA OF THE SAN DIEGUITO RIVER VALLEY REGIONAL OPEN SPACE PARK

City of Del Mar

The City of Del Mar and its residents have always been active in the San Dieguito River Park, and in particular the lagoon area. The City's Local Coastal Program (LCP; 1993) recognizes and supports the implementation of the San Dieguito River Park and preservation and expansion of the San Dieguito Lagoon but does not specifically identify the CtCT. The City's 1979 San Dieguito Lagoon Resource Enhancement Program is dated but shows how important the lagoon area has always been to City residents and includes many concepts, policies, and proposals that have since been implemented.



Photo 10 - Historic Image of Horses at Del Mar Beach



Photo 11 - Historic Image of Horses at Del Mar Beach

The City of Del Mar constructed the Riverpath Del Mar trail on the south side of the river between Jimmy Durante Boulevard and the railroad. This dirt trail is approximately 5 foot wide and accommodates pedestrians and an occasional cyclist. It is interpretive in nature, with interpretive signs along the way describing the native vegetation and wildlife in the area.

Chapter 4.08 of the Del Mar Municipal Code prohibits horses on the beach with the exception of the area north of the river mouth at the San Dieguito Lagoon. Per the code language (Chapter 4.08.010), horses are prohibited along the beach south of the first house at the river mouth, but are allowed north of that point.

Historically equestrians, particularly from the Del Mar racing events, have used the beach but horses on the beach have declined in recent years and are only occasionally seen. One reason may be the lack of safe access to the beach from inland areas where horses are kept. A fair number of horse boarding facilities exist east of Del Mar in the Carmel Valley, Fairbanks Ranch, and Rancho Santa Fe areas.

Once a trail alignment is proposed, the SDRPJPA would work with the City of Del Mar to obtain approvals for the trail and its associated components (e.g., crossing lights) and in compliance with local ordinances. A final trail route would require City Council approval.



Photo 12 - Entrance to Riverpath Del Mar



Photo 13 - View East Along Riverpath Del Mar

Lagoon Overlay Zone

The study area is subject to the City's Lagoon Overlay Zone which covers the wetland portion of the project site between the railroad trestle and Camino del Mar. Development is not allowed in wetland areas and 100-foot wetland buffers are required between allowed uses in the zone and wetlands. However, "passive recreational access paths" are permitted within wetland buffers.

A Conditional Use Permit and Coastal Development Permit are required for any development proposed within the Lagoon Overlay Zone.

California Coastal Act

The study area is located within the Coastal Zone and therefore the project must be consistent with the California Coastal Act and will require a Coastal Development Permit.

California Coastal Trail Plan

The California Coastal Trail Plan goal is to provide a trail across the entire state along the coastal corridor and in many cases follows the rail line (aka, Rail Trail). Typically, each jurisdiction within which the Coastal Trail is planned is responsible for implementation of their segment. The City of Solana Beach has built a segment of the Rail Trail. The San Diego Association of Governments (SANDAG) is currently planning several segments of the Coastal Trail within San Diego County, although an alignment has not been identified within the study area. It is envisioned that the CtCT would someday connect to the Coastal Trail in the Del Mar area, and the Coastal Trail Plan indicates a goal to do so.

Del Mar Fairgrounds Master Plan

The Ag District's 300-acre Fairground property represents a major land use in the study area that must be considered when routing the CtCT to the beach. The SDRPJPA and Ag District staffs have been working cooperatively together for the past several years and approximately one mile of the CtCT already exists on the fairgrounds property between Jimmy Durante Boulevard and I-5. In addition a 0.5 mile segment of the CtCT along Horsepark, also owned by the Ag District, is currently under construction and is due to be completed in 2012.

The Ag District adopted their 2008 Master Plan in 2011 although its status is pending under existing litigation regarding the Environmental Impact Report (EIR). The Fairgrounds Master Plan itself does not address the CtCT. However, the accompanying project EIR includes a site plan for the "near term" projects identified in the Fairgrounds Master Plan and shows a trail segment along the southern edge of their property north of the river between the railroad trestle and Jimmy Durante Boulevard (see Figure 7). According to the EIR, the trail segment would be located within a 100-foot wide buffer area between the river and new exhibit halls to be constructed by the Ag District. The trail segment stops at the south west corner of their property at the railroad trestle.



2.5 Design Criteria

The SDRPJPA Park Master Plan identified trail design criteria for the CtCT. The alternatives developed as part of this study strived to keep the Reach the Beach Trail segment consistent with those design criteria, but found specific sections of the alternatives could not fully comply. These sections require slightly different trail configurations to accommodate challenges along each section. Design modifications have been incorporated to minimize habitat impacts and maintain construction feasibility. Although these criteria vary from the Park Master Plan, they have been approved by the SDRPJPA.

Alignment Adjacent to Existing Developed Land

Any portion of the alignment that falls within the public right-of-way or within already developed areas such as the Fairgrounds, or an existing trail alignment, should be consistent with the design criteria established in the Park Master Plan as shown in Figure 8 whenever feasible.

Alignment Adjacent to Sensitive Natural Resources

Any portion of the alignment that is directly adjacent to, or falls within sensitive natural resources should be consistent with the design criteria identified in Figure 9.

The widths, surfacing and overhead clearance identified in these design criteria are consistent with professional standards for multi-use trails that can adequately accommodate hikers, cyclists and equestrians.



Figure 8 - Adjacent to Existing Developed Lands



Figure 9 - Adjacent to Sensitive Natural Resources

Reach the Beach Trail Design Criteria

3 Opportunities and Constraints

The following sections identify and discuss the various opportunities and constraints that have been identified within the project study area for the Reach the Beach trail segment.

3.1 Existing Trail Network

The Reach the Beach portion of the CtCT is well positioned to connect to existing trail networks. The SDRPJPA published the Park Master Plan in 2000, which identified several desired trail connections to existing or planned trails in proximity to the CtCT. The Riverpath Del Mar and the California Coastal Trail are identified in this master plan as desirable trails to connect with the CtCT, and are within the study area for the Reach the Beach Trail segment feasibility study. These existing trails, shown on Figure 2, present opportunities for the SDRPJPA to enhance, expand and create new trail connections and are described in more detail below.

3.1.1 Existing Coast to Crest Trail (CtCT)

Planning for the CtCT in the Lagoon area began in 2000 with the development and publication of the Park Master Plan, by the SDRPJPA. Since the Plans completion the SDRPJPA has been successful in implementing just over two miles of trail along the SCE restored wetlands and are in the process of constructing an additional 0.65 mile segment of trail through the Horsepark facility to El Camino Real. With the completion of the Horsepark segment the only remaining section within the Coastal Area left to implement is the Reach the Beach segment. The Park Master Plan did not include the Reach the Beach trail segment because a proposed alignment was not identified or known.

3.1.2 Riverpath Del Mar

The Riverpath Del Mar is a 1/4 mile long hiking path that runs between Jimmy Durante Blvd. to the railroad along the south side of the San Dieguito River. The approximately 5 foot wide decomposed granite and native soil path includes a picnic table and benches as well as interpretive signage about the ecology of the river. The path is owned and maintained by the City of Del Mar.

3.1.3 California Coastal Trail

The County of San Diego portion of the California Coastal Trail is a 33 mile long shared use path which accommodates walkers, runners and cyclists. The trail is located primarily within the NCTD Railway right-of-way (ROW) alongside the railroad track that passes through the cities of Oceanside, Carlsbad, Encinitas and Solana Beach. Designated access points for the trail are located at the train stations of the various communities it passes through. Currently, the California Coastal Trail terminates in Solana Beach at the intersection of Camino del Mar and Via de la Valle. It may be feasible to provide a connection to this trail from the Reach the Beach trail segment. This trail connection was identified as desirable in the Park Master Plan.

3.2 Existing Roadways

Two public roadways pose significant hurdles to the Reach the Beach trail segment and are described in more detail below.

3.2.1 Jimmy Durante Blvd.

Jimmy Durante Boulevard is a collector road which provides access to Via de la Valle in the north and Camino del Mar in the south for fairground users and residences nearby. The road bisects the study area in the east at the existing terminus to the CtCT, and borders the east side of the Del Mar Fairgrounds where the main access drive to the venue is located. Jimmy Durante Boulevard is a major barrier for users of the Reach the Beach trail segment as the high rate and frequency of vehicular traffic will require a special crossing that provides safety from these elements.

3.2.2 Camino del Mar

Camino del Mar is a small stretch of the larger county highway S21 (aka Highway 101), which is a coastal route that serves communities along the Pacific Ocean between San Diego and Oceanside. The part of this route known as Camino del Mar begins in the north at Via De La Valle and continues south through the City of Del Mar, and bisects the western portion of the project area. Like Jimmy Durante Boulevard to the east, Camino del Mar's rate and frequency of vehicular traffic present a major barrier for users of the Reach the Beach Trail Segment and will require a safe crossing that protects trail users from vehicular traffic.

3.3 Del Mar Fairgrounds

The Del Mar Fairgrounds is owned and operated by the Ag District. The main facilities of the fairgrounds are situated along the northern edge of the San Dieguito River, bordered by Stevens Creek to the west, Jimmy Durante Boulevard to the east and Via de la Valle to the north. Two unpaved, dirt overflow parking lots east of Jimmy Durante Boulevard are used by visitors during the San Diego County Fair, horse racing season, and other large events.

The Fairgrounds property has the potential to become an intermediate destination and/or point of beginning for users of the CtCT. Discussions regarding the viability of a trail on fairgrounds property between the SDRPJPA and the Ag District indicate a willingness and desire from both parties to arrive at a design solution that provides improved alternative transportation options to the fairgrounds, maintains existing use patterns of the fairgrounds property and provides a user experience compatible with the character of the CtCT.

3.3.1 Existing uses and activity

The fairgrounds serve as a venue for variety of events including meetings, conferences, trade shows and horse racing. In addition, 58 recreational vehicle parking spaces with hookups for electricity, water and sewage are available to the public for rent during a portion of the year.

Two events occur annually at the Del Mar Fairgrounds that have a significant effect on traffic patterns and land use within and around the fairground property; the San Diego County Fair and the Del Mar Horse Races.

The San Diego County Fair occurs annually from early June through July 4th weekend and includes a variety of attractions including music concerts, amusement rides, games and vendors. In 2011, average daily attendance of the fair was 64,187.

The Del Mar Races occur annually from mid July through the first week in September. The races are open 5 days a week from Wednesday to Sunday. The annual horse racing event attracts horses, their riders and spectators from around the country and the world. The average daily attendance of the races in 2011 reached 17,844.

In addition to these larger events, the Fairgrounds is host to a number of entertainment, private and community events including trade shows, art festivals and holiday shows.

The Fairgrounds present both opportunities and constraints for trail alignment alternatives through the fairgrounds. The Reach the Beach Trail segment could provide better alternative transportation options to most fairground events by improving access for pedestrians, cyclists and equestrians. Larger events however, such as the San Diego County Fair and Del Mar Races, pose challenges associated with the integration of these alternative transportation options with an increase in vehicular traffic and use-footprint of the fairgrounds property.

User safety and design solutions that avoid interruptions to existing use and circulation patterns of the fairgrounds is a goal of the Reach the Beach project.

3.4 The Railroad

The existing configuration of the railroad and two proposed projects within the study area pose significant challenges to the Reach the Beach trail segment and are described below.

3.4.1 Existing Railroad Bridge

Approximately 0.5 miles of Burlington Northern Santa Fe (BNSF) mainline track runs north-south across the project study area. The mainline track is currently comprised of a 1,100 foot wooden trestle bridge and single track, which crosses the San Dieguito River and Lagoon, and continues on an embankment to Via de la Valle to the north as shown in Figure 10. This section of track is within NCTD ROW. It runs along the LOSSAN Rail corridor and is used by Amtrak, NCTD and BNSF interstate freight service.

The challenges associated with designing a multi-use trail across the existing railroad ROW include safety, legality, expense, and environmental impacts. Any design solution must receive the full approval of NCTD and SANDAG. Discussion between the SDRPJPA and SANDAG regarding viable crossing alternatives for the Reach the Beach trail have been underway for some time and will continue throughout the design process.

3.4.2 Bridge Replacement and Second Track Project

SANDAG currently has plans to replace the San Dieguito River Bridge and add a Second Track within this portion of the railway, and has expressed a willingness to include accommodations for the Reach the Beach trail segment in any future replacement project. As part of the effort to replace this portion of track, SANDAG issued a report in June, 2009 titled "San Dieguito River Bridge Replacement and Second Track Project; Final Project Study Report Bridge 243.0" (Final Project Study Report). The report evaluates the feasibility, alternative designs and methods of construction, and preferred track alignment for the bridge replacement and second track project. The purposes of the project are to replace the 1,100 foot wooden trestle with modern building materials; widen the track to a two track structure; and raise the track above the 100-year Federal Emergency Management Agency (FEMA) floodplain elevation. The preferred alternative described in this report acknowledges a desire to incorporate the trail into a final design for the Bridge Replacement.

The most relevant aspects of the bridge replacement project to the Reach the Beach Trail segment are the raising of the track above the 100-year FEMA floodplain elevation and widening of embankment to support a second track.



Elevating the Track: As the bridge is currently constructed, clearance is insufficient at both the south and north embankment for a trail undercrossing of any kind. Approximate clearance at the north embankment at the time of the field investigation was thirteen feet from the sand to the first structural member of the bridge trestle at the bottom of the embankment. According to the *San Dieguito Wetlands Final Restoration Plan*, the annual highest high tide is around +5 feet NGVD. This tide would reduce the available clearance at the north embankment by more than half, and create conditions whereby a railroad undercrossing is not feasible due to insufficient clearance and unsafe conditions during high tide events. Approximate clearance at the south embankment at the time of the field investigations was 5 feet from the apparent high water mark to the bottom of the trestle structure. The project is also proposing to lengthen the bridge structure by removing a portion of the northern embankment in an effort to offset wetland impacts associated with the addition of a second track as described below.

The Final Project Study Report states that for the track to sit above the 100-year FEMA floodplain elevation, it would need to be elevated an additional 8.5 feet above its current height at the south abutment. The preferred alternative identifies 430 linear feet of retaining wall to be added along the tracks south of the river to accommodate this rise in elevation. The additional clearance that would result from elevating the track would most likely provide sufficient clearance for a trail undercrossing in the north during annual high tides and eliminate the need for trail closure. A trail undercrossing at the south abutment would become more feasible during lower tides and lower river water levels.

Track Widening: The addition of a second track as described in the Final Project Study Report will occur to the west of the existing track alignment. Since the project is only at the study phase at the time of the writing of this report, it is not possible to determine the exact extent to which the footprint of the additional track will expand to the west. Determining the ultimate footprint of the expansion will be critical to understanding the relationship between the proposed trail alignment, the wetlands on both sides of the track, and the new track. What has been determined is the wetland impacts associated with the addition of a second track to the west of the existing track will be offset by the removal of a portion of the embankment on the north side of the river to replace an equivalent acreage of wetlands impacted by the second track.

Bridge Replacement and Second Track Timeline

At the time of the writing of this report, a timeline for the implementation of the San Dieguito River Bridge Replacement and Second Track Project has not yet been determined. Current SANDAG projections estimate 20 years until full completion of the project. This uncertainty requires the inclusion of a viable, interim railroad crossing solution for the Reach the Beach trail that takes into account the planned design of the SANDAG project.

3.4.3 Seasonal Rail Platform

In June, 2009 SANDAG issued the "Del Mar Fairgrounds Permanent Seasonal Rail Platform Project: Final Conceptual Engineering and Environmental Constraints Report". The report examines the conceptual engineering and environmental constraints associated with the construction of a permanent seasonal rail platform to serve passengers arriving at and departing from the Del Mar Fairgrounds as shown in Figure 10. The platform would be located at the southwestern edge of the Fairgrounds and would be operated on a seasonal basis during special events such as the Del Mar Races and the San Diego County Fair. Construction of the platform is solely dependent on the implementation of the San Dieguito River Bridge Replacement and Second Track Project previously described.

During its operation, the seasonal rail platform could provide greater access to the Reach the Beach trail segment and the rest of the CtCT for San Diego County residents. Any trail alignment selected for the Reach the Beach segment should take into consideration the location of the planned seasonal platform and the potential to complement and/or conflict with its intended use.

3.5 Beach Access

Improved walking facilities within the public ROW do not exist from either end of the pedestrian cantilever on the west side of the Camino Del Mar Bridge. This lack of pedestrian facilities means access to the beach at the San Dieguito Rivermouth is currently limited to cyclists and motorists. Cyclists have access to the beach via a Class II bike lane along both sides of the road. Currently, no bike racks are provided at the beach. Motorists parallel park along west side of Camino del Mar north of the river, and along both the west and east side of the road south of the river. The only designated pedestrian crossing which allows visitors to safely cross the road south of the intersection with Via de la Valle is roughly ¼ mile south of the river at 29th Street. Field observation at the time of this report determined that most, if not all, visitors that park along the east side of the road south of the river, jaywalk across the road instead of using the designated crossing. Along the west side of the Camino del Mar bridge, a 5 foot wide cantilever provides a safe bridge crossing for beach goers who park or live south of the river and are willing to walk in the road or along the unimproved public ROW.

A path that meets American's with Disabilities Act of 1990 (ADA) guidelines was recently installed to provide direct universal access to the beach. The City of Del Mar has recently closed the path to cyclists due to conflicts that were occurring among the user groups. Alternatively, users may utilize a steeper unimproved dirt path that provides direct access to the beach from the north. When feasible, the Reach the Beach Trail segment should connect with both the ADA path as well as the existing dirt path.

3.6 Natural Resources

The San Dieguito coastal wetland area supports a variety of habitat types including tidal wetland (tidal open water, intertidal mudflat, salt marsh and seasonal), riparian, coastal sage scrub and non-native grasslands. Within the project study area, habitat types include open water, mudflat, salt marsh and coastal sage scrub. The coastal sage scrub exists primarily along the upland portion of the railroad embankment. Wetlands within the study area are supported by: ocean tides; river flows; and flows within Stevens Creek. Figure 11 shows the general location of the habitats described below.

3.6.1 Tidal Wetlands

Open Water: Open water is comprised of areas absent of vegetation due to constant inundation. The boundary of open water within the project area is a function of the sill elevation of the river mouth as this elevation determines how much water is able to drain at a low tide. As the sill elevation increases, so does the area of inundation. This habitat supports wildlife including invertebrates and algae, plankton and phytoplankton, fishes and birds. This habitat occurs within the main river channel, along the Stevens Creek, and within a depression in the northern arm of the lagoon between the railroad and Camino del Mar.

Intertidal Mudflat: Intertidal mudflat is comprised of areas absent of vegetation due to the frequency of inundation caused by the fluctuation of ocean tides that is frequent enough to prevent the establishment of vegetation. This habitat supports wildlife including invertebrates and algae, and provides foraging for shorebirds during low tide. This habitat occurs within the main channel of the river, as narrow bands along either side of Stevens Creek, and along the tidal channels between the railroad and Camino del Mar.



Salt Marsh: Salt marsh habitat occurs in littoral zones affected by daily or less than daily flooding by high tides. Salt marsh is typically found at elevations between +1.5 and approximately +5 National Geodetic Vertical Datum of 1929 (NGVD). The lower reaches of this elevation are characterized by unvegetated channel banks and flats, and the upper reaches salt-tolerant vegetation. The upper reach which is inundated less than once a year on average by high tides is a transitional zone between tidal wetlands and non-tidal habitats. Salt marsh vegetation supports a high concentration of native plant and animal species which include many that are rare or endangered. Vegetation characteristics include dense growth of native herbaceous, semi-succulent, and semi-woody shrubs that form a cover 1-3 feet in height (*San Dieguito Wetland Restoration Project Final Restoration Plan, 2005).* This habitat occurs as a narrow band along the western edge of Stevens Creek and as a significant component of the tidally influenced area in the northern arm of the lagoon between the railroad and Camino del Mar.

Southern Coastal Foredune: Southern coastal foredune habitat occurs in littoral zones where sand is placed above the normal tide range by storm events and wind. Southern coastal foredune is typically found at elevations above +5 National Geodetic Vertical Datum of 1929 (NGVD). Southern coastal foredune is very limited along the California coastline and supports a high concentration of native plant and animal species which include many that are rare or endangered. One such plant, Red Sand Verbena, occurs within the project study area. This habitat occurs on the north side of the main river channel between the railroad and Camino del Mar and the salt marsh habitat to the north.

Southern Willow Scrub: Southern willow scrub is typically associated with the fringes of freshwater creeks and ponds. Southern willow scrub is fairly common throughout Southern California and San Diego County and can support several sensitive bird species. This habitat occurs as a small patch on the east side of the Camino del Mar along the fringes of the northern arm of the lagoon and appears to be associated with runoff from the road.

<u>Coastal Sage Scrub:</u> Coastal sage scrub habitat is upland habitat which generally occurs above elevations influenced by tides or flooding. Vegetation is characterized by soft, woody sub-shrubs from ground level to 4 feet high. As noted above, the majority of the coastal sage scrub within the project area is located along the railroad embankment. This habitat was likely created as part of a revegetation project for the construction of the railroad and is not expected to support any sensitive species due to its proximity to the frequently used railroad tracks.

3.6.2 Stevens Creek

Stevens Creek is a tributary to the San Dieguito River that connects with the river and the tidal wetlands at the north end of the railroad trestle. The creek drains a relatively small (946 acres) watershed area that originates to the northeast in the Loma Santa Fe Country Club just east of I-5. The watershed expands west across the freeway and immediately turns south bordered by I-5 to the east and the ridgeline that follows Stevens Avenue to the west until it reaches the Del Mar Fairgrounds. The watershed is confined by the northern edge of the fairgrounds parking lot along the south as it turns west towards it southern boundary along the tidal wetlands and the river. The watershed is dominated by residential land uses and the entire creek is channelized to some degree. The creek channel is confined and incised as it flows through the fairgrounds, but does support some wetland vegetation, including a bench along the railroad embankment that supports the upper fringe of tidal salt marsh.

3.7 Sea Level Rise

With the entire Reach the Beach trail segment being planned immediately adjacent to or within close proximity of tidal influence, future sea level rise has to be considered. This study utilized the high sea level rise projection of 55 inches for the year 2100 per the California Ocean Protection Council's Interim Guidance Document. Based on a current maximum high tide of about +5 feet MSL a future tidal elevation in 2100 of about +9.5 feet MSL could be anticipated within the project study area. With much of the study area being +8 feet NGVD or lower, there is little opportunity to account for future sea level rise without the addition of fill material which would likely negatively affect local flood plain elevations. As such, this study does not recommended addressing sea level rise where existing elevations would require the placement of fill material, but does look for opportunities to route trail alignments above the future sea level rise where existing terrain permits.

4 Alignment Alternatives Analysis

Two general alignment alternatives were studied for the Reach the Beach trail segment. Each alignment runs between the existing CtCT terminus east of Jimmy Durante Boulevard and moves west to the beach just west of Camino del Mar. Alternative A runs along the north edge of the river and Alternative B along the south as shown in Figure 12. Within each general alignment alternative various options for getting trail users beyond several significant barriers are studied. The following sections examine the alignment options and provide analyses of the implications of each one.

4.1 Alternative A Options – North Side of River

Alternative Alignment A runs along the north side of the San Dieguito River from the existing CtCT east of Jimmy Durante Boulevard to the beach as shown in Figure 12. A large portion of the alignment travels across fairgrounds property and would require extensive coordination with the Ag District. The Del Mar Fairgrounds Master Plan, San Dieguito River Bridge Replacement and Second Track Project, and the Del Mar Permanent Seasonal Rail Platform are relevant projects discussed in further detail above and are important considerations in any of the options explored for the Alternative A alignment.

The various options associated with Alignment A are driven by five significant barriers that exist along the alignment which require creative solutions to safely and cost effectively move trail users along the alignment. The significant barriers are:

- Jimmy Durante Boulevard;
- Stevens Creek;
- The Railroad;
- Tidal Wetlands; and
- Camino del Mar

For the purposes of this report, Alignment A is broken into four reaches that are defined by at least one significant barrier on either end. The reaches are shown in Figure 12 with an alpha-numeric label that corresponds with the following descriptions:

- Existing CtCT to the Jimmy Durante Boulevard;
- Jimmy Durante Boulevard to the Railroad Bridge;
- Railroad Bridge to Camino del Mar; and
- Camino del Mar to Beach

The opportunities and constraints of each are discussed in detail below.

4.1.1 Existing CtCT to Jimmy Durante Boulevard

The existing CtCT terminus is located 1,200 feet east of Jimmy Durante Boulevard near the Jimmy Durante Boulevard Bridge that crosses the San Dieguito River. Two options for crossing Jimmy Durante Boulevard are described below for Alternative A.



The Tram Tunnel (A-1-a)

A tram tunnel is located approximately 850 feet north of the existing CtCT and connects the East Fairground overflow parking lot on the east side of Jimmy Durante Boulevard with the main parking lot on the west side as shown in Figure 12. The tunnel is used during special events to transport visitors from the overflow parking lot, under Jimmy Durante Boulevard to the fairgrounds main facilities on foot or via tram. The tunnel is divided into three sections by a concrete support system as shown in photo 15, which provides the opportunity for easy separation of circulation types if needed. Use of the tram tunnel for the Reach the Beach trail segment would take users along the western edge of the east overflow parking lot access road from the existing CtCT, north to the tram tunnel. The route would continue through the tram tunnel, and then head south back towards the river. As the trail would continue south the alignment could either: 1) remain on fairgrounds property; or 2) fol-



Photo 14 - View west of tram tunnel toward main fairgrounds facilities

low the public ROW along Jimmy Durante Boulevard, as shown in Figure 12.

A Fairgrounds property trail would take users along the southern edge of the fairgrounds main paved parking lot. The parking lot has various uses at different times of the year depending on the volume of visitors and the activity type and several driveways along Jimmy Durante. This trail option is less desirable due to the inherent conflicts between trail users, vehicular traffic and seasonal fairground activity along the south edge of the parking lot. Any trail through this portion of the fairgrounds could possibly require closure during special events and restrict use of the Reach the Beach trail segment.

Alternatively, the trail could proceed along the fairgrounds property until the main driveway south of the tunnel shown in Figure 12. Here, the alignment would leave the fairgrounds property and travel along the north/ west side of Jimmy Durante Boulevard in the public ROW. A four foot wide asphalt sidewalk currently exists in the public ROW and would require widening and resurfacing in order to accommodate bicycle, pedestrian and equestrian users. This alignment is preferred over the fairgrounds property alignment due to the fact that it falls mostly within the public ROW and minimizes conflict with fairgrounds operations.

Although the tram tunnel alternative provides a safe crossing of Jimmy Durante Boulevard, getting users to the tram tunnel from the existing CtCT requires them to travel approximately 1,100 feet away from the CtCT and the river. The route also crosses multiple driveways and would most likely get congested during fair activities. Additionally, there is no plan for a trail along Jimmy Durante Boulevard in the Fairgrounds Master Plan. Based on these issues, neither tram tunnel option is recommended as part of the preferred alternative.

South Overflow Parking Lot (A-1-b)

The second option for getting CtCT users across Jimmy Durante Boulevard is a trail along the northern edge of the South Overflow Parking Lot and then one of two possible pedestrian crossings shown in Figure 12, just north of the Jimmy Durante Boulevard Bridge. This trail extension has been discussed with Ag District staff as a part of the South Overflow Parking Lot wetland restoration project. Any trail alignment would require Ag District approval.

Pedestrian Crossing (A-1-c & A-1-d)

There are two possible pedestrian crossings shown in Figure 12, just north of the Jimmy Durante Boulevard Bridge. The distinguishing factor between the two crossings is their location in relationship to the fairgrounds and fire station driveways.

Existing Crosswalk (A-1-c): The existing crosswalk (photo 16) is located just north of the fairgrounds driveway as shown in Figure 12. It is designed to get pedestrians from the south side of Jimmy Durante Boulevard and the south overflow parking lot to the main fairgrounds facilities with the help of a crossing guard during special events. Currently, the CtCT terminates just south of the existing pedestrian crossing. Use of the pedestrian crossing for the Reach the Beach trail segment would require installation of a pedestrian actuator such as the one shown in photo 17 to account for the absence of a crossing guard attendant the majority of the year.



Photo 15 - Existing Pedestrian Crossing

Once users reach the north side of Jimmy Durante Boulevard at the crosswalk location, they would travel south to return to the river which requires crossing the fairgrounds and fire station driveways. The fire station driveway crossing could be problematic both from a user safety and emergency responder perspective.

Proposed Crosswalk (A-1-d): An alternative to the existing crosswalk would be to create a new user actuated crossing located south of the fairgrounds and fire station driveways as shown in Figure 12. This alternative would eliminate the safety issues associated with the driveway crossings, and provide a more direct alignment for CtCT users. The implementation of this crossing would not necessarily eliminate or replace the existing fairgrounds crossing. The existing crossing could function in the same manner it did previously, armed with a crossing guard during special events. During these limited time periods the new user activated crossing. Due to the improved safety, ease of construction and directness of this crossing, this is the preferred option for getting CtCT users from the existing CtCT across Jimmy Durante Boulevard.



Photo 16 - Example of Pedestrian Actuator

4.1.2 (A-2) Jimmy Durante Blvd. to RR Bridge



Photo 17 - View Southeast Along Proposed South Fairgrounds Trail Alignment

The Fairgrounds Master Plan includes a trail at the southern edge of the fairgrounds property along the river between Jimmy Durante Boulevard and Stevens Creek as shown in Figure 12. Implementation of the trail is intended to occur as part of a redevelopment effort within this area of the fairgrounds as it will require operational changes including the addition of a 100 foot recreational buffer from the river; and removal of parking, storage and other activities along the river edge. At the time of the writing of this report, the schedule for implementation of the trail as part of the Fairgrounds Master Plan is unknown. Discussions with the Ag District have indicated a willingness to coordinate with the SDRPJPA in the development of this portion of the trail, if only in an interim configuration, prior to full Master Plan implementation.

An interim configuration will be necessary in order to implement this portion of the trail prior to the Fairgrounds Master Plan implementation. An interim configuration could include the trail





Recreational Buffer Sections

alignment within a smaller buffer extending from the top of the riverbank to the north onto the fairgrounds property. The buffer would be made up of a standard CtCT trail consistent with the one represented in Figure 8, interpretive signage, and regionally appropriate native vegetation that is representative of local habitats. The interim buffer width would be determined in consultation with the Ag Dist, but would need to be a minimum of 16 feet to accommodate the trail and fencing (see Figure 13).

Upon implementation of the Fairgrounds Master Plan, fairground uses and activities will be redeveloped to allow for the full buildout of the trail alignment within a 100-foot buffer. At that time it may also be desirable to move the interim trail further from the river (if feasible), and be flanked on either side by native vegetation comprised regionally appropriate species that is representative of



Photo 18 - Existing Fairgrounds Activities Along South Fairgrounds Alginment

local habitats. However, the distance between the river and trail may vary to allow for viewpoints or interpretation. See Figure 14 for a section view of the final build-out of the South Fairgrounds Trail. The 100-foot recreational buffer from the wetlands is consistent with the requirements for development within the coastal zone.

West Fairground Trail (A-2-b)

As Alternative A approaches Stevens Creek it turns north along the western edge of the fairgrounds property, where views of the river, creek and the ocean could provide a desirable user experience. This alignment would provide the benefit of a connection with SANDAG's planned permanent seasonal platform once the second track is added.

This segment of the alignment is not included in the Fairgrounds Master Plan, which creates challenges associated with existing fairground uses and activities in this portion of the property. Fairgrounds uses become more intensive from south to north. Implementation of the trail would encroach on existing parking, storage and vehicular circulation within the constrained space. Due to these encroachments, there is minimal room for a buffer between the trail and fairground uses. The final implementation of this seg-



Photo 19 - Existing Fairgrounds Activities Along West Edge of Fairgrounds Property

ment of the trail on fairground property would include a narrow buffer (14-25 feet) as opposed to the 100 foot buffer proposed for the final implementation of the South Fairground Trail, due to the limitation of space. Given that there is precedence set by other trail segments upstream in the SDRP for a decreased buffer width when deemed necessary due to adjacent land uses, it is reasonable to assume that this is a viable trail configuration for this segment.

From the western edge of the fairground, three possibilities were analyzed for getting trail users across Stevens Creek and beyond the railroad tracks as shown in Figure 12: 1) a bridge and railroad undercrossing, 2) a bridge and underpass through the railroad embankment (two possible locations), and 3) routing the trail up the access road driveway to Via de la Valle. In addition to getting users safely beyond the railroad tracks, this portion of the trail must avoid or mitigate any impacts to sensitive wetland resources between the railroad and Stevens Creek.

Stevens Creek Crossing (A-2-c)

Three options for crossing Stevens Creek were analyzed based on their proximity to plausible railroad crossing locations:

- 1) The north creek crossing as shown in Figure 12 would provide a direct connection to a railroad embankment underpass. This is the preferred creek crossing option.
- 2) A mid-creek crossing would provide a direct connection to the future location of a railroad underpass upon completion of SANDAG's planned bridge replacement and second track project described in section 3.4.
- 3) A southern creek crossing would provide a direct connection to a temporary undercrossing at the existing southern edge of the railroad embankment that would need to be relocated upon completion of the planned bridge replacement.



Photo 20 - View East Along Steven's Creek

relocated upon completion of the planned bridge replacement and second track project.

The mid and south creek crossings could also provide a connection to a trail that would run north along the west side of Stevens Creek and then utilize the northern underpass to cross under the railroad (Figure 12). The advantage of this option is the avoidance of any encroachments on existing fairground uses and the west fairground trail as described above. The disadvantage of this option is the increased wetland impacts and the mitigation requirements that accompany them.

Any creek crossing will require mitigating impacts to Stevens Creek and adjacent jurisdictional wetlands. Additionally, the bridge design and elevation must take into consideration the high annual tide, intermediate flood flows from Stevens Creek, and the 100-year FEMA flood elevation associated with the San Dieguito River.

Railroad Crossing (A-2-d)

Based on SANDAG's plans to elevate the railroad bridge and add a second track as described in Section 3.3, and the uncertain timeline of the project, an interim design solution for a railroad crossing that can modified as part of SANDAG's future project is necessary. Two interim solutions have been identified: 1) A temporary railroad undercrossing to be replaced or re-located upon completion of the second track project; or 2) A permanent railroad underpass that could easily be expanded to accommodate the future second track.

A temporary undercrossing at the north railroad bridge abutment would eliminate a large portion of the west fairgrounds trail and minimize the disadvantages of this segment discussed above by directing the alignment to the west and off the fairgrounds property. It would also reduce the interface between fairgrounds activity and trail users, and improve the trail connection with views of the river and ocean. The primary disadvantages of a



Photo 21 - View West From West Edge of Fairground Across To Railroad



Photo 22 - North Railroad Bridge Abutment

railroad undercrossing at the north abutment are associated with the planned bridge replacement and second track project discussed in Section 3.4.2, and the implications of potential increases in wetland impacts due to the longer trail-wetland interface. Any underpass or undercrossing constructed prior to the bridge replacement and second track project would need to be replaced and moved north to the new abutment location. The underpass tread would need to be set at an elevation of at least 6 feet NGVD to avoid the annual high tides and may not accommodate horses due to inadequate overhead clearance, less than 12 feet (San Dieguito Lagoon Final Restoration Plan, 2005). In order to avoid or minimize wetland impacts, trail implementation may require extensive retaining walls and would intensify the interface between the trail and railroad track and cost more.

A permanent railroad underpass through the existing embankment could be designed for easy integration into the future second track project. Advantages associated with this alternative include a reduction of probable wetland impacts and minimized interface with the railroad on the west side of the railroad embankment. Additionally, the creek could serve as a buffer between trail users and the railroad due to the trail extending further north along the western edge of the fairgrounds property as shown in Figure 12. This is the preferred railroad crossing option; however it will require further coordination with the Ag District due to the increased trail length on their property.

Solana Gate Route (A-2-e)

An alternative to crossing Stevens Creek and the railroad by way of bridge, underpass or undercrossing is to route the trail up the Solana Gate entry drive at the north edge of the fairground property. This option takes users across fairground paved parking lots and storage areas, and up the narrow entry drive to Via De La Valle. The route eliminates the Stevens Creek crossing and utilizes the existing railroad overpass associated with Via de la Valle. Due to the broad expanse of asphalt and the functional nature of the surrounding fairground facilities, the route would provide a poor user experience and direct a significant portion of the trail away from the river. Additionally, the entry drive is narrow with limited space and poor sight distance. An alignment through this area of the fairground would require a reconfiguration of vehicular circulation and storage space in this portion of the fairground. Discussions with Ag District determined that due to these factors this route was not a viable option.



Photo 23 - View of Solana Gate Entry Drive
4.1.3 (A-3) RR to Camino del Mar

West of the railroad tracks between the railroad embankment and Camino del Mar, Alternative A encounters sensitive wetlands. Two possibilities were studied for getting users beyond the wetland: 1) a boardwalk trail through the wetlands; and 2) minimizing impacts by routing the trail along the wetland edge impacting mostly upland habitat.

Boardwalk Trail (A-3-a)

A boardwalk trail through the wetland as shown in Figure 12 would require the construction of an elevated boardwalk capable of withstanding an annual high tide. In order to avoid submersion under water during annual high tides, the structure should be designed with a tread set at an elevation at or above +6 feet NGVD. The boardwalk would be approximately 440 linear feet. Like the underpass structure discussed above, the boardwalk structure should be constructed of material capable of withstanding the deteriorating effects of saltwater and be designed to survive the forces of a 100 year flood event.



Photo 24 - Boardwalk trail

A boardwalk trail would provide a unique user experience with views of the wetland and opportunities for interpretive features about the ecology of the

area along it. However, permitting may prove to be difficult to obtain due to wetland and floodplain impacts, and cost of construction and mitigation could be prohibitive.

Upland Trail (A-3-b)

An upland trail alignment which gets users beyond the sensitive wetland and avoids or minimizes impacts to the wetland would head north along the railroad embankment before turning west at the edge of the wetland toward Camino del Mar as shown in Figure 12. Like the boardwalk trail, an upland trail would provide a unique user experience with views of the wetland and opportunities along the alignment for interpretive features about the ecology of the area.

Disadvantages of the trail include the expense associated with retaining walls necessary to locate the trail along the side of the steep railroad embankment, which is required to avoid wetland impacts and elevate the trail above the annual high tide, as well as the proximity of the trail to the railroad.



Photo 25 - View north along west side of RR embankment

4.1.4 (A-4) Camino del Mar to Beach

As alternative A heads west across the wetland and beyond the railroad, trail users must cross Camino del Mar to reach the final destination of the CtCT, the beach. The three options considered for crossing the road are as follows: 1) the Via de la Valle signalized intersection; 2) a pedestrian undercrossing under Camino del Mar; and 3) a new signalized pedestrian crossing.

Via De La Valle Signalized Intersection (A-4-a)

The controlled signalized intersection at Camino del Mar and Via De La Valle has an advantage over the other two options since it is existing infrastructure and provides a direct connection to an existing segment of the Coastal Rail Trail in the neighboring Solana Beach.



Photo 26 - View northeast of intersection at Vila De la Valle and Camino Del Mar

However, the location of the controlled crossing requires users to travel away from the trail destination along a highly trafficked section of road, and would require improvements to both sides of Camino del Mar. This route would provide a poorer user experience than the other options and be undesirable for equestrians due to the extended adjacency with Camino del Mar.

Pedestrian Undercrossing (A-4-b)

The feasibility of a pedestrian undercrossing under Camino del Mar from the wetland in the east to the beach in the west was studied as an option for getting trail users across Camino del Mar. A preliminary review of the existing topography determined that the feasibility of construction of a roadway undercrossing under four lanes of traffic a median and two shoulders, that meets overhead clearance requirements, and gradient thresholds was not within the realm of reasonable construction costs for this project.

Signalized Pedestrian Crossing (A-4-c)

A new user activated signalized pedestrian crossing is a relatively low cost crossing solution that could be located adjacent to one of two locations along Camino del Mar: 1) at the existing ADA beach path; or 2) near the existing dirt path at the north end of the beach as shown in Figure 12. If the crossing near the ADA path is implemented the trail leading to the crossing on the east side of Camino del Mar, could consist of a Class I Bike path and multi-use trail, which would require re-striping of the road to accommodate the additional user groups. If the crossing near the existing dirt path is implemented, very limited trail improvements to the east side of Camino del Mar would be required. Traffic studies will be required to fully understand the implications of an added pedestrian signal crossing on vehicular traffic along Camino del Mar. In addition, beach goers who park on the east side of Camino del Mar the beach, users can choose either of the existing paths to the sand; all user groups may use a steep dirt walkway at the north end of the beach, and hikers may use the pedestrian only, ADA concrete path with access from both the north and south. The northern signalized pedestrian crossing is the preferred option for crossing Camino del Mar due to the advantages discussed above assuming the findings of a traffic study support it.



Photo 27 - Beachgoers jaywalking across Camino Del Mar just south of the Camino Del Mar Bridge



Photo 28 - Beachgoers jaywalking across Camino Del Mar just south of the Camino Del Mar Bridge



Photo 29 - View south along Camino Del Mar at possible crossing location at dirt path at north end of Del Mar Beach



Photo 30 - North entry to ADA access path adjacent to dirt beach access path

4.2 Alternative B

Alternative B runs along the south side of the San Dieguito River from the existing CtCT at Jimmy Durante Boulevard to the beach as shown in Figure 12. Like Alternative A, Alternative B encounters significant barriers along its path that drive alignment options and possible design solutions. These significant barriers are:

- Jimmy Durante Boulevard;
- Railroad; and
- Camino del Mar

For the purposes of this report, Alignment B is broken into four reaches. The reaches are defined as follows:

- Existing CtCT to Jimmy Durante Boulevard;
- Jimmy Durante Boulevard to the Railroad;
- Railroad to Camino del Mar; and
- Camino del Mar to the Beach

The opportunities and constraints of each are discussed in detail below.

4.2.1 (B-1) Existing CtCT to Jimmy Durante Boulevard



Photo 31 - View northeast from Jimmy Durante Blvd Bridge



Photo 32 - Camino Del Mar cantilever

As is discussed above, the existing CtCT terminus is located on the east side of Jimmy Durante Boulevard just north of the Jimmy Durante Boulevard Bridge. The first challenge associated with this reach is getting users across Jimmy Durante Boulevard and over the river to the beginning of the Riverpath Del Mar. To accomplish this goal, two options for a crossing were studied: 1) a new signalized pedestrian crossing at the fairgrounds (Figure 12); and 2) the planned signalized intersection at Jimmy Durante Boulevard and San Dieguito Drive.

The same configuration considered for a signalized pedestrian crossing at Jimmy Durante Boulevard for Alternative A was considered for Alternative B. The opportunities and constraints associated with this option are the same for both alternatives. See Section 4.1.1 for further discussion of this option.

Based on submitted development plans for the lot located on the southeast corner of Jimmy Durante Boulevard and San Dieguito Drive mitigation is required for increased traffic associated with this development. The plans identify a traffic light at the intersection as the mitigation. It is reasonable to assume that implementation of the traffic signal would include a pedestrian actuated system that could provide a safe crossing of Jimmy Durante Boulevard to the Riverpath Del Mar.

Both road crossing options require users to utilize the Jimmy Durante Boulevard Bridge to get from the existing CtCT terminus to the south side of the river where the Riverpath Del Mar begins.

The existing sidewalk on both sides of the bridge is an insufficient width for equestrians, and the absence of a bike lane makes the bridge crossing undesirable for cyclists. A cantilever similar to the one along the Camino del Mar Bridge could alleviate these limitations and provide a path that is wide enough to safely accommodate all user groups. A cantilever on the east side of Jimmy Durante Boulevard to the future signalized intersection at San Dieguito Drive is the preferred options for this reach.

4.2.2 (B-2) Jimmy Durante Boulevard to the Railroad



Photo 33 - Terminus of the Riverpath Del Mar

As discussed in Section 3.1.2, the Riverpath Del Mar is a ¼ mile long hiking path along the south side of the San Dieguito River. The path is approximately 5 foot in width, and has a mixture of decomposed granite and native soil surfacing. A picnic table and benches, and interpretive signage about the ecology of the area provide a good user experience. Roughly ½ of the trail is bordered by a City of Del Mar Public Works office and storage facility along the south side of the trail. The remaining half of the trail meanders through a California native and Mediterranean plant garden. Incorporating this path into any south river alternative would make prudent use of existing trail infrastructure. The Riverpath Del Mar is currently designated as a hiking only path. To incorporate the path into the Reach the Beach trail segment and achieve the goal of being a multi-use trail, the Riverpath Del Mar would need to be improved to maintain a

consistent width and surfacing, and be designated a multi-use path that allows for hikers, cyclists and equestrians.

The Riverpath Del Mar currently terminates at the railroad right-of-way without any signage or end of trail marker (see photo 30). As with Alignment A, the railroad is a significant barrier within the alignment and presents limited opportunity for a legal, safe, and cost effective crossing for trail users. Four options were identified and analyzed for getting users across the railroad: 1) an at-grade crossing; 2) a railroad undercrossing; 3) a pedestrian underpass; and 4) a railroad overpass (see Figure 12). These three options are analyzed below.

At-grade Crossing

Field investigations determined that users of the Riverpath Del Mar may currently continue past the terminus of the trail by crossing the railroad tracks at-grade, and continue to the pedestrian path alongside the Sandy Pointe Condominiums described in section 4.2.3 below. Discussions with NCTD have determined that this is not an NCTD approved crossing, and that new at-grade, thru crossings are not allowed within NCTD ROW. This fact makes an at-grade crossing an infeasible option for getting users beyond the railroad.

Railroad Undercrossing (B-2-a)

At the time of field observation, a clearance of 5 feet was measured from the existing railroad trestle to the visible water line on the riprap below. This is insufficient clearance for an undercrossing of any kind. However, the SANDAG bridge replacement and second track project plan calls for elevating the track 8.5 feet. With this additional elevation, it may be feasible for SANDAG to incorporate an undercrossing as part of the trestle replacement portion of the project. Of the railroad crossing options studied for Alternative B, this is the most viable and therefore preferred option.



Photo 34 - South RR trestle abutment

Underpass (B-2-b)

The possibility of designing a underpass under the railroad to transport users across the railroad was briefly explored. Field observation found insufficient vertical clearance between the railroad track and an adjacent drainage swale to the west to achieve necessary gradients and headroom. No further investigation into a railroad underpass at this location was conducted.

Railroad Overpass (B-2-c)

A railroad overpass consisting of concrete ramps and a bridge structure that provides sufficient clearance over the railroad right-of-way was briefly considered. This option is deemed infeasible due to the cost and visual impact of constructing a structure capable of meeting gradient, width and height requirements.

4.2.3 (B-3) Railroad to Camino del Mar

Beyond the railroad, the alignment continues along an existing path to Camino del Mar flanked by Sandy Pointe Condominiums on the south and the river on the north. The pedestrian path lies within an existing public easement through the Sandy Pointe Condominium property, and is lined with benches for viewing the river. The path provides a good user experience.

To accommodate all user groups, the path would need to be widened and re-surfaced. Widening of the path may not be feasible at various locations along the trail, due to proximity to the river, without the use of retaining walls or wetland impacts. Additionally, it is unclear whether these improvements and the expansion of user groups would be consistent with the existing public access easement.

4.2.4 (B-4) Camino del Mar to Beach

As the alignment continues west toward the beach and approaches Camino del Mar, two options were analyzed for getting users safely across Camino del Mar: 1) utilizing the existing crossing at 29th Street; and 2) a new signalized pedestrian crossing just south of the Camino del Mar Bridge.

Existing Pedestrian Crossing (B-4-a): The existing pedestrian crossing is located roughly ¼ mile south of the river at 29th Street. Using the existing crossing would require the addition of roughly ½ mile of trail to get users south to the crossing and back north to the Camino del Mar Bridge and beach as shown in Figure 12. This could require public access easements along points of the widened trail that could cross private property, and would take users away from the destination and the river. If this crossing is used, it is possible that users will ignore the crossing and the portion of the trail leading to and from it, and continue crossing Camino del Mar illegally as beach goers do now.

Signalized Pedestrian Crossing (B-4-b): A signalized pedestrian crossing could be located just south of the bridge where the existing Sandy Pointe Condominium trail terminates at Camino del Mar as shown in Figure 12. An actuator such as the one shown in photo 33 could be used to activate flashing lights that notify motorists of trail users and beach goers crossing the road. The crossing could provide a direct connection to the Camino del Mar Bridge cantilever and subsequent ADA path without the addition of required trail improvements associated with utilizing the existing crossing. A traffic study is required to understand the implications of a new, actuated crossing in this location.

Upon crossing Camino del Mar, the alignment continues to the Camino del Mar Bridge cantilever described in Section 3.5. Upon arriving at the beach, users can choose either of the existing paths to the sand; all user groups may use a steep dirt walkway at the north end of the beach, and hikers may use the pedestrian only ADA concrete path with access from both the north and south. As described in Section 3.5, no bike racks or hitching posts currently exist at the beach.



Photo 35 - View north of Camino Del Mar and the existing ADA beach access path



Photo 36 - South entry to ADA beach access path



Photo 37 - Example of a pedestrian actuator

5 Preferred Alignments and Design Details

Based on the analysis and observations above, Alternative A was selected as the preferred general alignment for the Reach the Beach segment of the CtCT. This alignment was selected based on feasibility of construction with regard to cost and complexity, overall user experience and possible timeline of construction.

It was determined that although Alternative B will not be the primary focus of SDRPJPA efforts, the alignment represents viable alternate pedestrian and bicycle access to and from the CtCT. Therefore, the SDRPJPA could facilitate improvements (such as the Jimmy Durante Boulevard cantilever, railroad undercrossing, and Camino del Mar crossing) to the alignment by assisting with coordination and communication among motivated stakeholders. Below is a discussion of the selected alignment options for Alternative A and Alternative B.

5.1 Coast to Crest Trail Alignment

The following sections describe the recommended preferred alignment for the Reach the Beach trail segment. Recommended configurations, design details, and construction methods are also provided where appropriate to help provide insight to future design, permitting, and construction requirements.

5.1.1 Existing CtCT to Jimmy Durante Boulevard

The preferred extension of the existing CtCT trail is the South Overflow Parking Lot trail being considered as part of the Ag District's wetland restoration options for the area. The preferred crossing at Jimmy Durante Boulevard is a marked crossing with a user actuated flasher such as the one shown in Figure 15, which would provide the most safe and cost effective crossing solution. The user actuated crossing would be located just north of the Jimmy Durante Boulevard Bridge to avoid potential conflicts between trail users, the fire station and fairgrounds activity. A secondary warning system that consists of an additional flasher will likely be necessary for motorists approaching from the north due to the curvature of the road and the speed of vehicular traffic. A traffic study is required to understand the effect of the crossing on traffic patterns as well as any additional safety measures that are necessary. Extensive coordination with the City of Del Mar will be required for the design and permitting of the crossing. See Section 7 for a general discussion of permitting requirements.

5.1.2 Jimmy Durante Boulevard to the Railroad Bridge

The preferred alignment continues along the southern edge of the fairgrounds property as shown in figure 15. The first phase of implementation for this portion of the trail is recommended to include a minimum wetland buffer described in section 4.1.2. Upon completion of the Fairgrounds Master Plan improvements, the final trail build out is recommended to include the full 100 foot wetland buffer. See section 4.1.2 for discussion of the buffers as they relate to the Fairgrounds Master Plan.

As the preferred alignment turns north along the western edge of the fairgrounds, a 14-25 foot buffer is recommended to continue with the exception of the two locations where fairgrounds facilities and the river do not allow enough space for the buffer. These locations could be used as alternate access points to the CtCT from the fairgrounds. Due to the operational activities of the fairgrounds in this portion of the property, the wetland buffer along the west fairgrounds segment of the trail would most likely always remain at no more than 25 feet.

The wetland buffers (25 and 100 foot) should be comprised of regionally appropriate California native plants that are representative of upland habitat such as coastal sage scrub or chaparral. Seating and viewing areas should be located at strategic points along the trail segment to capitalize on views of the river and opportunities for interpretative signage.

The Ag District is a crucial project partner for this portion of the Reach the Beach segment. This portion of trail will require continued, extensive coordination with the Ag District to ensure staff can proactively plan facility uses and activities for the trail and buffer.





Note: Design plans for the bridge replacement and second track widening project have not been developed as of the time of the writing of this report. The alignment and embankment expansion shown are for illustrative purposes only and are not meant to represent the actual work.

Figure 16 - Possible Bridge and Underpass Configuration

5.1.3 Railroad Bridge to Camino del Mar

As the preferred alignment approaches Stevens Creek, users are recommended to cross the creek via a single span bridge. Upon crossing the creek, the alignment is recommended to transition almost immediately to a rail-road embankment underpass that would allow users to safely move beyond the railroad and onto the west side of the embankment as shown in Figure 16. The alignment then turns north along the railroad embankment for roughly 400 feet before turning west toward Camino del Mar. The major elements of this portion of the alignment are described in detail below.

Stevens Creek Bridge

The preferred location for crossing Stevens Creek is shown in Figure 15 and is located toward the north end of the western edge of the fairgrounds property. The option was selected based on the decreased wetland impacts associated with it and the feasibility of a railroad embankment underpass at this location as well.

The Stevens Creek Bridge is recommended to be a single span bridge 10 feet in width and approximately 60 feet in length and will accommodate pedestrian, bicycle, and equestrian traffic. A final decision regarding the bridge materials has not been made at this point in time and several options are still being considered. A final selection will be made after a more detailed hydraulic analysis of Stevens Creek has been completed during the next phase of design. Possible bridge superstructures include: steel girder system with timber deck; precast concrete girder; or truss system comprised of steel, aluminum, or fiberglass. The single span nature of the bridge to be situated outside the limits of jurisdictional wetlands and the bridge structure can be set in place with a small crane. The substructure will likely consist of reinforced concrete abutments founded on piles. The gradient of the bridge should not exceed 4.95 percent, and should be designed to sit above the future annual high tide based on sea level rise predictions (at or above +9.5 feet NGVD). To accomplish this, an earthen ramp will need to be constructed as the trail approaches the bridge from the east.

Railroad Embankment Underpass

A 20-foot single span underpass is recommended to be constructed in place to accommodate pedestrian, bicycle, and equestrian traffic underneath the existing railroad track and through the existing embankment. The proposed underpass would consist of precast/prestressed concrete slabs supported on abutments comprised of precast concrete caps and a driven or drilled pile system. The proposed underpass construction would require a weekend closure of the track that may coincide with planned NCTD track maintenance operations in order to minimize train schedule impacts. Construction would start with the placement of driven or drilled piles placed through the existing railroad embankment. This operation would occur during night shifts and would keep the existing track open as long as possible. Once the pile system was constructed, a weekend closure would start, and the usual train passengers would be placed on busses and transported around the construction site. NCTD personnel would then remove portions of the existing track. The underpass contractor would then excavate just enough to place the precast concrete caps, then the precast/prestressed concrete slabs, and finally the ballast. NCTD personnel would then reset the track and open the partially completed structure to railroad traffic. Finally, the contractor would finish the excavation beneath the structure and construct the proposed trail.

Upland Trail

As the preferred trail alignment comes through the underpass onto the west side of the railroad embankment it would turn north and travel along the railroad embankment for about 400 feet before it turns west around the northern edge of the tidal wetlands and then turns back to the south and climbs up the slope to Camino del Mar. Due to the proximity to the tidal wetlands and steep slopes along the railroad embankment and Camino del Mar the final trail within the section would not be constructed with the standard trail configuration. It is recommended to be constructed with an 8 foot decomposed granite surface without the adjacent 2 foot shoulder or 4 foot multi-use trail.

Due to the future SANDAG Bridge Replacement and Second Track project, the approximately 400 foot section of trail along the railroad embankment would need to be implemented in a phased approach, with an interim nar-



Underpass elevation

Figure 17- Railroad Underpass Conceptual Details

row trail being implemented first, and a wider more permanent trail being implemented as part of the SANDAG Bridge Replacement and Second Track project. This phased approach is necessary to avoid a situation where the SDRPJPA implements a permanent trail along the existing railroad embankment requiring at least 400 feet of 4-5 foot tall retaining walls that would need to be demolished and re-constructed as part of the Second Track project. The walls along the east side of the path would likely be comprised of steel sheet piles or a soldier pile wall system in order to minimize the excavation and limit the risk to existing railroad facilities. It is also necessary to avoid costly mitigation associated with locating the trail outside the future project limit of the Second Track project.

The interim narrow trail configuration is recommended to be 4 feet in width with a 2-3 foot sheet pile retaining wall along the edge nearest the railroad. The trail is recommended to be set at an elevation of approximately +12 feet NGVD; use native soil as its surfacing; and be bordered on the lagoon side by a lodge pole fence.

The ultimate trail is recommended to be implemented in conjunction with SANDAG's Bridge Replacement and Second Track project. It is recommended to be 8 feet in width with a 4-5 foot sheet piles or soldier pile retaining wall along the edge nearest the railroad. The trail is recommended to be set at an elevation of approximately+12 feet NGVD; use decomposed granite as its surfacing; and be bordered on the lagoon side by a lodge pole fence.

5.1.4 Camino del Mar to Beach

Upon climbing the road embankment to Camino del Mar, one of two options will be implemented depending on the results of a future traffic study regarding the most appropriate location for a user activated signal to cross Camino del Mar. The preferred location is where the trail first meets Camino del Mar which is close to being directly across from the dirt access path to the beach on the west side of Camino del Mar. Alternately, a new class I bikeway and multi-use trail separated from the road by protective railing would bring users further south on Camino del Mar to the secondary location for the user actuated crossing at the northern end of the Camino del Mar Bridge across from the Camino del Mar ADA concrete path to the beach.

At-Grade User Actuated Crossing



Figure 18- At-Grade Actuated Crossing

The preferred location for crossing Camino del Mar is about 800 feet south of the intersection with Via de la Valle and just south of where the two south bound lanes merge to one and the one north bound lane splits to two. A user actuated crossing such as the one shown in photo 38 will provide a safe crossing for Reach the Beach trail users. The crossing will require the installation of the user-actuated signal light as well as activation buttons on either side of the road. In addition, an 8 foot wide portion of the existing median will be removed to make room for the crossing and provide a safe haven for users to check and make sure traffic in both directions has stopped. Once across Camino del Mar, pedestrians could

use the ADA access path and cyclists and equestrians the nearby dirt path to access the beach.

The alternate location for crossing Camino del Mar is another 700 feet south and just north of the Camino del Mar Bridge. The same type of use actuated crossing would be installed. A reconfiguration of the median that consists of a slight

widening at the point of crossing as shown in Figure 18 would provide a safe haven for trail users and beach goers as they cross the road. Widening of the median at this point will also result in additional traffic calming effects that could result in a decrease in vehicular speed. Traffic on Camino del Mar at this point is using one lane of traffic in either direction. Once across Camino del Mar, pedestrians could use the ADA access path and cyclists and equestrians a new dirt path to access the beach.



Photo 38 - Example of a pedestrian actuator

Class I Bikeway and Multi-use Path



Figure 19 - Class I Bikeway/Multi-use Trail

If the alternate location for crossing Camino del Mar is chosen, then a class I bikeway and multi-use trail would need to be constructed along the eastern edge of Camino del Mar. The Camino del Mar path would provide a connection for trail users between the wetland trail segment and the user actuated crossing. The installation of these paths along Camino del Mar will require a re-striping of the north bound traffic lane and shoulder. The restriping of the road, to make room for the class I bikeway and multi-use trail, may also provide a traffic calming effect. The end result will be a safer, more enjoyable user experience for trail users and beach goers due to decreased vehicular speed along this portion of Camino del Mar and an improvement in pedestrian scale.

The path will consist of an 8 foot wide stabilized decomposed granite bike and pedestrian path with a 4 foot wide, compacted decomposed granite equestrian path. The alignment will have post and rail fencing along the eastern edge of the path, and a Caltrans grade vehicular guardrail along the west. See Figure 19 for a detailed section of the class I bikeway and multi-use trail configuration.

5.2 Alternate Pedestrian Access

Although it will not be a focus of the SDRPJPA efforts to implement the CtCT, the SDRPJPA recognizes the value of the alternative alignment studied in this report which is identified as Alignment B, and discussed in detail in section 4.2. The alignment would provide viable alternate pedestrian access to the CtCT and the SDRPJPA would like to facilitate linkages (such as the Jimmy Durante Boulevard cantilever, railroad undercrossing, and Camino del Mar crossing) to the alignment by assisting with coordination and communication among motivated stakeholders. A discussion of the suggested alignment is below.

5.2.1 Existing Coast to Crest Trail to Jimmy Durante Boulevard

Jimmy Durante Cantilever

A cantilever along the east side of the Jimmy Durante Boulevard Bridge similar to the one along the west side of the Camino del Mar Bridge could get users from the existing CtCT terminus on the north side of the Jimmy Durante Boulevard Bridge to the intersection with San Dieguito Road. The existing bridge is a 262.5 foot long 6-span precast/prestressed concrete slab bridge founded on piers consisting of reinforced concrete caps with pile extensions. Due to the difficulties of working in the river a cantilever sidewalk of 8-feet in width is proposed to be added to the bridge. In order to reduce the loading to the bridge a cantilever sidewalk comprised of steel stringers with timber or fiberglass decking is recommended (see Figure 20). The sidewalk will span between support brackets attached to the existing pier caps to remove any load from the existing superstructure. An analysis will need to be performed to confirm the adequacy of the existing substructure to support the new loads.



Signalized Pedestrian Crossing

As is discussed in section 4.2.1, there are currently plans to install a traffic signal at the intersection of San Dieguito Road and Jimmy Durante Boulevard as mitigation for increased traffic due to the development on the southeast corner of the intersection. Discussions with City of Del Mar staff have indicated that even if this development does not proceed as planned, the City intends to install the traffic signal in the future, which could include a user-actuated crossing system. Users of the trail can use this crossing to safely reach the Riverpath Del mar.

5.2.2 Jimmy Durante Boulevard to Camino del Mar

Railroad Undercrossing

As the alignment reaches the railroad, a solution for getting users safely and legally across the railroad is required. Although it is not currently feasible due to inadequate clearance, it may be possible to incorporate a railroad undercrossing with SANDAG's bridge replacement and second track project. As is discussed above in section 4.2.2, the project will elevate this portion of the track 8.5 feet which could allow for an undercrossing with suitable overhead clearance that would sit above the annual highest high tide. As is discussed in section 3.4.2 above, the timeline for implementation of the bridge replacement and second track project is uncertain. Further coordination with SANDAG is crucial to the success of this crossing option and communication between interested parties should be encouraged very early in the planning and design process.

5.2.3 Camino del Mar to the Beach

Camino del Mar: Pedestrian Actuated Crossing

As the alignment reaches Camino del Mar users can safely cross the road with the installation of a pedestrian actuated crossing signal like the one identified for Alignment A in section 5.1.4 and shown in Figure 18. The signal could be located just south of the Camino del Mar Bridge as shown in Figure 15. The crossing would be of a similar configuration to the one identified for Alignment A and could provide safe crossing for trail users as well as beach goers who park along the east side of Camino del Mar.

6 Public Outreach

Public involvement was a critical part of the Reach the Beach Feasibility Study and was conducted throughout the study period. Initially, input was received from many sources to assemble a range of possible trail alignment alternatives for evaluation and feedback, then narrow the alternative trail alignments based on input received, and finally to eventually identify the preferred alignments.

6.1 Outreach

Outreach was conducted by SDRPJPA staff beginning with field reconnaissance with the San Dieguito River Park's Trails Subcommittee. A field meeting in August 2010 was held by the Trails Subcommittee to investi-

| - | SAN DIEGOTO RIVER PARK |
|-----------|---|
| "REAG | CH THE BEACH" COAST TO CREST TRAIL STUDY |
| | PUBLIC WORKSHOP |
| 100 | |
| | AUD |
| WHERE: | DEL MAR CITY HALL ANNEX (behind City Hall) |
| WHEN: | WEDNESDAY, APRIL 27 TH , 6:30-7:30 PM |
| WHY: TO | D EXPLORE POSSIBLE TRAIL ROUTES FOR THE DEL MAR XTENSION OF THE COAST TO CREST TRAIL |
| JOIN YOUR | NEIGHBORS AND HAVE A SAY IN WHERE THE TRAIL SHOULD GO! |
| | 1 |
| | / |
| | / |
| | |

gate the project area and select and evaluate possible trail alignments. The Subcommittee met and discussed the trail alternatives again in January 2011 and March 2011. SDRPJPA staff provided the Subcommittee with frequent updates on the project status. The Trails Subcommittee and SDRPJPA staff reported on the progress of these meetings to the full Citizens Advisory Committee (CAC). A presentation of the alternative alignments was presented to the CAC on March 4, 2011 and the preferred alignments on December 2, 2011. Input from the CAC was solicited at these meetings.

The SDRPJPA also attended the Del Mar Lagoon Committee meeting of February 16, 2011 to obtain feedback and input on the alternative trail alignments, and again on December 21, 2011 to discuss the preferred trail alignments. Meetings were also held with members of the Friends of the San Dieguito River Valley, and agency staff from the City of Del Mar, SANDAG, NCTD, and the Ag District.

Ag District staff was consulted on several occasions regarding locating the trail on the Fairgrounds property. Field visits took place with Ag District and SDRPJPA staffs to review the proposed trail alignment and obtain input on Fairgrounds operations from staff.

6.2 Public Workshop

The SDRPJPA conducted a public workshop in Del Mar on April 27, 2011.

The purpose of the workshop was to obtain public input on the various alternative alignments under consideration. The workshop was well attended by representatives from all three trail user groups (i.e., pedestrians, cyclists, and equestrians). After a presentation by SDRPJPA staff and their consultants, the attendees were able to review the project maps and provide input.



Photo 39 - Field reconnaisance with SDRP trails subcommittee



Photo 40 - Public workshop was well attended by all user groups



Photo 41 - Attendees were able to provide input and review project maps

Issues Identified During Public Outreach

During the several meetings held, many issues were raised and discussed. These issues are listed below:

- Why are horses planned on the trail and will it really be used by equestrians?
- Traffic congestion in area and trail user interface.
- Potential conflict with trail and substantial congestion during Del Mar Fair and racing season.
- Concerns about litter and horse manure adjacent to the tidal wetlands.
- Desire to utilize existing trail on south side of river (Riverpath Del Mar trail).
- Potential conflict of trail with existing fire station driveway on Jimmy Durante at Fairgrounds.
- Adequate space along Fairgrounds to accommodate trail.
- Connection to future rail platform on Fairgrounds.
- Provide views from trail to river and wetlands.
- Potential cost of underpass through railroad berm.
- Potential for conflict between dogs and horses at Del Mar beach.

7 Permitting

The following permits would be required to construct various elements of the Reach the Beach Trail segment:

California Environmental Quality Act (CEQA) – adoption of a proposed trail alignment would require compliance with CEQA. Based on the Initial Study prepared for this study (Appendix B), a focused Environmental Impact Report or Mitigated Negative Declaration would be required. If the project is funded by using Federal grants then compliance with NEPA would also be required.

Coastal Development Permit (CDP) – A CDP will be required by the California Coastal Commission.

Local Coastal Permit – the City of Del Mar has local permitting authority with the city's jurisdiction. A proposed trail would require approval from the City of Del Mar including compliance with all local ordinances such as the Lagoon Overlay Zone. The project would also require design review, approval from the Del Mar Lagoon Committee and the City Council.

City of Del Mar permits – Compliance with the Lagoon Overlay Zone, which includes a conditional use permit and coastal permit, as well as construction permits.

United States Army Corps of Engineers (Corps) 404 permit – based on the results of the wetland delineation done for this feasibility study, the project will impact federal wetlands which will require a 404 permit from the Corps. It has not been determine if a Nationwide or Individual permit would be required.

Regional Water Quality Control Board (RWQCB) Section 401 Water Quality Certification – in conjunction with the processing of the Corps 404 permit, a Section 401 Water Quality Certification would also need to be obtained from the RWQCB.

Streambed Alteration Agreement – the Stevens Creek Bridge would require this permit from the California Department of Fish and Game due to potential impacts to the streambank and associated wetland vegetation, both temporarily and permanently, by construction activities.

FEMA Letter of Map Revision based on Fill (LOMR-F) – A LOMR-F may need to be filed with FEMA for the abutments and earthen transition ramp associated with the Stevens Creek Bridge.

State Lands Commission approval – because a portion of the proposed trail is located within the jurisdiction of State Lands, a permit will be required.

NCTD Encroachment permit – this permit will be required by NCTD to allow the trail to cross the railroad right-of-way.

22nd District Agricultural Association approval/easements – because part of the trail is located on the Fairgrounds, approval (and possibly an easement) will be required by the Ag District.

8 Environmental Issues

Once a trail route is proposed for construction it would require compliance with the CEQA. An Initial Study for the preferred trail alignment recommended in this feasibility study was completed to identify the environmental issues that must be further evaluated to comply with CEQA. Based on the results of the Initial Study (Appendix B), it was determined that either a focused EIR or a Mitigated Negative Declaration (MND) would be required to identify the environmental affects and mitigation measures required to extend the CtCT to the beach. The SDRPJPA would be the Lead Agency for the EIR or MND, with the City of Del Mar as responsible agency.

8.1 **Previous Environmental Documentation**

The SDRPJPA certified a Final EIR in 1994 for the San Dieguito River Park Concept Plan, which included the CtCT. The Concept Plan and EIR identified a conceptual alignment for the Trail and incorporated mitigation measures for construction of all park facilities including the CtCT. However, as stated in the Concept Plan and EIR more detailed trail plans would be developed as funding becomes available for specific trail segments, and additional environmental analysis would be conducted at that time.

The study area is within the San Dieguito Wetlands Restoration Project area. A Final EIR/EIS was certified for the wetlands restoration project in 2000 and most of the project has been implemented including the lagoon segment of the CtCT. Although a trail to "Reach the Beach" was not included in that project, information contained in the project EIR/EIS about the study area is useful for understanding the environmental setting and potential impacts of the beach access trail.

8.2 Project CEQA Compliance

The Reach the Beach trail segment has not yet been funded, which would be needed to define additional design and engineering details for some of the elements included in the feasibility study. At that time, the SDRPJPA would also prepare the required CEQA documentation (including a detailed biological evaluation and traffic analysis), seek approvals for the trail alignment from the City of Del Mar and Coastal Commission, and obtain construction permits. It could also be constructed in phases as funding becomes available.

The Initial Study identified the environmental issues that would require further evaluation to determine the significant adverse impacts from the project and mitigation measures required to mitigate those impacts. The potential environmental issues from the preferred trail route are discussed in the Initial Study based on the information contained in the feasibility study, the Final EIR for the San Dieguito Wetlands Restoration Project (2000), and the San Dieguito River Park Concept Plan EIR. The potential issues are:

8.2.1 Aesthetics

The project may impact the visual quality of a portion of the site where the tidal wetlands exist west of the railroad tracks. Impacts would depend on the exact trail elevation, the placement, amount and design of retaining walls, and the views that might be impacted. Although it is not anticipated that visual quality of the area would be substantially degraded or that views to the river or beach would be blocked, changes to the site would be anticipated that may require mitigation.

8.2.2 Biological Resources

Most of the study area is already developed. However, the trail would be close to the river and tidal wetlands and in one area would impact some wetlands, which would require mitigation. The tidal wetlands area between the railroad track embankment and Camino del Mar would be mostly avoided. It does not appear based on the feasibility study that wetland impacts could be completely avoided as a small amount of wetland area next to Stevens Creek would be impacted from bridge installation. These impacts would need to be quantified, evaluated, and mitigated. According to the feasibility study, impacts may be approximately 0.01 acres.

In addition, potential impacts from trail use in a sensitive area will also need to be evaluated. Trail design such as fencing and signage and the proper placement of trash receptacles and dog poop bags would be incorporated into project design details to reduce impacts (successfully used along other segments of the CtCT). The issue of introducing horses next to the wetland area would also need to be further evaluated. Horses are permitted on the rest of the lagoon trail and also exist on the Fairgrounds property; but access is primarily limited to east of I-5. Currently, equestrians using the beach are few and one reason may be that access isn't provided. The wetland area is used by many sensitive bird species and also contains sensitive plants so indirect impacts from adjacent trail use would be evaluated in greater detail to determine if impacts would be significant. The CtCT already exists along the river and tidal wetlands east of the study area, which may be useful in determining if any impacts are caused by such use.

8.2.3 Cultural Resources

The terraces around the San Dieguito River valley floor contain many archaeological sites that have been documented in previous cultural resource investigations of the area since the 1980s. However, areas that have been and remain subject to frequent tidal inundation did not contain sites. The study area is mostly built and paved except for the area between the railroad tracks and beach. Construction of the trail would not involve excavation in the already developed areas. The cantilever at the Jimmy Durante Bridge would involve some excavation for the structural supports and archaeological resources could exist in that area. The railroad bridge embankment however, is composed of fill material so excavation to construct a trail underpass is unlikely to impact any cultural resources.

An archaeological survey of the areas proposed for excavation would provide the information needed to make a determination whether sites exist and if an archaeological monitor would be required during construction.

8.2.4 Geology and Soils

Construction of the recommended trail and underpass along the railroad embankment would require soils investigations prior to project design to provide more detailed information about the structural integrity of the embankment and allow for proper design of the trail infrastructure.

8.2.5 Transportation / Traffic

The feasibility study recommended user-actuated trail crossing lights at two street crossings, Jimmy Durante Boulevard and Camino del Mar. The placement and use of crossing devises may impact traffic flow along those high volume streets particularly during the busy summer months. Therefore, traffic studies would be required to determine whether the crossing lights would have an impact, how significant that impact might be and whether alternatives or mitigation measures exist to minimize impacts. Alternatives might include traffic light timing adjustments, seasonal limitations, and placement locations.

8.2.6 Conclusion

Based on the Initial Study, either a focused EIR or an MND would be required to comply with CEQA. The CEQA analysis would take into consideration the issues previously examined in the SDRP Concept Plan EIR for the Coast to Crest Trail and focus on the issues that are listed in the Initial Study as "Potentially Significant Impact" and "Less than Significant with Mitigation Incorporated".

Appendix A

Alternatives Matrix

REACH THE BEACH COAST TO CREST TRAIL ALTERNATIVE ROUTES FEASIBILITY MATRIX

| Route Alternative | Advantages | Disadvantages | Other Observations |
|--|--|---|---|
| Alternative A. North Side of River from | west end of CTC Trail | | |
| Crossing Jimmy Durante | | | |
| At existing crosswalk | Already exists Close to existing trail Fairgrounds MP includes trail to crosswalk | Crosswalk not controlled Congested during fair and races Requires crossing fire station driveway to continue trail to river | Add user-activated warning lights at crossing |
| Fairgrounds tram tunnel | • Safe crossing of JD | • Out of direction | |
| | | No plan for trail along JD in Fairgrounds MP Long edge along both sides of Jimmy Durante Multiple driveways to cross Congested during fair | |
| Future planned Fairgrounds signal light | • Safe crossing | Schedule unknownLight may no longer be needed without hotel | Location not as desirable if fire station stays |
| Add controlled crosswalk just north of Jimmy Durante Bridge to access main Fairgrounds at river. | Eliminates crossing fire station driveway Shortens path along JD More direct to trail along river Fairgoers could continue to use other crosswalk | • May require new signal light (rather than crossing warning lights) | Traffic study needed to further evaluate |
| North edge of river along Fairgrounds: | • Trail route included | Close to existing Fairgrounds | Schedule unclear |
| | Hair fouce included in Fairgrounds MPBuffer will separate uses | Crose to existing rangrounds activity Dependent on Fairground moving parking and uses away from river edge | |
| West edge of Fairgrounds along Stevens | Creek: | | A 111 Constants and |
| Cussing Doilyood | Connection to future train platform Potential for creek restoration Views to river, creek, and ocean | Not currently in Fairgrounds MP (no buffer) Encroaches on existing Fairgrounds uses Minimal room for buffer Fairground uses become more intensive moving north | Add buffer along west edge of Fairgrounds along Stevens Creek |
| Undercrossing at existing north | • Less interface along | • Inlet dredging will increase | Planned trestle replacement |
| abutment | FairgroundsClose to river and ocean views | tidal flow and decrease room to put trail Conflicts with trestle replacement May not accom horses due to inadequate clearance Requires crossing wide | will move abutment further north so could add new undercrossing when trestle is replaced |

| Fairgrounds: Reduces welland impacts - (Creck serves as buffer from trains waiming for RR trester replacement - Longer interface with Fairground was - Can proceed without was - Requires bridging Stevens - Creck - Requires bridging Stevens - Creck - Creck are strain and would have minimal disruption to rail traffic - Avoiding RR and using Pairgrounds' Solana Gate' road past training track: - RR crossing eliminated - Views of wetlands would have minimal disruption to real traffic - Not direction and away from river - Poor trail experience - Conflict with Fairground uses - Read has limited space and poor sight distance - Uses narrow sidewalk along Via de la Valle - Poor trail experience - Conticits with Fairground uses - Read has limited space and poor sight distance - Poor trail experience - Controlled signalized wetland impacts - Following north edge wetland impacts - Connects to existing - Otor of direction entremation of the state in trail use and manne entremation of the state in trail use and manne entremation of the state in trail use and manne entremation of the state in trail use and manne entremation of the state in trail use and manne entremation of the state in trail use and manne entremation of the state in trail use and manne entremation entremation entrema | Cross RR/creek further north on | | opening of Stevens Creek Wetland impacts may not be mitigable Cannot continue directly west across wetlands Trail would have long interface with west side of RR berm to avoid wetlands Close to rail activity | |
|--|---|--|--|--|
| Avoiding KK and using Fairgrounds Solumit Gate Total past training track: • RR training track: • Real (pn or widen Solana Gate road way from river Realign or widen Solana Gate road • Real (pn or widen Solana claim of the solar and poor sight distance • Conflicts with Fairground uses Realign or widen Solana Gate road Between RR berm and Camino del Mar: • Opt rail experience via de la Valle • Potential wetland impacts from trail use and manure infeasible to permit • Folowing north edge wetland impacts • Controlled signalized intersection • Connects to existing Contexts to existing Contexts to existing Could directly • Not desirable for equestrians • Not desirable for equestrians • Requires traffic flow Could increase congestion in summer months • Requires traffic study • Could connect with CDM cantilever • Safe and non disruptive crossing • May not be feasible due to limited headroom, low water table and proximity to wetlands velands • Cold is and proximity to wetlands • Cold is and velands • Cold is an or velands • Cold is anor velands • Cold is anor velands | Fairgrounds: Tunnel through RR berm | Reduces wetland impacts Creek serves as buffer from trains Can proceed without waiting for RR trestle replacement Less interface with RR on west side Tunnel design is tested in Encinitas and would have minimal disruption to rail traffic | Longer interface with Fairgrounds May conflict with Fairground uses Requires bridging Stevens Creek | Work with Fairgrounds |
| Between RR berm and Camino del Mar: Boardwalk or trail • Views of wetlands Following north edge would reduce wetland impacts • Potential wetland impacts from trail use and manure Avoid wetlands by routing trail around Crossing Camino Del Mar: • Foloded during high tide • Potential wetland impacts intersection Avoid wetlands by routing trail around At Via de la Valle • Controlled signalized intersection • Out of direction Improvements needed to both sides of CDM to add path New lighted crosswalk • Could directly connect to new ADA path at beach • Disrupts CDM traffic flow Improvements needed to west side of CDM to add path Tunnel under CDM • Safe and non disruptive crossing • May not be feasible due to limited headroom, low water table and proximity to west and undercrossing if CDM is replaced More study needed, may be feasible as an undercrossing if CDM is replaced | Avoluing KK and using Fangrounus 30 | RR crossing eliminated | Out of direction and away from river Poor trail experience Conflicts with Fairground uses Road has limited space and poor sight distance Uses narrow sidewalk along Via de la Valle | Realign or widen Solana Gate road |
| Crossing Camino Del Mar: At Via de la Valle • Controlled signalized intersection • Out of direction Improvements needed to both sides of CDM to add path New lighted crosswalk • Could directly connect to new ADA path at beach • Disrupts CDM traffic flow Improvements needed to west side of CDM to add path New lighted crosswalk • Could directly connect to new ADA path at beach • Disrupts CDM traffic flow Improvements needed to west side of CDM to add path Tunnel under CDM • Safe and non disruptive crossing • May not be feasible due to limited headroom, low water table and proximity to wetlands More study needed, may be feasible as an undercrossing if CDM is replaced | Between RR berm and Camino del Mar: Boardwalk or trail | Views of wetlands Following north edge would reduce wetland impacts | Potential wetland impacts from trail use and manure Infeasible to permit Flooded during high tide | Avoid wetlands by routing trail around |
| New lighted crosswalk• Could directly connect to new ADA path at beach • Direct to beach • Could connect with CDM cantilever• Disrupts CDM traffic flow • Could increase congestion in summer months • Requires traffic studyImprovements needed to west side of CDM to add pathTunnel under CDM• Safe and non disruptive crossing• May not be feasible due to limited headroom, low water table and proximity to wetlandsMore study needed, may be feasible as an undercrossing if CDM is replaced | Crossing Camino Del Mar: At Via de la Valle | Controlled signalized intersection Connects to existing Coastal Rail Trail | Out of directionPoorer trail experienceNot desirable for equestrians | Improvements needed to both sides of CDM to add path |
| Tunnel under CDMSafe and non disruptive crossingMay not be feasible due to limited headroom, low water table and proximity to wetlandsMore study needed, may be feasible as an undercrossing if CDM is replaced | New lighted crosswalk | Could directly connect to new ADA path at beach Direct to beach Could connect with CDM cantilever | Disrupts CDM traffic flow Could increase congestion in summer months Requires traffic study | Improvements needed to west side of CDM to add path |
| | Tunnel under CDM | • Safe and non disruptive crossing | • May not be feasible due to limited headroom, low water table and proximity to wetlands | More study needed, may be feasible as an undercrossing if CDM is replaced |

| | Alternative B. | South | Side | of | River | from | west | end | of | СТ | Ċ | Trail |
|--|----------------|-------|------|----|-------|------|------|-----|----|----|---|-------|
|--|----------------|-------|------|----|-------|------|------|-----|----|----|---|-------|

| Crossing to south side of river via Jimmy | Durante Bridge: | | |
|---|--|---|--|
| Cantilever on southeast side of Jimmy Durante Bridge | Direct connection to path on JD Avoids Fairgrounds congestion Can connect to future signal light at San Dieguito Rd. | • Limited space along sidewalk to connect existing trail to cantilever | |
| Cantilever on northwest side | • Direct connection to | • Requires crossing JD at | New controlled crossing |
| | Riverpath DM | Fairgrounds | needed at JD (see above for Alt A) |
| Along Riverpath Del Mar: | | | |
| | Trail existsGood trail experience | • Trail widening needed to accommodate 3 user groups | Limit to peds only, and put CTC on north side |
| Crossing Railroad: | | | |
| Undercrossing at abutment | Planned new trestle will be raised 8.5 feet increasing undercrossing possibility NCTD could add undercrossing as part of trestle replacement Allows ped access from Riverpath to beach | Insufficient clearance now Trail would dead end here until trestle is replaced Requires waiting for rebuilt trestle –schedule unknown | |
| Tunnel: | | | |
| Add tunnel just south of trestle | Avoids RR | Insufficient grade and headroom | Not feasible |
| Trail west of RR: | | | |
| Use existing trail | Existing public trail easement along condos No wetland impacts | Improvements needed for multi use Existing easement may not allow trail widening or new user groups (ie, horses) Limited space (congestion) | Use as ped only trail |
| Crossing Camino del Mar to existing car | tilever on west side of CI | DM: | |
| At 29 th Street crosswalk | Controlled crossing | Out of direction Trail users may not use and jaywalk instead | |
| New crosswalk just south of | Dapah gaars already | • Could disput traffic flow | Traffic study needed to |
| inlet/bridge | Beach goers already cross here to access beach Direct connection to cantilever to ADA path | • Could disrupt traine now | further evaluate |

Appendix B CEQA Initial Study

INITIAL STUDY

PROJECT NAME

SAN DIEGUITO RIVER PARK COAST TO CREST TRAIL, "REACH THE BEACH" TRAIL SEGMENT

PROJECT LOCATION

The project area is generally located between Jimmy Durante Boulevard and the beach in Del Mar along the San Dieguito River in Del Mar, California (Figures 1 and 2).

PURPOSE AND MAIN FEATURES OF THE PROPOSAL

PROJECT SUMMARY

The San Dieguito River Park Joint Powers Authority (JPA) proposes to construct a 0.5-mile long segment of the Coast to Crest Trail to extend the Trail's current terminus just east of Jimmy Durante Boulevard to the beach in Del Mar. The regional multi-use trail for pedestrians, bicyclists and equestrians is a goal of the San Dieguito River Park Concept Plan and this trail segment will complete the west end of the Coast to Crest Trail.

PURPOSE AND NEED

The purpose of the project is to extend the existing western terminus of the San Dieguito River Park's Coast to Crest Trail to the beach. The Coast to Crest Trail is a primary goal of the San Dieguito River Park, which extends along the San Dieguito River from the beach in Del Mar to its headwaters on Volcan Mountain just south of Julian. Approximately 34 miles of the 55-mile long regional trail is complete.

Currently the lagoon segment of the Coast to Crest Trail extends along the edge of the San Dieguito Lagoon and terminates just east of Jimmy Durante Boulevard. The recreational facility provides a walking and riding path for the public affording views to the wetlands and birdwatching opportunities along its 3-mile long route. The existing trail does not extend west of Jimmy Durante Boulevard and does not provide access to the coast, which is the goal of the San Dieguito River Park. The proposed trail extension to Del Mar beach would achieve that goal and would provide a non-vehicular alternative for beach goers.

PROJECT OBJECTIVES

The objectives of the proposed project are to:

- Complete the western segment of the Coast to Crest Trail to the beach in Del Mar.
- Accommodate hikers, bicyclists, and equestrians consistent with the San Dieguito River Park Concept Plan and the rest of the Coast to Crest Trail.
- Provide safe passage for trail users across Jimmy Durante Boulevard, the existing railroad, and Camino del Mar.
- Link the two existing pedestrian trails in the area, the board walk trail and the Riverpath Del Mar trail to create a continuous pedestrian path along the south side of the river.
- Minimize impacts to wetlands.

ENVIRONMENTAL SETTING

The project area is relatively urbanized especially in contrast with the rest of the San Dieguito River Park FPA, which is mostly rural and natural open space. The exception to this is the river and lagoon itself which defines the character of the study area. Expansive views of the river valley are provided from Interstate 5 and the surrounding street system. The San Dieguito Lagoon covers an area of over 600 acres much of which was recently restored and expanded to include new tidal wetlands. The lagoon restoration was done by Southern California Edison (as mitigation for impacts caused by the San Onofre Nuclear Power Plant) in partnership with the San Dieguito River Park JPA. SCE completed the restoration in September 2011, however they will continue monitoring and maintaining the project for another 30 years. The Coast to Crest Trail represents a recreational and public access component of the larger restoration project.

Besides the restored wetlands, much of the western San Dieguito River Valley has also been preserved as open space especially east of I-5. The preserved land represents an open space area of approximately over 600 acres, the valley floor itself and many of the surrounding slopes. Surrounding the valley is a variety of land uses. The dominant land use west of I-5 is the Del Mar Fairgrounds which encompass the entire north side of the valley between the river and Via de la Valle. The existing Coast to Crest Trail extends along the southern edge of the Fairgrounds property just north of the river between I-5 and Jimmy Durante Blvd.

Development in the City of Del Mar exists along the coast just south of the lagoon inlet and along the southern edge of the study area. This development is primarily residential, but also includes the Del Mar Public Works Yard and some office use on the south side of the river along San Dieguito Drive just east of Jimmy Durante. Residential development also exists along Via de la Valle just north of the study area in the City of Solana Beach.

Three major transportation facilities cross the study area from north to south including Jimmy Durante Blvd, the Atchison Topeka and Santa Fe railroad tracks and trestle (bridge) that cross the river channel, and Camino del Mar. These barriers to east/west non-vehicular travel must be crossed by the Coast to Crest Trail to "reach the beach".

Aesthetics and Visual Quality

The project area is scenic with views to the lagoon, river and ocean and the beach at the west end. Much of the proposed trail would travel through an area directly adjacent to the San Dieguito River and the lagoon inlet. Although the lagoon area is scenic and largely undeveloped the Del Mar Fairgrounds dominates the visual setting due to its size and number of large structures. Several large exhibit halls sit adjacent to the river and both paved and unpaved parking lots are extensive. Other related structures exist to the north of the project area just west of I-5.

The river corridor is constrained west of Jimmy Durante with development on both the north and south sides of the river. However, the south side contains a narrow buffer between the river and the Del Mar Public Works Yard. The River Path Del Mar pedestrian trail exists within this buffer and adjacent to the river. Views and scenic quality increases moving west where direct views to the ocean inlet and beach are present. A wide, open area of tidal wetlands also exists between the railroad tracks and Camino del Mar representing a scenic vista. Scenic resources include wetlands, the river and ocean.

Natural Resources

The primary natural resource in the area is the San Dieguito Lagoon/River and associated tidal wetlands. The wetlands include the river channel itself and the tidal marsh habitat adjacent and along the south side of the river between I-5 and Jimmy Durante Blvd. The river narrows to just a channel west of Jimmy Durante until it passes the railroad at which point it widens out to a tidal inlet and to the ocean. Wetlands between the railroad embankment (berm) and Camino del Mar extend to the north almost to Via de la Valle.

The tidal wetlands support a variety of fish and bird species that depend on the wetlands for food, shelter, reproduction, and nursery. The tides cause the water elevation in the study area to fluctuate daily between approximately -1 and +7 feet MSL. Dramatic differences in water level can be seen during the extreme high and low tides that occur during the winter and spring. This constant rise and fall in water elevation is important to consider with regard to trail route placement and design. Although the trail could withstand periodic inundation by tidal waters frequent inundation would damage the trail and require frequent trail closures.

PROJECT BACKGROUND

The Coast to Crest Trail is a key component of implementing the San Dieguito River Park's Concept Plan adopted in 1994. The Coast to Crest Trail will extend from the ocean in Del Mar to Volcan Mountain – a distance of approximately 55 miles. The Concept Plan defines a generalized corridor for the trail leaving it up to future master plans and future funding to define a more detailed alignment for specific trail segments. The JPA certified an EIR for the Concept Plan in 1993 that included analysis of potential impacts and programmatic mitigation measures for implementation of the Concept Plan including the Coast to Crest Trail. The Coast to Crest Trail is multi-use for hikers/pedestrians, bicyclists, and equestrians and generally consists of two trail types, a hard-surfaced path for bikes or wheelchairs (typically compacted dirt or d.g.) and a more

natural dirt surface for hikers and pedestrians. Although much of the trail has been built as one alignment, the trail route may diverge in some places along different paths to better accommodate user groups or avoid impacts. The "Reach the Beach" segment is located within Landscape Unit A, Del Mar Coastal Lagoon of the Concept Plan.

In 2000, the JPA certified an EIR/S for the San Dieguito Wetlands Restoration Project that included the lagoon segment of the Coast to Crest Trail from El Camino Real to Jimmy Durante. Most of that project has been completed. The project area for the wetlands project includes the area in which the "Reach the Beach" Trail segment is proposed, but did not include the segment of trail.

In 2012 the JPA completed a feasibility study for the western segment of the Coast to Crest Trail to the beach. The results of the feasibility study identified one preferred alignment for the Coast to Crest Trail on the north side of the river as well as a pedestrian linkage on the south side of the river. The preferred trail alignments are the subject of this Initial Study.

PROPOSED TRAIL IMPROVEMENTS

The "Reach the Beach" trail segment consists of three infrastructure components in addition to the trail itself. The trail width is proposed to range between 4 feet wide (along a stretch of trail adjacent to tidal wetlands) and 12 feet wide.

The trail would typically be surfaced with compacted decomposed granite (d.g.); however, some portions of the trail would be concrete (undercrossing) or wood (bridge). Most of the trail would also be fenced on one or both sides. Fencing would be required by the Fairgrounds to secure the property where it traverses Fairgrounds property and also along wetlands to keep trail users on the trail and out of the wetlands. Fencing would also be required in some sections for safety (e.g., on the bridge and cantilever) and also defines the trail for the user. Fencing type and style would vary depending on its function. Lodge pole fencing is typically used along portions of the Coast to Crest Trail to separate the trail from nearby sensitive habitat. Higher fencing may be necessary along the Fairgrounds and safety railing would be required on the cantilever.

Table 1 lists the project components associated with the trail.

| Project Component | Description |
|----------------------------------|---|
| New Trail | DG or existing surface |
| Trail roadway crossings at Jimmy | User activated warning and crossing lights to slow and |
| Durante and Camino del Mar | stop traffic for trail crossing. |
| Jimmy Durante cantilever | 8' wide cantilever trail attached to existing bridge |
| Bridge over Stevens Creek | 12' x 60' bridge over Stevens Creek |
| Railroad underpass (tunnel) | 20' span underpass/tunnel through the existing railroad |
| | embankment. The tunnel would have 9-12 feet of |
| | clearance to accommodate all 3 user groups. |

Table 1

Approximately 400 feet long and 4-5 feet high along the west side of the existing railroad embankment to create space for trail and fence.

PROJECT/CONSTRUCTION PHASING

The project construction timeline is unknown at this time and would depend on the availability of funding. Funding would be provided through Federal, state or local grants and/or private donations. The project could be phased to allow certain components to be constructed independently as funding became available. For example, the cantilever on Jimmy Durante could be constructed independently to provide the pedestrian link between the boardwalk trail and the Riverpath Del Mar trail.

ENVIRONMENTAL ANALYSIS - CEQA CHECKLIST

Issues:

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--|--|---|-------------------------------------|
| I. AESTHETICS. Would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | | Х | | |
| The proposed trail would be visible within a scenaric and would not be intrusive or block views. Theref | c vista to the beac ore adverse effects | ch, but it represents a s would be minimal a | small component of nd not substantial. | the visual setting |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | Х | |
| No scenic resources would be physically damaged berm would alter the scenic views of the tidal wet on the west side of the railroad berm. | to construct the tr land area. The retain | rail although proposed aining wall would be | l retaining wall alon approximately 400' | g the railroad long by 4-5' high |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | | Х | | |

The existing visual quality of the project site between the rail line and Camino del Mar could be degraded by the addition of a retaining wall along the railroad berm. In order to create a flat surface along the edge of the berm for the trail an approximately 400-foot long by 5-foot high retaining wall would be necessary along the west side of the berm. This portion of the trail would be visible from Camino del Mar. Mitigation would be required in the form of project design to minimize visual impacts such as limiting the exposed height of the wall, and adding aesthetic appeal such as color and variation to reduce visual blight.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|--------------|
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | | Х |

No light or glare would be added by the project - the trail would not be lighted and would be closed at night.

II. AGRICULTURE AND FORESTRY

RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

None of these farmland categories exist on the project site (San Dieguito Restoration Project EIR/S, 2000).

| Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | Х |
|---|--|---|
| The project site is not zoned for agricultural uses. | | |
| Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | | Х |

The project area does not contain any forest land or timberland nor is it zoned for such uses.

Х

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--|--|---|---|
| Result in the loss of forest land or conversion of forest land to non-forest use? | | | | Х |
| The project area does not contain any forest land. | | | | |
| Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | | | | Х |
| The project area does not contain any farmland or | forest. | | | |
| <u>III. AIR QUALITY</u> . Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | |
| Conflict with or obstruct implementation of the applicable air quality plan? | | | | Х |
| The completed project would not generate air quat to accessing the beach. The project extends an ex California Recreational Trails Plan and does not a quality plans. No conflict would occur. | lity emissions and isting trail, and is ffect any regional | may reduce them by included in the San I or local growth project | providing a non-veh Dieguito River Park ctions that are the b | icular alternative Concept Plan, the asis for the air |
| Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | | | | Х |
| The project would not generate emissions except of | during construction | n, and would not viola | ate any standards. | |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | | Х | |
| The project would not generate a net increase in a A net decrease in criteria pollutants could occur fr | ir emissions becau om the proposed p | use it is a non-vehicul project due to the pote | ar trail. ential reduction in lo | ocal automobile |

A net decrease in criteria pollutants could occur from the proposed project due to the potential reduction in local automobile trips as a non-vehicular alternative to accessing the beach. Air quality impacts from implementation of the San Dieguito River Park Concept Plan were addressed in the Concept Plan EIR. While the Concept Plan EIR concluded that potential traffic generated as a result of implementation of the San Dieguito River Park Concept Plan was not anticipated to result in direct

| | | Less Than Significant | | |
|--|--|--|---|--|
| | Potentially | with | Less Than | |
| | Significant | Mitigation | Significant | No |
| impacts to air quality, the Concept Plan EIR also quality standards, any increase in air contaminant extend an already existing trail along the lagoon to vehicular trips. | Impact concluded that becc s represented a sig o the beach, thereb | Incorporated ause the San Diego r nificant cumulative i by providing an altern | Impact egion is unable to me mpact. The propose native that may reduc | Impact eet certain air d project would e some local |
| d) Expose sensitive receptors to substantial pollutant concentrations? | | | | Х |
| The project would not generate substantial air pol construction would be produced but would be tem concentrations. | lutant concentration | ns. Some emissions and would not expos | from construction vel e people to substanti | hicles during ial pollutant |
| e) Create objectionable odors affecting a substantial number of people? | | | | Х |
| The project would not generate odors. | | | | |
| IV. BIOLOGICAL RESOURCES: Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | | Х | | |

Biological resources impacts from the implementation of the San Dieguito River Park Concept Plan were addressed in the Final Program EIR for the Concept Plan (1993). The Final Program EIR concluded that direct effects to native habitat and sensitive species caused by the Concept Plan would constitute a significant environmental impact. Specifically, the Program EIR concluded that the Coast to Crest Trail could potentially impact wetlands and other habitat types, depending on the ultimate design and alignment. In addition, direct and indirect impacts to sensitive animal species, such as the coastal California gnatcatcher, and sensitive riparian species, including the least Bell's vireo, were identified as potentially significant. Adherence to the Design and Development Standards in the Concept Plan would mitigate the impacts to below a level of significance.

The project site is already developed with the exception of the area between the Fairgrounds and the beach. This area was surveyed and mapped as Southern Coastal Foredunes and salt marsh (San Dieguito Wetlands Restoration Project EIR/S). This area was also surveyed in November 2011 for the feasibility study, including a wetland delineation. Stevens Creek is southern willow scrub and freshwater marsh mixed with non-native shrubs and trees. The lower elevations of the railroad berm also contain coastal sage scrub species.

The project would impact a small area of wetlands and thus habitat for threatened and endangered species that use the habitat. Approximately 0.098 acre of wetlands would be directly impacted by the proposed trail along the east side of Camino del Mar that could not be avoided. However, following the Concept Plan development standards for trail placement would result in avoiding most of the site's wetlands. For example, the trail could be placed high enough on the railroad embankment and around the north side of the existing wetlands to avoid impacting most of the area.

Indirect impacts may also be caused by increased human use in the area. Both direct and indirect impacts would require mitigation, but could be mitigated below a level of significance.

The Design and Development Standards contain policies on avoidance and mitigation for unavoidable impacts. The standards consist of siting criteria, trail alignment criteria, buffer criteria, mitigation ratios requirements and management

| nolicies/recommendations (refer to pages 150 thro | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact | | |
|---|---|---|---|--|--|--|
| ponetes/recommendations (refer to pages 150 tino | ugn 154 of the FIG | bgrain Enc for the spe | enne language in the | ise standards). | | |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | | Х | | | | |
| The project would impact a small amount of tidal wetlands from placement of the trail along the west side of the wetlands adjacent to Camino del Mar. Approximately 0.098 acres of wetlands would be directly impacted in this area and could not be avoided, but would be mitigated through habitat restoration in the project area. | | | | | | |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | Х | | | | |
| Approximately 0.098 acre of wetlands would be in wetlands may be indirectly impacted. These impact | npacted through d cts could not be av | irect removal from co roided and would requ | nstruction of the tra uire mitigation. | il and additional | | |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | | Х | | | |
| The project is located within the Pacific Flyway ar block any migration or interfere substantially with be used to separate trail users from sensitive habit unimpeded. | nd along sensitive the movement of at and would be lo | coastal wetlands. How resident or migratory odgepole in style to al | wever, the trail exter fish or wildlife. Tra low wildlife movem | nsion would not il fencing would ent to continue | | |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | Х | | | |
| The project may conflict with City of Del Mar poli designed to minimize conflicts and mitigation wou | icies that prohibit Ild likely be requir | impacts to wetlands a red. | and the lagoon. The | project would be | | |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | | | | Х | | |
| The project site is not included within a NCCP or | НСР. | | | | | |
| <u>V. CULTURAL RESOURCES</u> . Would the project: | | | | | | |

INITIAL STUDY FOR THE SAN DIEGUITO RIVER PARK COAST TO CREST TRAIL, 'REACH THE BEACH' SEGMENT

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--|--|--|--|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5? | | | | Х |
| No historical resources exist on the site. | | | | |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5? | | | Х | |
| The project area was included in a Cultural Resou Restoration EIR/S (SAIC, 2000). Most of the trail the area between the railroad tracks and Camino d because it is subject to tidal flows it is unlikely to previous EIR/S did not survey this area although ir required to determine if any resources exist, and b resources or provide mitigation should the trail im | rces investigation route is in a deve- lel Mar (tidal inlet contain such resor t was included in ased on the result pact a site. | conducted in 1998 as loped area along road t area) may contain ar urces. The cultural re the project area. An a s of that survey, the t | part of the San Die ways and the Fairgr chaeology resources sources investigatio rchaeological surve rail would either ha | eguito Wetlands counds. However, s; however, n conducted for the y would be ve to avoid |
| The proposed project is identified as a component contained in the Final Program EIR (pages 161 the policies, survey methods, testing and mitigation, s report preparation and qualifications for lead invest | of the Concept Pl rough 164) and co uch as capping, da stigators. | an. Mitigation for im nsist of general meass ata recovery, monitori | pacts to cultural res ures which specify n ng, Native America | sources is management in consultation, |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | | Х |
| Because the majority of the trail route is in a deve it is unlikely that paleontological resources would | loped area along r be affected. No u | roadways and the Fair nique geologic feature | grounds and little g es exist in the project | rading is proposed, ct area. |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | | | | Х |
| No excavation would occur during construction with highly unlikely that human remains would be encour- in the case where human remains are discovered. | th the exception of ountered. The Con | of along the railroad b cept Plan and EIR co | erm which is on fill ntain measures that | . Therefore, it is must be followed |
| <u>VI. GEOLOGY AND SOILS</u> . Would the project: Geology/soils impacts from the implementation of the San Dieguito River Park Concept Plan were addressed in the Final EIR for the Concept Plan. The Final EIR concluded that impacts from seismic activity, geologic hazards, such as rock outcrops and landslides, and seismic- induced flooding would be less than significant. | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | Х | |
| i) Rupture of a known earthquake fault, as | | | Х | |
| | | | | |

INITIAL STUDY FOR THE SAN DIEGUITO RIVER PARK COAST TO CREST TRAIL, 'REACH THE BEACH' SEGMENT
| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--|--|--|--|
| delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | Impact | Incorporateu | impact | Impact |
| The project is a trail and no permanent structures constructed to meet all local and state building con | that house people les. | are proposed. The tra | ail cantilever and tur | nnel would be |
| ii) Strong seismic ground shaking? | | Х | | |
| While ground shaking from earthquakes is commo trail facilities would be constructed to meet all loc | n in the area, no p al and state seism | permanent structures nic standards. | that house people ar | e proposed. The |
| iii) Seismic-related ground failure, including liquefaction? | | | Х | |
| The majority of the project site is already developed the proposed tunnel through the railroad berm wou conducted before detailed construction plans are d standards. | ed and the trail wo ald be constructed eveloped for the t | ould not expose peopl l on fill a geologic stu unnel. The facility wo | e to liquefaction. He dy including borings ould meet all local a | owever, because s would have to be nd state seismic |
| iv) Landslides? No landslide features are present in the project area. | | | | Х |
| b) Result in substantial soil erosion or the loss of topsoil? | | Х | | |
| The majority of the project site is already developed the Fairgrounds and Camino del Mar is undevelop completed project would not cause erosion because contours and compacted and shaped to allow runot during construction would be followed, including during construction. | ed and little excav ed and construction e the trail grade w ff to flow across the use of wattles, silt | vation or grading wou on of the trail could c yould be less than 5% the trail. Best manager t fencing and other mo | ld occur. However, t ause soil erosion in and would be place ment practices to con easures to contain es | the area between this area. The d along the slope ntrol soil erosion xposed soil on site |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | | Х | | |
| Most of the project site is already developed. How fill therefore a geologic investigation including bo developed so that the trail is designed to not affect | ever, the proposed rings would have the integrity of th | d tunnel through the r to be conducted befor he berm. | ailroad berm would e detailed construct | be constructed on ion plans are |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or | | | | Х |
| INITIAL STUDY FOR THE SAN DIEGUITO RIVER PAR | RK | | | 11 |

COAST TO CREST TRAIL, 'REACH THE BEACH' SEGMENT

| | Less Than | | |
|-------------|--------------|-------------|--------|
| | Significant | | |
| Potentially | with | Less Than | |
| Significant | Mitigation | Significant | No |
| Impact | Incorporated | Impact | Impact |

Х

property?

The majority of the project site is already developed and does not contain expansive soils.

| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? No wastewater will be generated by the project. | | | Х |
|--|--|---|---|
| VII. GREENHOUSE GAS EMISSIONS. Would the project: | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | Х | |

Greenhouse gas emissions would be generated from heavy machinery and vehicles during some construction activities. These emissions would be temporary over the length of the construction period and are not expected to be significant. The project would provide a non-vehicular alternative to accessing the beach and would extend an existing trail about one-half mile to the beach and would not add access to any area that is not already populated by recreational users of the trails, Fairgrounds, and beach. Although the extended trail route may attract more people to the area, these users are likely already producing recreational trips and would not represent new gas emissions. Therefore, no substantial greenhouse gas emissions are expected from the project.

| b) Conflict with an applicable plan, policy or | |
|--|--|
| regulation adopted for the purpose of reducing | |
| the emissions of greenhouse gases? | |

The trail extension would be consistent with the San Dieguito River Park's Concept Plan for the Coast to Crest Trail route to the coast and does not conflict with any other plans or policies for reducing greenhouse gases. Non-vehicular trails may contribute to reducing emissions.

| VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project: | | | | |
|---|--------------------------------------|---|---|------------------------------------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | | Х |
| No hazardous materials would be routinely used or be used temporarily during construction. These mat | disposed of for t erials would be | this project. Some haz handled in a manner 1 | ardous materials su required by local an | ch as fuel would d state codes. |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | | Х |
| No hazardous materials exist in the project area. | | | | |

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|--------------------------------------|--|------------------------------------|--------------|
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | Х |
| No hazardous emissions would be expected and r | to school exist in th | ne project area. | | |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | | Х |
| The project site does not contain hazardous materials. | | | | |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | | | | Х |
| Not applicable. | | | | |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? No private airstrip exists. | | | | Х |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? The trail would not interfere with any emergency response plans or routes. | | | | Х |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? The area is not subject to wildland fires. | | | | Х |
| IX. HYDROLOGY AND WATER QUALITY. Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | | | | Х |

Because the project is directly adjacent to three water sources, Stevens Creek, San Dieguito River, and the Pacific Ocean, the project could impact any one of them during construction if proper measures are not used to control discharge of sediment or

Less Than Significant **Potentially** with Less Than Mitigation Significant Significant No Impact Incorporated Impact Impact

Х

pollutants during construction activities. No discharge would be generated by the project after it is constructed. Erosion control measures would be implemented during construction to minimize runoff (discharge) into adjacent water bodies including the use of silt fences to contain construction materials and exposed soils.

| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | | | X |
|---|--|---|---|
| The project would not use groundwater. | | | |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial | | Х | |

The trail would not alter drainage patterns because it would be at grade in a developed area with no obstructions to block or redirect flow. The trail would be routed around the wetlands area between the railroad and beach and would not impact tidal flow. The trail bridge over Stevens Creek would require a biological assessment to determine whether it could impact the river bank, although no pilings or supports would be located in the floodway of the creek. Construction of the bridge abutments could temporarily impact the creek from construction activities on or near the streambank.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

erosion or siltation on- or off-site?

The project is not expected to create any flooding impacts or change conditions such that runoff would be increased. Most of the project would be constructed on areas that are already paved. Some new impervious surfaces would be added such as the proposed bridge and cantilever, but these facilities are relatively small and would not be expected to substantially increase runoff. No structures that could block or redirect flow are proposed.

| e) Create or contribute runoff water which would | | |
|--|--|---|
| exceed the capacity of existing or planned | | Х |
| stormwater drainage systems or provide | | 1 |
| substantial additional sources of polluted runoff? | | |

Because most of the trail route is already paved the project would not contribute substantially to runoff into stormwater drainage systems. The proposed trail surface would be sloped to direct runoff across the trail and into the surrounding pervious area.

| f) Otherwise substantially degrade water quality? | Х | |
|---|---|--|
| | | |

| INITIAL STUDY FOR THE SAN DIEGUITO RIVER PARK | |
|---|---------|
| COAST TO CREST TRAIL, 'REACH THE BEACH' S | SEGMENT |

| | Less Than | | |
|-------------|--------------|-------------|--------|
| | Significant | | |
| Potentially | with | Less Than | |
| Significant | Mitigation | Significant | No |
| Impact | Incorporated | Impact | Impact |

The trail is proposed adjacent to a tidal wetland area between the railroad and Camino del Mar. This area could be subjected to water quality degradation from litter or horse manure that may collect on the trail if not disposed of. This may occur if the trail is inundated. Horse manure is not expected to be substantial because equestrian use on other segments of the Coast to Crest Trail is low to moderate even in the rural areas of the San Dieguito River Park. Pedestrian and bicycle use is much greater. The San Dieguito River Park JPA employees park rangers that patrol and maintain the trail. Trash receptacles are typically provided at various points along a trail or at staging areas. The JPA also maintains an active volunteer trail patrol program to assist in trail maintenance. These measures would reduce the occurrence of litter on the trail. However, the introduction of trail users adjacent to these wetlands could subject them to increased pollutants. Additional measures to minimize litter and horse manure on this particular stretch of the trail could be used such as signage to educate users about the sensitivity of the adjacent wetlands, trash cans and dog manure bags could be provided on the trail before entering the sensitive area, and increased patrolling in this area and manure removal would reduce the incidents of pollutants entering the wetlands.

| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | | | Х |
|---|--|---|---|
| No housing is proposed. | | | |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | | Х | |

The entire project is within the 100-year flood hazard zone, therefore, the trail and proposed structures such as the bridge over Stevens Creek and the tunnel would be inundated during a 100-year storm event. Many segments of the existing Coast to Crest Trail are within the 100-year flood area and are routinely closed when they are inundated to protect public safety.

| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | | | | Х |
|---|---|---|--|--|
| Many segments of the existing Coast to Crest Trail ar inundated to protect public safety. | re within the 1 | 100-year flood area and | are routinely clos | ed when they are |
| j) Inundation by seiche, tsunami, or mudflow? | | | Х | |
| It is possible that the trail may be inundated by a tsur surrounding the trail would also be inundated. The pr users are in the area temporarily to use the trail and b be expected and the trail could be closed in such an e | nami if it occu roject is locate beach. The tra event. | rred in the project area. ed in a populated area th il would not impede eva | However, the en nat is subject to in acuation of the are | tire area 1undation. Trail ea should a tsunami |
| project: | | | | |
| a) Physically divide an established community? The trail would not divide a community. | | | | Х |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not | | | Х | |

INITIAL STUDY FOR THE SAN DIEGUITO RIVER PARK COAST TO CREST TRAIL, 'REACH THE BEACH' SEGMENT

Less Than
SignificantPotentiallywithLess ThanSignificantMitigationSignificantNoImpactIncorporatedImpact

limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The trail is consistent with the land use plans in the area particularly the San Dieguito River Park Concept Plan which includes this segment of the Coast to Crest Trail to the beach and the Local Coastal Plans which advocate access to the coast and recreation. Although adopted before the Concept Plan, the Del Mar Land Use Plan (1993) includes public access routes to the beach primarily along the south side of the river. This trail is already in place (Del Mar Riverpath trail), although it does not include a legal crossing over the railroad tracks. It also includes a crossing at Jimmy Durante but this crossing does not currently exist.

The portion of the proposed trail on the edge of the Fairgrounds property was also included in the Fairgrounds Master Plan Final EIR although the trail is now proposed to extend further along the Fairgrounds property (along the west edge next to Stevens Creek) than shown in the Master Plan EIR. Consultation and coordination with the 22nd DAA will need to occur during final trail design to ensure impacts to Fairgrounds operations are minimized. The proposed trail would not conflict with any zoning.

c) Conflict with any applicable habitat conservation plan or natural community Х conservation plan? The project area is not within an HCP or NCCP. XI. MINERAL RESOURCES. Would the project: a) Result in the loss of availability of a known mineral resource that would be of value to the Х region and the residents of the state? No mineral resources exist in the project area. b) Result in the loss of availability of a locallyimportant mineral resource recovery site Х delineated on a local general plan, specific plan or other land use plan? None exist in the project area. XII. NOISE -- Would the project result in: a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or Х applicable standards of other agencies? The project would not generate noise and would not expose persons to high noise levels. b) Exposure of persons to or generation of excessive groundborne vibration or groundborne Х noise levels? The project would not generate vibration.

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|---|---|---|--|---|
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? The project would not change the ambient noi vehicular traffic, and trains. The trail is a non-vehicular | se level which is n nicular passive use habitat. | relatively high in the e and has not negative | project area due to h | X numan activity, rounding estuarine |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | | Х | |
| Short-duration noise levels could increase due to p tunnel facilities. No residents are nearby the proje wetlands adjacent to the proposed trail route that of time periods may have to be altered to reduce nois levels. Construction of the trail would not occur due construction of the rest of the existing trail along t | broject construction ct site so impacts could be disturbed se levels, but it is uring the breeding the lagoon. | n particularly when c to people would not c l by some construction unlikely that noise lev season for sensitive | onstructing the canti- occur. However, sense a activities. Construc- vels would increase bird species as was | lever, bridge, and sitive birds use the ction methods or over existing followed for |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? Not applicable. f) For a project within the vicinity of a private | | | | Х |
| airstrip, would the project expose people residing or working in the project area to excessive noise levels? | | | | Х |
| Not applicable. | | | | |
| XIII. POPULATION AND HOUSING. Would the project: | | | | |
| a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? The project is a trail and would not induce growth. | | | | Х |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? No housing would be displaced. | | | | Х |
| c) Displace substantial numbers of people, necessitating the construction of replacement | | | | Х |

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------|
| housing elsewhere? | I | I I I I I I I I I I I I I I I I I I I | 1 | 1 |
| No people would be displaced. | | | | |
| XIV. PUBLIC SERVICES. | | | | |
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | Х |

The project is located in an urbanized area that is served by all public services. Recreational uses already exist in the area including the existing trail, Fairgrounds, and the beach. The extension of the trail would not result in an increased or new demand for public services.

| Fire protection? | | | Х |
|---|--|---|---|
| Police protection? | | | Х |
| Schools? | | | Х |
| Parks? | | | Х |
| Other public facilities? XV. RECREATION. | | | Х |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? The project would add to recreational facilities in the area. The beach would be more accessable to users but the project is not anticipated to | | Х | |
| cause any physical deterioration.b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | Х |
| The project is a recreational facility. | | | |
| XVI. TRANSPORTATION/TRAFFIC. Would the project: | | | Х |

INITIAL STUDY FOR THE SAN DIEGUITO RIVER PARK COAST TO CREST TRAIL, 'REACH THE BEACH' SEGMENT

| | Potentially Significant | Less Than Significant with Mitigation | Less Than Significant | No Impact |
|---|----------------------------|--|--------------------------|---------------------|
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | Impact | Incorporateu | Impact | Impact |
| The project does not involve vehicular improvements. | | | | |
| b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | | | | Х |
| Not applicable. | | | | |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | | Х |
| Not applicable. | | | | |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | Х | | |
| The project includes two street crossings that wou | ld be designed in | consultation with City | y of Del Mar staff a | nd a traffic study. |
| e) Result in inadequate emergency access? | | | | Х |
| The project would not affect any emergency access. | | | | |
| f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | | | | Х |
| The recreational trail implements the San Dieguite not conflict with these policies. | o River Park's Co | ncept Plan for the Coa | ast to Crest Trail an | d therefore does |

XVII. UTILITIES AND SERVICE SYSTEMS. Would the project:

The project would extend an existing trail and

| | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact |
|--|--------------------------------------|--|------------------------------------|--------------|
| would not generate demand for or affect existing utilities or public services. | | F | | F |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | | Х |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | Х |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | | | | Х |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | | Х |
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | | Х |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | | Х |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | | | | Х |
| <u>XVIII. MANDATORY FINDINGS OF</u> <u>SIGNIFICANCE.</u> | | | | |
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | | Х | | |

The project could degrade the nearby wetlands if not designed and implemented with measures to reduce its impact. See discussions under IV. However, impact to the wetlands would be small and not substantial enough to reduce its size or habitat value enough to cause a fish or wildlife population to drop below self-sustaining levels, threaten or eliminate a plant or animal community or create the other impacts mentioned. Proportionally, the amount of direct impact would be less than one percent

| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of | of the habitat in the area between the Fairgrounds | Potentially Significant Impact s and Camino del M | Less Than Significant with Mitigation Incorporated Mar. | Less Than Significant Impact | No Impact |
|---|---|--|--|------------------------------------|--------------|
| probable future projects)? | b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? | | Х | | |

The nearby wetlands are impacted and constrained by existing urban development and transportation facilities that have existed in the area for a long time. Recent wetlands restoration in the area over the past five years has improved the function and value of these tidal wetlands. New impacts from this proposed project and others proposed such as double tracking associated with the LOSSAN project and increased development at the Fairgrounds could cause significant impacts to the wetlands and species that depend on them. Most of the proposed trail is along areas that are already developed. New construction however is proposed adjacent to Stevens Creek and the tidal wetlands between the railroad and Camino del Mar. However, direct impacts to those habitats from construction can be avoided by the project.

One of the objectives of the project design is to avoid impacting these wetlands to the extent possible. This includes routing the trail on the already developed Fairgrounds property and routing the trail around the existing wetlands. However, even with these design measures, a small amount of wetlands would be directly impacted (approximately 0.098 acre). Increased human use along this sensitive area could also impact the wetland value. Although some wetland impact is anticipated, the impacted can be mitigated by habitat restoration in the project area.

| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? No adverse impacts to human beings would | | |
|---|--|--|
| occur. | | |

MITIGATION MEASURES INCORPORATED INTO THE PROJECT DESIGN:

San Dieguito River Park Concept Plan

The *San Dieguito River Park Concept Plan* and Final EIR provide design standards and programmatic mitigation measures for development of park facilities within the River Park. Applicable policies and directives include:

BIOLOGICAL RESOURCES

- Avoid disturbance to wetlands, the only exception being where bridges or undercrossings are required for trail access.
- Where possible, park amenities should be located in disturbed areas to avoid impacts to native habitats.

Х

- Align park trails within existing dirt roads and trails to the extent feasible.
- Avoid paving trails and minimize trail widths except where necessary to accommodate multiple uses or disabled access.
- In sensitive biological areas limit some trails to pedestrian only or decrease trail width in order to minimize direct impacts.
- Control off-trail activities through trail design, fencing, and/or signage.
- Install fencing and signage along the trail as appropriate to direct trail users away from sensitive areas and to encourage them to stay on the trail. Expand existing trail patrols to cover new trails. An important purpose of the trail patrol is to educate the public about the importance of protecting the resources along the trail by always staying on the designated trail.
- Restore temporarily impacted areas with native plant species.

CULTURAL RESOURCES

- The JPA shall conduct an archaeological survey as part of final design to survey the undeveloped areas of the trail route to determine whether any resources exist.
- Avoid impacts to sensitive cultural resources by realignment to avoid a site and/or fencing. Measures shall be determined during project design and incorporated into the project.
- In those cases where avoidance is not possible or feasible, mitigation in the form of capping and/or data recovery for that portion of the resource shall be required. Capping is the preferred method to preserve the cultural resource in situ while allowing the development of the trail.
- Where appropriate, monitoring of activities involving subsurface disturbance shall be conducted in those areas with known cultural sites.

GEOLOGY AND SOILS

• To the extent possible, bridges shall be used to cross streambeds.

INITIAL STUDY SOURCES:

San Dieguito River Park Concept Plan (Joint Powers Authority, 1994; revised 2002) Final Program EIR for the San Dieguito River Park Concept Plan (Joint Powers Authority, 1993) Reach the Beach Trail Feasibility Study (Joint Powers Authority, 2012) Reach the Beach Trail Wetlands Delineation Report (Rocks Biology, 2012) Final EIR/S, San Dieguito Wetlands Restoration Project (Joint Powers Authority, 2000) Archaeological Investigations for the San Dieguito Wetland Restoration Project EIR/EIS (SAIC, August 2000) City of Del Mar Land Use Plan, 1993

RECOMMENDATION:

On the basis of this initial evaluation:

- O I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- O I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Shawna C. Anderson, AICP, Principal Environmental Planner San Dieguito River Park Joint Powers Authority

Appendix C

Jurisdictional Delineation

ROCKS BIOLOGICAL CONSULTING

January 24, 2012

Ms. Shawna Anderson San Dieguito River Park JPA 18372 Sycamore Creek Rd. Escondido, CA 92025

Subject: Feasibility Study for Reach the Beach Trail Segment in the City of Del Mar, CA

Ms. Anderson:

This report is intended to provide you with current information about U.S. Army Corps of Engineers (Corps), California Department of Fish and Game (CDFG), and California Coastal Commission (CCC) jurisdictional areas and general biological constraints along the proposed Reach the Beach trail segment in the City of Del Mar, CA.

Existing Conditions

The proposed trail segment occurs along Stevens Creek and the San Dieguito Lagoon (lagoon) in the City of Del Mar. The trail segment passes through or immediately adjacent to sensitive wetland habitat and non-sensitive disturbed and developed land. The following habitat types are present within or immediately adjacent to the trail alignment:

- Coastal Salt Marsh (Low, Mid, and High)
- Ruderal (primarily Iceplant (*Carpobrotus edulis*) dominated)
- Coastal Sage Scrub
- Southern Willow Scrub
- Freshwater Marsh
- Ornamental
- Developed (riprap, dirt roads, parking areas)

Methodology

Prior to conducting the jurisdictional delineation (JD) and biological constraints analysis, RBC reviewed the *Corps' Regional Supplement to the ACOE's Wetland Delineation Manual: Arid West Region (Version 2.0;* September 2008) and other relevant data and information, including color aerial photography, the U.S. Geological Society (USGS) 7.5' Del Mar Quadrangle, and the U.S. Department of Agriculture's (USDA) soil survey maps. The data review was conducted to evaluate the project area in a historical context, assess the effects of land use practices on the jurisdictional status of the project area, and to evaluate the function and values of Stevens Creek, the lagoon, and adjacent habitats.

On November 8 and 10, 2011 RBC visited the project area to conduct the JD and general biological constraints survey. The jurisdictional boundary was delineated in the field and then digitized using GIS. The field survey included pedestrian transects through the project area and observations of the immediate vicinity. The JD was documented with photography, field

notes, and delineation forms. Sampling points were taken at representative sites throughout the project area. At each sampling point a soil pit was excavated to allow examination of the soil, the dominant vegetation in the immediate area was identified, and the local hydrology was assessed. This information was recorded on datasheets, and representative photographs of sampling points and the general project area were taken to document current field conditions. A tape measure was used to more accurately determine the width of the Corps', CDFG, and CCC jurisdictional areas in the field, when needed. Jurisdictional boundaries were mapped in the field on an aerial photograph (1 inch = 50 feet scale) based on field measurements and with the aid of contour lines.

Jurisdictional Determination

The project area supports Corps', CDFG, and CCC jurisdictional wetlands based on the data gathered at 24 discrete sampling points (Figures 1-3). As the primary hydrological features, jurisdictional lands occur within and adjacent to Stevens Creek and San Dieguito Lagoon. Table 1 shows the jurisdictional acreage that may be affected by the proposed trail alignment. Note that 0.10 acres of the project area are CDFG and CCC jurisdictional while no impacts on Corps' jurisdictional areas are expected. This is due in part to the Corps' requirement that three wetland parameters (hydric soil, hydrophytic vegetation, and wetland hydrology) be present as opposed to requiring that only one of the three parameters be present to trigger CDFG and/or CCC jurisdiction. Wetland areas were avoided to the maximum extent practicable during trail planning and the alignment avoids Corps' jurisdictional areas.

| Agency Jurisdiction | Temporary Impact | Permanent Impact | Total Impact Acreage |
|--------------------------|------------------------------|-------------------------------|----------------------|
| U.S. Army Corps of | 0.0 | 0.0 | 0.00 |
| Engineers | | | |
| California Department of | 0.005 (218 ft ²) | 0.098 (4247 ft ²) | 0.10 |
| Fish and Game | | | |
| California Coastal | 0.005 (218 ft ²) | 0.098 (4247 ft ²) | 0.10 |
| Commission | | | |

Table 1. Summary of Potential Jurisdictional Impacts

The proposed impact areas are associated with the footings that will be placed to help support the bridge span over Stevens Creek and adjacent Corps' jurisdictional areas and an approximately 40 foot long and one-foot wide retaining wall that will be constructed along the slope adjacent to Camino Del Mar. The CDFG and CCC jurisdictional areas in this area have likely been created from uncontrolled road runoff to the lagoon and do not appear to be a natural occurrence of Southern Willow Scrub.

An effort was made to avoid impacts and/or minimize impacts where possible throughout the alignment. Impacts associated with the span bridge were considered unavoidable because of the need to cross Stevens Creek, but were minimized and the bridge abutments were placed outside of Corps' jurisdiction. Impacts to the Willow trees that would occur with installation of the retaining wall are also unavoidable because of the steep terrain downslope of Camino Del Mar that will need to be stabilized to secure the trail. In addition, there could be impacts on water quality from horse manure that may be left along the trail. During storm events, manure could be washed into Stevens Creek or the lagoon potentially impacting water quality. However, manure is likely to be sporadic along the trail and in very low concentration. Manure typically decomposes quickly and will be absorbed by the trail and is not expected to have a significant effect on water quality.

Permitting Issues

Wetland habitat is considered a sensitive and declining resource by several regulatory agencies. Wetlands are specifically addressed by the Corps' section 404 permit process and are also covered under the jurisdiction of CDFG Code sections 1600-1606 (Streambed Alteration Agreement), and the CCC. Clean Water Act permit provisions regulating dredge and fill operations are enforced by the Corps' and U.S Environmental Protection Agency (EPA), with technical input from the USFWS. Because of the sensitivity of wetland habitats, the regulatory constraints associated with them, and their potential use as important wildlife habitat or wildlife corridors, impacts to wetlands should be avoided whenever practicable. No impacts on Corps' jurisdictional areas are anticipated based on the trail alignment. Because impacts on CDFG and CCC jurisdictional areas are unavoidable, the following permits or authorizations may be required:

- Streambed Alteration Agreement per Section 1601 of the California Fish and Game Code.
- Waste Discharge Requirements per the Porter Cologne Water Quality Act
- Coastal Development Permit per the California Coastal Act.

Potential Mitigation Options

If impacts are proposed as part of the trail project, mitigation for impacts on sensitive wetland habitat will be required. Potential habitat mitigation in the form of wetland creation, restoration, and/or enhancement, could range from 1:1 ratio for Southern Willow Scrub to 5:1 or higher for Coastal Salt Marsh habitat. The CDFG and CCC will strongly encourage mitigation to be accomplished in areas immediately adjacent to the project impacts within Stevens Creek and the San Dieguito Lagoon.

Based on the field survey, there are numerous opportunities for wetland creation, restoration, and enhancement along the proposed trail alignment to meet mitigation requirements including, but not limited to:

- Removal of Iceplant (*Carpobrotus edulis*) and other invasives (e.g. *Myoporum laetum, Nicotiana glauca, Schinus terebinthifolius, Acacia cyclops,* etc.)
- Planting of Coastal Salt Marsh species in areas where invasives were removed
- Removal of large debris items (concrete pieces, etc.)
- Restoration and enhancement of the small patches of Southern Willow Scrub and Freshwater Marsh at west end of trail alignment
- Restoration and enhancement of disturbed Coastal Sage Scrub habitat
- Use of vegetated 'bio-filters' to slow runoff and improve water quality

Opportunities for habitat enhancement and restoration occur throughout the trail alignment. Large patches of Iceplant could be removed in both wetland and upland areas and based on specific site conditions, these areas could be replanted with native species or left to recolonize with native species without planting. In addition, removal of large debris items and woody invasives species such as Myoporum could also help enhance habitats along the trail and offset project impacts.

Other Biological Resource Issues

In addition to sensitive wetland and upland habitat, the trail project could affect sensitive animal species such as the California state endangered Belding's Savannah Sparrow (*Passerculus*)

sandwichensis beldingi; within Coastal Salt Marsh) and the federally-threatened California Gnatcatcher (*Polioptila californica;* within Coastal Sage Scrub). Although not observed, habitat for these species is present within the project area. These species as well as other potentially occurring sensitive species should be addressed during the CEQA process.

Please don't hesitate to contact me at (619) 843-6640 if you have any questions regarding this letter report or need additional information.

Sincerely,

Jim Rocks



Trail Alignment, Typ.

PITS 1 AND 2

-7

Lodgepole Fencing, Typ.

-1

Legend



ACOE, CDFG and CCC Jurisdiction

'7

Additional Areas of CDFG and CCC Jurisdiction



Additional Areas of CDFG and CCC Impacts

Test Soil Pit Location

----- 5ft Contours

1ft Contours

25

0

50 100 Feet

Reach the Beach Trail Alignment Jurisdictional Delineation

FIGURE

1



















Reach the Beach Trail Site Photos November 2011

Photo 1. View north from south end of alignment. The trail will be at the top of slope and no impacts on sensitive wetland habitat are expected in this section. Note Iceplant and Myoporum that could be removed and the area enhanced as part of mitigation.



Photo 2. Looking north, with salt marsh species at low-mid slope with invasive Iceplant throughout. The trail will be at the top of slope outside of Corps', CDFG, and CCC jurisdiction.

Ms. Shawna Anderson January 24, 2012 Page 6 of 8



Photo 3. View of Coastal Salt Marsh habitat at low elevation. The trail will not impact this sensitive vegetation.



Photo 4. View north of trail alignment along Del Mar Fairgrounds parking lot. Note dense Iceplant that could be removed as part of mitigation and restoration efforts.

Ms. Shawna Anderson January 24, 2012 Page 7 of 8



Photo 5. View north from approximate location where span bridge and railroad embankment tunnel will be constructed. The bridge will span the creek and the footings will impact CDFG and CCC jurisdictional areas, but not Corps' because of lack of hydric soils.



Photo 6. View south along lagoon edge showing clear boundary between sensitive Coastal Salt Marsh and upland weedy, invasive species upslope.

Ms. Shawna Anderson January 24, 2012 Page 8 of 8



Photo 7. View north of Coastal Salt Marsh in foreground with disturbed Coastal Sage Scrub and Ruderal vegetation in background. The trail is aligned to avoid Coastal Salt Marsh here.



Photo 8. View from Camino Del Mar looking downslope at Willow (*Salix lasiolepis*) trees that appear to have established from nuisance road runoff. A portion of this area will be impacted by installation of a retaining wall.

Appendix D

Summary of Probable Costs

Reach the Beach Trail Segment Summary of Probable Costs

Construction Costs

| Construction Costs | | | | | | Total |
|--|------|------|-------|-----------|-----------------|-----------------|
| Item | Unit | C | osts | Quantity | Low | High |
| Mobilization/De-mobilization (10%) | LS | | | | \$ 168,000 | \$ 189,000 |
| Demolition | LS | | | | \$ 10,000 | \$ 25,000 |
| Clear & Grub | SF | \$ | 0.45 | 34,000 | \$ 15,300 | \$ 15,300 |
| Trail Grading along Railroad/Camino del Mar | CY | \$ | 30.00 | 7,400 | \$ 222,000 | \$ 222,000 |
| Jimmy Durante Blvd. User Actuated Crossing | Ea. | | | | \$ 60,000 | \$ 60,000 |
| Camino del Mar User Actuated Crossing | Ea. | | | | \$ 39,000 | \$ 39,000 |
| 8' wide, 3" Decomposed Granite Trail | SF | \$ | 3.00 | 32,000 | \$ 96,000 | \$ 96,000 |
| 4' wide, 3" Decomposed Granite Trail | SF | \$ | 3.00 | 2,100 | \$ 6,300 | \$ 6,300 |
| 6" Class 2 Base (Railroad & Camino del Mar sections) | SF | \$ | 0.50 | 6,000 | \$ 3,000 | \$ 3,000 |
| Lodgepole Fencing | LF | \$ | 13.50 | 8,000 | \$ 108,000 | \$ 108,000 |
| Stevens Creek Bridge | Ea. | | | | \$ 110,000 | \$ 215,000 |
| Railroad Berm Tunnel (12ft vs 9ft Clearance) | Ea. | | | | \$ 430,000 | \$ 505,000 |
| Retaining Walls @ Railroad (interim) | SF | \$ | 85.00 | 1,600 | \$ 136,000 | \$ 136,000 |
| Retaining Walls @ CdM West-side | SF | \$ | 85.00 | 2,000 | \$ 170,000 | \$ 170,000 |
| Retaining Walls @ CdM East-side | SF | \$ | 50.00 | 2,000 | \$ 100,000 | \$ 100,000 |
| NCTD (Flagging, Trackwork, Busing) | Ea. | | | | \$ 200,000 | \$ 300,000 |
| Construction Admin | Ea. | | | | \$ 251,000 | \$ 283,000 |
| | | | | | \$ 2,124,600 | \$ 2,472,600 |
| | | With | 25% C | ontigency | \$ 2,655,750 | \$ 3,090,750 |
| Design and Engineering Costs | | | | | | |
| Trail Design | | | | | \$ 50,000 | \$ 65,000 |
| Jimmy Durante Crossing + Traffic Study | | | | | \$ 15,000 | \$ 30,000 |
| Camino del Mar Crossing + Traffic Study | | | | | \$ 15,000 | \$ 30,000 |
| Stevens Creek Bridge | | | | | \$ 50,000 | \$ 60,000 |
| Railroad Underpass | | | | | \$ 155,000 | \$ 175,000 |
| Railroad/CdM Retaining Walls | | | | | \$ 90,000 | \$ 110,000 |
| Utility Coordination | | | | | \$ 10,000 | \$ 25,000 |
| Mitigation | | | | | \$ 25,000 | \$ 75,000 |
| Permitting | | | | | \$ 50,000 | \$ 100,000 |
| | • | | | - | \$ 460,000 | \$ 670,000 |
| | , | With | 15% C | ontigency | \$ 529,000 | \$ 770,500 |

Total Anticipated Project Costs w/ Contigency

\$ 3,184,750 \$ 3,861,250

Appendix E

Preliminary Layout of Preferred Alternative





Checked: MC

CP - 2





Sheet Title: CONSTRUCTION PLAN

Sheet: CP - 4

Project No. 011-001.01

Project Name. COAST TO CREST TRAIL -REACH THE BEACH SEGMENT

VORTH SCALE: 1"= 50"

Date: