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**NORTH COAST CORRIDOR PUBLIC WORKS PLAN &  
TRANSPORTATION AND RESOURCE ENHANCEMENT PROGRAM****STAFF NOTE**

Due to the size and scope of the proposed North Coast Corridor Public Works Plan and Transportation and Resource Enhancement Program (NCC PWP/TREP) and associated Local Coastal Program amendments and Federal Consistency review, the subject staff report has been released early to provide additional review time (beyond that which is required by law) for the public and Coastal Commission in advance of the public hearing scheduled for the August 2014 Commission meeting in San Diego at the Catamaran Resort. An updated report as needed to respond to any substantive comments or make corrections will be distributed with the August 2014 mailing. Please submit any comments no later than July 17, 2014 to give staff adequate time to respond in this final staff report. Comments can be emailed to [NCCPWP@coastal.ca.gov](mailto:NCCPWP@coastal.ca.gov) or sent to the San Diego District Office, 7575 Metropolitan Drive, Suite 103, San Diego CA 92108. Questions may be directed to Coastal staff - Gabriel Buhr or Kanani Brown at (619) 767-2370.

The final version of the NCC PWP/TREP, as submitted by Caltrans and SANDAG in June 2014, can be accessed at [http://www.dot.ca.gov/dist11/Env\\_docs/I-5PWP/5PWPFinal.html](http://www.dot.ca.gov/dist11/Env_docs/I-5PWP/5PWPFinal.html)

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**DATE:** July 3, 2014

**TO:** Commissioners and Interested Persons

**FROM:** Sherilyn Sarb, Deputy Director, San Diego Coast District  
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**SUBJECT:** California Department of Transportation (Caltrans) and San Diego Association of Governments (SANDAG) Public Works Plan and Transportation and Resource Enhancement Program (PWP/TREP) PWP-6-NCC-13-0203-1 plus associated Local Coastal Program (LCP) Amendments for the Cities of San Diego LCP-6-SAN-14-0813-1, Encinitas LCP-6-ENC-14-0814-1, Carlsbad LCP-6-CAR-14-0814-1, and Oceanside LCP-6-OCN-14-0816-1 and Federal Consistency Review CC-002-14 for transportation infrastructure improvements and community and resource enhancements located within the North Coast Corridor (NCC) of San Diego County

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**SYNOPSIS**

Caltrans and SANDAG have prepared the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) to function as a single integrated document for comprehensively planning, reviewing, and authorizing the NCC's transportation, community, and resource enhancement projects within the NCC extending from La Jolla to Oceanside along the North San Diego County coastline. The NCC PWP/TREP creates a framework within which identified projects can be analyzed and implemented over the next 30 to 40 years under a coordinated plan. The goal of this process is to optimize the suite of included improvements so that transportation goals are achieved in a manner that maintains and improves public access while also maximizing protection and enhancement of the region's significant sensitive coastal resources.

The approval and implementation of the NCC PWP/TREP improvements will require multiple and sequential approvals by the Commission. The Commission will first review the NCC PWP/TREP federal consistency certification (TREP) (CC-002-14), followed by the necessary Local Coastal Program (LCP) amendments (LCP-6-SAN-14-0813-1, LCP-6-ENC-14-0814-1, LCP-6-CAR-14-0814-1, and LCP-6-OCN-14-0816-1) and then the proposed PWP (PWP-6-

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**NCC-13-0203-1).** The necessary analysis and findings of approval for all of these Commission actions are combined into one, unified staff report.

The development of the NCC PWP/TREP has been an iterative and collaborative process between the project applicants and Commission staff. An initial draft NCC PWP/TREP was released for public review in July 2010, followed by revised drafts released in March 2013 and November 2013. Throughout this process, Coastal staff has provided extensive suggested modifications to the document that have now been incorporated in the final version submitted to the Commission in June 2014.

The NCC PWP/TREP will be scheduled for the August 2014 Coastal Commission hearing in San Diego, California. Coastal staff has released this staff report early in an effort to provide additional review time for the public and the Commission due to the significant scope and content of the proposed plan.

### **EXECUTIVE SUMMARY**

The North Coast Corridor is approximately 27 miles long by 6 miles wide, consists of approximately 111,215 gross acres, and is home to over 525,000 people ([Exhibit 1](#)). Six San Diego County cities lie entirely or partially within the NCC: San Diego, Del Mar, Solana Beach, Encinitas, Carlsbad, and Oceanside. The NCC includes long open stretches of public beaches, six coastal lagoons and five creeks and rivers as well as associated open space and other coastal habitat areas.

The NCC PWP/TREP comprises a plan and implementation schedule for a series of rail, highway, transit, bicycle, and pedestrian projects to improve and maintain mobility and access to coastal recreational resources in the corridor. More specifically, the NCC PWP/TREP includes widening of Interstate 5 (I-5) to accommodate four new Express Lanes, double tracking of the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor, Enhanced Coastal Bus and a Bus Rapid Transit (BRT) service, a new 27 mile NCC Bikeway that would provide non-motorized connectivity through the corridor, 7 miles of the Coastal Rail Trail, as well as other shorter connections to existing trail networks and transit stations. These proposed NCC PWP/TREP improvements are scheduled for phased implementation over the next 30 to 40 years. The primary goal for these transportation-related projects is to move people more efficiently through a more coordinated and connected suite of transportation options that will encourage alternate modes of travel other than the single occupancy vehicle (SOV). This would result in an anticipated transit mode share (percentage of travelers using transportation modes other than SOVs) shift away from the existing 2-3% condition to a 10-15% transit mode share.

NCC PWP/TREP development strategies and implementation measures require that transportation system improvements be phased and implemented in a balanced manner to ensure that benefits of the multimodal transportation improvements are maximized and correlated with impacts. The NCC PWP/TREP Implementation and Phasing Plan ([Exhibit 5](#)) identifies phased priorities for transportation improvements, and provides the mechanism to track the progress of corridor project implementation in the context of all NCC PWP/TREP highway, rail, transit, community, and resource enhancement project implementation. This also provides some

flexibility in implementing improvements to accommodate opportunities and uncertainties that may occur over the anticipated 30 to 40 year implementation schedule for the NCC PWP/TREP. This framework ensures that projects are implemented in a way that balances rail and highway improvements, and that community and resource enhancements are implemented prior to, or concurrent with, project implementation.

The NCC PWP/TREP includes provisions for an ongoing monitoring and reporting program to track progress toward meeting the goals outlined in the NCC PWP/TREP, including maintaining and improving public access while also maximizing protection and enhancement of the region's significant sensitive coastal resources. The indicators used in this ongoing monitoring will illustrate those areas in which the region appears to be moving towards the goals articulated under the NCC PWP/TREP, versus those in which improvement is needed. These indicators provide the stakeholders with assurances that the program is being implemented in a timely and balanced manner. These indicators can also help in the assessment of whether requested scope and/or schedule changes to future improvements in the program are consistent with commitments made in the NCC PWP/TREP. The accounting system required by the NCC PWP/TREP will ensure that the overall program implementation is consistent with approved impacts, and that it meets required compensatory mitigation requirements and overall resource benefits within the NCC.

The NCC PWP/TREP contains a comprehensive restoration program designed to protect, restore, and enhance sensitive coastal resources in the NCC, taking advantage of some of the opportunities provided by the project and also mitigating potential resource impacts caused by implementation of the transportation and community enhancement projects. The scope of the NCC PWP/TREP creates the ability to identify and prioritize regional resource needs and align them with available restoration and enhancement opportunities. The Resource Enhancement and Mitigation Program (REMP) developed as a part of the NCC PWP/TREP contains traditional wetland and upland restoration sites (approximately 55 acres of wetlands and 78 acres of uplands), large scale lagoon enhancement projects, the preservation of existing high quality habitats (approximately 0.5 acres of wetlands and 66 acres of uplands) under the threat of future development, and endowments to fund future lagoon inlet maintenance activities ([Exhibit 8](#) and [Exhibit 17](#)). The overall goal of the REMP is to enhance and restore the biodiversity and habitat functions and services of critical ecological coastal resources within the 27-mile NCC coastline as compensatory mitigation in advance of unavoidable impacts associated with planned NCC PWP/TREP transportation projects and community enhancement projects.

The REMP was developed in coordination with resource agency representatives and employs a combination of measures to mitigate for coastal resource impacts resulting from implementation of the NCC transportation improvements and community enhancement projects. The suite of projects included within the REMP was identified as the optimal group of restoration opportunities within the NCC to maximize benefits to coastal resources on a regional level. Few opportunities exist in the NCC for large-scale land acquisitions that could allow traditional ratio-based mitigation efforts to be focused in distinct areas with the goal of establishing large tracts of contiguous and diverse habitat areas within the corridor. However, the NCC is home to six major lagoon systems, which represent some of southern California's most significant natural resource areas. The NCC's lagoon systems and their habitats are biologically unique and cannot

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be replicated elsewhere. As such, opportunities to protect the NCC's lagoon systems from potential future degradation and to enhance and expand habitat within these systems requires comprehensive solutions with mitigation efforts focused on ecosystem-wide enhancements.

To minimize adverse impacts to ESHA, the majority of NCC PWP/TREP improvements have been sited within previously disturbed and developed areas within the existing rail and highway right-of-ways; however, where infrastructure improvements could adversely affect natural resources, measures provided for in the REMP would be implemented to avoid, minimize, and mitigate these impacts. The REMP approach to advancing habitat creation, restoration, and preservation mitigation projects ahead of NCC PWP/TREP impacts, allows for assurances that the selected restoration program is performing and providing realized benefits to coastal resources ahead of infrastructure improvement project related impacts. Early creation and restoration of habitat areas will serve to reduce the mitigation ratios that are typically required for project impacts by eliminating temporal losses of wetland habitat functions and values, provided that these projects are achieving identified performance standards. In addition, the early coordination between transportation facility infrastructure improvements designed to avoid and minimize impacts, and large-scale lagoon restoration efforts would enhance lagoon system function and values and serve to mitigate project impacts associated with both temporal loss of habitat values and temporary construction related impacts.

Additionally, the linkages between different transportation corridors created through the NCC PWP/TREP, and more specifically in the Implementation Phasing Plan, provide the opportunity to further reduce temporal and spatial impacts to the lagoon systems. By coordinating project design and construction staging that otherwise could move forward in separate pathways, potential impacts to wetlands can further be reduced. This coordinated approach to project design facilitated by the NCC PWP/TREP framework also allowed Caltrans and SANDAG to study appropriate bridge designs utilizing a lagoon-wide approach rather than just being limited to study of a precise project footprint. Individual lagoon studies analyzed the potential effects that proposed bridge design alternatives would have on tidal circulation, flood flows and associated scour, sediment transport, sea level rise relative to freeboard, wildlife connectivity, channel protection features, and associated impacts on wildlife habitats and federal or state jurisdictional waters/wetlands. These analyses considered the existing infrastructure constraints in the context of the optimal lagoon environment in order to identify appropriate bridge dimensions that will enhance lagoon-wide function and services. The studies confirmed that existing rail and highway bridges at San Elijo, Batiquitos, and Buena Vista Lagoons were the primary opportunities where significant improvement could be realized through expanded bridge lengths. These optimized bridge designs represent another unique component realized through the NCC PWP/TREP that resulted in an opportunity to further minimize impacts on coastal wetlands.

The *I-5 NCC Project Design Guidelines* include corridor-wide and local design themes to preserve the natural and community visual characteristics of the existing corridor and create a unifying visual thread. Common design features reflected within the proposed implementation measures include the use of terrain-contoured retaining walls to minimize visual prominence and allow for increased landscape screening, use of natural contour grading wherever feasible, implementation of spatial buffers to reduce the urbanizing edge effect of new structures,

preservation and enhancement of median landscaping, enhanced bridge design, specific bridge railing design, widened sidewalks and landscaped parkways, and appropriate use of color for compatibility with local design themes. The *I-5 NCC Project Design Guidelines* also include specific identification of where future signage and lighting would be located throughout the corridor along with specification describing the design and size of these elements. Further, the NCC PWP/TREP includes provisions to require that signage and lighting be sited to avoid blocking existing views to coastal resources and be sensitive to biological impacts on lagoon resources throughout the corridor. The *I-5 NCC Project Design Guidelines* also include specific landscaping palettes to be utilized throughout the NCC, and the NCC PWP/TREP design/development strategies further require that all landscaping will consist of native, drought-tolerant vegetation.

Altogether, the proposed NCC PWP/TREP is a multimodal transportation program that would implement a variety of improvements (highway, rail, bicycle, pedestrian) to meet the NCC's different transit needs. The non-highway improvements would increase capacity within the corridor; however, even collectively, they would not be able to accommodate projected corridor travel growth or avoid improvements to the I-5 corridor that will be critical to maintaining an efficient, uncongested transportation system in the NCC that meets all of the travel demands of residents, commuters, visitors, and goods movement. The suite of projects included in the NCC PWP/TREP represents the mix of infrastructure improvements that would best achieve the transportation goals of the project while avoiding and minimizing impacts to sensitive coastal resources including wetlands. Double tracking the rail corridor was identified as the most efficient and concentrated opportunity to move people through the corridor via public transit. Additionally, the 8+4 highway alternative (8 general purpose lanes and 4 Express Lanes) that was selected presents the smallest footprint analyzed that could achieve the identified travel improvement goals identified for the project, and was further endorsed as the appropriate highway alternative in SB 468.

The addition of Express Lanes to the I-5 highway is proposed to accommodate existing and future travel demand resulting from forecasted population and employment growth. Since the proposed highway improvements focus on non-SOV travel, growth in travel would be accommodated by a greater percentage of transit options and high-occupancy vehicles (HOV), with each individual person-trip having a smaller impact as the ratio of people to vehicles increases. The Express Lanes would address congestion on I-5, which would lessen the need to accommodate travel on arterial streets paralleling the highway (Coast Highway and El Camino Real) that might otherwise require widening or other improvements. Expansion of these local arterial streets would result in significant adverse impacts to coastal resources and public recreational areas. Providing improved access through the corridor by addressing congestion on I-5 would also allow infrastructure to support planned growth in the already developed corridor as infill and redevelopment, consistent with Section 30250(a) of the Coastal Act. By facilitating growth in already developed areas, significant impacts on natural areas are avoided.

The proposed NCC PWP/TREP improvements would facilitate and enhance access to the coast via public transit and would provide for greater non-automobile circulation. The Express Lanes and direct access ramps would prioritize service for HOVs, buses, and other transit vehicles. Additionally, with the projected increase in travel demand, future bus routes could use this

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infrastructure which would allow even greater accessibility to the coast. Double-tracking and associated rail corridor improvements would reduce travel times, increase frequencies, and improve weekend and off-peak period service, making rail more attractive and competitive with the automobile. Many of the corridor's existing bicycle paths and pedestrian trails are fragmented due to topographical and infrastructure barriers; however, the proposed bicycle and pedestrian improvements would create or substantially improve many of these necessary connections, including 26 highway over- and under-crossings that would be reconstructed with improved facilities. These pedestrian bridges and enhanced sidewalks/bike lanes would provide safe, nonautomobile-dependent routes to and within the Coastal Zone.

The proposed NCC PWP/TREP includes improvements to public transportation infrastructure necessary to serve and support existing and future land uses previously approved by the Coastal Commission pursuant to certified LCPs and/or approved coastal development permits. The proposed transportation improvements would not result in excessive growth-inducing impacts that could result in overburdening the corridor's recreational resources, nor would the proposed transportation improvements exacerbate existing congestion problems on I-5.

The proposed project's air quality benefits include reduced idling time by automobiles on roadways and train locomotives in the LOSSAN corridor and would thereby lead to associated reductions in energy consumption and emissions of air pollutants. In addition, the anticipated operational efficiency improvements arising from construction of additional segments of double track are expected to increase ridership on existing passenger trains in the corridor and to correspondingly reduce automobile trips and vehicle miles traveled (VMT). Other non-automobile improvements, such as the proposed Enhanced Bus service along the Coast Highway, BRT service, and improved bicycle lanes and pedestrian trails, would promote travel mode shifts away from SOVs, thereby reducing VMT and emissions of air pollutants. These project benefits are also consistent with previous Commission actions to protect coastal resources that would be directly affected by global climate change resulting from increases in greenhouse gas (GHG) emissions.

Any increased VMT associated with the proposed NCC PWP/TREP improvements would be offset by the operational and travel improvements gained from the expanded rail infrastructure and new Express Lanes, including reduced vehicle hours traveled (i.e., fewer idling trains and congested hours of highway travel) and shifts to HOV travel (carpools and transit), which would result in increased overall person-carrying capacity in the corridor. In addition, the multimodal transportation improvements and enhanced connectivity within these elements would improve mobility in the corridor by providing alternative transportation options, such as transit, HOV facilities, pedestrian trails, and bike paths, all of which efficiently and effectively accommodate more person-trips in the corridor while minimizing energy, air pollutant and GHG impacts, particularly impacts per person-trip. Furthermore, increased congestion under the No Build Alternative would result in conditions inconsistent with the air quality policies of the Coastal Act because it would exacerbate emissions of certain pollutants (additional 340 tons of CO<sub>2</sub> emissions per day compared to the proposed Build Alternative). Altogether, the proposed highway, rail, bus, bicycle, and pedestrian improvements would minimize increases in energy consumption and ensure Caltrans and SANDAG are consistent with SDAPCD and CARB requirements through sensitive programming, design, and construction and by applying the

design/development strategies and implementation measures included within the NCC PWP/TREP. Thus, the proposed NCC PWP/TREP and the resulting improvements to public transportation in the NCC would help to reduce energy consumption, reduce GHG emissions, and improve air quality.

To assist in planning and designing of the NCC lagoon bridge crossings, Caltrans and SANDAG prepared the San Diego Region Coastal Sea Level Rise Analysis, which assesses potential drainage, tidal inundation and flooding impacts to transportation infrastructure crossing waterbodies within the NCC that are potentially subject to sea level rise. The results of the study were incorporated in the design of the NCC PWP/TREP infrastructure improvements. Most importantly, both rail and highway facility crossings are considered together in terms of identifying design options and, where necessary, adaptive strategies, that address the potential long-term impacts of sea level rise and related drainage, flooding, and shoreline erosion effects. As such, the proposed bridge replacement projects are designed to accommodate the anticipated increase in sea level rise through the year 2100, both with and without fluvial floods (50-year and 100-year), through design and/or adaptive strategies, which would minimize structure exposure to increased ocean water levels and flooding. Furthermore, the NCC PWP/TREP design/development strategies and implementation measures provide that proposed improvements are analyzed based on the most current sea level rise projections and best available scientific information at the time of project implementation.

NCC PWP/TREP design and development strategies also require that lagoon shoreline/bank armoring be allowed only to protect existing legal structures, or where necessary for replacement structures across coastal waterbodies that are proven to be in danger from erosion, and only if less-environmentally damaging alternatives to armoring are not feasible, including relocation of the endangered structure; and armoring has been sited, designed, and accompanied by feasible measures to mitigate any unavoidable negative coastal resource impacts. Other than necessary scour protective devices placed at the base of bridge support structures (abutments and/or pilings), proposed improvements would not involve the construction of new or expanded lagoon shoreline protective devices that would alter natural landforms or shorelines, and result in associated shoreline erosion.

Where new development could adversely affect agricultural resources, appropriate mitigation measures shall be required and implemented. The NCC PWP/TREP requires that unavoidable impacts to active coastal agricultural lands within the NCC be mitigated pursuant to a tiered approach that would be submitted as part of the notice of impending development (NOID) process for applicable specific projects.

Given the existing location of the transportation corridors contained within the NCC, and their close proximity to coastal lagoon systems, some impacts to coastal resources would be unavoidable. The subject projects would result in permanent impacts to wetlands (approximately 24 acres), environmentally sensitive habitat areas (approximately 64 acres), and agriculture (approximately 11 acres) that are not allowed under the Coastal Act. The proposed project's dredging and filling of wetlands, impacts to ESHA and impacts to coastal agriculture are inconsistent with Coastal Act Sections 30233, 30240 and 30242, respectively. However, denying the proposed project to eliminate this inconsistency would be inconsistent with mandates of other

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Coastal Act policies, namely Sections 30210-30213 and 30252 (public access), 30230 and 30231 (marine biology and water quality), 30250 (concentration of development), and 30253 (air quality).

Even though components of the NCC PWP/TREP would result in impacts to wetlands, ESHA and coastal agriculture, it also includes several benefits to coastal resources that are inherent to the subject plan and would not occur without the proposed development. New and enhanced east/west and north/south bicycle and pedestrian connectivity would significantly improve public access as would the integrated transportation system across the various travel modes included in the plan that would facilitate connectivity and reduce travel times. The ability to link different project types through a phased implementation program provides assurance that development will move forward in a balanced approach that is most protective of coastal resources and public access. Existing bridges that constrain sensitive coastal lagoons within the corridor would be replaced with longer spans to improve the biological health and water quality within these systems. The NCC PWP/TREP would also allow for construction coordination between different transportation infrastructure corridors that would minimize both spatial and temporal impacts to several coastal resources. The proposed plan would facilitate development along existing transportation corridors thereby encouraging Smart Growth and centralized development patterns. The improved transportation system would also create new travel options that would reduce congestion along the highway and parallel roadway and rail arterials while also creating improved transit and non-vehicular transportation opportunities that when combined in total would result in improved air quality conditions. In such a situation, when a proposed project is inconsistent with a Chapter 3 policy and denial or modification of the project would be inconsistent with another Chapter 3 policy, Section 30007.5 of the Coastal Act provides for resolution of such a policy conflict in a manner that is on balance most protective of coastal resources. In order to undertake this analysis, the Commission must compare the impacts associated with the proposed project against the impacts to coastal resources that would occur if the proposed project was not realized.

Denial of the project because of its inconsistency with cited Coastal Act policies would result in significant adverse effects on public access, biological resources, water quality, and air quality due to the persistence of the existing antiquated transportation system in the NCC. More specifically, denial of the project would result in the continued presence of constraints on coastal lagoon systems and watersheds created by existing narrow bridge spans and associated support fill that result in diminished water quality and biological productivity within these sensitive coastal resources and would therefore be in conflict with the policies of Coastal Act Sections 30230 and 30231. Additionally, denial of the project would perpetuate and increase existing congestion along I-5 and other coastal arterial roadways resulting in increased emissions of pollutants and energy consumption thereby diminishing air quality in conflict with Coastal Act Section 30253(d). Approval and implementation of the project would provide some significant relief from these negative influences.

In this instance, given the location of the existing transportation corridors in the NCC, there are no alternatives that would include expansion of this infrastructure without introducing some impacts to the lagoon systems that they bisect, and the agricultural lands that they border; and, without some level of facility expansion, the project objectives of improving travel and coastal

access in the NCC could not be achieved. In order to minimize impacts, Caltrans has selected the alternative with the smallest footprint (8+4 buffer) that could achieve these transportation goals, and SANDAG has conducted a Prioritization Study to identify what rail projects and the order these projects should be implemented to achieve these transportation goals in a feasible and timely manner. The applicants have proposed compensatory mitigation that is expected to result in significantly greater habitat values throughout the NCC than those impacted areas directly adjacent to transportation right-of-ways.

### **REQUIRED APPROVAL MECHANISMS**

The overall NCC PWP/TREP-approval process is illustrated in [Exhibit 3](#). This process provides that 1) under the TREP, rail projects will be evaluated on a case-by-case basis to determine whether the Commission's review of those projects will be limited to the federal consistency review process only; 2) all projects located in areas of the Commission's retained permit jurisdiction are subject to Commission review through the coastal development permit review process; and 3) all other NCC projects are subject to Commission review through the PWP review process, as described in greater detail below.

A Public Works Plan (PWP) is one of the alternatives available to the Commission and project proponents for Commission review of large or phased public works projects and remains under the authority of the Commission irrespective of coastal permit jurisdictional boundaries. A PWP is an alternative to project-by-project review for public works projects that would require multiple coastal development permits, in multiple jurisdictions. PWPs must be sufficiently detailed regarding the size, kind, intensity, and location of development to allow the Commission to determine its consistency with the policies in Chapter 3 of the Coastal Act (pre-LCP certification) or the certified LCP (post-LCP certification). Once the Commission approves a PWP, no coastal development permit is required for a specific project described within it; rather, before commencing each specific project, the project proponent would need to submit notice in the form of a Notice of Impending Development (NOID), which would require the Commission's review to determine whether the submitted project is consistent with the standards within the PWP, or if special conditions are necessary to make it consistent.

One issue that the use of the PWP mechanism does not resolve is that each of those municipalities located within the identified scope of the PWP may have established different standards (through adoption of individual LCPs) for the components of the project within its jurisdiction, and those LCPs form the standard of review for the PWP, so that the standard of review varies with the LCP status of each jurisdiction. Within the corridor at issue here, there are four cities with fully certified LCPs that would be affected by proposed PWP improvements (San Diego, Encinitas, Carlsbad, and Oceanside), and the PWP would be subject to a different standard of review in each one, based on the different LCP provisions. However, proposed LCP amendments have been submitted in order to address both the inconsistencies among the various LCPs and the inconsistencies between the coastal resource protection policies of the various certified LCPs, on the one hand, and the NCC PWP/TREP, on the other. The LCP amendments establish an NCC Overlay that, when combined with submitted mapping, identifies the specific project types included in the Overlay and the geographic locations they comprise. These LCP

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amendments have been submitted by Caltrans and SANDAG as a part of the Third Party Initiated (also referred to as the Override) LCP amendment process.

The NCC PWP/TREP also requires Coastal Commission review of a federal consistency certification, because the program proponents are state and local agencies receiving federal funding, and because a number of the program components will need federal permits or other authorizations. The TREP component of the NCC PWP/TREP functions as a master federal consistency certification to ensure the entire suite of rail, highway, transit, bicycle, pedestrian and other community and resource improvements will be appropriately linked, phased and implemented in a manner consistent with applicable Coastal Act policies.

As part of future, individual project submittals, NCC PWP/TREP design/development strategies and implementation measures require a project-level analysis for all proposed corridor improvements that evaluates potential coastal resource impacts (habitat, public access and recreation, visual resources) and either confirms the avoidance of substantial adverse impacts, or requires the implementation of additional studies and mitigation measures if potential impacts are identified. In the event that additional study and/or project redesign is required to address previously unidentified potential impacts, project consistency with applicable Coastal Act policies would be achieved during this required future, project-specific federal consistency, coastal development permit, or NOID review.

Given the long-term nature of this planning process (30-40 year planning horizon), many individual project components have not been described to a level of specificity allowing final determinations at this time. Also, it is inevitable that future modifications to rail, highway, community, and resource enhancement project design and/or changes within the project area will occur that will need to be reviewed for changes in resource impacts not considered during this initial review. Thus, further Commission review will need to be conducted at appropriate future dates, once specific projects are more fully developed, and when future state/federal funding and permitting decisions are being made.

Therefore, projects that may be processed through the PWP may be subject to future PWP amendment (to specify details) and NOIDs to ensure consistency with all policies, design/development strategies and implementation measures contained in Chapter 5 of the approved PWP. Similarly, the federal consistency review process is phased such that additional specific projects where limited detail is currently available will require future, individual federal consistency review. For future projects located in areas of Commission retained permit jurisdiction, Chapter 3 of the Coastal Act will remain the standard of review with the NCC PWP/TREP used as guidance. However, all projects (regardless of approval process) are included in the NCC PWP/TREP for implementation, phasing, and monitoring purposes.

### **SUMMARY OF STAFF RECOMMENDATION**

Staff is recommending that the Commission certify the proposed NCC PWP/TREP, as submitted, through the various approval mechanisms described above. The NCC PWP/TREP includes policies, design/development strategies and implementation measures that are intended to protect coastal resources while maximizing public access throughout the corridor. Staff has concluded

that there will be no other feasible alternatives or mitigation measures available that would further lessen any significant adverse effect that the approval would have on the environment. In conclusion, staff recommends that the Commission find the NCC PWP/TREP, as submitted, consistent with the applicable standards.

*The appropriate resolutions and motions for the NCC PWP/TREP commence on [page 27](#).*

**ADDITIONAL INFORMATION**

The final, June 2014 version NCC PWP/TREP and attached appendices can be accessed here:

[http://www.dot.ca.gov/dist11/Env\\_docs/I-5PWP/5PWPFinal.html](http://www.dot.ca.gov/dist11/Env_docs/I-5PWP/5PWPFinal.html)

Further information on the NCC PWP/TREP may be obtained from the San Diego District office staff - Gabriel Buhr or Kanani Brown at (619) 767-2370.

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## I. PROCEDURAL ISSUES

### Purpose

Caltrans and SANDAG have prepared the NCC PWP/TREP to function as a single integrated document for comprehensively planning, reviewing, and authorizing the NCC's transportation, community, and resource enhancement projects. The NCC PWP/TREP creates a framework within which identified projects can be analyzed and implemented under a coordinated plan. The goal of this process is to optimize the suite of included improvements so that transportation goals are met in a manner that maintains and improves public access while also maximizing protection and enhancement of the region's significant sensitive coastal resources.

The NCC PWP/TREP contains the Implementation and Phasing Plan ([Exhibit 5](#)) for rail, highway, transit, community and resource enhancement improvements, and is intended to ensure that a balanced, multimodal solution for the corridor's transportation needs is implemented in conjunction with community enhancement and natural resource restoration plans. The PWP/TREP phasing plan attempts to coordinate the timing of rail, highway, transit, bicycle and pedestrian projects, along with community enhancement and resource enhancement components, in a manner assuring that multimodal transportation improvements for the corridor will progress in a balanced manner which will not outpace natural resource restoration and enhancement needs.

As an overarching document, the NCC PWP/TREP serves a number of integrally related functions:

First, the PWP provides a long range planning vehicle for transportation infrastructure improvements and community enhancement projects that encompasses coastal development permit processing requirements (as described in more detail below).

Second, the TREP serves as the federal consistency review document for two general classes of development: (a) the rail improvements, some of, which may not be subject to coastal development permit requirements; and (b) federal funding and other authorizations which may precede permitting stage reviews. Other than procedural differences (depending on which process is under review), the substantive language within the document is identical in PWP and TREP sections and is intended to reinforce consistency between the Phasing and Implementation portions of the NCC PWP/TREP.

Third, the NCC PWP/TREP serves several LCP-related functions: (a) it provides enough of an overview (but with as much detail as is possible) of the long range planning and authorization process to enable the Commission to identify and analyze where review of future activities under the NCC PWP/TREP is likely to present conflicts between one or more Chapter 3 policies of the Coastal Act, (b) it provides a project overview and an analytical framework that can be incorporated by reference into the various individual LCP amendments to assist the Commission's consideration of how these conflicts can be resolved in a manner that on balance is most protective of significant coastal resources, and thereby support LCP amendments specific to this project; and (c) it provides a framework for amendments to the LCPs that will allow

Caltrans and SANDAG to apply for approval of a PWP that will avoid conflicts with existing (as amended) LCPs.

### **Public Works Plan**

The Coastal Act (Section 30114) defines public works to include, among other things, the following:

*(b) All public transportation facilities, including streets, roads, highways, public parking lots and structures, ports, harbors, airports, railroads, and mass transit facilities and stations, bridges, trolley wires, and other related facilities. (...)*

*(c) All publicly financed recreational facilities, all projects of the State Coastal Conservancy, and any development by a special district.*

Section 30605 of the Coastal Act states, in part:

*To promote greater efficiency for the planning of any public works (...) and as an alternative to project-by-project review, plans for public (...) may be submitted to the commission for review in the same manner prescribed for the review of local coastal programs set forth in Chapter 6 (commencing with Section 30500).*

A Public Works Plan (PWP) is one of the alternatives available to the Commission and project proponents for Commission review of large or phased public works projects and remains under the authority of the Commission irrespective of coastal permit jurisdictional boundaries. A PWP is an alternative to project-by-project review for public works (which, in this situation would require multiple coastal development permits, in multiple jurisdictions). PWPs must be sufficiently detailed regarding the size, kind, intensity, and location of development to allow the Commission to determine its consistency with the policies in Chapter 3 of the Coastal Act (pre-LCP certification) or the certified LCP (post-LCP certification). Once the Commission approves a PWP, no coastal development permit is required for a specific project described within it; rather, before commencing each specific project, the project proponent would need to submit notice in the form of a Notice of Impending Development (NOID), which would require the Commission to determine whether the submitted project is consistent with the standards within the PWP, or if conditions are necessary to make it consistent.

### **Federal Consistency**

Section 307 of the Coastal Zone Management Act (CZMA)<sup>1</sup> details the types of activities that require federal consistency review. These include:

*307(c)(3) (A) After final approval by the Secretary of a state's management program, any applicant for a required Federal license or permit to conduct an activity, in or*

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<sup>1</sup> The CZMA is codified in Chapter 33 of Title 16 of the United States Code (U.S.C.): sections 1451-1464.

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*outside of the coastal zone, affecting any land or water use or natural resource of the coastal zone of that state shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state's approved program and that such activity will be conducted in a manner consistent with the program.*

(...)

*307(d) Application of local governments for Federal assistance; relationship of activities with approved management programs*

*State and local governments submitting applications for Federal assistance under other Federal programs, in or outside of the coastal zone, affecting any land or water use of natural resource of the coastal zone shall indicate the views of the appropriate state or local agency as to the relationship of such activities to the approved management program for the coastal zone. Such applications shall be submitted and coordinated in accordance with the provisions of section 6506 of Title 31. Federal agencies shall not approve proposed projects that are inconsistent with the enforceable policies of a coastal state's management program, except upon a finding by the Secretary that such project is consistent with the purposes of this chapter or necessary in the interest of national security.*

A federal consistency certification is required for the proposed NCC PWP/TREP, because the program proponents (SANDAG and Caltrans) are state and local government entities receiving federal funding, and because a number of the program components will need federal permits or other authorizations. (e.g. from the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and U.S. Army Corps of Engineers (USACE)).

The TREP section of the document provides the mechanism for federal consistency review. The standard of review for consistency certifications is the enforceable policies are the California Coastal Management Program (CCMP), which are found in Chapter 3 of the Coastal Act.

### **Local Coastal Programs (and) Amendments**

The standard of review for the Land Use Plan (LUP) portion of an LCP amendment is Chapter 3 of the Coastal Act. The standard of review for the remainder of the LCP is the LUP.

Section 30512 of the Coastal Act states in part:

*(c) The Commission shall certify a land use plan, or any amendments thereto, if it finds that a land use plan meets the requirements of and is conformity with, the policies of Chapter 3 (commencing with Section 30200) (...)*

Section 30605 of the Coastal Act states in part:

*If any plan for public works (...) is submitted prior to certification of the local coastal programs for the jurisdictions affected by the proposed public works, the commission shall certify whether the proposed plan is consistent with Chapter 3 (commencing with Section 30200) (...) If any such plan for public works is submitted after the certification of local coastal programs, any such plan shall be approved by the commission only if it finds, after full consultation with the affected local governments, that the proposed plan for public works is in conformity with certified local coastal programs in jurisdictions affected by the proposed public works.*

Section 30605 of the Coastal Act Section 13356 of Title 14 of the California Code of Regulations provide that where a PWP is submitted prior to certification of the LCP for the jurisdiction affected by the PWP, the standard of review for certification of the PWP is the Chapter 3 policies of the Coastal Act. Section 30605 of the Coastal Act and Section 13357 of Title of the Code of Regulations then also state that where a PWP is submitted after the certification of an LCP for the jurisdiction affected by the PWP, the PWP shall be approved by the Commission only if it finds, after full consultation with the affected local government(s), that it is in conformity with the certified LCP.

Within the corridor, there are four cities with fully certified LCPs that would be affected by proposed PWP improvements: San Diego, Encinitas, Carlsbad, and Oceanside (the PWP projects will not be located in any portion of the city of Del Mar covered by the city's certified LCP, and Solana Beach has a certified Land Use Plan (LUP) but does not currently have a certified Local Implementation Plan, and as such does not yet have a fully certified LCP). Therefore, pursuant to Section 30605 of the Coastal Act, the standard of review for portions of the NCC PWP/TREP improvements occurring in San Diego, Encinitas, Carlsbad, and Oceanside, excluding any rail projects that may be subject to federal consistency review only and projects located in the Commission's permit jurisdiction, is that those portions of the PWP are in conformance with the certified LCP of each respective city. The standard of review for those portions of the NCC PWP/TREP improvements occurring in the City of Solana Beach, the City of Del Mar, or areas of the Commission's retained jurisdiction is the Chapter 3 policies of the Coastal Act.<sup>2</sup>

In cases where proposed PWP improvements are inconsistent with an applicable LCP, the Coastal Act allows agencies that are authorized to undertake a public works project to request an LCP amendment to ensure consistency. If certain criteria apply and the local government(s) do not amend their LCPs, the project proponents can then submit their proposed LCP amendments directly to the Commission. This third party-initiated LCP amendment process is described in Section 30515 of the Coastal Act, which provides:

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<sup>2</sup> Following approval of the PWP, the PWP will provide the standard of review for NOIDs submitted for all NCC PWP projects (i.e., projects that are both subject to coastal development permit requirements and located outside areas of the Commission's retained jurisdiction).

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*Any person authorized to undertake a public works project or proposing an energy facility development may request any local government to amend its certified local coastal program, if the purpose of the proposed amendment is to meet public needs of an area greater than that included within such certified local coastal program that had not been anticipated by the person making the request at the time the local coastal program was before the commission for certification. If, after review, the local government determines that the amendment requested would be in conformity with the policies of this division, it may amend its certified local coastal program as provided in Section 30514.*

*If the local government does not amend its local coastal program, such person may file with the commission a request for amendment which shall set forth the reasons why the proposed amendment is necessary and how such amendment is in conformity with the policies of this division. The local government shall be provided an opportunity to set forth the reasons for its action. The commission may, after public hearing, approve and certify the proposed amendment if it finds, after a careful balancing of social, economic, and environmental effects, that to do otherwise would adversely affect the public welfare, that a public need of an area greater than that included within the certified local coastal program would be met, that there is no feasible, less environmentally damaging alternative way to meet such need, and that the proposed amendment is in conformity with the policies of this division.*

Pursuant to Section 30515 of the Coastal Act, SANDAG and Caltrans submitted a formal request to the Executive Director for a determination regarding the necessary LCP amendments related to the proposed NCC PWP/TREP. In response, on December 9, 2013, the Executive Director confirmed that the NCC PWP/TREP is a public works project that meets the public needs of an area greater than that included in the identified Cities' certified LCPs, and was unanticipated at the time these LCPs were before the Commission for certification. This determination confirmed that Caltrans and SANDAG have the option to invoke the 30515 process. Here, Caltrans and SANDAG did so, and the local governments declined to amend their LCPs. Thus, Caltrans and SANDAG can file an LCP amendment directly to the Commission for the NCC PWP/TREP.

LCP amendments have been submitted in order to resolve these conflicts associated with coastal resource protection policies of the various certified LCPs. The LCP amendments include a narrowly defined Overlay zone specific to the proposed NCC PWP/TREP projects consisting of highway, transit, and related community and resource enhancement projects located within these cities.

### **Conflict Resolution**

As is explained above, several aspects of the NCC PWP/TREP present conflicts between one or more Chapter 3 policies of the Coastal Act. The TREP section of the document provides the mechanism for initial conflict identification and resolution to ensure the overall NCC PWP/TREP is consistent with the applicable enforceable policies of the CCMP. The Commission has historically invoked, as part of the enforceable policies, the conflict resolution

policy in Chapter 1 of the Coastal Act (Section 30007.5) and section 30200(b), when federal consistency matters have raised conflicts between Chapter 3 policies.

The PWP section of the document provides the mechanism for both specific project authorization and conflict resolution to ensure the NCC PWP is consistent with applicable Coastal Act policies and certified LCPs. Because the Coastal Act does not authorize the resolution of conflicts among LCP policies, the PWP cannot be approved unless it is consistent with all of the policies of the applicable LCPs. Thus, the Commission must resolve conflicts presented by the PWP at the LCP level. In other words, the Commission must approve LCP policies that themselves resolve conflicts among Chapter 3 policies, and the PWP must then be consistent with those new LCP policies.

Where PWP projects that are subject to review pursuant to certified LCPs are determined to result in potential inconsistencies with the corridor cities' certified LCPs, LCP amendments have been submitted (more specifically for the Cities of Oceanside, Carlsbad, Encinitas and San Diego). Because the proposed PWP projects will not be located in any portion of the City of Del Mar covered by the city's certified LCP and the city of Solana Beach does not have a certified LCP, no LCP amendment is required for these jurisdictions.

As described above, the standard of review for federal consistency certification and LCP amendment requirements associated with the NCC PWP/TREP are the Chapter 3 policies of the Coastal Act. Secondly, once the LCPs have been amended consistent with the Coastal Act, the standard of review for the PWP component of the review would also be either Chapter 3 of the Coastal Act or the LCPs as amended (again consistent with the Coastal Act). Therefore; in order to eliminate redundancy and any unnecessary confusion, all analysis has been combined into the following staff report that analyzes the NCC PWP/TREP under the Chapter 3 policies of the Coastal Act.

### **Legislative Framework**

On September 9, 2011, the California State Legislature approved Senate Bill 468 (SB 468) - introduced by Senator Christine Kehoe (San Diego), which details certain requirements of the NCC PWP. Governor Brown signed it into law on October 7, 2011. SB 468 is the result of a collaborative effort involving representatives of SANDAG, Caltrans, and the California Coastal Commission to ensure project design and mitigation measures are included in the NCC PWP to address (among other things) coastal public access, habitat restoration projects, environmental mitigation measures, and community enhancements. The bill requires consultation with the Commission and other stakeholders on the PWP, establishes PWP procedures for addressing improvements within areas of the Commission's retained permit jurisdiction as part of PWP implementation, and authorizes the Commission to use Section 30515 of the Public Resources Code as it relates to filing a third-party initiated LCP amendment with the Commission for the NCC PWP. Additionally, SB 468 requires that SANDAG and Caltrans not select a locally preferred freeway alternative larger than the 8+4 buffer alternative, and further identifies that all fees collected from single occupancy vehicles (SOVs) utilizing the Express lanes be directed toward funding transit service and operations in the NCC. Consistent with SB 468, the NCC PWP/TREP includes the entire NCC program to provide an overview and linkages to ensure that

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rail, highway, transit, community enhancement and required mitigation projects are appropriately linked, phased and implemented in such a manner to benefit coastal resources.

### **Review Stages**

The approval and implementation of the NCC PWP/TREP improvements will require multiple and sequential approvals by the Commission. The Commission will first review the NCC PWP/TREP federal consistency certification (TREP), followed by the LCP amendments and then the proposed PWP. Additionally, in areas where projects are located in areas of Coastal Commission's retained jurisdiction, future, individual coastal development permits will also need to be submitted for review and approval by the Commission. Because the federal consistency review process is phased, future federal consistency reviews will be necessary as well.

The Commission's overall review of the NCC PWP/TREP required for the federal consistency certification component of these approvals will provide the opportunity for the Commission to review the entire suite of included projects on a regional basis under Chapter 3 of the Coastal Act. As a part of this analysis, where necessary the Commission will employ the conflict resolution provisions of the Coastal Act in order to resolve any policy conflicts inherent in the NCC PWP/TREP as a whole. This analysis will determine whether or not the entire program can be found, on a comprehensive policy basis, consistent with the Coastal Act. It will also then inform and assist the forthcoming approvals subsequently required by the Commission on how any arising policy conflicts can be resolved at either the specific project or jurisdictional level.

The Commission will next review the four individual LCP amendments submitted by Caltrans and SANDAG for the Cities of Oceanside, Carlsbad, Encinitas and San Diego. The LCP amendments are crafted as overlays that will reside within each affected City's LCP and include specific maps and project identification related to the NCC PWP/TREP footprint and content. Additionally, the LCP amendment overlays include general policy language that mirrors the policy language within the NCC PWP/TREP, but defers more specific project development standards to the language within the NCC PWP/TREP itself. The relationship between the LCPs and the NCC PWP/TREP was crafted in this manner to provide assurance for the local affected jurisdictions that they will have future control in the event that significant changes to the content or scope of the NCC PWP/TREP occur that would create inconsistency with the LCP (as amended by the overlay) and therefore would require additional future LCP amendment. The relationship was also crafted in this manner to allow for more minor changes to the NCC PWP/TREP requiring PWP amendments to occur without requiring amendment to the LCPs, so long as these changes were still consistent with the broader policy language included within the overlay.

The procedural advantage of first conducting the federal consistency review of the NCC PWP/TREP ahead of the LCP amendments gives the Commission the opportunity to determine the application of the NCC PWP/TREP on a regional and comprehensive basis under the Coastal Act. This advantage would be lost were the Commission to begin with individual LCP amendment reviews. Thus, starting first with federal consistency review provides the assurance that the PWP can then also be referenced as a primary supporting document for each LCP amendment.

Finally, the Commission will conduct its review of the PWP for consistency with the affected LCPs as amended by any of the above-described overlays that are approved and for consistency with the Chapter 3 policies of the Coastal Act where applicable. This approval must be conducted as the final action taken by the Commission at this stage because the Commission could otherwise not find consistency with the LCPs if they are not amended first.

The overall NCC PWP/TREP-approval process is illustrated in [Exhibit 3](#). This process provides that 1) under the TREP, rail projects will be evaluated on a case-by-case basis to determine whether the Commission's review of those projects will be limited to the federal consistency review process only; 2) all projects located in areas of the Commission's retained permit jurisdiction are subject to Commission review through the coastal development permit review process; and 3) all other NCC projects are subject to Commission review through the PWP review process. The NCC PWP/TREP Implementation Framework and Phasing Plan ([Exhibit 5](#)) and the PWP/NOID requirements serve to plan, monitor, and report to the Commission the ongoing progress of rail, highway, transit, bicycle, pedestrian and other community enhancement and resource enhancement projects.

## **Future Reviews**

### Federal Consistency

The TREP component of the NCC PWP/TREP functions as a master federal consistency certification to ensure the entire suite of rail, highway, transit, bicycle, pedestrian and other community and resource improvements will be appropriately linked, phased and implemented in a manner consistent with applicable Coastal Act policies. However, given the long-term nature (30 - 40 year planning horizon) of this planning process, many individual project components have not been described to a level of specificity allowing final determinations of consistency at this time. This initial review is therefore programmatic, and at appropriate future dates, once specific projects are more fully developed, further federal consistency review will need to be conducted in a phased manner as plans evolve, and when future federal funding and permitting decisions are being made. The standard of review in these cases will remain the Coastal Act, with the affected LCP(s) and the PWP/TREP providing guiding policy and/or background information. To assist in these reviews, the NCC PWP/TREP identifies specific filing content requirements regarding future federal consistency submittals for projects included within the NCC PWP/TREP.

Also, given the long-term nature of the planning, it is inevitable that future modifications to rail, highway, community, and resource enhancement project design and/or changes within the project area will occur that will need to be reviewed for changes in resource impacts not considered during this initial federal consistency review for the NCC PWP/TREP. These situations may also trigger the need for additional federal consistency review. The Commission notes, and the NCC PWP/TREP (Section 6A) provides, the manner in which changes to the activities described in the NCC PWP/TREP, or in impacts to coastal resources, will be addressed

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in future federal consistency reviews. These future reviews may involve analysis and determinations under the “re-opener clause” of the federal consistency review process<sup>3</sup>.

### PWP –Notice of Impending Development (NOID)

After the PWP/TREP has been approved by the Commission, any development proposed pursuant to the approved plan would be processed as a Specific Project. Development submitted to the Commission for review under the NOID process as a Specific Project shall not be authorized unless it is of a type, location, and size as identified in Chapter 4 of the NCC PWP/TREP ([Exhibit 5](#)), and it is demonstrated that project implementation is in compliance with all policies, design/development standards, and implementation measures of the NCC PWP/TREP or can be made to comply through the imposition of conditions. The Commission may impose special conditions to a submitted Specific Project to ensure consistency with the NCC PWP/TREP; however, the Commission cannot reject a Specific Project if it is included within the listed projects approved as a part of the Commission’s original PWP review. The NCC PWP/TREP identifies specific filing content requirements regarding future NOID submittals for projects included within the NCC PWP/TREP.

### Future Coastal Development Permits

All NCC PWP/TREP improvements located within areas of retained Commission permit jurisdiction (such as lagoon bridge replacements) shall be subject to the Commission coastal development permit review procedures. The standard of review in these cases would be the Coastal Act, with the affected LCP(s) and the PWP/TREP providing guiding policy and/or background information. These projects may be proposed to be implemented by another Lead Agency (such as lagoon restoration projects or certain pedestrian and bicycle improvements located outside of the Caltrans/SANDAG right-of-way). The NCC PWP/TREP (Section 6A) identifies specific filing content requirements regarding future coastal development permits for projects included within the NCC PWP/TREP and provides necessary linkage between these projects and other Specific Projects included within the NCC PWP/TREP.

### Summary

As described above, and detailed in the NCC PWP/TREP, the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail projects will be evaluated on a case-by-case basis to determine whether the Commission’s review of those projects will be limited to the federal consistency review process only. The NCC PWP/TREP includes a process for Commission federal consistency reviews for these identified rail projects, as detailed in Section 6A.4 (Federal Consistency Review Procedures). Similarly, rail projects that may be processed through the PWP (along with

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<sup>3</sup> Codified in 15 CFR §§930.65 & 930.66 for federally permitted activities, and §§930.100 & 930.101 for federally funded activities, these re-opener provisions require resubmittal for re-review based on “changed circumstances” of previously approved projects, based on a determination that the project is having coastal zone effects that are substantially different than originally proposed and, as a result, the project is no longer consistent with the applicable CMP policies.

conceptual highway, bike, and pedestrian enhancement components of the PWP) may be subject to future PWP amendment (to specify details) and Notice of Impending Developments (NOIDs) to ensure consistency with the approved PWP, or Caltrans and SANDAG may choose (in consultation with the Commission) to submit a coastal development permit application to the appropriate local government. All other improvements included in the NCC PWP/TREP not located in areas of Commission retained permit jurisdiction must be found consistent with the NCC PWP/TREP and all policies, design development standards and implementation measures contained in Chapter 5 of the NCC PWP/TREP, and are subject to the PWP procedures detailed in Sections 6A.5 (PWP Development Review Procedures). Procedural requirements for projects located in areas of Commission retained permit jurisdiction are located in Section 6A.6 (Coastal Development Permit [CDP] Review Procedures); for these projects, Chapter 3 of the Coastal Act will remain the standard of review, and Chapter 5 of the NCC PWP/TREP will be used as guidance. All projects (regardless of approval process) are included in the NCC PWP/TREP for implementation, phasing, and monitoring purposes.

[Exhibit 4](#) lists the proposed NCC PWP/TREP rail and highway projects by project phase and identifies the review process that each project would be subject to (federal consistency review, PWP requirements, and/or CDP requirements). NCC PWP/TREP community and resource enhancement improvements would be subject to PWP requirements, with the exception of projects located in areas of Commission retained permit jurisdiction, which would require separate CDPs, and would utilize the NCC PWP/TREP as guidance.

### **Reporting Mechanisms**

The NCC PWP/TREP includes provisions for ongoing monitoring to track progress toward meeting the goals outlined in the NCC PWP/TREP to maintain and improve public access while also maximizing protection and enhancement of the region's significant sensitive coastal resources. The indicators used in this ongoing monitoring will illustrate those areas in which the region appears to be moving towards the goals articulated under the NCC PWP/TREP, versus those in which improvement is needed. These indicators provide the stakeholders with assurances that the program is being implemented in a timely and balanced manner. These indicators can also serve help in the assessment of whether requested scope and/or schedule changes to future improvements in the program are consistent with commitments made in the NCC PWP/TREP. These requirements for reporting on the performance of NCC PWP/TREP implementation represent a recognition that the success of the improvements goes beyond the initial capital investment. Performance reporting will also assess how the investments made in the corridor have resulted in tangible improvements to NCC PWP/TREP objectives.

### **NCC PWP/TREP Monitoring Report**

Caltrans and SANDAG will prepare an annual NCC PWP/TREP monitoring report, commencing with approval of the NCC PWP/TREP by the Commission, which will include a cumulative and calendar year summary of the following: 1) status of NCC PWP/TREP project implementation for the year (status of any associated authorizations, funding, construction timeline, etc.) and summary of compliance with any applicable implementation measures and/or conditions placed on the authorized project; 2) status update and summary of compliance with conditions for any

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continuing obligations associated with project authorizations in previous years; 3) any emergency authorizations that occurred; 4) any comments received on NCC PWP/TREP implementation; 5) preparation and submittal status of NCC PWP/TREP phasing and REMP monitoring reports (see next section); and 6) and an updated copy of the NCC PWP/TREP Implementation Phasing Plan.

### Resource Enhancement and Mitigation Program (REMP) Monitoring Report

An important subset of the overall NCC PWP/TREP Monitoring report described above is the inclusion of annual updates on the status of the projects identified as a part of the Resource Enhancement and Mitigation Program (REMP). This annual report will be submitted to the REMP Working Group (comprised of resource agency representatives) and the Scientific Advisory Committee responsible for reviewing NCC PWP/TREP mitigation and restoration projects. The PWP/TREP Implementation Phasing Plan ([Exhibit 5](#)) ensures that all NCC PWP/TREP compensatory mitigation projects are reviewed and monitored as a part of the development review process for all transportation infrastructure and community enhancement projects included in the NCC PWP/TREP, regardless of the specific Commission approval process required for each REMP project. The NCC PWP/TREP Implementation Phasing Plan also includes a monitoring and reporting program that will provide a yearly assessment and summary of information and updates to the Implementation Phasing Plan, in order to document projects and associated mitigation requirements completed, and also to assess cumulative NCC PWP/TREP phase impacts, resource benefits and available resource mitigation credits for future project and/or phase implementation as identified in the compensatory mitigation credit ledger. REMP accounting will be tracked with a ledger that tracks project implementation timing, permanent and temporary impacts, and credit establishment and release. The NCC PWP/TREP credit ledger will be updated according to the final post-project construction reports. The accounting system will ensure that the overall program implementation is consistent with approved impacts, and that it meets required compensatory mitigation requirements and overall resource benefits within the NCC.

### Transportation Report Package

The Transportation Report Package will be prepared to overlap with the monitoring reports SANDAG prepares for regularly updated regional transportation and growth plans (RTP process) and will be submitted to the Commission and corridor cities for informational purposes every four years in order to provide detail on improvements to the entire transportation system located within the NCC, as described in the NCC PWP/TREP. Submittal of each report will also coincide with an informational public hearing and project status update presented to the Commission. The package and associated update will include summaries of NCC PWP/TREP improvement and enhancement projects, an accounting of dollars invested, changes in transportation trends and information on other transportation strategies and policies implemented through the corridor. It will provide an overall picture of the progress made during the reporting period toward meeting the 30-year transportation goals expressed by the region within regional plans and the NCC PWP/TREP. The report will consider a variety of factors to track overall enhancements to the transportation system within the corridor, particularly those necessary to ensure that positive steps toward improved connectivity and mass transit are developed to reduce

vehicle miles traveled and energy usage as described in the NCC PWP/TREP. The report will include both a description of areas where measurable enhancements have been realized as well as areas where the results do not meet expectations, an analysis of the factors behind those results and potential adaptive management solutions for improvements, where necessary. Moreover, the report will provide a reassessment of land-use changes over time and identify new opportunities for improved transit services as a result of those changes.

### **Public Participation**

The Preliminary Draft NCC PWP/TREP, first released to the public in June 2010, was updated to reflect input and comment received from the public, local cities, resource agencies and Commission staff. An updated Draft NCC PWP/TREP was released for an initial 60-day public review period in March 2013. Caltrans and SANDAG distributed postcards to approximately 72,000 affected residents and businesses located within half a mile of the NCC PWP/TREP project area in association with both draft document release dates. Also during this review period, Caltrans and SANDAG hosted two workshops to solicit feedback and to answer questions from the public. This 2013 version of the Draft PWP/TREP was further revised based on comments received during the public review period prior to finalizing the document for submittal to the Commission. The NCC PWP/TREP was formally submitted to the Commission in November 2013, and Commission staff has continued to accept public comment throughout this review process.

### **Local Government Consultation**

Throughout the development of the NCC PWP/TREP, Caltrans and SANDAG have engaged the local governments in the review process. Focused meetings were held with City staffs beginning in January 2011 and extending through the summer of 2012. In the fall of 2013, Caltrans and SANDAG presented agendaized briefings to the City Councils of Oceanside, Carlsbad, Encinitas and San Diego in order to provide an update on the ongoing NCC PWP/TREP document development and process.

The Executive Director's December 2013 determination that the project was eligible for the third party initiated LCP amendment process authorized Caltrans and SANDAG to concurrently submit the LCP amendments directly to the affected North County Corridor Cities for their review as described in CCR Section 13666.2. LCP amendment packages were formally submitted by Caltrans and SANDAG to each affected City on December 13, 2013. Each city then had ninety (90) days to review and act upon the proposal. During this review period, none of the affected cities decided to amend its LCP, which allowed Caltrans and SANDAG to then formally submit their LCP amendment requests for the NCC PWP/TREP Overlay directly to the Commission for review (formally submitted May 28, 2014).

### **Stakeholder Consultation**

The development of the Resource Enhancement and Mitigation Program (REMP) has been a collaborative process with representatives of various resource agency staff representatives including the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the California

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Department of Fish and Wildlife, the Regional Water Quality Control Board, NOAA National Marine Fisheries Service, the U.S. Environmental Agency and the California Coastal Conservancy. The development of the REMP was initiated by members of this group as early as 2010 in order to identify regionally significant restoration and enhancement opportunities within the NCC. Through the NCC PWP/TREP, this group has now been formalized as the REMP Working Group and will meet quarterly throughout the implementation of the NCC PWP/TREP to track and guide progress through the planned implementation phases.

### **Environmental Documents**

Section 30605 of the Coastal Act and Sections 13353 and 13357 of the Commission Regulations require PWPs to include environmental information sufficient in detail to enable the Commission to determine the consistency of the plan with the policies of the Coastal Act or LCP, as applicable.

Consistent with these requirements, Caltrans and the FHWA prepared the *Interstate 5 North Coast Corridor Project Draft Environmental Impact Report/Environmental Impact Statement (I-5 NCC Project EIR/EIS)* (June 2010) to examine the potential environmental impacts of the highway alternatives being considered. Caltrans and FHWA then prepared an *Interstate 5 North Coast Corridor Project Supplement Draft Environmental Impact Report/Environmental Impact Study* (August 2012). Finally, in November 2013, Caltrans and FHWA prepared and certified the *Interstate 5 North Coast Corridor Project Final Environmental Impact Report/Environmental Impact Statement*.

In addition, the Federal Railroad Administration and Caltrans (as federal and state lead agencies) prepared the *Los Angeles to San Diego (LOSSAN) Final Program EIR/EIS* (September 2007) for the proposed rail corridor improvements. This document analyzes and discloses potential environmental effects and benefits of the proposed rail program and its alternatives. Given the level of analysis in the Program EIR/EIS for the LOSSAN Improvement Project, which is very general, decisions to advance and construct the proposed rail improvements require additional environmental review under NEPA and additional, phased federal consistency review under the CZMA.

Finally, SANDAG has prepared a Program EIR to evaluate the potential environmental effects associated with SANDAG's adoption and implementation of the 2050 Regional Transportation Plan (RTP) and its Sustainable Communities Strategy (SCS). The 2050 RTP/SCS outlines projects for rail and bus services, highways, local streets, bicycling, and walking, as well as systems and demand management for the entire San Diego County region. In addition, the SCS, adopted as part of SANDAG's 2050 RTP, serves to align regional transportation, housing, and land use planning to reduce the amount of vehicle miles traveled to attain the regional greenhouse gas reduction target. The 2050 RTP follows the previously adopted 2030 RTP which addressed much of the same analysis as the 2050 RTP, with the exception of the SCS element which was not a requirement at the time it was adopted.

## II. MOTIONS AND RESOLUTIONS

### A. TRANSPORTATION AND RESOURCE ENHANCEMENT PROGRAM

#### 1. Concurrence with Caltrans and SANDAG Consistency Certification

**Motion:** *I move that the Commission concur with Caltrans and SANDAG's consistency certification CC-0002-14 by concluding that the project would be consistent with the enforceable policies of the California Coastal Management Program (CCMP).*

#### STAFF RECOMMENDATION FOR CONCURRENCE:

The staff recommends a **YES** vote on the motion. Passage of this motion will result in a concurrence with the consistency certification, and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

#### Resolution:

The Commission hereby concurs with consistency certification CC-0002-14 by Caltrans and SANDAG on the grounds that the project is consistent with the enforceable policies of the California Coastal Management Program.

### B. LOCAL COASTAL PROGRAM AMENDMENTS

#### 1. Certification of Land Use Plan Amendment for City of San Diego

**Motion:** *I move that the Commission certify City of San Diego Land Use Plan Amendment LCP-6-SAN-14-0813-1, as submitted.*

#### STAFF RECOMMENDATION TO CERTIFY:

Staff recommends a **YES** vote. Passage of this motion will result in certification of the Land Use Plan amendment as submitted and adoption of the following resolution and findings. The motion to certify as submitted passes only upon an affirmative vote of a majority of the appointed Commissioners.

#### Resolution:

The Commission hereby certifies the Land Use Plan Amendment for the City of San Diego as submitted and adopts the findings set forth below on the grounds that: (1) the Land Use Plan, as amended, will meet the requirements of and be in conformity with the policies of Chapter 3 of the Coastal Act; (2) failure to certify this amendment would adversely affect the public welfare; (3) certification will satisfy a public need of an area greater than the area covered by the certified San Diego LCP; and (4) there is no feasible, less environmentally damaging alternative that would meet

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that need. Certification of the land use plan amendment complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the plan on the environment, or 2) there are no further feasible alternatives and mitigation measures that would substantially lessen any significant adverse impacts on the environment that will result from certification of the land use plan amendment.

## **2. Certification of Land Use Plan Amendment for City of Encinitas**

**Motion:** *I move that the Commission certify City of Encinitas Land Use Plan Amendment LCP-6-ENC-14-0814-1, as submitted.*

### **STAFF RECOMMENDATION TO CERTIFY:**

Staff recommends a **YES** vote. Passage of this motion will result in certification of the Land Use Plan amendment as submitted and adoption of the following resolution and findings. The motion to certify as submitted passes only upon an affirmative vote of a majority of the appointed Commissioners.

### **Resolution:**

The Commission hereby certifies the Land Use Plan Amendment for the City of Encinitas as submitted and adopts the findings set forth below on the grounds that: (1) the Land Use Plan, as amended, will meet the requirements of and be in conformity with the policies of Chapter 3 of the Coastal Act; (2) failure to certify this amendment would adversely affect the public welfare; (3) certification will satisfy a public need of an area greater than the area covered by the certified Encinitas LCP; and (4) there is no feasible, less environmentally damaging alternative that would meet that need. Certification of the land use plan amendment complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the plan on the environment, or 2) there are no further feasible alternatives and mitigation measures that would substantially lessen any significant adverse impacts on the environment that will result from certification of the land use plan amendment.

## **3. Certification of Land Use Plan Amendment for City of Carlsbad**

**Motion:** *I move that the Commission certify City of Carlsbad Land Use Plan Amendment LCP-6-CAR-14-0815-1, as submitted.*

### **STAFF RECOMMENDATION TO CERTIFY:**

Staff recommends a **YES** vote. Passage of this motion will result in certification of the Land Use Plan amendment as submitted and adoption of the following resolution and findings. The motion to certify as submitted passes only upon an affirmative vote of a majority of the appointed Commissioners.

**Resolution:**

The Commission hereby certifies the Land Use Plan Amendment for the City of Carlsbad as submitted and adopts the findings set forth below on the grounds that: (1) the Land Use Plan, as amended, will meet the requirements of and be in conformity with the policies of Chapter 3 of the Coastal Act; (2) failure to certify this amendment would adversely affect the public welfare; (3) certification will satisfy a public need of an area greater than the area covered by the certified Carlsbad LCP; and (4) there is no feasible, less environmentally damaging alternative that would meet that need. Certification of the land use plan amendment complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the plan on the environment, or 2) there are no further feasible alternatives and mitigation measures that would substantially lessen any significant adverse impacts on the environment that will result from certification of the land use plan amendment.

**4. Certification of Land Use Plan Amendment for City of Oceanside**

**Motion:** *I move that the Commission certify City of Oceanside Land Use Plan Amendment LCP-6-OCN-14-0816-1, as submitted.*

**STAFF RECOMMENDATION TO CERTIFY:**

Staff recommends a **YES** vote. Passage of this motion will result in certification of the Land Use Plan amendment as submitted and adoption of the following resolution and findings. The motion to certify as submitted passes only upon an affirmative vote of a majority of the appointed Commissioners.

**Resolution:**

The Commission hereby certifies the Land Use Plan Amendment for the City of Oceanside as submitted and adopts the findings set forth below on the grounds that: (1) the Land Use Plan, as amended, will meet the requirements of and be in conformity with the policies of Chapter 3 of the Coastal Act; (2) failure to certify this amendment would adversely affect the public welfare; (3) certification will satisfy a public need of an area greater than the area covered by the certified Oceanside LCP; and (4) there is no feasible, less environmentally damaging alternative that would meet that need. Certification of the land use plan amendment complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the plan on the environment, or 2) there are no further feasible alternatives and mitigation measures that would substantially lessen any significant adverse impacts on the environment that will result from certification of the land use plan amendment.

## **C. PUBLIC WORKS PLAN**

### **1. Approval of Public Works Plan**

**Motion:** *I move that the Commission certify the North Coast Corridor Public Works Plan PWP-6-NCC-13-0203-1, as submitted.*

#### **STAFF RECOMMENDATION FOR CERTIFICATION OF PUBLIC WORKS PLAN:**

Staff recommends a **YES** vote. Passage of this motion will result in certification of the Public Works Plan as submitted and adoption of the following resolution and findings. The motion to certify passes only by affirmative vote of a majority of the appointed Commissioners.

#### **Resolution:**

The Commission hereby certifies the North Coast Corridor Public Works Plan as submitted and adopts the findings stated below on the grounds that the Plan conforms with the Chapter 3 policies of the Coastal Act and with the amended provisions of the Cities of San Diego, Encinitas, Carlsbad and Oceanside Local Coastal Programs, as applicable. Certification of the Plan as submitted complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the Plan on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the Plan on the environment.

## **III. FINDINGS AND DECLARATIONS**

### **A. NORTH COAST CORRIDOR BACKGROUND AND EXISTING CONDITIONS**

The North Coast Corridor (NCC) is approximately 30 miles long by 6 miles wide, consists of approximately 111,215 gross acres, and is home to over 525,000 people ([Exhibit 1](#)). Six San Diego County cities lie entirely or partially within the NCC: San Diego, Solana Beach, Del Mar, Encinitas, Carlsbad, and Oceanside. The NCC includes long open stretches of public beaches, six coastal lagoons and five creeks and rivers as well as associated open space and other coastal habitat areas.

Within the NCC, the majority of land located directly adjacent to the coastline, including areas adjacent to the LOSSAN rail and I-5 highway corridors, has been developed for residential, light industrial, and commercial use, and much of the corridor's population density occurs along these transportation facilities. Some significant coastal open space and natural resource areas also occur along the NCC, particularly where these facilities cross coastal lagoon systems; however, most of the NCC is considered nearly fully developed with urban uses. Few vacant, developable parcels of land remain in the immediate vicinity of the LOSSAN rail and I-5 corridors. In general, new growth in the NCC would predominantly be accommodated by redevelopment and

infill development on vacant lots. All jurisdictions within the NCC have less than 10% of their land available for future development, some of which are reserved for residential uses.

Historic development trends generally have not supported transit use, as the majority of land in the corridor was developed when local land use decisions encouraged low-density, single-use development. This land use configuration required an extensive highway and arterial network to connect origins and destinations and was unsupportive of densities necessary for functioning transit services. However, passenger rail service in the corridor has experienced investment and growth over the last few decades.

Employment within the corridor is primarily located along established transportation routes or concentrated into large activity/employment centers. The majority of jobs in the corridor are located in the City of San Diego, particularly within the Sorrento Valley, Sorrento Mesa, University City/Golden Triangle areas, and at the University of California, San Diego (UCSD). Future employment in the corridor is expected to continue to grow within the established employment centers, along with expanding employment centers in the eastern portions of Carlsbad and Oceanside.

Travel demand in the project area has increased and generally has been influenced by population and employment growth in the region. Since the time that the highway system was completed in the early 1970's, the population in the NCC has increased by almost 400%, and the population in this area is forecasted to grow by an additional 23% by the year 2040<sup>4</sup>. Within the NCC, I-5 serves as the primary transportation corridor, carrying more than 700,000 vehicle trips on an average weekday to and from local communities, employment centers, and recreational facilities. The combination of rapid growth, fiscal and physical constraints, and the absence of reliable, multimodal travel options in the NCC has created both transportation and environmental deficiencies that continue to worsen. The resulting congestion related impacts have resulted in negative impacts to both public access and coastal resources (including impaired water quality, biological productivity and habitat value) within the NCC.

Population growth in neighboring regions, which often exceeds that of the corridor because of the availability of affordable housing and developable land, also affects travel demand in the corridor by generating pass-through traffic to and from the borders with Mexico and the counties of Riverside, Imperial, Orange and Los Angeles. While the 2040 population of San Diego County is expected to increase by 29% from its 2010 level, in this same timeframe, the neighboring Imperial County, Riverside County, and Baja California, Mexico areas, are projected to experience population growth rates of 94%, 87%, and 65%, respectively.<sup>5</sup> Travel between San Diego and these regions is forecasted to lead to additional increases in trips (and therefore additional congestion) in the NCC.

The NCC contains one major interstate highway (I-5) that runs its entire length, as well as several state highways of varying capacities, and multiple arterial roads. Together they comprise

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<sup>4</sup> SANDAG/Caltrans Series 12 Model, November 2011.

<sup>5</sup> SANDAG/Caltrans Series 12 Model, November 2011; California Department of Finance; United Nations Department of Economic and Social Affairs; Mexico Consejo Nacional de Población (CONAPO).

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a roadway network that connects residents and visitors to the corridor's many residential, recreational, and community destinations. I-5 is the principal north-south highway corridor in the western US and extends from the US/Mexico international border to the US/Canada international border.

Most of I-5 was planned and constructed in the 1960s and 1970s as part of the Interstate Highway System. Within the NCC, I-5 has eight general-purpose lanes (four northbound and four southbound), and in the southern portion of the NCC (from the I-5/I-805 merge in San Diego to just south of Manchester Avenue in Encinitas) the highway also contains one high occupancy vehicle (HOV) lane in each direction. The freeway in the NCC contains 24 local street interchanges and four freeway-to-freeway interchanges (at I-805, SR 56, SR 78, and SR 76). I-5 acts as a local circulation and commuter link for coastal communities, a regional route to the Los Angeles metropolitan area, and as a regional and an international goods movement corridor. By the late 1980s, traffic congestion on I-5 had increased significantly due to population growth and shifts in the region's economy.

The Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor provides north-south commuter and intercity rail service along the coast, reaching north to Los Angeles (and beyond to Santa Barbara and San Luis Obispo) and south to San Diego. Increasing the frequency, and therefore the quality of service, is limited by the fact that within the NCC, only 54% of the line has a second track. This deficiency causes congestion as trains are forced to wait for oncoming trains to pass before proceeding through single-tracked segments. This congestion is compounded by the fact that four different users utilize this rail corridor: COASTER commuter rail, Metrolink commuter rail, Amtrak intercity rail, and BNSF freight trains.

The Amtrak Pacific Surfliner provides intercity passenger rail service from downtown San Diego to Los Angeles Union Station and on to Santa Barbara and San Luis Obispo. The COASTER commuter rail service, operated by NCTD, serves eight stations: Oceanside Transit Center, Carlsbad Village, Carlsbad Poinsettia, Encinitas, Solana Beach, Sorrento Valley, Old Town (San Diego), and Santa Fe Depot (downtown San Diego). With the exception of the two southernmost stations, all COASTER stations are located within the NCC. Metrolink commuter rail service is operated by the Southern California Regional Rail Authority and connects the Oceanside Transit Center with Orange, Los Angeles, Riverside, and San Bernardino Counties. The only station in the NCC served by Metrolink trains is the Oceanside Transit Center, the northernmost station in the NCC. Freight rail in the corridor services the movement of regional, interregional, interstate, and international goods. All freight services in the corridor are operated by BNSF Railway, which provides off-peak service from the Port of San Diego marine terminals to the Los Angeles area via four to eight daily trains, as well as short-haul services within the region operated by BNSF contractor Pacific Sun Railroad.

Local bus routes in the NCC travel along regional arterials and local streets, with most of the public bus service in the corridor providing local circulation, serving short-distance trips, and acting as a feeder service to COASTER and SPRINTER (commuter rail) services as well as local activity centers. There are currently 15 bus routes operated by NCTD that serve the NCC and an additional 12 bus routes operated by MTS in the corridor. With the exception of Route 101,

which connects University City with Oceanside via Coast Highway, most bus services do not serve regional and interregional trips.

SANDAG's Regional Vanpool Program provides subsidies to vanpool commuters in order to encourage ridesharing and manage roadway demand during peak travel times. Nearly 800 subsidized vanpools serve approximately 6,000 passengers each weekday across San Diego County. Additionally, nine park-and-ride parking lots currently exist in the NCC to facilitate carpooling, vanpooling, and regional transit ridership.

Within the NCC, there is an existing bicycle and pedestrian network that provides access to the coast and upland recreation areas. Like the corridor's arterial network, gaps and barriers in the routes prevent them from fulfilling many local and longer-distance trip needs. East-west connectivity is impacted in a number of locations in the corridor by the existing highway and rail facilities. Also, the coastal lagoon systems in north San Diego County create barriers to north-south connectivity for bicycle and pedestrian travelers. Existing primary bicycle and pedestrian routes in the NCC include the Coastal Rail Trail, California Coastal Trail, Camp Pendleton Trail, San Luis Rey River Trail, El Camino Real Bikeway, Palomar Airport Road/San Marcos Boulevard Bikeway, La Costa Avenue/Rancho Santa Fe Road Bikeway, Mid County Bikeway, SR 56 Bikeway, and the Central Coast Corridor. These routes connect public beaches and parks, residences, town centers, transit centers, and other activity centers.

The corridor includes about 30 miles of Pacific Ocean coastline with world-renowned public beaches, coastal sandstone bluffs, and six lagoons that are part of river valley systems. Scenic public beaches include La Jolla Shores, Torrey Pines State Beach, Del Mar Beach, Cardiff State Beach, San Elijo State Beach, Moonlight State Beach, Leucadia State Beach, Carlsbad State Beach, and Oceanside State Beach, and provide a wide array of recreational opportunities for the public. At the NCC's designated state beaches alone (not including the numerous other public beaches), over seven million visitors were counted in the 2009–2010 fiscal year, which is more than twice the population of the entire San Diego region.<sup>6</sup> Primary access to these coastal areas is accomplished by private automobile. On I-5, 19 of the 28 interchanges provide direct access to the corridor's beaches and harbors via major arterial roads. While the majority of access to the NCC's coastal areas is provided by vehicle, all of the corridor's north-south passenger rail services also support access to these coastal beaches and/or lagoons, with some circulation and local access also obtained on foot and by bicycle.

The six lagoons in the NCC from south to north are Los Peñasquitos, San Dieguito, San Elijo, Batiquitos, Agua Hedionda, and Buena Vista. These lagoons provide habitat for sensitive animals and plants, stopping points for migratory birds, natural water treatment and flood prevention, scenic beauty, opportunities for passive recreation, and many other benefits. Portions of these lagoons were historically filled to construct transportation facilities, and when coupled with build out of the watershed to accommodate other adjacent developments and recreational use have resulted in increases in year-round freshwater input, accelerated sedimentation and water contamination, reduced tidal mixing, introduction of exotic species, and

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<sup>6</sup> *California State Park System Statistical Report, 2009/10 Fiscal Year*, California Department of Parks and Recreation, 2010.

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impacts on habitats and wildlife. Ongoing lagoon resource planning, restoration, and management has been implemented at varying levels for the corridor's lagoons and will continue to be essential in ensuring that the many flood, water quality, habitat, and recreational benefits of these significant watershed features are maintained and enhanced.

As mentioned previously, the NCC includes six coastal San Diego County cities that lie either entirely or partially within the subject area. The following summaries more specifically characterize existing conditions within each City and provide a brief review of each City's Local Coastal Program in the context of the NCC PWP/TREP.

### **City of San Diego**

The City of San Diego is the largest of the NCC cities. Five of the 52 existing communities within the City of San Diego are located within the NCC. These communities include La Jolla, University City, Torrey Pines, Torrey Hills, and Carmel Valley and are located in the northwestern area of the City. Primary land uses include parks/open spaces; residential, commercial, light industrial, and UCSD. Large open space areas include Torrey Pines State Reserve and Los Peñasquitos Canyon Preserve, as well as the San Dieguito River Valley. For the past 40 years, the City of San Diego, like other California cities, has experienced rapid population growth and urbanization. Because the majority of land within the city has been developed, the city is planning for more infill development in the future.

San Diego has a fully certified LCP that consists of 12 segments. The North City LCP segment is divided into individual communities, each with its own community plan or coastal land use plan. The PWP improvements planned in San Diego would be located entirely in the North City LCP area and occur within University City, Torrey Pines, Torrey Hills, and the North City Future Urbanizing Area. Not all areas included in the North City LCP have been fully certified, and other portions of the City are located in areas of the Commission's retained jurisdiction; in both instances, the Commission has jurisdiction to issue coastal development permits. Within San Diego, the proposed NCC PWP/TREP improvements span areas both within and outside the Coastal Zone, and would be located in areas subject to the City's certified LCP as well as areas of deferred certification and Commission retained jurisdiction. The NCC PWP/TREP as proposed would result in conflicts with some policies in the City's LCP. Since the LCP is the standard of review for those portions of the PWP, the PWP can only be approved if the LCP can be amended to address these inconsistencies. These conflicts involve policies related to impacts to wetlands and wetland buffers, ESHA and ESHA buffers, stormwater runoff treatment, and natural features (e.g. mature trees, natural landforms).

### **City of Del Mar**

Del Mar is the smallest city in the NCC. It is a narrow, north-south oriented municipality bordered by Solana Beach to the north, San Diego to the east and the south, and the Pacific Ocean to the west. The city is located west of I-5. The LOSSAN rail corridor travels through Del Mar along the coast and bluffs at the south end of the city, and then turns inland at the north end where it enters the City of Solana Beach. Del Mar is urbanized and consists primarily of residential land uses. The city also has interspersed commercial land uses along Camino del Mar

(Coast Highway), a major north/south transportation corridor, within an area known as “Village Center.” The Del Mar Fairgrounds and Racetrack, a regional sporting and entertainment venue, is located in the northernmost area of the city. Del Mar is almost entirely developed, and future development in the city will most likely consist of infill development and redevelopment on existing lots.

Del Mar has a certified LCP and issues coastal development permits throughout most of its Coastal Zone area. The Commission retains jurisdiction within and adjacent to the San Dieguito Lagoon and issues coastal development permits in this area. NCC PWP/TREP improvements within Del Mar are limited to rail line improvements and associated facilities including a future proposed passenger platform that would be located within this area of retained jurisdiction. Thus, the improvements within Del Mar will not ultimately be authorized through the PWP, which means the City’s LCP will not be the standard of review for those portions of the NCC PWP/TREP and will not require amendment at this time. The City of Del Mar LCP will continue to provide guidance and/or background for NCC PWP/TREP projects that require either federal consistency review or a coastal development permit directly from the Commission.

### **City of Solana Beach**

Solana Beach is bordered by Encinitas to the north, unincorporated San Diego County to the east, Del Mar and San Diego to the south, and the Pacific Ocean to the west. The city is bisected by I-5, and the LOSSAN rail corridor runs through Solana Beach parallel to, and directly east of Coast Highway. Solana Beach is almost entirely developed. The majority of land consists of residential land uses comprised of low to medium densities. Commercial land uses, including some mixed-use development, are located along transportation corridors. Immediately north of the city and partially within the city boundary, is San Elijo Lagoon.

Solana Beach is located entirely in the Coastal Zone; however, it is the only city in the corridor that does not yet have a fully certified LCP. The Land Use Plan (LUP) component of the City’s LCP was approved by the Commission in March 2012. The Commission will continue to have jurisdiction to issue coastal development permits within the City, with the policies in Chapter 3 of the Coastal Act serving as the standard of review and the City’s LUP serving as guidance, until the Implementation Plan component of the City’s LCP is certified (currently under development). Similarly, Chapter 3 of the Coastal Act will serve as the standard of review for those portions of the NCC PWP/TREP covering improvements within the City of Solana Beach.

### **City of Encinitas**

Encinitas is bordered by Carlsbad to the north, unincorporated San Diego County to the east, Solana Beach to the south, and the Pacific Ocean to the west. The I-5 corridor is located in the western area of the city. The LOSSAN rail corridor, located west of I-5, travels through the city, generally paralleling the east side of Coast Highway. Encinitas is largely urbanized and consists of a mixture of residential, commercial, open space, and agricultural land uses. Residential land uses are the most prominent, with low to medium densities. Commercial land uses are generally located along major transportation corridors, including Coast Highway, Encinitas Boulevard, and El Camino Real. Agricultural land uses exist throughout the city, with larger areas located east of

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I-5 directly north of San Elijo Lagoon and near the Encinitas Ranch Golf Course. Large open spaces are available near Batiquitos Lagoon and San Elijo Lagoon. Much of the remaining undeveloped land within the city is constrained by environmental factors; however, there is potential to add infill housing units in mixed-use developments in downtown Encinitas and along Coast Highway.

Encinitas has a fully certified LCP and issues coastal development permits throughout the majority of its Coastal Zone area. The Commission retains jurisdiction within San Elijo Lagoon and issues coastal development permits in this area. The NCC PWP/TREP as proposed would result in conflicts with some policies in the City's LCP. Since the LCP is the standard of review for those portions of the PWP, the PWP can only be approved if the LCP can be amended to address these inconsistencies. These conflicts involve policies related to impacts to wetlands and wetland buffers, ESHA and ESHA buffers, agriculture, and natural features (e.g. mature trees, natural landforms). Also, the City's Bike and Trails maps are updated to incorporate proposed NCC PWP/TREP enhancements.

### **City of Carlsbad**

Carlsbad is the third-most populous city in the NCC and is bordered by Oceanside to the north, the cities of Vista and San Marcos to the east, Encinitas to the south, and the Pacific Ocean to the west. I-5 travels through the western area of the city, and the LOSSAN rail corridor runs parallel to, and west of I-5 and east of Carlsbad Boulevard (Coast Highway). Carlsbad is an urbanized municipality with a mix of land uses. Residential uses are predominant and concentrated in the northern and southern areas of the city. Central Carlsbad has become a regional employment center, with commercial land uses situated along major roadways including Carlsbad Village Drive and State Route 78 (SR 78), and east of I-5 (between Cannon Road and Palomar Airport Road). The Buena Vista, Agua Hedionda, and Batiquitos Lagoons are located in Carlsbad, and represent some of the largest remaining areas of open space within the City. Future development patterns will be influenced by the city's unique landforms, nonresidential central area, the airport, and the regional employment center surrounding the airport. As of 2012, only 6% of Carlsbad's total land area is considered remaining developable land, with over half of that planned for residential development.

Carlsbad has a certified LCP and issues coastal development permits throughout the majority of its Coastal Zone area. The City of Carlsbad LCP consists of six segments: Mello I; Mello II; West Batiquitos Lagoon/Sammis Properties; East Batiquitos Lagoon/Hunt Properties; the Carlsbad Village Redevelopment Area; and the Agua Hedionda Lagoon (which is not fully certified by the Coastal Commission). In addition, Carlsbad completed a Multiple Habitat Conservation Program (MHCP) Subarea Plan, which has been incorporated into the City's certified LCP. The Commission retains jurisdiction within Batiquitos Lagoon and Buena Vista Lagoon, and issues coastal development permits for these areas as well as in the uncertified portions of the City that constitute the Agua Hedionda Lagoon segment. The NCC PWP/TREP as proposed would result in conflicts with some policies in the City's LCP. Since the LCP is the standard of review for those portions of the PWP, the PWP can only be approved if the LCP can be amended to address these inconsistencies. These conflicts involve policies related to impacts to wetlands and wetland buffers, ESHA and ESHA buffers, stormwater runoff treatment, and

natural features (e.g. mature trees, natural landforms). Additionally, an amendment to the City of Carlsbad LCP would also reflect map changes to the City's HMP map.

### **City of Oceanside**

Oceanside is bordered by Camp Pendleton to the north, the city of Vista and unincorporated San Diego County to the east, Carlsbad to the south, and the Pacific Ocean to the west, and is the second most populous city in the NCC. I-5 travels through the western area of the city. Just south of the city limits, the LOSSAN rail corridor crosses to the west of Coast Highway and continues parallel to the ocean to the northern city limits. Portions of Oceanside located west of I-5 are highly urbanized with predominantly residential land uses consisting of a wide range of densities. This area also includes transit-oriented development at the Oceanside Transit Center Station. The eastern areas of the city are generally more rural in character, with a greater amount of open space, agricultural, and low density residential lands. Oceanside has a well-defined commercial downtown extending north and south along both sides of Coast Highway. In addition to the downtown area, commercial land uses are also generally located along major transportation corridors including Mission Avenue, SR 76, and Oceanside Boulevard. Few areas for future development exist within the City's Coastal Zone, while some areas of developable land are available in the eastern portions of the City.

Oceanside has a fully certified LCP and issues coastal development permits throughout the majority of its Coastal Zone area. The Commission retains jurisdiction within Buena Vista Lagoon and western portions of the San Luis Rey River, and issues coastal development permits in these areas. Within Oceanside, the proposed NCC PWP/TREP improvements span areas both within and outside of the Coastal Zone. The NCC PWP/TREP as proposed would result in conflicts with some policies in the City's LCP. Since the LCP is the standard of review for those portions of the PWP, the PWP can only be approved if the LCP can be amended to address these inconsistencies. These conflicts involve policies related to impacts to wetlands and ESHA and related buffers surrounding these sensitive coastal resources.

## **B. PWP/TREP DESCRIPTION & CONTENT**

### **Purpose of NCC PWP/TREP**

The NCC PWP/TREP, jointly prepared by SANDAG and Caltrans, is a single integrated document that establishes a framework for the comprehensive planning, reviewing, and permitting of the NCC's transportation, community, and resource enhancement projects. The NCC PWP/TREP allows these improvements to be analyzed as an integrated and coordinated system, with the goal of optimizing the suite of improvements so that transportation goals are met in a manner that maintains and enhances public access to coastal resources and recreational facilities, and sensitive coastal resources are protected and enhanced to provide regional benefits.

The NCC PWP/TREP includes a plan and implementation schedule for a series of rail, highway, transit, bicycle, and pedestrian projects to improve and maintain mobility and access to coastal recreational resources in the NCC ([Exhibit 2](#) includes project maps for the corridor). The NCC PWP/TREP also includes a comprehensive restoration program designed to protect, restore, and

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enhance sensitive coastal resources in the NCC and thereby mitigate potential resource impacts caused by implementation of the transportation and community enhancement projects. The framework created within the NCC PWP/TREP Phasing Implementation Plan creates linkages between these various project types to ensure that transportation infrastructure improvements move forward in a balanced fashion along with regional restoration efforts in order to protect and enhance coastal resources and to ensure that mitigation for impacts caused by the project occur in a timely manner in relation to their associated impacts.

### **Rail Improvements**

The identified NCC PWP/TREP rail projects include a mix of double-tracking, other track capacity enhancements, rail bridge replacement, vehicle crossing improvements, parking expansion, new platform locations, and other station enhancements. Generally, track projects improve capacity directly and, therefore, improve reliability, reduce travel times, and provide the opportunity for increased service levels. Other improvements may increase access to rail services or improve the passenger experience, which may lead to increased ridership.

#### Double-Tracking (from south to north)

- *San Dieguito Double Track and Platform (Del Mar):* Construct 1.1 miles of second main track from CP Valley to CP Crosby, replace the San Dieguito River Bridge, and construct a new special-event platform adjacent to the Del Mar Racetrack and Fairgrounds. This project would result in a 2.8-mile stretch of double-track from CP Craven to CP Del Mar.
- *San Elijo Lagoon Double Track (Encinitas):* Construct 1.5 miles of double-track between CP Cardiff and CP Craven, modify the existing at-grade crossing at Chesterfield Drive, and replace the San Elijo Lagoon Bridge with a new, increased span, double-track bridge. The project would result in 4.2 miles of double-track from CP Swami to CP Valley.
- *CP Moonlight to CP Swami (Encinitas):* Add a second main track for the 0.8-mile stretch between CP Moonlight and CP Swami, resulting in a 2.4-mile stretch of double-track from CP Moonlight to CP Cardiff.
- *Batiquitos Lagoon Double Track (Encinitas/Carlsbad):* Construct 2.7 miles of a second main track between CP Ponto and CP Moonlight, replace the Batiquitos Lagoon Bridge with a new, increased span, double-track bridge, and expand the La Costa Avenue grade separation. This would result in 5.8 miles of double-track from CP Farr to CP Moonlight.
- *Carlsbad Village Double Track (Carlsbad):* Construct a 1.1-mile second main track and straighten a curve from Mile Post (MP) 228.4 to MP 229.5 including through the Carlsbad Village Station. This would lead to an 8.6-mile stretch of double-track from CP Shell to CP Ponto. The existing single-track bridge across Buena Vista Lagoon would be replaced with a new, increased span, double-track bridge.

- *East Brook to Shell Double Track*: Add a second main track and replace the San Luis Rey River Bridge in the 0.6-mile segment from CP East Brook to CP Shell. This would result in a 3.6-mile stretch of double-track from CP Westbrook to CP Escondido Junction.

#### Station and Parking Improvements

- *Solana Beach Station Parking (Solana Beach)*: Additional spaces at the COASTER Solana Beach Station.
- *Encinitas Station Parking (Encinitas)*: Additional spaces at the COASTER Encinitas Station.
- *Poinsettia Station Parking (Carlsbad)*: Additional spaces at the COASTER Carlsbad Poinsettia Station.
- *Carlsbad Village Station Parking (Carlsbad)*: Additional spaces at the COASTER Carlsbad Village Station.
- *Oceanside Station Parking (Oceanside)*: Additional spaces at the existing Oceanside Transit Center.

#### Grade Separation Improvements

- *Poinsettia Station Improvements (Carlsbad)*: Installation of an inter-track fence and a grade-separated pedestrian crossing at Carlsbad Poinsettia Station. New station platforms would be constructed to accommodate these improvements.
- Three additional grade separations of the LOSSAN rail corridor are planned at local roadways within the NCC, and will include bicycle and pedestrian improvements (described in the following Vision Phase section).

#### Other Track Improvements

- *Oceanside Through Track (Oceanside)*: Expand the rail portion of the station to the north and south, and add a third rail track to the southern end of the station. The existing boarding platform would be extended to the north. The southern end of the existing Platform 1 would be removed, and a new walkway would lead passengers to a new southern boarding platform. A series of turnouts and crossovers would be installed to enable trains to move laterally from track to track as they approach the platforms. Platform improvements would also be implemented.
- *Del Mar Bluffs Additional Stabilization (Del Mar)*: Replace eroded track bed support, protect bluff face and reinforce bluff toe in order to provide continued operation of the rail service.

## Highway Improvements

The I-5 NCC improvements would maintain or improve existing and future traffic operations on the existing I-5 freeway from La Jolla Village Drive in San Diego to Harbor Drive in Oceanside/Camp Pendleton, extending approximately 27 miles. In July 2011, Caltrans identified the 8+4 Buffer alternative as the Locally Preferred Alternative (LPA) which was further supported through SB 468. The LPA consists of two high-occupancy vehicle (HOV)/Express Lanes in each direction, separated by a buffer from the existing four general-purpose lanes in each direction ([Exhibit 7](#)). Other components of the identified LPA highway improvements include auxiliary lanes, bridge replacements, overcrossing improvements, two, new Direct Access Ramps (DARs) and interchange improvements, six Intermediate Access Points (IAP) to the Express Lanes, park-and-ride facilities, gateway features, intelligent transportation system features, and retaining and sound walls. The following section includes additional detail regarding the various types of highway facility improvements proposed as a part of the NCC PWP/TREP; a more specific project and detail list is also presented in Chapter 4 of the NCC PWP/TREP itself.

### Express Lanes

Express Lanes operate as high occupancy vehicle (HOV) lanes with transit vehicles, carpools and other HOVs travelling at free-flow speeds. Any additional capacity in the lanes, while still ensuring they are freely moving, can be used by single occupancy vehicles (SOV) paying a fee. The required fees vary in order to keep travel times reliable within the Express Lanes, and a higher premium would be paid to use extra capacity in the Express Lanes as that capacity diminishes. The NCC PWP/TREP and SB 468 both require that collected revenue from the Express Lanes is reinvested in NCC transit service and operations.

These Express Lanes directly address the transportation project goals by focusing on moving people and not just cars by providing new travel options for HOVs, which would incentivize carpooling and transit use. They also provide the region with much more flexibility to manage its transportation investment over time. As travel demand and characteristics change, the region can set policies to promote changes in the composition of Express Lane users (e.g., more or larger carpools, more transit, higher fees, truck access) to achieve the most effective and efficient use of transportation facilities.

- One new HOV/Express Lane in each direction from La Jolla Village Drive to just north of Lomas Santa Fe Drive. There is already one existing HOV/Express Lane in each direction from the I-5/I-805 merge to Lomas Santa Fe Drive, resulting in two total HOV/Express Lanes in each direction.
- Two HOV/Express Lanes in each direction would be added from just north of Lomas Santa Fe Drive to Harbor Drive/Vandegrift Boulevard.
- Provision of a continuous HOV lane in each direction through the I-5 / I-805 junction with a freeway-to-freeway connector (flyover), crossing over the I-5 / I-805 merge and

connecting the proposed project HOV/Express Lanes to existing HOV lanes just north of that merge.

### Auxiliary Lanes

Auxiliary lanes are lanes on the outside of the freeway that typically connect on-/off-ramps and allow for weaving, acceleration, deceleration, merging, truck climbing, and other purposes supplementary to through traffic. These lanes maximize the capacity of the facility by reducing congestion caused by weaving and variable travel speeds. In the NCC, where access to local streets from I-5 (ramp volume) is high due to local trips using the freeway, the distances between interchanges is short, and freeway volumes are high, which results in a condition where merging movements create greater levels of congestion. As such, 12-foot-wide auxiliary, acceleration, and deceleration lanes with shoulders up to 12 feet wide are planned for certain segments within the corridor. Auxiliary lanes improve the efficiency of the highway facility by moving disruptive merging out of the main travel lanes. The I-5 has a number of existing auxiliary lanes throughout the NCC that would be maintained. The NCC PWP/TREP also includes the addition of 19 new auxiliary lane segments located throughout the corridor.

### Bridge Replacement

The I-5 corridor crosses five lagoon systems within the NCC. As such, the bridges that cross these lagoons need to be upgraded or replaced as part of the project. One of the five existing highway lagoon bridges (crossing San Dieguito Lagoon) is relatively new, and the proposed changes to this bridge under the NCC PWP/TREP do not require replacement of the existing bridge. The remaining four lagoon bridges, including the I-5 crossings at San Elijo, Baticuitos, Agua Hedionda, and Buena Vista Lagoons, would be replaced due to the age of the existing bridge and increased width required for the project. Los Peñasquitos Lagoon is not crossed directly by the I-5 and recent improvements to the highway in proximity to this lagoon system require that the existing bridge over Carmel Creek only be slightly widened. In addition, Los Peñasquitos Creek and Soledad Creek (which feed into Los Peñasquitos Lagoon) would be crossed by two new HOV/Express Lanes flyovers at the I-5/I-805 merge.

### Over and Undercrossing Improvements

To accommodate highway widening, most corridor overcrossings and undercrossings would need to be replaced or widened. This is in addition to the lagoon bridges previously identified. Structure rehabilitation and upgrading presents the opportunity to upgrade and reconfigure local interchanges and to improve pedestrian and bicycle circulation. In total, the NCC PWP/TREP includes the replacement of 22 existing overcrossings (not including lagoon bridges), 11 existing undercrossings, and the construction of 4 new overcrossings (not including Direct Access Ramps) and one new undercrossing.

### Interchange Improvements

In order to adapt to the widened highway footprint and to improve vehicular, pedestrian and bicycle circulation, local interchange ramps would undergo modifications. While the basic

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configuration would generally remain, the number of lanes and alignment would be modified to ensure that they accommodate expected traffic volumes and conform to current design standards. At some interchanges, ramps would be modified to address expected increases in local traffic and resulting accessibility needs. Most ramps would have HOV bypass lanes.

### Direct Access Ramps (DARs)

The NCC PWP/TREP includes two DARs that would allow direct access into the Express Lanes from overcrossings or tunnels and would be located near Voigt Drive (San Diego) and Manchester Avenue (Encinitas). The Manchester Avenue DAR would feature a park-and-ride facility and provide direct access not only to the Express Lanes for HOVs, but also to the proposed San Elijo Multi-Use Facility serving recreational facilities near San Elijo Lagoon as well as providing bike storage and EV charging capabilities. The San Elijo Multi-Use Facility also includes a transit station that offers future opportunities for a Bus Rapid Transit (BRT – see details in next section) as well as other transit programs with access directly to the Express Lanes for potential future transit uses originating along El Camino Real.

### Park-and Ride Improvements

The I-5 highway corridor currently contains several park-and-ride lots that facilitate carpooling and other ride-sharing activities. Many also serve as parking and staging areas for corridor recreational facilities such as lagoon trails and upland resources. These park-and-ride lots encourage alternative transportation modes and contribute to improved traffic conditions on I-5, and could help facilitate future transit services.

Three of the existing park-and-ride facilities are planned for improvement (Carmel Valley, Birmingham, and La Costa), including maximization of available space for parking, and are classified as community enhancement projects, and a new park-and-ride facility is proposed as a part of the Manchester Avenue DAR. Altogether, the number of park-and-ride spaces available for commuters along I-5 will increase by at least 43% with implementation of these planned new and enhanced park-and-ride facilities, and could increase even more, depending on the ultimate design of each facility.

### Intelligent Transportation System (ITS) Features

The corridor already has some ITS elements in place that would be supplemented by further improvements as part of the Transportation Management System improvement plan included as a part of the NCC PWP/TREP. These elements manage congestion using historical data, real-time information, and control and advanced communication networks to provide information about system operations to users and operators so they can make informed travel decisions. Additionally, ITS features improve the efficiency of existing infrastructure and reduce the need for major capacity increasing projects. Within the NCC PWP/TREP, multiple ITS components are planned, including:

- Twenty-seven miles of new fiber-optic cable that would relay real-time traffic information to highway operators and to signage along the corridor.

- Five new changeable message signs that would convey information to motorists, including traffic conditions, alternate routes, special event, or traffic incident information. For Express Lanes, these signs would also display applicable tolls for SOV users.
- Between 15 and 20 new closed circuit television cameras that would provide visual analysis of the freeway and congestion and security surveillance.
- Two new highway advisory radio channels that would provide drivers with real-time information about highway conditions to allow for educated travel decisions.
- New vehicle detection systems at five locations (nine total) that would provide traffic managers real-time information about how the freeway is operating.
- Arterial interconnect signals on El Camino Real that would assist in maximizing the capacity of an existing facility.
- Ramp meters that would create consistent and even flow and develop a coordinated corridor-wide ramp metering system for all on-ramps within the corridor
- Arterial signal timing enhancements.

#### Retaining Walls and Sound Walls

Multiple retaining walls have been proposed as a part of the NCC PWP/TREP along the I-5 alignment. Retaining walls would be used to reduce property acquisition needs, stabilize slopes, minimize impacts and accommodate engineered structures. In general, Caltrans' standard retaining walls (Type 1 through Type 5) or crib walls may be used without special design. Non-standard retaining walls may be utilized in suitable locations, but would require additional support work and design during the Specific Project design phase. Sound walls may be recommended as described in the *I-5 NCC Project Final EIR/EIS* (Section 3.15, October 2013) which describes the sound walls required under a different, and significantly larger highway footprint (10+4 with Buffer Alternative) that would therefore be revised during final design. Following the final noise studies and prior to the Notice of Impending Development process, the location and size of sound walls and retaining walls will be reevaluated for feasibility, reasonableness, and impacts to coastal character.

#### Gateway Features

Along the I-5 highway corridor, several key interchanges serve as the primary entryways to the region as well as local communities. The planned highway improvements within the NCC PWP/TREP include gateway features at these locations, which would contain artistic elements and other design treatments to enhance views, increase natural light, and create an inviting multimodal atmosphere around the interchange crossing. They would provide bicycle and pedestrian-friendly improvements on the local streets and integrate human-scale elements such

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as lighting and material textures. Gateway Features would be designed to be in context with the surrounding character of the corridor and would not block or disrupt views to coastal resources.

### **Other Transit Improvements**

#### Bus Rapid Transit (BRT)

A BRT route would use the new I-5 Express Lane facility as identified in the SANDAG 2050 RTP. BRT combines stations, enhanced vehicles, ITS, and priority running ways into a premier rubber-tire transit alternative with fast, frequent, and high-quality service. The first planned service for I-5, identified in the 2050 RTP as Route 653, is a reverse-commute BRT that targets the peak-period commute trip between the high-density Mid City residential area in central San Diego and the Palomar Airport Road business park in the NCC. It would travel via Kearny Mesa/I-805 and the I-5 HOV/Express Lanes. Buses are planned to run at 15-minute intervals during the peak period by 2035, or sooner based on demand. Although other routes have not been planned yet, additional BRT or traditional bus routes could use the Express Lanes and reap the same travel-time and reliability benefits. Such operations would be facilitated by the proposed DARs at Voigt Drive and Manchester Avenue, and by the new and enhanced park-and-ride facilities identified within the NCC PWP/TREP (see above Highway Improvements section).

#### Enhanced Coast Highway Bus Service

The NCC PWP/TREP includes Coast Highway bus transit enhancements that would be integrated and coordinated with multimodal improvements planned for Coast Highway by the cities along the corridor. The planned service would operate year-round at 10-minute frequencies all day, providing a higher-quality local transit option to complement the existing network of local bus routes in the corridor, and is scheduled to be implemented during the Mid-Term Phase (2021-2030). The envisioned Coast Highway enhanced bus transit would provide frequent service and fast, reliable travel times through a menu of potential roadway features to facilitate transit operations, such as fewer stops, dedicated transit lanes, traffic-signal priority, and intersection queue jumps (short dedicated lanes approaching intersections that would allow buses to advance to the intersection ahead of other vehicles stopped at traffic signals). Ongoing coordination among SANDAG, NCTD and the coastal cities will define the optimum transit service and infrastructure enhancements within the Coast Highway multimodal corridor context.

### **Bicycle, Pedestrian and Recreational Improvements**

#### North Coast Bike Trail

A key component of the NCC PWP/TREP is the proposed North Coast Bike Trail, a new facility that would run the entire, 27 mile length of the NCC, roughly parallel to the highway. It would consist of both separated and shared bicycle facilities, located partially in the I-5 right-of-way and partially on adjacent city streets. Caltrans is continuing to work with local jurisdictions to determine the preferred alignment for this shared facility, with a preliminary alignment shown in [Exhibit 13](#); many segments are planned to be within, or immediately adjacent to, the

community enhancement projects described in the NCC PWP/TREP. As part of the highway construction, Caltrans would complete those portions of the bikeway that fall within the I-5 right-of-way, and coordination with local jurisdictions would ensure completion of the remaining segments.

### Coastal Rail Trail

The Coastal Rail Trail is a dedicated bicycle facility in the region's coastal corridor, with most segments in or adjacent to the LOSSAN rail right-of-way. Once fully completed, the Coastal Rail Trail would provide a continuous north-south bicycle route—mostly comprising Class I facilities—through the NCC with direct access to coastal resources and recreational facilities. Caltrans and SANDAG have identified opportunities to complete approximately 7 miles of the Coastal Rail Trail within the LOSSAN rail right-of-way as part of the NCC PWP/TREP improvements. These segments also will contribute to the completion of the California Coastal Trail, a planned 1,200-mile public right-of-way spanning the entire California coastline. The Coastal Rail Trail segments planned in the NCC PWP/TREP—all of which are immediately adjacent to the coast—will support the development of the California Coastal Trail in the NCC by providing additional options for non-motorized travel along the coast. The Coastal Rail Trail segments included for permitting in the PWP/TREP are:

- *Chesterfield Drive to G Street (Encinitas)*: Construct approximately 1.7 miles of dedicated bicycle facility in the LOSSAN right-of-way. Partially overlaps with LOSSAN San Elijo Lagoon Double Track project.
- *G Street to Leucadia Boulevard (Encinitas)*: Construct approximately 1.7 miles of dedicated bicycle facility in the LOSSAN right-of-way. Partially overlaps with LOSSAN Batiquitos Lagoon Double Track project.
- *Leucadia Boulevard to La Costa Avenue (Encinitas)*: Construct approximately 1.3 miles of dedicated bicycle facility in the LOSSAN right-of-way. Overlaps with LOSSAN Batiquitos Lagoon Double Track project.
- *Poinsettia Station to Palomar Airport Road (Carlsbad)*: Construct approximately 0.9 mile of dedicated bicycle facility in the LOSSAN right-of-way.
- *Palomar Airport Road to Cannon Road (Carlsbad)*: Construct approximately 0.5 mile of dedicated bicycle facility in the LOSSAN right-of-way.
- *Cannon Road to Tamarack Avenue (Carlsbad)*: Construct approximately 1.2 miles of dedicated bicycle facility in the LOSSAN right-of-way.

### Rail Crossings

Several grade-separated crossings of the LOSSAN rail corridor are planned in the NCC PWP/TREP exclusively for bicycles and pedestrians and are identified below. In addition to these exclusive bicycle and pedestrian crossings, three additional grade separations of the

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LOSSAN rail corridor are planned at local roadways, and will include bicycle and pedestrian improvements (described in the following Vision Phase section).

- *Coast to Crest Trail Crossing (Del Mar):* Construct a new grade-separated crossing of the LOSSAN corridor at the Coast to Crest Trail, in the general proximity of the Del Mar Fairgrounds.
- *Hillcrest Drive Pedestrian Undercrossing (Encinitas):* Construct a new grade-separated crossing of the LOSSAN rail corridor at Hillcrest Drive in Encinitas. This crossing would provide connections to the Coast Highway local bicycle and pedestrian routes, the California Coastal Trail, and the planned Coastal Rail Trail segment from La Costa Avenue to Chesterfield Drive as proposed in the city's Bikeway Master Plan. This is one of four grade-separated LOSSAN crossings being constructed in Encinitas, with the other three permitted prior to the NCC PWP/TREP.
- *Chestnut Avenue LOSSAN Crossing (Carlsbad):* Construct a new grade-separated crossing of the LOSSAN rail corridor for bicycles and pedestrians at Chestnut Avenue in Carlsbad. It would connect to the Coastal Rail Trail (both existing and planned segments), the bicycle and pedestrian routes on Coast Highway, and the California Coastal Trail.
- *Harbor Drive LOSSAN Crossing Bicycle/Pedestrian Improvements (Oceanside):* Improve the existing undercrossing of the LOSSAN rail corridor located north of the San Luis Rey River, at the west end of the Harbor Drive parking lot. This project would provide bicycle and pedestrian access to coastal resources via an undercrossing that currently accommodates automobiles only.

### Highway Crossings

Local roads cross I-5 at 32 locations within the NCC. Many of these crossings do not have standard bicycle and pedestrian facilities and therefore do not facilitate non-motorized modes crossing the freeway. As a part of the NCC PWP/TREP, pedestrian and bicycle facilities would be upgraded as overcrossings are rebuilt and undercrossings are widened to accommodate additional lanes on I-5. Sidewalks on 20 of these crossings would be 10 to 12 feet wide on each side of the street. Sidewalks would be at least 15 feet wide at six crossings: Voigt Drive (San Diego), MacKinnon Avenue (Encinitas), California Street, Brooks Street, Mission Avenue, and Bush Street (Oceanside). These enhanced crossings would improve access to schools, parks, and transit stations, and provide stronger connections between the inland and coastal areas of the NCC.

### Community Enhancements

The NCC PWP/TREP also includes a package of community enhancement projects that extends beyond highway and rail crossings that would further improve access to coastal resources, recreational facilities, transit stations, and corridor activity centers. The Caltrans *I-5 NCC Project Final EIR/EIS* and the *I-5 North Coast Community Enhancement Plan* have identified these other

community improvements (such as trails, parks, and parking) adjacent to the I-5 highway and LOSSAN rail rights-of-way that would be implemented as part of the NCC PWP/TREP. Some of these designated community enhancements are located at the rail and highway crossings discussed above, while others are parallel to I-5 or outside the highway right-of-way. A complete list of these included community enhancement projects is included in Chapter 4 of the NCC PWP/TREP and also depicted within [Exhibit 13](#) of this staff report. Additional community enhancement projects may be incorporated into the NCC PWP/TREP, if requested by the local government and in consultation with Caltrans/SANDAG, the Coastal Commission, and other affected agencies and stakeholders.

## **Natural Resource Improvements**

### Water Quality

A wide range of NCC PWP/TREP projects is planned to restore and protect water quality and biological productivity in the NCC through implementation of treatment Best Management Practices (BMPs) for both the new and existing impervious pavement. Each portion of the corridor project is furnished to the maximum extent practicable with the best available technology for treatment of stormwater runoff, and in compliance with the 2013 Caltrans Statewide Storm Water Permit issued by the Water Resources Control Board. The program will comprehensively address water quality improvements throughout the corridor in relation to each receiving water body in the NCC. Treatment BMPs would consist of permanent measures to improve water quality during the operation of the facility after completion of the construction. Caltrans approved treatment BMPs include biofiltration systems, infiltration devices, detention devices, dry weather flow diversions, gross solid removal devices, media filters, and wet basins. Preliminary locations for bioswales and detention basins are identified in the NCC PWP/TREP. The future Specific Project design development processes required by the NCC PWP/TREP likely result in expanded stormwater runoff treatment opportunities beyond what is currently described in the document (see Water Quality section below).

### Resource Enhancement and Mitigation Program (REMP)

The REMP, as incorporated within the NCC PWP/TREP, was developed in coordination with resource agency representatives and employs a combination of measures to mitigate for coastal resource impacts resulting from implementation of the NCC transportation improvements and community enhancement projects. The suite of projects included within the REMP was identified as the optimal group of restoration opportunities within the NCC to maximize benefits to coastal resources on a regional level ([Exhibit 17](#)). Few opportunities exist in the NCC for large-scale land acquisitions that could allow traditional ratio-based mitigation efforts to be focused in distinct areas with the goal of establishing large tracts of contiguous and diverse habitat areas within the corridor. However, the NCC is home to six major lagoon systems, which represent some of southern California's most significant natural resource areas. The NCC's lagoon systems and their habitats are biologically unique and cannot be replicated elsewhere. As such, opportunities to protect the NCC's lagoon systems from potential future degradation and to enhance and expand habitat within these systems requires comprehensive solutions with mitigation efforts focused on ecosystem-wide enhancements.

The REMP provides an opportunity to assess proposed transportation infrastructure and community enhancement improvements with varying constraints and opportunities located within the NCC and then provide prioritized restoration efforts at the same regional level. Such mitigation projects include creation and significant restoration of wetland habitats, facilitation of large-scale lagoon enhancement projects, restoration and preservation of upland habitat areas, restoration of riparian habitat areas within inland waterways, and endowments established to maintain lagoon inlet function. Funding is also provided through the REMP to staff a Scientific Advisory Panel to better inform the applicants, the REMP Working Group (composed of resource agency representatives) and the Commission, on the ongoing status and success of the mitigation program.

- *Habitat Establishment and Significant Restoration:* These opportunities include compensatory mitigation sites that have significant establishment and/or restoration components, and would generally result in a net gain in habitat area and/or functions and services. This net gain would directly offset permanent wetland and/or upland ESHA impacts at a 1:1 ratio, provided that the subject mitigation plans are implemented and performing at identified standards ahead of construction impacts associated with NCC PWP/TREP transportation infrastructure and community enhancement projects. For waters of the U.S., waters of the state, or other aquatic habitats, establishment is the manipulation of the physical, chemical, or biological characteristics to create an aquatic resource that did not previously exist at an upland site resulting in a gain in aquatic resource area and functions. For both wetland and upland habitats, restoration involves the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded resource. Restoration efforts result in a gain in habitat function and habitat area.
- *Large-Scale Lagoon Enhancement:* In the context of the regional lagoon systems of the NCC and their proximity to the ocean, the intent of the large-scale lagoon restoration funding is to improve the ecological health and hydrological connectivity and to enhance critical coastal resources and habitats. These large-scale lagoon restoration projects aim to provide comprehensive lagoon restoration through a suite of possible restoration alternatives, which would be facilitated by planned infrastructure improvements where the transportation corridors cross the lagoon systems and would include: hydrological improvements to the lagoon mouth opening, necessary lagoon restoration, and funding for ongoing maintenance into the future. The large-scale lagoon restoration projects would result in the restoration and enhancement of an integrated ecosystem, providing improved habitat for fish, birds, and benthic organisms. These efforts would not only serve to enhance and restore water quality in the corridor, but they would also serve to restore, enhance, and protect different habitat types within the lagoon ecosystem.
- *Habitat Preservation:* These REMP projects include the early acquisition of parcels containing high-quality upland ESHA, wetland or other aquatic resources, or parcels where enhancement of habitat can occur within the NCC Coastal Zone area, and which can be permanently preserved from future development.

- *Lagoon Inlet Management:* The REMP includes an endowment component that is intended to increase the capacity for long-term management of the Batiquitos and Los Peñasquitos Lagoons and support stewardship of these resources in perpetuity. This includes, but may not be limited to, funding for maintenance of lagoon inlets and channels deemed necessary to sustain tidal and fluvial flows and reduce sedimentation within these lagoon systems. To ensure that endowment funding is effectively managed, a Long-Term Management Plan indicating the ecological priorities and associated endowment contributions would be created, reviewed, and approved by the resource agencies and the lagoon manager.
- *REMP Technical Support:* The REMP provides funding for a Scientific Advisory Committee made up of independent scientists. The committee will provide technical advice regarding the design, implementation, and monitoring of mitigation and enhancement projects described in this REMP. Funding for the committee would cover the time, expenses, and materials needed by scientists to complete their tasks. The committee will be directed by the REMP Working Group and will oversee the development or modification of ecological performance standards, monitoring methodology (techniques and timing), and actual monitoring of site performance.

### **Unconstrained Vision Phase**

The NCC PWP/TREP includes a number of projects identified as a part of the “Unconstrained Vision Phase” that are projected to be implemented between 2041–2050. Given the uncertainty related to the design alternatives, locations, and alignments associated with the projects in this phase, future environmental review and amendment to the NCC PWP/TREP will be required. The projects identified within the Unconstrained Vision Phase include the following:

- *Del Mar Tunnel:* The SANDAG 2050 RTP includes a rail tunnel to move the existing rail alignment away from the Del Mar bluffs, which are susceptible to failure and unable to accommodate double-tracking due to significant excavation, stabilization and ongoing maintenance needs of such a facility. The alignment of the tunnel is undecided and will be determined through an alternatives analysis. There are two alternatives included in the LOSSAN Final Program EIR/EIS. The first would run underneath Camino Del Mar where tracks would then connect with the existing LOSSAN alignment across Los Peñasquitos and San Dieguito Lagoons. The second alternative tunnel would run under I-5 and daylight along the southern bluffs of the San Dieguito Lagoon. Tracks would reconnect with the existing LOSSAN rail corridor at-grade near the Del Mar race track. Should either of these tunnel options be selected, the existing rail track on the Del Mar bluffs would be removed from service.
- *Peñasquitos Double Track (San Diego):* Construct 1.7 miles of a second main track and replace bridges through Peñasquitos Lagoon from Control Point (CP) Torrey to a new CP Carmel Mountain. This project would depend on the ultimate alignment of the Del Mar Tunnel (This project is identified in the “Unconstrained Vision” Phase).

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- *Leucadia Boulevard Grade Separation (Encinitas):* An undercrossing of Leucadia Boulevard (MP 236.5) in Encinitas.
- *Two Additional (location to be determined) Rail Grade Separations:* Two additional grade separations between surface streets and the LOSSAN rail corridor in the NCC are planned in the SANDAG 2050 RTP. The locations of these grade separations will be determined as part of the regional planning process and may be included in the NCC PWP/TREP.

### **I-5 Interchange Projects w/ Ongoing Environmental Review**

There are two major highway interchange projects that will undergo an environmental review process outside of the *I-5 NCC Project Final EIR/EIS (October 2013)*. Given that a preferred alternative has not yet been selected for these projects, these projects would be subject to future PWP amendment and a NOID to ensure consistency with the approved PWP, or Caltrans may choose (in consultation with the Coastal Commission and the affected cities) to submit a coastal development permit application to the City.

- *I-5/SR-56 Interchange:* The Interstate 5/State Route 56 Interchange Project is proposed to improve the traffic operations between these two highway systems. Currently direct on and off ramps only connect the westbound SR-56 with the south I-5, and the north I-5 with the eastbound SR-56. Local streets and the surrounding communities experience increased demand and congestion during peak hours from I-5 and SR 56 traffic.
- *I-5/SR-78 Interchange:* The Interstate 5/State Route 78 Interchange Project is proposed to address existing congestion at the I-5/SR 78 interchange. Five alternatives are under consideration, ranging from No Build to an interchange with direct freeway-to-freeway connectors and Direct Access Ramps (DARs).

## **C. AIR QUALITY AND GREENHOUSE GAS EMISSIONS**

Section 30253 of the Coastal Act states:

*New development shall do all of the following: (...)*

*(c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.*

*(d) Minimize energy consumption and vehicle miles traveled. (...)*

Section 30253 of the Coastal Act requires that new development minimize energy consumption and vehicle miles traveled (VMT) and that new development is consistent with air quality requirements, including restrictions on greenhouse gas (GHG) emissions.

As discussed in greater detail in the “PWP/TREP Description & Context” section of this staff report, the demand for travel in San Diego County and the NCC project area, as well as adjacent

regions accessed by the I-5 highway and LOSSAN rail corridor, has increased at a faster rate than population growth, with people making more and longer trips today than in the past. As a result, the NCC's transportation infrastructure, the majority of which was designed and built decades ago, has become increasingly strained and congested. Both the roadways and rail corridor experience regular congestion, especially during peak periods and weekends, as automobiles and locomotives idle and operate at inefficient speeds for longer periods of time. Congestion of the corridor is anticipated to increase as both population and travel demand continue to grow, with trips taken on a daily basis by individuals (daily person-trips) in the corridor forecast to grow from 2.5 million today to 3.27 million in 2030, an increase of 770,000 daily trips, or approximately 30%.<sup>7</sup>

One of the primary goals of the proposed NCC PWP/TREP is to increase the transit mode share, or percentage of travelers using transportation modes other than single occupancy vehicles (SOVs), to 10-15% for peak-period commute trips, which would be a major improvement from the current transit mode share of 2-3%, as well as minimizing VMT, energy consumption, and emissions of pollutants. This would be achieved by concentrating anticipated growth in travel on a combination of different travel modes, and by coordinating and improving connectivity between these various travel options. The suite of different projects would result in an enhanced and expanded transportation corridor with improved integration that would encourage shifts away from SOVs to carpooling, rail, and transit, as discussed in greater detail below.

The proposed addition of two High-Occupancy Vehicle (HOV) or "Express Lanes" in each direction would maximize the carrying capacity of the I-5 by prioritizing HOVs, such as carpools, vanpools, and buses, over SOVs. Restricting these additional lanes to certain vehicles would reduce travel times and improve trip time reliability for HOV traffic that would be able to utilize these lanes, encouraging commuters to switch from SOVs to ridesharing. The anticipated shift in travel mode from SOVs to HOVs would result in fewer vehicle trips and, hence, fewer vehicle miles traveled and fewer emissions of all pollutants. However, the increase in speeds for both Express Lanes and general purpose lanes would have different effects for various pollutants and could even increase emissions of certain pollutants. Additionally, if people who previously used transit switch to carpools, thereby increasing the number of vehicles on the road, it could result in additional emissions that would partially offset the benefits of vehicle trip reduction that the Express Lanes are designed to provide. However, in general, the proposed Express Lanes in combination with the other transportation improvements are anticipated to reduce emissions of overall pollutants.<sup>8</sup>

Another component of the NCC PWP/TREP is the use of new and expanded park-and-ride facilities to encourage drivers to share car trips, thereby reducing VMT and emissions of all pollutants associated with driving. The proposed construction and expansion of park-and-ride facilities adjacent to I-5 would ensure adequate parking supplies for people who park their vehicles at these lots and then join a carpool, vanpool, or transit service. Since the use of park-and-ride facilities requires individuals to drive to them, this component would not reduce the number of vehicle cold starts that are taken, during which time the highest emission outputs of

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<sup>7</sup> *San Diego NCC-CSMP (Chapter 4)*, July 2010; *SANDAG/Caltrans Series 12 Model*, November 2011.

<sup>8</sup> I-5 North Coast Corridor Project Final EIR/EIS

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carbon monoxide (CO), nitrogen oxides (NOx), and volatile organic compounds (VOCs) are produced; however, the enhanced interconnectivity between transit stations and park-and-ride facilities developed within the NCC PWP/TREP would facilitate improved access to these locations. Thus, while this component of the project is not as effective at reducing emissions of pollutants as other transportation demand strategies that reduce vehicle trip-making entirely, it is an important element in supporting the project's overall congestion-relief efforts, as well as ridesharing.

The proposed enhancements to the public transit network and services in the NCC, including commuter rail, bus rapid transit (BRT), and Enhanced Bus services, would also provide more viable and attractive travel options, which would encourage shifts from SOVs to transit, thereby reducing energy consumption and emissions. Transit's ability to move large volumes of people results in more energy efficient travel and less pollution compared to travel by automobile, especially during peak commute hours when transit vehicles carry their heaviest loads. Currently, more than half of the rail corridor is single-tracked, which causes bottlenecks where locomotives idle to allow for passing trains and operate at inefficient speeds. These bottlenecks and speed restrictions result in increased emissions and energy use that will continue and increase under the No Build Alternative. Thus, the double-track improvements proposed as part of the NCC PWP/TREP are necessary to increase capacity and allow for standard speeds along the rail corridor, as well as to reduce idling, thereby decreasing locomotive emissions. Station and parking improvements at corridor rail stations would also facilitate increased passenger capacity, enhanced quality of service and improved access to coastal rail.

In addition to rail, a new all-day enhanced bus route along Coast Highway and bus rapid transit (BRT) service on I-5 would help to relieve congestion within the NCC. As shown in the Phasing Plan ([Exhibit 5](#)), enhancements to the Coast Highway bus service would occur during the Mid-Term Phase (2021-2030) and BRT service would be implemented during the Long-Term Phase (2031-2040). The enhanced bus service would provide higher speed, limited-stop service through the use of roadway priority treatments such as traffic signal priority, intersection queue jumps, and dedicated transit lanes. Operating at ten-minute frequencies all day, it would provide a higher-quality local transit option to complement the existing network of local bus routes in the corridor. Additionally, a new "reverse commute" BRT service on I-5 would serve peak-period commute trips between the high-density Mid City residential area in central San Diego and the Palomar Airport Road business park, but is wholly dependent upon the construction of Express Lanes included within the NCC PWP/TREP.

The NCC PWP/TREP would improve bicycle and pedestrian network connectivity by providing links to the region's major bicycle and pedestrian facilities, including the Coastal Rail Trail as well as the new NCC Bikeway. This enhanced and expanded network would improve access, encourage non-motorized travel, and reduce VMTs and emissions of all pollutants. The NCC PWP/TREP includes bicycle paths and lanes, bicycle racks or lockers, sidewalks, new grade separated crossings across existing infrastructure, pedestrian urban design enhancements, bicycle share programs, and bicycle incentives, which would result in improved connectivity and encourage shifts from SOVs to transit service, bicycling, or walking. Emissions reductions from this component of the PWP/TREP are likely to be small given limited shifts from driving and the relatively short trip distances associated with bicycling/walking; however, each trip shift from an

SOV to a bicycle or walking would result in a 100% reduction in vehicle emissions for that trip, and each trip shift from an SOV to a combination of bicycle/walking and transit would result in a reduction of vehicle cold starts during which time the highest emission outputs of CO, NO<sub>x</sub>, and VOCs are produced.

In addition to the aforementioned improvements, Caltrans and SANDAG have adopted several operational strategies as part of the NCC PWP/TREP that would increase efficiency of the roadway system, resulting in energy savings. Transportation Demand Management strategies such as ride-matching services, vanpool subsidies, and other incentives offered through SANDAG's iCommute program would encourage travelers to shift from SOVs to carpooling, transit, and other alternative modes of travel. Transportation Systems Management is a strategy that increases highway capacity and includes construction of new auxiliary lanes on the outside of the freeway that connect on- and off-ramps and allow for acceleration, deceleration, and merging – often the causes of traffic bottlenecks and congestion. Intelligent Transportation Systems features include real-time information for drivers that allows them to make informed decisions on travel routes and corridor-wide ramp metering to help regulate the flow of traffic. Additional detection, monitoring, and communications infrastructure would allow for incident responders such as Freeway Service Patrol to reduce traffic congestion by efficiently removing disabled vehicles from the freeway, decreasing the potential for additional incidents caused by onlookers and the resulting stop-and-go traffic. Together, these strategies would help eliminate or minimize bottlenecks in the transportation system, thereby minimizing emissions of pollutants.

The California Air Resources Board (CARB) is the state air quality agency and the San Diego Air Pollution Control District (SDAPCD) is the regional air pollution control district that has jurisdiction over the proposed NCC PWP/TREP improvements. As required by Coastal Act Section 30253(c), the proposed NCC PWP/TREP is necessary in order for Caltrans and SANDAG to comply with all applicable local and state laws, ordinances, regulations, and standards pertaining to air quality, including CARB and SDAPCD requirements. The California Clean Air Act requires areas that are designated nonattainment of California Ambient Air Quality Standards (CAAQS) for O<sub>3</sub>, CO, SO<sub>2</sub>, or NO<sub>2</sub> to prepare and implement plans to attain the standards by the earliest practicable date.<sup>9</sup> CAAQS for these pollutants have been attained in the San Diego Air Basin (SDAB); however, the State of California as a whole remains a designated nonattainment area for O<sub>3</sub> and consequently the SDAPCD prepared and adopted the Regional Air Quality Strategy Revision, dated April 22, 2009, for reducing O<sub>3</sub> precursor emissions (VOCs and NO) within the San Diego Air Basin. Therefore, the future developments included in the NCC PWP/TREP are required to be consistent with the emission reduction strategies in the Regional Air Quality Strategy.

In addition, the passage of Senate Bill 375 (SB 375) in 2008 provided a means to realize Assembly Bill 32's (AB 32) goal to reduce GHG emissions from cars and trucks in California to 1990 levels by 2020. As part of SB 375, CARB set targets for passenger vehicles and light-duty trucks in the San Diego region that call for a 7% per-capita reduction in GHG emissions by 2020 and a 13% reduction by 2035. Since a significant portion of GHG emissions come from transportation sources, these targets heavily influenced the composition of transportation projects

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<sup>9</sup> Health and Safety Code Section 40911(a)

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and the design of the transportation network in the SANDAG 2050 Regional Transportation Plan (2050 RTP) which includes the proposed NCC PWP/TREP improvements. Together, with the regional land use policies and transportation investments contained in the 2050 RTP, the NCC PWP/TREP is an integral component necessary to achieve the reductions in GHG emissions required by AB 32 and SB 375.

Energy consumption associated with constructing the NCC PWP/TREP improvements would result in one-time energy costs and temporary increases in air pollutant emissions in the project area. Construction emissions result from material processing, on-site construction equipment, workforce travel to and from the project site, traffic delays or detours caused by construction, and fugitive dust from construction activities. However, construction-phase best management practices (BMPs) have been incorporated to minimize energy consumption and to ensure the project's consistency with SDAPCD and CARB requirements. The use of alternative fueled vehicles, recycling of construction debris, implementation of better traffic management, and coordination/phasing of construction activities along the LOSSAN and I-5 transportation corridors would minimize energy consumption and emissions during the construction phase. In addition, with innovations such as longer pavement life and changes in construction materials, the GHG emissions produced during construction can be mitigated by longer intervals between maintenance and rehabilitation events.<sup>10</sup>

There is a direct relationship between congestion, on the one hand, and energy consumption and emissions of pollutants, on the other – as congestion within the corridor increases, so does energy consumption and emissions of pollutants, thereby reducing air quality ([Exhibit 9](#)).<sup>11</sup> In 2010, on-road transportation represented almost 50% of GHG emissions in the San Diego region.<sup>12</sup> On-road transportation's contribution to GHG emissions depends on a few main factors, including the types of vehicles on the road; types of fuel used (gasoline, diesel, or alternative fuels); and the time, distance, and efficiency of vehicle travel. While certain strategies to reduce GHG emissions, such as improved fuel economy and new vehicle and fuel types, are determined at the state, federal or global levels, other strategies, such as improving efficiency and reducing demand on the transportation system, are identified at the local level and would be achieved through the implementation of proposed NCC PWP/TREP improvements.

Travel demand forecasts project a significant increase in VMT on the I-5 highway regardless of whether the proposed NCC PWP/TREP improvements are implemented or not; however, implementation of the NCC PWP/TREP improvements would minimize these increases in VMT compared to the other Build alternatives considered in the Final EIR (e.g., 10 general purpose lanes + 4 express lanes).<sup>13</sup> It should be noted that the proposed improvements would still increase VMT on the I-5 highway 4% to 9.9% above the level of the No Build alternative projection ([Exhibit 10](#)). However, Section 30253(d) of the Coastal Act provides that new development should *minimize* VMT. Although the No Build alternative would result in fewer

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<sup>10</sup> I-5 NCC Project Final EIR/EIS (Section 2.2), October 2013; *Prioritization of Transportation Projects for Economic Stimulus with Respect to GHGs*, UC Davis/Caltrans, 2009.

<sup>11</sup> *Traffic Congestion and Greenhouse Gases*, University of California Transportation Center, Access Magazine No. 35, Fall 2009.

<sup>12</sup> *SANDAG 2050 RTP Final EIR (Chapter 4)*, October 2011.

<sup>13</sup> SANDAG/Caltrans Series 11-based Micro-Simulation Model, August 2010; SANDAG/Caltrans Series 12 Model, November 2011.

VMT on I-5, the proposed improvements represent the alternative that best meets the transportation objectives for the NCC while also achieving other energy consumption requirements of the Coastal Act and minimizing VMT as compared to the other Build alternatives. Further, the projected increase of VMT on I-5 does not take into account the corresponding decrease in VMT on local arterials within the NCC. For example, Coast Highway and El Camino Real, the two primary north-south alternatives to I-5, were projected to experience reductions in VMT of 17% and 10%, respectively, by 2030 under the Build alternative as compared to the No Build alternative.<sup>14</sup>

Section 30253(d) of the Coastal Act requires that new development minimize energy consumption and VMT; however, vehicle hours traveled (VHT), average vehicle speed, and vehicle hours of delay (VHD) are also proxies for measuring vehicle energy consumption. VMT is the total number of miles traveled by all vehicles in a given period of time. VHT is the total number of hours vehicles spent traveling in a given period of time and is directly related to traffic volumes, levels of traffic congestion, and the resulting average vehicle speed (miles per hour [mph]). VHD has an inverse relationship to vehicle speed and represents the total number of hours vehicles spent traveling below 35 mph on the highway in a given period of time. Since VMT is a measure of the amount and extent of travel in the area of concern, an increase in VMT can be expected with the addition of new corridor transportation facilities proposed as part of the NCC PWP/TREP. Once a transportation improvement is implemented, it is not unusual for VMT to increase as traffic seeks out the new, more optimum route that may be faster or more reliable. However, simultaneous decreases in VHT and VHD, and the corresponding increase in average vehicle speed, indicate a more efficient network and less congestion. Reduced congestion results in an associated reduction in vehicle-generated emissions that would otherwise occur during stop-and-go traffic conditions. Therefore, although relatively small increases in VMT are projected as part of this project on I-5 (approximately 4% to 9.9%), VHT and VHD are expected to decrease and should also be examined to obtain an accurate analysis of air quality impacts associated with a congested transportation corridor.

Stop-and-go congestion results in vehicles that idle for longer periods of time, consuming more energy and emitting more pollutants than vehicles operating in free-flowing traffic conditions, resulting in increased emissions and reduced air quality – a condition that worsens as congestion increases ([Exhibit 9](#)). Fuel consumption increases by about 30% when average speeds drop from 30 mph to 20 mph, while a drop from 30 mph to 10 mph results in a 100% increase in fuel use. Automobiles are more efficient when operating at moderate and steady speeds (i.e., little to no VHD) and are most inefficient when operating at speeds of less than 35 mph – when traffic is not only slow, but also generally stop-and-go.<sup>15</sup> Thus, the effects of transportation congestion on air emissions within the corridor can be substantial. A report commissioned by the State of California estimated that approximately 10% of all on-road fuel consumed is a result of congestion.<sup>16</sup> Congestion both decreases vehicle energy efficiency and increases VHT and VHD, leading to increased energy consumption.

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<sup>14</sup> *I-5 NCC Corridor System Management Plan* (Chapter 8), August 2010.

<sup>15</sup> *I-5 NCC Project Final EIR/EIS (Section 4.6)*, October 13.

<sup>16</sup> *Energy Efficient Report*, California Energy Commission, 1990.

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Compared to the No-Build Alternative, the combination of different transportation improvements proposed as part of the NCC PWP/TREP would provide energy, air pollutant, and emissions benefits by reducing overall congestion and demand on the corridor's transportation system. To estimate the potential beneficial or negative effect of the proposed project on San Diego regional GHG levels, the CARB EmissionFactor (EMFAC) 2007 vehicle emissions model for the San Diego air basin was used to calculate CO<sub>2</sub> emissions for the San Diego metropolitan area with and without the proposed project. Next, in order to determine regional GHG emissions, the I-5 Northcoast Series 11 GHG Regional Effects travel demand models were utilized for both the Build and No Build scenarios. As shown in [Exhibit 10](#), compared to the No Build alternative, implementation of the proposed project is estimated to reduce 2030 CO<sub>2</sub> emissions in the San Diego region by up to 340 tons per day (No Build emits 64,260 tons/day, Build emits 63,920 tons/day).<sup>17</sup> These reductions would be due to improved travel times and decreased congestion along the corridor. Thus, although VMT on I-5 are expected to increase with the Build Alternative, overall CO<sub>2</sub> emissions would be reduced and regional transportation efficiency would be increased by the proposed NCC PWP/TREP improvements. SANDAG and Caltrans note that the model used is limited to generating output for freeway mainlines, and not local streets; thus, the subject analysis likely underestimates GHG emissions reductions associated with the proposed NCC PWP/TREP, as it does not include savings from reduced queue lengths at ramp meters and interchanges, or reduced congestion anticipated on roads that parallel I-5.

In conclusion, the proposed project's air quality benefits include reduced idling time by automobiles on roadways and train locomotives in the LOSSAN corridor and would thereby lead to associated reductions in energy consumption and emissions of air pollutants. In addition, the anticipated operational efficiency improvements arising from construction of additional segments of double track are expected to increase ridership on existing passenger trains in the corridor and to correspondingly reduce automobile trips and vehicle miles traveled in the corridor. Other non-automobile improvements, such as the proposed enhanced bus service along the Coast Highway, BRT service, and improved bicycle lanes and pedestrian paths, would promote travel mode shifts away from SOVs, thereby reducing VMT and emissions. These project benefits are also consistent with previous Commission actions (e.g., CC-009-12, SANDAG, San Diego County) to protect coastal resources that would be directly affected by global climate change resulting from increases in greenhouse gas emissions. Potential adverse effects on coastal resources associated with global climate change include sea level rise, increased coastal flooding and erosion, inundation of developed areas and public access and recreation areas, alterations to existing sensitive habitat areas, ocean warming, changes in marine species diversity, distribution, and productivity, and increased ocean acidification. Numerous Coastal Act policies provide a basis for Commission action to reduce GHGs and to protect coastal resources at risk from the adverse effects of global warming, including the air quality and energy minimization policies.

Therefore, any increased VMT associated with the proposed NCC PWP/TREP improvements would be offset by the operational and travel improvements gained from the expanded rail infrastructure and new Express Lanes, including lower VHT (i.e., fewer idling trains and congested hours of highway travel) and shifts to HOV travel (carpools and transit), which would result in increased overall person-carrying capacity in the corridor. In addition, the multimodal

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<sup>17</sup> I-5 North Coast Corridor Project Final EIR/EIS

transportation improvements and enhanced connectivity within these elements would improve mobility in the corridor by providing alternative transportation options, such as transit, HOV facilities, pedestrian trails, and bike paths, all of which efficiently and effectively accommodate more person-trips in the corridor while minimizing energy, air pollutant and GHG impacts, particularly impacts per person-trip. Furthermore, increased congestion under the No Build Alternative would result in conditions inconsistent with the air quality policies of the Coastal Act because it would exacerbate emissions of certain pollutants (additional 340 tons of CO<sub>2</sub> emissions per day compared to the proposed Build Alternative). Altogether, the proposed highway, rail, bus, bicycle, and pedestrian improvements would minimize increases in energy consumption and ensure Caltrans and SANDAG are consistent with SDAPCD and CARB requirements through sensitive programming, design, and construction and by applying the design/development strategies and implementation measures included within the NCC PWP/TREP. Thus, the Commission finds the proposed NCC PWP/TREP and the resulting improvements to public transportation in the NCC, would help to reduce energy consumption, reduce GHG emissions, and improve air quality, and is therefore consistent with Section 30253 of the Coastal Act.

#### **D. CONCENTRATION OF DEVELOPMENT AND SMART GROWTH**

Section 30250(a) of the Coastal Act states:

*New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. (...)*

Section 30252 of the Coastal Act states:

*The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (...)  
(4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, (...)*

Section 30254 of the Coastal Act states:

*New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided; however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public*

*recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.*

Section 30250 of the Coastal Act requires new development to be located in already developed areas and areas with adequate public services. This requirement is intended to concentrate development away from undeveloped rural areas and thus avoid significant adverse impacts on coastal resources, either individually or cumulatively. Section 30252 of the Coastal Act encourages the development of non-automobile public access to the coast to reduce demand on coastal access roads. Section 30254 of the Coastal Act limits constructing or expanding public works facilities to the capacity generated by development permitted consistent with the Coastal Act.

The NCC is largely built out with little remaining undeveloped land to accommodate the anticipated growth in both population and travel demand in the future. SANDAG and Caltrans have developed regional policies that will better connect land use and transportation decisions, increase multimodal transportation options, and encourage a new pattern of Smart Growth in corridor cities.

### **Smart Growth**

As discussed previously in this report, the NCC is considered nearly fully developed with urban uses, with only a few vacant, developable areas in the immediate vicinity of the I-5 corridor and LOSSAN rail corridor. For the most part, the coastal areas of San Diego County consist of low to medium-density residential development and other uses, and any new growth would be accommodated by increasing the intensity of use of existing developed areas through redevelopment of developed parcels and infill development on vacant lots. All municipal jurisdictions within the corridor (San Diego, Del Mar, Solana Beach, Encinitas, Carlsbad, and Oceanside) have less than 10% of their land available for future development, some of which are reserved for residential development.<sup>18</sup>

Population projections by Caltrans and SANDAG ([Exhibit 12](#)) indicate that population growth and associated development will continue in the NCC with population growth rates ranging from 14% to 31% between 2010 and 2040.<sup>19</sup> Growth is also expected throughout the surrounding regions accessed by the LOSSAN rail and I-5 highway corridors, including Orange County and Riverside County to the north, Imperial County to the east, and Baja California, Mexico to the south. Travel demand in the corridor has been driven primarily by this population and associated housing growth, as land has become scarcer within the corridor, requiring more people to commute farther distances to reach employment. However, through 2050, it is projected that 56% of new residences and 42% of new jobs within the San Diego region will be located within a 10-minute walk of high-frequency transit stations, indicating that new, multimodal transportation facilities are necessary to meet these future demands.<sup>20</sup>

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<sup>18</sup> SANDAG, July 2012.

<sup>19</sup> SANDAG 2050 RTP (Chapter 3), October 2011; SANDAG/Caltrans Series 12 Model, November 2011.

<sup>20</sup> SANDAG 2050 Regional Growth Forecast, February 2010.

SANDAG's Regional Comprehensive Plan (RCP) served as the basis for the 2050 RTP and its associated programs, and provides the planning framework for local and regional decisions while balancing the needs and goals of the region.<sup>21</sup> The RCP contains Smart Growth principles, including a policy approach that links local and regional transportation and land use plans and develops incentives for Smart Growth planning. Smart Growth development is generally comprised of a mix of uses in a concentrated area where many trips can be made on foot or bicycle, or is in close proximity to transit services. To implement the RCP and identify areas appropriate for Smart Growth incentives, SANDAG developed a Smart Growth Concept Map ([Exhibit 11](#)) with over 200 existing and future transit-supportive and Smart Growth opportunity areas in the region. There are 15 opportunity areas within the NCC, of which the majority are located in community cores near SPRINTER and COASTER transit stations. The Smart Growth Incentive Program uses this map to provide funds to local jurisdictions from the \$280 million funded by the voter-approved TransNet sales tax for planning and implementing compact, mixed-use development focused around public transit. Smart Growth communities focus on mixed-use development by using land and infrastructure efficiently, creating pedestrian-oriented neighborhoods that are attractive and unique, and providing desirable transportation and housing options that are less dependent on the automobile.

Providing a transportation system that facilitates bicycling and walking as a safe and easy means of travel to and from transit opportunities – including a higher-quality rail service – is vital to fully realize Smart Growth opportunities adjacent to rail stations. As such, the NCC PWP/TREP includes bicycle and pedestrian improvements identified in the Safe Access to Transit and Coastal Resources (SATCR) study.<sup>22</sup> Caltrans and SANDAG conducted this study during the NCC PWP/TREP planning process to determine gaps or deficiencies within both the regional and local bicycle and pedestrian networks that constrain bicycle/pedestrian access to transit services and coastal resources. These bicycle, pedestrian, and community enhancements ([Exhibit 13](#)) would improve accessibility and safety for mass transit users who walk or bicycle to transit facilities, and would also increase the walkability in areas surrounding transit stations that are targeted for Smart Growth. Together, these transit-friendly bicycle and pedestrian improvements with the proposed LOSSAN rail improvements will ensure that forecasted growth can be accommodated and will support Smart Growth development that provides a mix of uses in a concentrated, well-connected area where many trips can be made without an automobile.

The addition of Express Lanes to the I-5 highway is proposed to accommodate existing and future travel demand resulting from forecasted population and employment growth. Since the proposed highway improvements focus on non-SOV travel, growth in travel would be accommodated by a greater percentage of transit options and HOVs, with each individual person-trip having a smaller impact as the ratio of people to vehicles increases. The Express Lanes would address congestion on I-5, which would lessen the need to accommodate travel on arterial streets paralleling the highway (Coast Highway and El Camino Real) that might otherwise require widening or other improvements. Expansion of these local arterial streets would result in significant adverse impacts to coastal resources and public recreational areas. Providing access through the corridor by addressing congestion on I-5 would also allow infrastructure to support planned growth in the already developed corridor as infill and

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<sup>21</sup> SANDAG's RCP was adopted in 2004 and is currently being updated

<sup>22</sup> Included as Appendix A of the NCC PWP/TREP

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redevelopment, consistent with Section 30250(a) of the Coastal Act. By facilitating growth in already developed areas, significant impacts on natural areas are avoided.

To be found consistent with Section 30254, the proposed project must serve existing development, or if it accommodates new development, such development must be at planned and approved densities consistent with the Coastal Act. The proposed improvements to the LOSSAN rail and I-5 highway corridors would be located within a developed urban area and would provide safe and efficient travel circulation for growth that is already planned and anticipated. As discussed previously, growth within the corridor is projected to occur with or without the proposed improvements.<sup>23</sup> SANDAG projects that almost 80% of future job and housing growth will occur within the region's already developed urbanized areas, including the coastal cities in the corridor.<sup>24</sup> The regionally projected growth that would occur in the corridor would be supported by the proposed infrastructure improvements. These regional projections concentrate and maintain anticipated development growth within and/or connecting to the existing development and also reduce development pressure on the few remaining rural and undeveloped lands. The growth projected in the corridor is inevitable and consistent with local land use plans, as well as current growth patterns. Proposed improvements would not induce new or unplanned growth within the Coastal Zone. As such, the proposed NCC PWP/TREP improvements would concentrate development in already developed areas and limit the capacity of the proposed public works facilities to serve only permitted development; and is therefore consistent with Sections 30250 and 30254 of the Coastal Act.

### **Public Transportation**

The proposed transit improvements would result in reduced travel times and increased reliability for transit riders, and thus, would allow increased frequencies for inter- and intra-city public transit in the NCC. With almost half of the rail corridor operating on a single track, the proposed double-track improvements are necessary to accommodate the planned increase in rail corridor services over the next few decades.<sup>25</sup> COASTER service is planned to nearly double by 2030, with the capacity to serve 35,000 passengers daily; and overall capacity in the corridor is expected to reach 47,000 passengers per day across all rail services ([Exhibit 12](#)). With the proposed improvements in frequency and span of service to the rail corridor, it could not only be used for commuter and intercity travel, but local users could utilize it more for recreation and leisure trips – especially since all LOSSAN rail stations in the NCC are located within a few blocks of a major coastal resource – either a public beach or coastal lagoon.

The NCC PWP/TREP also includes station facilities and parking improvements at rail stations that would increase passenger capacity and improve quality of service. The new Special Event Platform at the Del Mar Fairgrounds would provide enhanced nonautomobile access to coastal resources, such as the Del Mar Racetrack and Fairgrounds, San Dieguito River Park and Lagoon, and City of Solana Beach and Del Mar beaches. With regard to parking, all of the COASTER station parking lots, except Sorrento Valley and Oceanside, are at least 90% full on weekdays,

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<sup>23</sup> LOSSAN Final Program EIR/EIS (Section 3-15), September 2007.

<sup>24</sup> SANDAG 2050 RTP (Chapter 3), October 2011.

<sup>25</sup> SANDAG 2050 RTP (Chapter 6), October 2011; San Diego – LOSSAN Corridor Project Prioritization Analysis, Final Project Report, July 2009

with several stations exceeding 95%.<sup>26</sup> This is a major capacity constraint that acts as a barrier to many potential rail users who may wish to commute via rail but cannot always rely on parking being available at the train station. The expansion of existing parking facilities or construction of new parking structures at all NCC stations (Sorrento Valley, Solana Beach, Encinitas, Carlsbad Poinsettia, Carlsbad Village, and Oceanside) would alleviate the currently constrained parking facilities and support increased rail use in the corridor.

Public transit improvements would also occur on the I-5 highway and would prioritize access by HOVs and transit vehicles, thereby incentivizing their increased use. Two Express Lanes in each direction would provide uncongested travel and reliable trip times to HOVs, vanpools, buses, and other transit vehicles using I-5. To ensure that excess capacity in these Express Lanes is not wasted, any additional capacity would be available to SOVs for a variable fee (a fee based on the use of Express Lanes). The NCC PWP/TREP requires that revenue from the Express Lanes be allocated to support future transit projects within the NCC to further improve the region's transportation system. Compared to the No-Build Alternative, the 2030 Build Alternative would almost double HOV volumes during peak periods in the peak direction through the added Express Lanes.<sup>27</sup> The NCC PWP/TREP also includes a "reverse commute" BRT service on I-5 that would serve peak-period commuters between the high-density Mid-City residential area in central San Diego and the Palomar Airport Road business park. Implementation of the BRT can be advanced if demand for this transit service is realized sooner than forecasted. Other transit services could also utilize the Express Lanes.

Additionally, the NCC PWP/TREP includes an Enhanced Bus service along the Coast Highway that would provide higher speed, limited-stop service through the use of roadway priority treatments such as traffic signal priority, intersection queue jumps, and dedicated transit lanes. Operating at ten-minute frequencies all day, it would provide a higher-quality local transit option to complement the existing network of local bus routes in the corridor, and would provide another travel option between the NCC's coastal cities.

Community enhancements such as bicycle paths and pedestrian trails would further support non-automobile transportation. Proposed bicycle and pedestrian improvements ([Exhibit 13](#)), such as expansion of the Coastal Rail Trail, a new NCC Bikeway, pedestrian corridor crossings, addition and enhancement of overpass sidewalks and bike lanes, and grade separations would significantly improve connectivity among different travel modes. These new and improved links would significantly augment non-vehicular access to and within the Coastal Zone, making public access by alternative transportation modes more viable and desirable.

Altogether, the proposed NCC PWP/TREP is a multimodal transportation program that would implement a variety of improvements (rail, bicycle, pedestrian) to meet the NCC's different transit needs. These non-highway improvements would increase capacity within the corridor; however, even collectively, they would not be able to accommodate projected corridor travel growth or avoid improvements to the I-5 corridor that will be critical to maintaining an efficient,

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<sup>26</sup> NCTD, November 2012. See Section 3A.1.2.5.

<sup>27</sup> NCTD, November 2012. See Section 3A.1.2.5.

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uncongested transportation system in the NCC that meets all of the travel demands of residents, commuters, visitors, and goods movement.

In conclusion, the proposed NCC PWP/TREP improvements would facilitate and enhance access to the coast via public transit and would provide for greater non-automobile circulation. The Express Lanes and DARs would prioritize service for HOVs, buses, and other transit vehicles. Additionally, with the projected increase in travel demand, future bus routes could use this infrastructure which would allow even greater accessibility to the coast. Double-tracking and associated rail corridor improvements would reduce travel times, increase frequencies, and improve weekend and off-peak period service, making rail more attractive and competitive with the automobile. Many of the corridor's existing bicycle paths and pedestrian trails are fragmented due to topographical and infrastructure barriers; however, the proposed bicycle and pedestrian improvements would create or substantially improve many of these necessary connections, including 26 highway over- and under-crossings that would be reconstructed with improved facilities. These pedestrian bridges and enhanced sidewalks/bike lanes would provide safe, nonautomobile-dependent routes to and within the Coastal Zone. Therefore, the Commission finds that the proposed NCC PWP/TREP is consistent with Section 30252 of the Coastal Act.

### **E. PUBLIC ACCESS AND RECREATION**

Section 30210 of the Coastal Act states:

*In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Section 30211 of the Coastal Act states:

*Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Section 30212(a) of the Coastal Act states:

*Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or, (3) agriculture would be adversely affected. Dedicated access shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.*

Section 30212.5 of the Coastal Act states:

*Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.*

Section 30213 of the Coastal Act states:

*Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. [...]*

Section 30223 of the Coastal Act states:

*Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

Section 30252 of the Coastal Act states:

*The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (...)*

As population has expanded and open lands, beaches, and historic trails have become developed, more people have sought the use of the corridor's remaining recreational resources. Many critical support facilities for access and recreation have been adversely affected as existing transportation, transit, parking, and other amenities have become overburdened. Additionally, it has become increasingly difficult to expand such facilities given the shrinking supply of available land. Thus, improving and maintaining overall mobility in the NCC is necessary to remove existing transportation impediments to coastal access and recreational opportunities and to meet future demand for access to and along coastal and upland areas providing recreational and other opportunities.

The system of proposed NCC PWP/TREP transportation improvements has been designed to provide substantial public access and recreation benefits. The proposed design and development strategies would ensure that both coastal access and recreational resources are considered in the planning and design of transportation improvements so that maximum public access within the corridor would be protected and enhanced, consistent with public safety and sensitive coastal resources needs. Without the proposed project, coastal access is expected to continue to degrade due to projected population growth and already constrained transportation facilities, which would result in a substantial increase in congestion on the region's primary access corridor to the coast.

The I-5 highway serves as the primary means for the public to reach coastal access points, as well as upland recreation areas within the corridor. As travel demand in the highway corridor continues to increase, so does traffic congestion which in turn impedes coastal access. The proposed NCC PWP/TREP improvements focus on Express Lanes that would give priority to

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ride-sharing, public transit, and SOVs when capacity allows. These Express Lanes would reduce overall congestion, protect and facilitate public access to the coast, encourage ride-sharing that would further promote the foregoing benefits, and fund transit investments in the NCC. The proposed program would ensure that HOVs within the NCC would be provided with a transportation corridor with reliable access to and along the coast.

In addition, the proposed rail improvements would increase capacity, reduce travel time, increase reliability, and provide new service area opportunities, which would further protect and enhance coastal access. Proposed NCC PWP/TREP improvements would contribute substantially to the enhancement of multimodal access throughout the NCC by increasing rail service; providing new rail service at the Del Mar Fairgrounds and Racetrack; accommodating better vehicle, pedestrian, and bicycle access to rail stations; and supplementing parking supply at rail stations to support access to and along nearby beaches, as well as upland recreational areas.

Within the NCC, there is an existing bicycle and pedestrian network that provides access to the coast and other upland recreation areas. Gaps and barriers in these existing routes prevent them from accommodating many local and longer-distance trip needs. East-west connectivity is impacted in a number of locations in the corridor by the existing highway and rail facilities. Also, the coastal lagoon systems in North San Diego create barriers to north-south connectivity for bicycle and pedestrian travelers. The NCC PWP/TREP includes grade separations along the LOSSAN rail corridor that would provide new or improved pedestrian and bicycle crossings across the rail tracks, better connecting communities to corridor beaches. Further, proposed highway improvements would include the reconstruction of under- and overpasses, which would allow the connection and improvement of local and regional bicycle and pedestrian routes to and from the coast. New and improved access routes across corridor lagoons would be similarly integrated into the proposed improvements.

Beyond the improved bicycle and pedestrian enhancements directly related to crossings with the I-5 and LOSSAN corridors, the NCC PWP/TREP also includes the creation of the NCC Bikeway. This new community enhancement feature would span the entire 27 mile length of the NCC and create a new route for non-motorized travel through the region. The NCC Bikeway would also link with other existing trail and bicycle networks in the NCC expanding connectivity to coastal resources and improving public access and recreation.

The NCC PWP/TREP bike and pedestrian components ([Exhibit 13](#)) would serve to meet one of the primary goals in *Completing the California Coastal Trail*, which is to: “Create linkages to other trail systems and to units of the State Park system, and use the Coastal Trail system to increase accessibility to coastal resources from urban population centers.”<sup>28</sup> NCC PWP/TREP implementation would achieve this goal by providing and linking several threads within the coastal trail system between inland and coastal communities to provide access to the shoreline, lagoons and upland recreational areas.

Proposed NCC PWP/TREP improvements also include public transportation infrastructure to support more frequent, attractive, and reliable bus transit services (including BRT and enhanced

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<sup>28</sup> *Completing the California Coastal Trail*, California State Coastal Conservancy, January 2003.

local bus services). These new and enhanced transit opportunities could increase transit ridership and reduce traffic congestion that would otherwise adversely affect the public's ability to access the coast using this primary coastal access corridor.

New and improved multimodal transportation improvements ([Exhibit 13](#)) would provide enhanced access to and along the coast and recreation areas via trails, bicycle paths, and transit, thereby encouraging non-automobile transportation. Upgraded bicycle and pedestrian facilities and routes would better connect with public transit centers, thereby promoting carpooling and connectivity with public transit. Such improvements would not only facilitate multimodal access to the coast, but would also provide multimodal access to recreational and low-cost visitor-serving recreational areas for transit-dependent users that may not otherwise have the means to access coastal areas.

NCC PWP/TREP development strategies and implementation measures require a project-level analysis for all proposed corridor transportation improvements that evaluates potential coastal access and recreation impacts and either confirms the avoidance of substantial adverse impacts, or requires the implementation of additional studies and mitigation measures if potential impacts are identified. In the event that additional study is required to address previously unidentified potential impacts, project consistency with applicable Coastal Act public access and recreation policies would be achieved during this required future, project-specific federal consistency or NOID review.

Development strategies and implementation measures further require that transportation system improvements be phased and implemented in a balanced manner to ensure that benefits of the multimodal transportation improvements are maximized and correlated with impacts. The NCC PWP/TREP Implementation and Phasing Plan identifies phased priorities for rail improvements, and provides the mechanism to track the progress of rail corridor project implementation in the context of all other NCC PWP/TREP highway, community, and resource enhancement project implementation. This also provides some flexibility in implementing improvements to accommodate opportunities and uncertainties that may occur over the anticipated 30 to 40 year implementation schedule for the NCC PWP/TREP. This framework ensures that projects are implemented in a way that balances rail and highway improvements, and that community and resource enhancements are implemented prior to, or concurrent with, project implementation.

The proposed NCC PWP/TREP program includes improvements to public transportation infrastructure necessary to serve and support existing and future land uses previously approved by the Coastal Commission pursuant to certified LCPs and/or approved coastal development permits. The proposed transportation improvements would not result in excessive growth-inducing impacts that could result in overburdening the corridor's recreational resources. As such, the proposed NCC PWP/TREP improvements would not be growth-inducing, nor would the proposed transportation improvements exacerbate existing congestion problems on I-5.

In addition, the proposed NCC PWP/TREP improvements are not expected to result in substantial impacts to travel demand and traffic congestion on local roads within the corridor. While highway capacity improvements sometimes can induce more travel on local roads, the demand on local roads in the majority of the corridor is projected to be reduced as a result of the

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I-5 improvements. The corridor's topographic constraints and circuitous street network make I-5 the most direct north-south route for most trips, but frequent congestion on the highway leads many travelers to shift their trips to local roads instead. With additional capacity available on I-5, this "spillover traffic" in local communities would be reduced. Caltrans has conducted several evaluations of the I-5 project's impacts to local traffic, with the following results projected between the No Build and Build scenarios:

- Coast Highway and El Camino Real, the two primary north-south alternatives to I-5, were projected to experience reductions in VMT of 17% and 10%, respectively, by 2030 under the Build scenario as compared to the No-Build scenario.<sup>29</sup>
- Coast Highway and El Camino Real were projected to experience overall reductions in Average Daily Traffic (ADT) of 12% and 3%, respectively, by 2030 under the Build scenario as compared to the No Build scenario.<sup>30</sup>
- In an analysis of 131 roadway segments (including key arterials and intersections selected jointly by Caltrans and corridor cities), the proposed highway improvements were shown to have negligible impacts on local traffic, with 68 of the 131 segments (52%) experiencing either decreases or no change in ADT by 2030 under the Build scenario as compared to the No Build scenario. An additional 51 segments (39%) were projected to experience ADT increases of less than 10%. Only 12 (9%) of the local NCC roadways would experience increases in ADT of over 10%.<sup>31</sup>
- Even with increases in ADT on some roadways, only 3 of the 131 (2%) segments studied that were under capacity in the 2030 No Build scenario were projected to exceed capacity in the 2030 Build scenario. Eighty-five segments that were under capacity in the 2030 No Build scenario remained under capacity in the 2030 Build scenario and five segments that were over capacity in the 2030 No Build scenario are projected to be under capacity in the 2030 Build scenario.<sup>32</sup>
- A study of traffic level of service at 75 key intersections near freeway access points showed either improvement or no change at 73 intersections (97%) in the morning peak period and 68 intersections (91%) in the evening peak period, when comparing the 2030 Build scenario to the 2030 No Build scenario.<sup>33</sup>

These findings indicate that the capacity improvements on I-5 would help to relieve traffic congestion in the corridor communities by providing a superior alternative for north-south travel than local roads.

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<sup>29</sup> *I-5 NCC Corridor System Management Plan* (Chapter 8), August 2010.

<sup>30</sup> SANDAG/Caltrans Series 12 Model, November 2011.

<sup>31</sup> *I-5 NCC Technical Report #5: Traffic Demand Forecasting Report* (Section 3.3), August 2007. Conducted in support of I-5 NCC Project Draft EIR/EIS.

<sup>32</sup> *I-5 NCC Technical Report #6: Freeway Interchange Operations Report* (Section 3.6), August 2007. Conducted in support of I-5 NCC Project Draft EIR/EIS.

<sup>33</sup> *I-5 NCC Technical Report #6: Freeway Interchange Operations Report* (Section 3.4), August 2007. Conducted in support of I-5 NCC Project Draft EIR/EIS.

In conclusion, the proposed NCC PWP/TREP would provide a multimodal transportation system that provides reliable access to and along coastal and upland areas in the corridor, as well as the entire San Diego region, and would thereby affirmatively implement Coastal Act policies that require maximum protection and, where feasible, enhancement of coastal access and recreation. Additionally, improvements include project elements (such as the REMP) that would serve to protect and enhance natural resources at corridor beaches, lagoons, and recreational areas that sustain and support coastal and resource-dependent recreational uses. Furthermore, NCC PWP/TREP polices, design and development strategies, and implementation measures (Section 5.3.3.2-4) would prevent or reduce significant adverse impacts to coastal access compared to the No Build alternative. Thus, the proposed NCC PWP/TREP is consistent with the applicable public access and recreation policies of the Coastal Act.

## **F. WATER QUALITY AND BIOLOGICAL RESOURCES**

Section 30230 of the Coastal Act states:

*Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Section 30231 of the Coastal Act states:

*The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

### **Existing Conditions**

The NCC is located entirely within the coastal region of the San Diego Basin, and encompasses several of the most significant remaining coastal lagoons in southern California. The corridor's lagoons, drainages and watersheds support a variety of marine resources, including open water, wetland, and riparian habitat. The proposed NCC PWP/TREP project area crosses five hydrologic units (HUs) within the San Diego Regional Water Quality Control Board (RWQCB) Basin and six significant coastal lagoon systems - Los Peñasquitos, San Dieguito, San Elijo, Baticuitos, Agua Hedionda, and Buena Vista. In addition, the corridor crosses the significant coastal and inland waterways of Carroll Canyon Creek/Soledad Canyon Creek, Los Peñasquitos Creek, Carmel Creek, San Dieguito River, Cottonwood Creek/Moonlight Creek, Encinas Creek,

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Loma Alta Creek/Slough, Buena Vista Creek, the San Luis Rey River and Oceanside Harbor, as well as other valuable coastal drainages and wetlands.

Corridor lagoons provide significant benefits in their respective watersheds for flood relief (by allowing high flows to slow and disperse into the larger water bodies) and for water quality (where pollutants from stormwater are discharged and absorbed by vegetation within the lagoon prior to entering the ocean). As discussed in the ESHA Section III.H of this report, the lagoons also contain sensitive habitat areas for threatened and endangered species and migratory birds, as well as for fish and many wildlife species. In addition, where associated with open space and adjacent habitat preservation areas, the corridor lagoons provide habitat linkages and wildlife corridors in a coastal area that has experienced rapid population growth and intensive urban development over the last several decades. Several of the corridor lagoons also provide popular public recreation amenities with trail systems, interpretative areas, wildlife observation opportunities, and, in some cases, expansive beach areas where the lagoons meet the ocean.

The overall hydrology of the watersheds in the corridor has been incrementally altered and constrained by development, including the existing transportation corridors, which have displaced watershed features including lagoons, rivers, streams, and drainage catchments. Realignment or channelization of waterways conveying stormwater through the watersheds has also resulted in significant modification to the hydrology of the corridor and has adversely affected the valuable biological function of these areas to naturally dissipate and filter sediment and pollutants in stormwater runoff prior to discharge to the lagoons and eventually the Pacific Ocean.

Over time, the combined effects of polluted stormwater runoff from corridor facilities and urbanization, the absence of water quality treatment of stormwater runoff, and the impacts of physically displacing or constraining natural watershed features have negatively impacted water quality in the corridor's coastal water bodies. Water quality within the NCC has been affected by increases in impermeable surface areas, stormwater pollutant loads, and direct alteration of watershed features. Transportation infrastructure contributes to these impacts by adding bridges, roadways, and parking lots, and disturbing the natural landforms.

Corridor urbanization and development has cumulatively affected water quality as impermeable surfaces have increased and vegetative cover has decreased. Non-point sources of pollution have proliferated while the natural ability of wetlands and stream corridors to cleanse pollutants has diminished. This has resulted in significant increases in stormwater pollutant loads, as well as, the velocity and volume of runoff which in turn contributes to accelerated erosion and sedimentation within corridor watersheds. The majority of existing transportation facilities in the NCC was constructed before current regulations were enacted to control and treat stormwater; and therefore, most highway and rail facilities have not incorporated retention or treatment facilities for stormwater runoff to protect water quality.

Existing water quality in the corridor is best characterized by examining the quality of water in coastal waters. Within the NCC, there are a number of impaired water bodies that do not meet water quality standards established for them pursuant to the Clean Water Act (CWA), meaning that they cannot support the beneficial uses for which the water body has been designated.

Pollutants found in highway runoff contribute to the degradation of the quality of coastal waters and negatively impact wetland habitats. Highway pollutants commonly include: sediment eroded from disturbed lands, highway embankments and cut slopes; nutrients from plant debris and fertilizer; hydrocarbons, pesticides, and other organic compounds; emulsifiers and surfactants; dissolved and particulate metals; and trash. Moreover, the RWQCB produces bi-annual “Integrated Report (CWA Section 305(b) and Section 303(d))” assessments of statewide water quality conditions. These assessments are focused on identifying state waters that are continually failing to achieve water quality standards and therefore need to be listed in the state’s CWA Section 303(d) listing of impaired waters. These impaired waters are then scheduled for development of a Total Maximum Daily Load (TMDL) requirement, which sets the maximum amount of pollutants that a body of water can assimilate in a day while still meeting water quality standards. States are required to identify and document any and all polluted surface water bodies, with the resulting documentation referred to as the Clean Water Act Section 303(d) List of Water Quality Limited Segments, or more commonly the 303(d) list. Within the corridor, Los Peñasquitos Creek, Los Peñasquitos Lagoon, Soledad Canyon Creek, the Pacific Ocean at San Dieguito Lagoon, San Elijo Lagoon, Buena Vista Lagoon, Loma Alta Slough, the Pacific Ocean at the mouth of San Luis Rey River, the San Luis Rey River and Oceanside Harbor are listed as impaired water bodies.

In addition to the adverse impacts of polluted stormwater runoff from corridor facilities and adjacent land uses, water quality is also adversely affected, particularly within the corridor lagoons, where embankment fills were used to construct bridge crossings for the existing highway and rail facilities. The embankment fills have substantially narrowed the lagoon cross-section at infrastructure facility crossings, which has resulted in a decrease in circulation of lagoon waters, and have contributed to, and caused, water stagnation. These constraints on lagoon circulation impede the natural process of tidal flushing, and slow the influx of freshwater from waterways that convey sediment and pollutant loads to corridor lagoons, especially during large rainfall events. The result is a substantial build-up of sediment and water pollutants within the lagoons over time, which has negatively impacted biological productivity and the quality of coastal waters.

### **Water Quality Treatment**

The LOSSAN corridor does not currently involve significant impervious areas since the rail bed is constructed with crushed rock as ballast; however, rail stations and adjacent parking lots comprise impervious areas within the corridor. Proposed rail facility main track improvements would not result in significant expansion of impermeable surfaces and thus would not contribute substantially to increased stormwater runoff. The NCC PWP/TREP includes rail system improvements such as parking area expansion at stations and a new platform that would be located at the Del Mar Fairgrounds that would involve increased impervious surfaces and could contribute to increased runoff, erosion, and pollutant loads to receiving waterbodies. It should be noted that except for the new proposed rail platform at Del Mar, all stations already have, or are developing, multi-level parking structures in previously developed areas; therefore, additional conversion of pervious surfaces to impervious surfaces would be minimal.

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The I-5 highway corridor has an existing impervious area of approximately 670 acres, of which 7% (47 acres) has been retrofitted with stormwater BMPs. The proposed NCC PWP/TREP would result in the addition of approximately 225 acres of impervious surface, resulting in a total impervious area of 895 acres post-construction. The proposed NCC PWP/TREP improvements would implement, to the extent feasible, treatment BMPs for both the new and existing impervious pavement surfaces as each portion of the corridor project is designed and requires that the net new impervious surfaces be treated. Caltrans NPDES-approved treatment BMPs could include, for example, biofiltration, infiltration or detention, dry weather flow diversions, gross solid removal, and media filtration. Preliminary design has identified BMPs that can treat stormwater runoff from approximately 287 acres of the entire post-PWP I-5 corridor. This preliminary BMP scenario would mean that the amount of impervious area treated would be equal to 128% of the net new equivalent impervious area created, and 32% of the total post-development impervious area would be treated, corridor-wide. These improvements would result in an overall increase in treatment of stormwater runoff compared to existing treatment conditions for the I-5 corridor. Source Control BMPs are also required, including litter removal, toxics control, street sweeping, and other approved measures.

These preliminary estimates reflect a minimum baseline for the corridor that represents a treatment scenario required by the Caltrans NPDES permit. The NCC PWP/TREP provides for additional levels of water quality protection and restoration beyond this established baseline. As more detailed project design progresses for each Specific Project identified within the NCC PWP/TREP, the feasible percentage of treatment available is anticipated to increase as new or enhanced treatment BMP opportunities are identified and are incorporated during the project development process. Existing treatment BMPs would be assessed to determine those that could remain in place or could be retrofitted or upsized. Likewise, the feasibility of additional treatment BMP opportunities will be assessed given the final drainage, grading design, and siting conditions, and then compared against potential impacts to coastal resources.

As an example for how this additional required analysis could potentially result in expanded treatment realization within the corridor, Caltrans has incorporated further detailed analysis that was conducted for the San Elijo HOV Project (the San Elijo HOV Project is scheduled in the early phases of project implementation for the NCC PWP/TREP) into the NCC PWP/TREP Water Quality Section ([Exhibit 14](#)). The San Elijo HOV Project has reached the 60% design phase, and a more comprehensive stormwater runoff treatment analysis was prepared. For this Specific Project under the NCC PWP/TREP, the original assessment was that the San Elijo HOV Project would provide treatment of runoff for 21 of the 92 acres of pavement that would exist in the post construction condition (23% post construction total pavement treated). However, after the additional analysis was completed, it was shown that the project could provide water quality treatment for 69 acres of pavement (70% of the total post project pavement). With the implementation of heightened design treatment features, that number can be raised to 88 acres of pavement being treated (90% of the total post-project pavement). Reference to this process has been incorporated into the NCC PWP/TREP, which would require that similar analyses and revisions be applied to all Specific Projects as they proceed through future project design review. While identical results can't be assured for other Specific Projects, this example nonetheless demonstrates that the potential for significant increases in the area of proposed impervious surface that can be treated, and the area of pre-existing impervious surface that can be treated to

improve water quality treatment will likely be identified at later design review stages and, as feasible, will be incorporated in individual NCC PWP/TREP projects.

An additional level of water quality protection and restoration required by the PWP/TREP is to require enhanced infiltration of storm water by conveyance to open areas to filter and detain runoff through existing soils, landscaping, vegetation and wetlands. This practice, referenced as “*enhanced infiltration through the natural environment*”, would also be maximized throughout the corridor. These enhanced infiltration opportunities are not classified as Caltrans-approved BMPs for NPDES permit compliance, and therefore are not reflected in the baseline treatment percentages described in the NCC PWP/TREP. Breaking up impermeable surfaces and using vegetation to assimilate pollutants using enhanced infiltration techniques add to the level of stormwater runoff treatment that is possible on a project and would be documented and used to the extent feasible on the NCC PWP/TREP Specific Projects.

Pollutants from construction activities could be generated from construction materials as well as construction activities. Pollutants generated from construction materials include vehicle fluids, asphaltic emulsion from paving activities, joint and curing compounds, concrete curing compounds, solvents and thinners, paint, sandblasting material, landscaping materials, treated lumber, PCC rubble, and general litter. Pollutants from construction activities, associated with clearing and grubbing, grading operations, soil import operations, sandblasting, landscaping, and utility excavation, can impact coastal waters. Under the requirements of the applicable NPDES permits, California Department of Transportation Statewide Storm Water Permit and the Construction General Permit, each individual NCC PWP/TREP project that disturbs one acre or more must prepare a construction runoff plan (SWPPP). Each project must include BMPs to minimize potential short-term increases in sediment transport caused by construction, including erosion control requirements and stormwater management for all stream and lagoon crossings. Vegetation and other BMP techniques would then be installed upon construction completion to maintain slope stability.

Implementation of proposed highway improvements could result in the disturbance of contaminated materials during construction. Soil along and adjacent to the shoulders of I-5 is generally non-hazardous with respect to Aerial Deposited Lead (ADL); however, if excess soil from the shoulders that contain ADL is exported, further characterization would be necessary to evaluate proper disposal criteria. Hazardous waste may also be encountered at service stations located within the construction corridor. Contaminated soils and groundwater could be encountered in excavations when relocating utilities, and during bridge construction. Caltrans would comply with the National Pollutant Discharge Elimination System (NPDES) permit for handling and disposing of groundwater for intersections, and further characterization for petroleum hydrocarbons, volatile organic compounds, or semi-volatile organic compounds as to the proper disposal method that would be required. Proposed corridor improvements would be designed and developed to avoid and minimize potential impacts associated with hazardous material release into the environment. The NCC PWP/TREP requires the implementation of Site Management Program/Contingency Plans, when applicable, to address hazardous material issues, including contaminated soil and groundwater, lead-based paint, and asbestos-containing materials. The NCC PWP/TREP includes numerous design development strategies and implementation measures to ensure that potential on-site hazardous materials be properly

identified and that plans be developed for the handling and disposal of such materials in a safe and legal manner.

### **Bridge Replacement**

NCC PWP/TREP transportation infrastructure improvements include projects that will replace a number of rail and highway bridges that cross over coastal waters, all of which will be designed to improve hydrology and water quality (see also the Coastal Hazards Section III.J of this report for a discussion of drainage and flooding). Implementation of projects that modify existing bridge structures across lagoons, streams, and drainages could allow for improved tidal flushing and water conveyance in inland waterways thereby improving water quality and marine habitats. Caltrans and SANDAG, in conjunction with a number of resource agencies, conducted lagoon-wide studies to identify existing and proposed rail and highway bridge dimensions in the context of existing environmental conditions identified for each lagoon system. The results of these bridge design optimization studies identified that removal of some of the existing fill at the lagoons could result in substantial benefits to water quality and marine habitats by increasing overall water circulation in the lagoons and improving tidal flushing and freshwater flows from inland waterways that convey sediment and pollutants during large rainfall events. The informed design parameters used in the bridge replacement projects are predicted to reduce build-up of sedimentation and other pollutants within the lagoons, and improve the quality and biological productivity of coastal waters.

Individual lagoon studies analyzed the potential effects that proposed bridge design alternatives would have on tidal circulation, flood flows and associated scour, sediment transport, sea level rise relative to freeboard, wildlife connectivity, channel protection features, and associated impacts on wildlife habitats and federal or state jurisdictional waters/wetlands. These analyses considered the existing infrastructure constraints in the context of the optimal lagoon environment in order to identify appropriate bridge dimensions that will enhance lagoon-wide function and services. The studies confirmed that existing rail and highway bridges at San Elijo, Batiquitos, and Buena Vista Lagoons were the primary opportunities where significant improvement could be realized through expanded and optimized bridge lengths. Additional technical studies were then undertaken to identify how the replacement bridges could be designed to optimize tidal and fluvial flows in these systems. In addition, bridge designs were produced that would not restrict or limit the large-scale restoration efforts at San Elijo and Buena Vista Lagoons currently under consideration for these lagoons. These new, optimized bridge lengths have been incorporated into the NCC PWP/TREP to be included when more specific project design for these bridges is undertaken.

The NCC PWP/TREP also requires that options for coordinating rail and highway infrastructure construction plans in lagoon areas would be analyzed for potential benefits to lagoon systems. This coordination among separate infrastructure corridors that is facilitated through the NCC PWP/TREP could allow for reduced construction impacts both temporally and spatially on sensitive lagoon systems.

## Conclusion

The project will be in compliance with the 2013 Caltrans Statewide Storm Water Permit issued by the State Water Resources Control Board. The project actually exceeds the SWRCB requirements, in that the NCC PWP/TREP provides for additional levels of water quality protection and restoration where projects can feasibly provide this added protection and restoration. The NCC PWP/TREP requires analysis of each individual hydrologic area from a water quality perspective in relation to the impaired receiving water bodies. This will be achieved through the participation of Caltrans and SANDAG as active members of several lagoon stakeholder groups throughout the corridor working to monitor, and eventually adopt measures to implement the TMDL requirements identified by the San Diego RWQCB. Combined with these efforts, the NCC PWP/TREP would provide for a more comprehensive approach to analyze each hydrological area for BMP implementation, thus improving water quality in the corridor.

The policies, design and development strategies, and implementation measures for proposed NCC PWP/TREP projects (Section 5.4.3.2-4) would improve the treatment of stormwater runoff in the corridor over existing conditions, resulting in improved water quality to ensure that marine resources are maintained, enhanced, and where feasible, restored. Optimized bridge designs would help restore water quality and tidal circulation of lagoons, improve conveyance of stream flow and sediment transport from inland areas, facilitate the improved passage of fish and other aquatic species, and help to restore natural shoreline processes, thereby improving water quality and enhancing the biological productivity of marine resources. Thus, the Commission finds the proposed NCC PWP/TREP and the resulting improvements to water quality in the NCC, would help to enhance marine resources, and sustain biological production, and is therefore consistent with Sections 30230 and 30231 of the Coastal Act.

## G. WETLANDS

Section 30233(a) of the Coastal Act states, in part:

*(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*

- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
- (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channel, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
- (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of*

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*structural pilings for public recreational piers that provide public access and recreational opportunities.*

- (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
- (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
- (6) Restoration purposes.*
- (7) Nature study, aquaculture, or similar dependent activities.*

The majority of the proposed NCC PWP/TREP activities would occur within previously developed areas in the highway and railroad ROW that do not constitute wetlands, estuaries, lakes, or other type of open coastal waters, and have been designed to avoid sensitive habitats in the surrounding area to the maximum extent possible. However, given the location of these transportation corridors within the NCC across six major coastal lagoon systems, and other adjacent coastal water bodies, portions of the proposed NCC PWP/TREP would result in both permanent and temporary fill of wetland habitats.

Wetland habitat impacts associated with the NCC PWP/TREP include impacts at the six lagoons, as well as the San Luis Rey River, Loma Alta Creek, Encinas Creek, Cottonwood Creek, and numerous small lined and unlined drainage ditches that run parallel to the NCC transportation corridors. The primary wetland habitats that would be filled include salt marsh, mudflats, open water, fresh/brackish marsh and various riparian habitats. All drainage ditches, arundo scrub, and salt marsh transition habitats have also been included in the wetland habitat impact analysis for proposed highway improvements. The majority of the impacts to wetlands are associated with infrastructure facility widening at the lagoons. A more detailed analysis of specific wetland habitat types and acreages impacted will be submitted as a part of the updated biological surveys and reports that are required as a part of future, individual project submittals.

Proposed rail improvements included within the NCC PWP/TREP would result in unavoidable fill impacts to wetlands. Preliminary assessment indicates that approximately 7.45 acres of total wetland habitat within the rail corridor could be directly impacted by fill associated with proposed rail improvements in the first three phases of the NCC PWP/TREP Implementation Phasing Plan. New bridges would likely include a reduction in the number of columns within wetlands and longer spans when compared to existing bridges, but fill of wetlands within lagoon systems not entirely spanned by bridges would still result in increased wetland fill to support proposed infrastructure expansion.

Proposed NCC PWP/TREP improvements along the I-5 corridor would result in approximately 17.6 acres of coastal wetland habitat within the highway corridor directly filled to provide support for proposed highway improvements. Temporary impacts to coastal wetlands are also identified that could range up to approximately 13.5 acres. Depending on their severity and

duration, these temporary impacts could be considered permanent. [Exhibit 15](#) provides a breakdown of potential rail and highway corridor permanent wetland impacts according to the project phases.

Section 30233 sets forth a number of limitations on what development projects may be allowed in coastal wetlands. For analysis of whether a project is allowable in wetlands under the Coastal Act, there are three general tests, each of which must be satisfied for the project to be approvable:

- that the purpose of the filling, diking, or dredging is for one of the specific uses allowed in Section 30233;
- that the project has no feasible less environmentally damaging alternative; and
- that feasible mitigation measures have been provided for all remaining unavoidable impacts to minimize adverse environmental effects

### **Allowable Use**

Under the first of these tests, a project must qualify as one of the seven stated uses allowed under Section 30233(a). The Commission has considered minor expansions of existing roads, railroad lines, and airport runways in certain situations to qualify as “incidental public service purposes,” and thus allowable under Section 30233(a)(4), but only where no other feasible less damaging alternative exists and the expansion is necessary to maintain existing traffic capacity (emphasis added). The Court of Appeal has recognized this definition of incidental public service as a permissible interpretation of the Coastal Act. In the case of *Bolsa Chica Land Trust et al., v. The Superior Court of San Diego County* (1999) 71 Cal.App.4<sup>th</sup> 493, 517, the court found that:

*(...) we accept Commission's interpretation of sections 30233 and 30240(...) In particular we note that under Commission's interpretation, incidental public services are limited to temporary disruptions and do not usually include permanent roadway expansions. Roadway expansions are permitted only when no other alternative exists and the expansion is necessary to maintain existing traffic capacity.*

Thus, the Commission examines whether the fill associated with the proposed project is for a use allowable under Section 30233(a)(4), i.e., that it is for a public purpose, and in addition, that it is for an “incidental public service” purpose.

The Commission has accepted the assertion that double track projects are an incidental public service in two previous concurrences with NCTD double track construction projects in northern San Diego County which involved fill of coastal waters and wetlands (CC-086-03 and CC-052-05). The Commission found in CC-052-05 that:

*Allowable Use Test - Coastal Act Section 30233(a). Section 30233(a) does not authorize wetland fill unless it meets the “allowable-use” test. Similar to the Commission decision regarding safety improvements at the Santa Barbara Airport (CC-58-01), the proposed*

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*project is an allowable use as an incidental public service because is it necessary to maintain existing passenger service. The second main track project is being proposed to streamline service for existing trains, and would not result in an increase in the number of trains (capacity) utilizing the tracks. Rather, the proposed project would improve mass transit services by providing more efficient services, thereby increasing the incentive for travelers to choose this mass transit option instead of personal automobiles. Therefore, any increase in utilization of the train service would be related to an increase in number of passengers aboard, rather than an expansion of train services.*

However, the Commission subsequently found in CC-004-05 (NCTD, O'Neil to Flores double track) that:

*In finding those projects [CC-086-03 and CC-052-05] “limited expansions” and “necessary to maintain existing capacity,” and thus an allowable use as an incidental public service under Section 30233(a)(5) [now (a)(4)], the Commission reserved the concern over future double tracking proposals, stating that they would not necessarily continue to qualify under this section, because at some point with increasing numbers of double tracking proposals, the double tracking: (a) will no longer be limited; and (b) will contain enough length of a second set of tracks to in fact constitute an increase in capacity. However, at that time and in those locations the Commission found that the double tracking projects did not meet either of these thresholds that would render the projects ineligible for consideration as an incidental public service.*

*The piecemeal nature of NCTD’s submittals has faced the Commission with a continuum of improvements, rather than a single unified project, which has made the determination of when increases in capacity are triggered a difficult one. To assist in this determination the Commission staff has requested information both about future double tracking proposals NCTD (or other proponents) are considering or planning for, and about documenting the public access benefits of improving public transit. On the first request, NCTD states future double-tracking proposals on Camp Pendleton would likely only be part of more comprehensive transportation improvement programs such as Los Angeles-San Diego Rail Corridor Agency (LOSSAN) and/or California High Speed Rail Authority projects. NCTD states:*

*Currently, no additional future double-track projects have been identified by NCTD to be constructed within the Camp Pendleton area. It should be noted, however, that NCTD performs railroad maintenance-of-way activities on a continuous basis, is required to respond promptly to emergency situations as they may occur along the railroad right-of-way, and is mindful of pursuing potential opportunities that may improve railroad operations. As such, it is possible that double-tracking projects may arise in the future as individual projects or as part of comprehensive transportation improvement programs, such as LOSSAN and/or the California High Speed Rail Authority.*

*On the second request for individual and cumulative benefits, NCTD has provided the detailed discussion (...) which establish that the project will benefit public access. This*

*discussion, combined with the programmatic operational discussion contained in the Fish and Wildlife Service's Biological Opinion (...) make it clear that the numbers and speeds of trains are going to increase, if not individually from this project, then certainly cumulatively based on currently planned improvements, leading the Commission to conclude that the project is likely to increase capacity. If it increases capacity, it does not qualify as an allowable use under Section 30233(a) as an incidental public service, and none of the other eight allowable uses in Section 30233 apply. Therefore, as discussed in the previous section of this report (Section B, and with elaboration in Section F), the only way the Commission could find the project consistent with the Coastal Act would be through the "conflict resolution" provision (Section 30007.5).*

As a result, while the Commission concurred with CC-004-05, it found that the project was not an allowable use under Section 30233(a). However, the Commission also found that the impacts on public access, water and air quality, and energy conservation from not constructing the project would be inconsistent with other policies listed in Chapter 3 of the Coastal Act and would be more significant and adverse than the project's wetland habitat impacts (as mitigated). Using the "conflict resolution" provision of Section 30007.5 of the Coastal Act, the Commission concluded that concurrence with the consistency certification would, on balance, be most protective of coastal resources. The Commission subsequently used the "conflict resolution" provision and a similar analytical approach to concur with similar double track projects in San Diego County (CC-008-07, CC-059-09, CC-075-09, CC-052-10, and CC-056-11).

One of the methods employed through the NCC PWP/TREP to achieve identified transportation goals is to increase the capacity for public transit and multi-occupancy vehicles along the LOSSAN and I-5 transportation corridors respectively. Thus, as was the case in the post-2005 matters listed above, the NCC PWP/TREP improvements include rail and roadway expansions which would increase the capacity of the subject transportation facilities. Therefore, the improvements cannot qualify as incidental public service activities under Section 30233(a) of the Coastal Act, which allows for wetland fill only for limited uses. As such, the proposed NCC PWP/TREP improvements resulting in direct impacts to wetlands are not an allowable use under Section 30233(a) and, as discussed below in Section III.M of this report, the only way the Commission could find this project consistent with the Coastal Act would be through the "conflict resolution" provision of Section 30007.5.

### **Feasible, Less Environmentally Damaging Alternatives**

The second test of Section 30233(a) is whether there are feasible less environmentally damaging alternatives to the proposed project. Coastal Act Section 30108 set forth above defines "feasible" as follows:

*'Feasible' means capable of being accomplished in a successful manner within a reasonable time, taking into account economic, environmental, social, and technological factors.*

The Coastal Act requires that adverse impacts on the environment be avoided if possible as a first priority when considering a proposed project. In cases where thorough analysis and review

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reveal that adverse impacts on the environment posed by the proposed project cannot be feasibly avoided through the selection of a different alternative, the Coastal Act further requires the consideration of alternatives that would reduce the unavoidable adverse impacts on the environment posed by the subject project. Only after determining that a proposed project's adverse impacts on the environment cannot be feasibly avoided or further reduced through the selection of feasible alternatives to the project does the consideration of mitigation for adverse impacts become possible.

If the Commission cannot, through such analysis, conclude that the proposed project is one for which "there is no feasible less environmentally damaging alternative" then the project, as proposed is inconsistent with Coastal Act Section 30233. If, however, the Commission analyzes the alternatives to the project and determines that there is no feasible less environmentally damaging alternative, then the Commission review of the subject project proceeds through the remaining tests of Section 30233 and the other applicable policies and provisions of the Coastal Act.

The existing location of the developed NCC rail and highway facilities necessitates that PWP/TREP improvements occur in areas containing wetlands; and, it is therefore infeasible to avoid all fill impacts to wetland areas during construction of the proposed improvements. Over the past decade, Caltrans and SANDAG have analyzed a wide range of transportation alternatives to address the travel needs of the NCC. These alternatives have included both highway only and public transit only alternatives as well as infrastructure improvement combinations that included various iterations of the different transportation options available. The suite of projects included in the NCC PWP/TREP represents the mix of infrastructure improvements that would best achieve the transportation goals of the project while avoiding and minimizing impacts to sensitive coastal resources including wetlands. Double tracking the rail corridor was identified as the most efficient and concentrated opportunity to move people through the corridor via public transit. The 8+4 highway alternative that was selected presents the smallest footprint analyzed that could achieve the identified travel improvement goals identified for the project, and was further endorsed as the appropriate highway alternative in SB 468 (see Section I - Procedural Issues of this report).

Additionally, the linkages between different transportation corridors created through the NCC PWP/TREP, and more specifically in the Implementation Phasing Plan, provide the opportunity to further reduce temporal and spatial impacts to the lagoon systems. By coordinating project design and construction staging that otherwise could move forward in separate pathways, potential impacts to wetlands can further be reduced. This coordinated approach to project design facilitated by the NCC PWP/TREP framework also allowed Caltrans and SANDAG to study appropriate bridge designs utilizing a lagoon-wide approach rather than just being limited to study of a precise project footprint. The applicants conducted analysis of each lagoon at a system-wide level, identifying existing constraints on the system, and then designed bridge crossings located within a system in concert with each other in order to optimize hydrological benefits to each individual system. These optimized bridge designs represent another unique component realized through the NCC PWP/TREP that resulted in an opportunity to further minimize impacts on coastal wetlands.

Therefore, as discussed above, the Commission has considered alternatives, including the no-project alternative and the proposed project. The Commission finds for the reasons set forth above that the suite of projects included within the NCC PWP/TREP represents the least environmentally damaging feasible alternative in terms of protection of coastal wetlands in the NCC.

### **Feasible Mitigation Measures**

The third test set forth by Section 30233 is whether feasible mitigation measures have been provided to minimize significant adverse environmental impacts. The Restoration Enhancement and Mitigation Program (REMP) included within the NCC PWP/TREP was developed in coordination with resource agency representatives and employs a combination of measures to mitigate for coastal resource impacts resulting from implementation of the NCC transportation improvements and community enhancement projects. The suite of projects included within the REMP was identified as the optimal group of restoration opportunities within the NCC to maximize benefits to coastal resources on a regional level. Few opportunities exist in the NCC for large-scale land acquisitions that could allow traditional ratio-based mitigation efforts to be focused in distinct areas with the goal of establishing large tracts of contiguous and diverse habitat areas within the corridor. However, the NCC is home to six major lagoon systems, which represent some of southern California's most significant natural resource areas. The NCC's lagoon systems and their habitats are biologically unique and cannot be replicated elsewhere. As such, opportunities to protect the NCC's lagoon systems from potential future degradation and to enhance and expand habitat within these systems requires comprehensive solutions with mitigation efforts focused on ecosystem-wide enhancements.

The REMP provides a unique opportunity to assess proposed transportation infrastructure and community enhancement improvements with varying constraints and opportunities located within the NCC and then provide significant and prioritized restoration efforts at the same regional level. Such mitigation projects include creation and significant restoration of wetland habitats, facilitation of large-scale lagoon enhancement projects, restoration and preservation of upland habitat areas, restoration of riparian habitat areas within inland waterways, and endowments established to maintain lagoon inlet function ([Exhibit 17](#)). Funding is also provided through the REMP to staff a Scientific Advisory Panel to better inform the applicants, the REMP Working Group (composed of resource agency representatives) and the Commission, on the ongoing status and success of the mitigation program.

Restoring tidal circulation in lagoon systems and enhancing riparian and upland habitat areas would significantly improve water quality and the ecological value of the lagoons, riparian systems, and adjacent upland areas to better support Environmentally Sensitive Habitat Areas (ESHAs), special-status species and wildlife. [Exhibit 15](#) identifies the potential rail and highway wetland impacts discussed in this section by project phase in conjunction with the corridor-wide wetland habitat mitigation and enhancement opportunities provided by the REMP. The REMP approach to advancing habitat creation, restoration, and preservation mitigation projects ahead of NCC PWP/TREP impacts, allows for assurances that the selected restoration program is performing and providing realized benefits to coastal resources ahead of infrastructure improvement project related impacts. Early creation and restoration of habitat areas will serve to

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reduce the mitigation ratios that are typically required for project impacts by eliminating temporal losses of wetland habitat functions and values, provided that these projects are achieving identified performance standards. In addition, the early coordination between transportation facility infrastructure improvements designed to avoid and minimize impacts, and large-scale lagoon restoration efforts would enhance lagoon system function and values and serve to mitigate projects impacts associated with both temporal loss of habitat values and temporary construction related impacts.

New opportunities for various types of coastal resource improvements may become available in the NCC after adoption of the NCC PWP/TREP due to unforeseen factors, such as additional funding availability, completed habitat restoration plans, or land acquisition options. Future prioritization efforts may also identify some mitigation opportunities that would promote large-scale ecological improvements to resources as more critical for the region, while others that would contribute to enhancing a smaller area within the NCC may be considered less critical for achieving regional resource goals. These factors make it necessary to maintain flexibility when considering the most appropriate mitigation opportunity. Widespread improvements to natural resources in the NCC require a unique, comprehensive approach to resource enhancement with input from multiple regulatory agencies and stakeholders. The REMP, and the REMP Working Group established within, creates the arena where this ongoing evaluation can take place. The REMP is the framework used to describe the available resource enhancement opportunities on a corridor-wide level based on these evolving factors; and allows for supplementing the mitigation opportunities program when new opportunities arise. New mitigation projects could be authorized pursuant to future project-specific NOIDs for PWP projects, coastal development permits, federal consistency review, or through amendments to the NCC PWP/TREP.

REMP project implementation, credit establishment and release, and maintenance and monitoring efforts will be tracked and reported pursuant to NOID submittals, future federal consistency review submittals, or coastal development permit submittals for all NCC PWP/TREP projects to ensure the overall program implementation is proceeding in a manner commensurate with approved impacts, and meets required mitigation and resource benefits identified in the NCC PWP/TREP Implementation Phasing Plan ([Exhibit 5](#)). Each mitigation site will have its own funding and a separate habitat mitigation and monitoring plan (HMMP) that will be reviewed and monitored by the REMP Working Group and Scientific Advisory Panel, as necessary. If a mitigation project is not performing at the planned level, adaptive management or other solutions may be proposed by these groups, and Caltrans and SANDAG will be responsible for correcting these system flaws or will identify and implement mitigation at another agreed upon location. The NCC PWP/TREP includes specific project submittal requirements that ensure that all REMP projects are reviewed and monitored as part of the development review process for all projects included in the NCC PWP/TREP, regardless of the specific Coastal Commission approval process required. Reports summarizing this monitoring process will be submitted to the Commission on an annual basis.

REMP implementation will increase the extent, value and success of natural resource protection, restoration and enhancement in the NCC. The REMP achieves this goal through developing and implementing a regional plan for the advanced acquisition, creation, restoration, enhancement and preservation of the NCC's natural resources, through infrastructure improvements designed

to avoid and minimize impacts and enhance resources, and through long-term resource management endowments. The Commission finds that the proposed project is consistent with the wetland fill alternatives and mitigation tests, but is not consistent with the allowable use test of Section 30233(a) of the Coastal Act for the reasons described above. The only way the Commission could concur with this public works plan would be if it finds the project consistent with the Coastal Act through the “conflict resolution” provision contained in Section 30007.5 (see Section III.M below).

## **H. ENVIRONMENTALLY SENSITIVE HABITAT AREAS**

Section 30240 of the Coastal Act states:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Section 30107.5 of the Coastal Act states:

*“Environmentally sensitive area” means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.*

Coastal Act Section 30240 sets forth a strict limitation on the type of development and uses that are permitted to occur in environmentally sensitive habitat areas (ESHA), and requires that new development adjacent to ESHA be compatible with the continuance of the ESHA and be sited and designed to prevent impacts that would significantly degrade the ESHA.

In preparation of the NCC PWP/TREP, site-specific evaluations were conducted and several ESHAs were observed or have the potential to occur within the NCC, including coastal lagoons, coastal and inland waterways, smaller drainages supporting wetland/riparian habitats, isolated riparian/wetland habitats, and upland habitats, some of which support sensitive or special-status animal and plant species and provide wildlife corridors. More specifically, the following native upland habitat types are found within the corridor and may be found to constitute ESHA: coastal sage scrub, coastal bluff scrub, southern maritime chaparral, coastal sage-chaparral scrub, coast live oak woodland, Torrey pine forest, southern dune scrub, southern foredunes, and native grassland. Additionally, designated critical habitat occurs within the corridor for the following: least Bell’s vireo, western snowy plover, southwestern willow flycatcher, coastal California gnatcatcher, tidewater goby, Riverside fairy shrimp, San Diego fairy shrimp, spreading navaretia, and Essential Fish Habitat (EFH) for Pacific salmon, Pacific groundfish, coastal pelagic species, and highly migratory species. The mapped ESHA within the NCC PWP/TREP provides a baseline from which to evaluate potential project impacts; however, since the

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corridor's natural resources are subject to change during implementation of the NCC PWP/TREP, further analysis will be conducted as part of project-level environmental review to assess and identify all potential permanent or temporary impacts to ESHAs and special-status species and appropriate mitigation measures to ensure consistency with Coastal Act Section 30240.

While significant areas of native wetland and upland habitat have been preserved in and around the lagoons and other protected open space areas, habitats within the NCC have been adversely impacted by the development of adjacent urban areas and transportation facilities; vegetation thinning and clearing for fire protection of adjacent development; realignment and/or channelization of inland waterways; armoring of the shoreline; and spread of exotic plants that displace native plant species. These impacts are demonstrated by areas of degraded habitat void of vegetation, areas of excessive erosion, and areas infested with non-native, invasive plant species. The peripheries of corridor lagoons and inland waterways are particularly subject to habitat disturbance and ongoing degradation due to development encroachment, intense recreational use, and lack of adequate upland habitat buffers. In addition, existing transportation facilities act as barriers to east-west wildlife migration where lagoons, rivers, creeks, and the surrounding upland habitat would otherwise provide corridors for wildlife to cross between coastal and inland areas. Although many of the existing rail and highway bridges have steep, narrow abutments at lagoon crossings or channelized drainages that wildlife sometimes utilize for crossing, the design of these facilities does not adequately support their use as wildlife corridors.

The ESHAs and special-status species in the NCC have been subject to disturbance as a result of development; thus, the remaining natural resources have become increasingly valuable, and further loss or degradation of these communities could occur if NCC PWP/TREP projects are not properly designed, implemented, and monitored during construction to avoid and/or minimize potential impacts. NCC PWP/TREP improvements could result in unavoidable impacts to upland and wetland ESHAs as both the LOSSAN rail corridor and I-5 highway corridor are existing north-south transportation corridors that transect six east-west lagoon systems and are adjacent to existing ESHAs. Proposed transportation improvements located within or adjacent to ESHAs could result in impacts as a result of the following:

- Bridge improvements involving pilings and structural grade beams resulting in direct disruption and displacement of sensitive habitat and wetlands.
- Construction activities or long-term maintenance and operational activities for portions of the rail corridor located at or near coastal bluffs and associated shoreline protective devices in the marine environment.
- Increased fill caused by rail- or highway-widening projects.
- Setbacks/buffers between development and areas containing ESHAs that are inadequate to ensure adjacent land uses are developed and maintained in a manner compatible with the continuance of habitat areas.
- Impacts from short- and long-term construction activities that could occur during roosting, breeding, foraging, migrating, and nesting periods for special-status species or otherwise displace sensitive wildlife species.

- Temporary lighting impacts during construction that could alter or disrupt feeding, roosting, breeding, foraging, migrating, and nesting of wildlife and special-status species.
- Potential adverse impacts to riparian habitat and marine resources from stream alterations, increased erosion, and contaminated storm runoff.
- Indirect shading impacts resulting in decreased light penetration in coastal water bodies and loss of eelgrass.

Preliminary assessment indicates that approximately 64-74 acres of native upland habitat ([Exhibit 16](#)) within the NCC would be directly impacted by the project, and several sensitive or special-status plant and animal species could be affected by the proposed improvements; however, this approximation is conservative and potentially overstates impacts to ESHA, as this figure includes habitat areas that have established within or directly adjacent to the right-of-way that may not rise to the level of ESHA as defined by the Coastal Commission. Nine sensitive plant species could be affected by the proposed corridor improvements, including Del Mar sand aster, Del Mar Manzanita, coastal scrub oak, Orcutt's pincushion, sea dahlia, wart-stemmed ceanothus, coast barrel cactus, southern tarplant, and Torrey pine. Non-listed sensitive wildlife species that could be affected by the project include: San Diego horned lizard, Coronado Island skink, orange-throated whiptail, rufous-crowned sparrow, raptors, loggerhead shrike, desert woodrat, and San Diego pocket mouse. Listed species historically found within the project area that may be impacted include the following: Pacific pocket mouse, light-footed clapper rail, California least tern, western snowy plover, coastal California gnatcatcher, least Bell's vireo, Belding's savannah sparrow, southwestern willow flycatcher, San Diego fairy shrimp, Riverside fairy shrimp, tidewater goby, and the southern ESU of the southern steelhead trout.

Section 30240 of the Coastal Act mandates that only resource-dependent uses are allowed in ESHAs. Thirteen proposed NCC PWP/TREP community enhancement projects involving the improvement of public access to trails and contemplated habitat restoration plans are considered resource-dependent uses and are therefore permitted uses in ESHAs; however, the majority of improvements consist of public facility improvements, which are not typically considered resource-dependent uses. As such, NCC PWP/TREP improvements within ESHA that do not consist exclusively of resource-dependent uses are inconsistent with the limited uses permitted in ESHAs pursuant to Section 30240. As discussed in greater detail in the Conflict Resolution Section III.M of this report, the proposed NCC PWP/TREP can therefore only be found consistent with the Coastal Act through the conflict-resolution provision of Coastal Act Section 30007.5, and only if it is demonstrated that there are no feasible less-damaging alternatives for project components that would result in unavoidable impacts to ESHA, and that feasible mitigation measures have been included in the NCC PWP/TREP to minimize significant adverse environmental impacts.

To minimize adverse impacts to ESHA, the majority of NCC PWP/TREP improvements have been sited within previously disturbed and developed areas within the existing rail and highway rights-of-way; however, where infrastructure improvements could adversely affect natural resources, measures provided for in the REMP would be implemented to avoid, minimize, and mitigate these impacts. The REMP approach to evaluating and implementing compensatory mitigation projects at the regional scale and in advance of NCC PWP/TREP project impacts, in addition to designing lagoon bridges to avoid and minimize project impacts, would result in

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greater benefits to coastal resources throughout the corridor than if only ratio-based, and project- and site-specific compensatory mitigation were employed. The REMP ([Exhibit 17](#)) includes options for allocating funds from SANDAG's Environmental Mitigation Program for a variety of regionally significant mitigation opportunities, including the establishment, restoration (re-establishment or rehabilitation), enhancement, preservation, and long-term management of coastal wetlands and adjacent riparian areas, other transitional habitats, and upland habitat areas. These mitigation activities include the following:

- Acquisition of habitat parcels for the REMP because of the sites' contributions to protecting and enhancing the NCC lagoon system, watershed functions and services, and meeting no net loss requirements through establishment and restoration
- Acquisition, preservation, and, if necessary, enhancement of parcels that contribute to regionally significant resources, including upland habitat areas
- Planning and implementation of regionally significant lagoon restoration projects
- Providing long-term non-wasting endowments for two regionally significant lagoons in order to fill gaps in the funding of maintenance and management activities
- Funding a Scientific Advisory Committee to provide technical support for the design, implementation, and monitoring of the suite of mitigation activities described in the REMP

The overall goal of the REMP is to enhance and restore the biodiversity and habitat functions and services of critical ecological coastal resources within the 30-mile NCC coastline as compensatory mitigation in advance of unavoidable impacts associated with planned NCC PWP/TREP transportation projects and community enhancement projects. If mitigation is completed in advance of project impacts, there would be no temporary losses in the amount of habitat in the corridor. In addition, the REMP provides for no net loss of habitat ([Exhibit 15](#) and [Exhibit 16](#)) to ensure that the quantity, variety, and range of coastal habitats in the corridor would not be diminished by the proposed project. The program also provides for habitat preservation, thereby facilitating conservation of remaining sensitive habitats in the corridor. In addition, the NCC PWP/TREP would facilitate the development and implementation of comprehensive lagoon restoration efforts for San Elijo and Buena Vista Lagoons, as required by the NCC PWP/TREP Implementation and Phasing Plan ([Exhibit 5](#)). These efforts would serve not only to substantially enhance and restore water quality in the corridor; they would also restore, enhance, and protect different habitats within the lagoon ecosystems. While these restoration efforts would not focus on traditional in-kind habitat replacement mitigation ratios, the overall program would restore and ultimately enhance an integrated ecosystem that provides habitat for birds, fish, and benthic organisms, which would not only adequately compensate for the loss of ESHA that would occur from the NCC PWP/TREP improvements, but would provide for enhancement of ESHA throughout the entire coastal zone of North San Diego County.

In conclusion, the proposed NCC PWP/TREP consists primarily of improvements to existing transportation facilities located in previously developed and disturbed areas within existing LOSSAN rail and I-5 highway right-of-ways. The majority of these improvements are generally reconfigurations or expansions of existing facilities that involve minor encroachments into adjacent areas and would not result in substantial impacts to ESHAs or special-status species. However, some impacts to ESHAs would be unavoidable given that the existing rail and

highway facilities cross six coastal lagoons and adjacent upland habitat areas. As such, the proposed NCC PWP/TREP raises Coastal Act issues relative to permitted uses in ESHAs. The NCC PWP/TREP includes a comprehensive REMP which would serve to significantly enhance water quality, marine, and upland habitat resources, all of which would facilitate enhancement of ESHA and special-status species habitats throughout the NCC. The proposed program provides for advanced mitigation opportunities that would allow for habitat establishment or significant enhancement of degraded habitat prior to project implementation. Altogether, the proposed NCC PWP/TREP policies, design and development strategies, and implementation measures (Section 5.5.3.2-4) would serve to avoid or minimize, and mitigate potential impacts to ESHAs and special-status species; however, given the existing alignment of the subject transportation corridors, some impacts to ESHAs would be unavoidable. Therefore, the Commission finds that the proposed project is not consistent with Section 30240 of the Coastal Act. The only way the Commission could approve this public works plan would be if it finds the project consistent with the Coastal Act through the conflict resolution provision contained in Section 30007.5 (see Section III.M below below).

## I. VISUAL RESOURCES

Section 30251 of the Coastal Act states:

*The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.*

Coastal Act Section 30251 provides for the protection of scenic and visual resources within the Coastal Zone. Coastal Act Section 30253(b) further provides that new development shall not require constructing protective devices that substantially alter natural landforms along bluffs and cliffs.

Development densities within the NCC have remained low, for the most part, and large groupings of mature trees, large open space areas with significant natural resources, and the coastline are the primary coastal visual resources interspersed in the developed landscape. Much of the NCC's existing rail and highway system parallels the Pacific Ocean's coastline; and, in many locations, the transportation facilities offer expansive views of the coastline, river valleys, coastal lagoons, beaches, and other upland scenic resources. The I-5 highway corridor is part of the California Scenic Highway System and is eligible for designation as an Official Scenic Highway.

There are significant coastal visual resources within the NCC that could be affected by the proposed improvements, including public views of natural coastal features such as the Pacific Ocean, coastal river valleys and lagoons, coastal bluffs, open spaces, and cultural landscapes.

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Proposed transportation facility improvements that could potentially impact views include the construction of new rail tracks and extended paved surfaces; parking lots/structures, new or expanded bridges with railings, direct access ramps (DARs), and rail tunnel portals; and new signage, sensors, signals, fencing, cameras, lighting, retaining walls, and sound walls. In addition, project grading could remove or alter natural landforms, landscaping, trees, and topography, thereby decreasing the visual openness and semi-rural character of the corridor. Further, new and extended facilities could increase the visual mass and their overall visibility from adjacent public viewing areas, and could result in public view obstruction of visual resources in the corridor. Finally, general project appearance has the potential to disrupt the experience of the natural environment as viewed by people visiting the natural preserves and open space areas adjacent to transportation facilities.

The majority of the proposed NCC PWP/TREP improvements would be located within the existing rights-of-way directly adjacent and contiguous to existing facilities and would not result in substantial visual changes to the dominant, overall form characterizing the existing transportation corridor. At-grade rail track improvements, including those requiring increased track elevations, would be minor, incremental, and have minimal impacts on public views to and along the coast, or to scenic inland areas for both travelers and adjoining views. While the highway is an existing visual feature within the viewsheds of the lagoons it crosses, highway improvements are also linear in nature and would not be significant enough to substantially affect public views through these viewsheds to the coastline or inland foothills. Additionally, potential impacts to significant coastal views and area aesthetics for travelers and adjoining views would be analyzed during project-level review to ensure the location and design of improvements protects coastal visual resources, to the greatest extent feasible, and to ensure overall compatibility with the visual resources in the area.

Widening of bridge structures as part of double-tracking the rail corridor could increase the visual mass of structures, as viewed from surrounding areas; however, this potential view impact would be offset by new, concrete bridge designs that would be smaller in scale with fewer support structures than existing bridges ([Exhibit 18](#)). The existing timber-trestle bridge support structures are relatively dense in form and mass and presently hinder adjoining views to coastal and inland areas in the corridor. The proposed bridge replacements allow for a more visually permeable design that would restore views of the ocean for travelers along I-5 and people using adjacent open space areas.

The Vision Phase includes trench and tunnel alignment options, though not decided at this time, that could replace at-grade rail facilities and adversely affect passenger views of coastal views currently available from the at-grade facility. However, trench and tunnel alignments would result in an overall beneficial impact to visual resources in the corridor by placing facilities below-grade, thereby eliminating visibility of structures from public viewsheds. Rail improvements would include an option for removal of the rail service from the coastal bluffs in Del Mar, as well as portions of Los Penasquitos Lagoon, which would potentially allow for restoration of the coastal viewshed in these highly scenic areas.

Improvements to highway bridges could require the continued use of protective structures at piles and/or abutments along the shoreline of coastal lagoons and streams; however, these

improvements would only occur in areas already altered by existing bridge structures. Additionally, proposed bridge improvements would replace existing lagoon bridges that have steep, narrow abutments with new bridges designed with a bench at the abutment to facilitate wildlife movement as well as use by hikers, which would also soften the appearance of the shoreline. Further, new replacement bridges would also be designed with fewer in-water columns, where feasible, as new technology and construction methods allow for longer span distances, thereby opening views under the bridges and lagoons.

The construction of new DARs at Voigt Drive and Manchester Avenue could affect coastal visual resources, as viewed by highway travelers and from adjacent properties; however, these improvements have been designed to minimize potential view impacts. The Voigt DAR would not result in substantial impacts to coastal views, as it is located in a highly developed area adjacent to the University of California San Diego campus and would not be incompatible with the urbanized landscape of the surrounding area. Potential impacts to views would be more notable at the Manchester DAR and associated San Elijo Multi-Use Facility, which would also include a new access road and parking for 150 cars ([Exhibit 21](#)). These improvements would expand transportation facilities into the adjacent agricultural area and result in loss of visual open space; however, the scenic bluffs, hillside terrain, and the upper agricultural fields located on the northern and eastern slopes would remain undisturbed and visible ([Exhibit 18](#)). Additionally, the DAR was redesigned as a trenched ramp and an undercrossing to be situated below the level of the existing ground plane to minimize its visibility. The associated multi-use facility has also been redesigned to reduce the project footprint and to incorporate landscaping that softens the view impacts.

The *I-5 NCC Project Design Guidelines* include corridor-wide and local design themes to preserve the natural and community visual characteristics of the existing corridor and create a unifying visual thread.<sup>34</sup> Common design features reflected within the proposed implementation measures include the use of terrain-contoured retaining walls to minimize visual prominence and allow for increased landscape screening, use of natural contour grading wherever feasible, implementation of spatial buffers to reduce the urbanizing edge effect of new structures, preservation and enhancement of median landscaping, enhanced bridge design, specific bridge railing design, widened sidewalks and landscaped parkways, and appropriate use of color for compatibility with local design themes ([Exhibit 18](#)). The corridor has been divided into three visual theme units – Southern Bluff, Coastal Mesa, and Northern Urban – to assure that the visual character of improvements are designed to complement the various local landscapes. Thus, the *I-5 NCC Project Design Guidelines* include specific provisions to minimize impacts to coastal visual resources and reflect the visual character and goals of each affected community.

The *I-5 NCC Project Design Guidelines* also include specific identification of where future signage and lighting would be located throughout the corridor along with specification describing the design and size of these elements. The NCC PWP/TREP includes provisions to require that signage and lighting be sited to not block existing views to coastal resources and be sensitive to biological impacts on lagoon resources throughout the corridor. The *I-5 NCC Project Design Guidelines* also include specific landscaping palettes to be utilized throughout the

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<sup>34</sup> The *I-5 NCC Project Design Guidelines* are Appendix C of the NCC PWP/TREP

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NCC, and the NCC PWP/TREP includes design/development strategies further require that all landscaping will consist of native, drought-tolerant vegetation with slight exceptions related to screening of retaining walls. These landscaping requirements will create a change over the existing vegetation profile along the corridor that is dominated by non-native species (e.g. iceplant and eucalyptus trees), but will create a more uniform character through the NCC reflective of the surrounding native, natural environment and also would provide benefits to biological resources and water quality.

Community enhancement projects that include new and widened sidewalks; enhanced fencing, paving and lighting; street tree plantings; slope and parkway plantings; creation of pocket parks and community gardens; and improved landscape buffers between the highway, trails, parking areas and community streets are proposed in coordination with affected cities to avoid or minimize visual impacts. Existing landscaping includes non-native and invasive plant species; however, NCC PWP/TREP landscaping plans would only include species native to Southern California. The removal and replacement of non-native species with native non-invasive, drought-tolerant species would result in a change of visual aesthetics, but would be more visually compatible with the surrounding natural areas ([Exhibit 18](#)).

Additionally, the NCC PWP/TREP includes implementation measures that would mitigate the appearance of sound and retaining walls. Architectural detailing would be used to add visual interest and reduce the apparent height of the walls. Where feasible, retaining walls would be located mid-slope to achieve visual compatibility with surrounding terrain and provide a buffer area for landscape screening. Where conditions allow, retaining walls would be divided into separate structures sufficiently offset from one another to create a planting area between the two.

In conclusion, while the proposed project would change the overall visual character of the corridor, NCC PWP/TREP policies, design and development strategies, and implementation measures (Section 5.7.3.2-4) would minimize potential adverse visual resource and aesthetic impacts, which would be further evaluated and reduced during project-level analyses pursuant to future environmental review and/or NOIDs, phased federal consistency review, or coastal development permit review, as applicable. The design and development strategies include minimizing grading, landform alteration, and vegetation removal; providing landscape treatments such as trees, shrubs, and groundcover along the edge of the right-of-way to provide partial screening and to visually integrate the right-of-way into surrounding areas; addressing potential night-lighting impacts by limiting, shielding and directing lights to only that required for operations and safety; and implementing native revegetation efforts disturbed by grading activities. As such, the NCC PWP/TREP protects views to and along the coast, including scenic areas, and would be visually compatible with the character of surrounding areas. Therefore, the proposed NCC PWP/TREP is consistent with Sections 30251 of the Coastal Act.

## **J. COASTAL HAZARDS**

Coastal Act Section 30253 states that new development shall do all of the following:

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
- (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

Section 30235 of the Coastal Act states:

*Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.*

Section 30236 of the Coastal Act states:

*Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.*

Coastal Act Section 30253 addresses the need to ensure long-term stability and structural integrity, minimize risk, and avoid landform-altering devices. Coastal Act Section 30235 requires approval of shoreline protective devices only in certain, limited cases, including when required to protect existing structures or public beach beaches in danger from erosion, and only when designed to avoid or mitigate adverse impacts on local shoreline sand supply. Coastal Act Section 30236 requires that substantial modifications to rivers and streams incorporate the best feasible mitigation measures, and limits development in such waterways to water supply and certain flood control projects, or for purposes of improving fish and wildlife habitat.

### **Geology, Soils, Seismicity, and Topography**

Proposed corridor improvements have been designed to avoid and minimize potential impacts associated with geologic hazards, unstable soils, seismicity, and topography. The seismicity of Southern California is dominated by the intersection of the north-northwest trending San Andreas Fault system and the east-west trending Transverse Ranges Fault system, both of which can subject the corridor to ground shaking events. Additionally, lagoon sediments are comprised

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of Lagoonal Alluvium and are subject to settlement and bearing capacity failure. To avoid the risks associated with geologic and seismic hazards, the NCC PWP/TREP includes design/development strategies and implementation measures (Section 5.8.3.2-4) that require appropriate technical personnel to be present during project construction to observe cuts, foundation subgrade, and embankment subgrade to assure that all design-level provisions are implemented. If unexpected subsurface conditions are encountered during construction, a geotechnical specialist would be alerted to make recommendations to the resident engineer and contractor.

To avoid these risks during development of the LOSSAN rail corridor, future site-specific project design would be based on the results of detailed engineering, geologic, and geotechnical studies and could include measures such as ground modification methods (e.g., soil densification) to prevent liquefaction, or structural design (e.g., deep foundations) to accommodate or resist liquefiable zones. It is unlikely that train derailment during a potential peak event could be mitigated by designing a track-wheel system capable of withstanding the ground motions in most of the project area. Existing train systems throughout California, including the existing service along the LOSSAN rail corridor, face the same challenge; however, a network of strong-motion instruments has been installed throughout California and additional monitoring stations are proposed. These stations provide ground-motion data that could be used with rail instrumentation and control systems to temporarily shut down LOSSAN rail operations during or after an earthquake. The system would then be inspected for damage due to ground motion and/or ground deformation and returned to service when appropriate. This type of seismic protection is already used for many transit systems in seismically active areas and has been proven effective.

The proposed improvements would be contained primarily within the existing corridor and would avoid construction within undisturbed and potentially unstable steep topography. Site and soil stability would be addressed further through the development and implementation of SWPPP and NPDES permit requirements. Other potential impacts associated with topography, excessive erosion, and construction activities would be addressed by construction-phase BMP requirements, which would minimize uncontrolled site runoff and erosion and ensure site stability.

### **Drainage and Flooding**

Potential impacts associated with drainage and flooding have been addressed through the design of corridor facilities, including bridge facilities for both the rail and highway. Many of the proposed rail improvements will elevate the track over existing drainage and flood areas. Crossings over the corridor's waterbodies would include bridges or culverts that would avoid surface floodplains. In order to reduce potential flood hazards, lagoon optimization studies were conducted to evaluate and determine the optimal design for new/enhanced rail and highway crossings. In addition, design/development strategies and implementation measures provide that future project-level analysis for proposed improvements include assessment of floodplain hydrology and evaluation of potential impacts of specific designs on water surface elevation, flood conveyance, and potential flooding risk, with full consideration for sea level rise, based on best available sea level rise science at the time. Further, construction of facilities within

floodplains would be avoided, where feasible, or the footprint of facilities within the floodplain would be minimized.

Environmental and technical studies conducted for the NCC PWP/TREP concluded that the proposed highway improvements would result in improved drainage and flood conveyance at Carmel Creek, and San Elijo, Batiquitos, and Buena Vista Lagoons. Other than placing necessary bridge support structures (abutments and/or pilings) and extending existing culverts, proposed highway improvements would not involve the construction of new structures that would adversely affect natural stream courses or result in drainage or floodplain impacts. NCC PWP/TREP improvements that would occupy areas within corridor floodways, such as bridges, would be designed to minimize necessary stream alterations, and to provide new opportunities to improve stream flow as well as fish and wildlife habitat. These proposed improvements would potentially result in alteration of rivers and streams; however, they are permitted pursuant to Section 30236, as they are necessary to upgrade and protect existing development for continued public safety and would not constitute substantial alterations. In addition, they would not create an unreasonable, unnecessary, undesirable, or dangerous impediment to the flow of floodwaters.

### **Shoreline Erosion**

As discussed previously, drainage and flooding impacts associated with the proposed project would be negligible, which means that potential adverse impacts associated with the alteration of shorelines and/or floodplains, as well as associated erosion, would be similarly negligible. Other than necessary scour protective devices placed at the base of bridge support structures (e.g., abutments, pilings), proposed highway improvements would not involve the construction of new or expanded lagoon shoreline protective devices that would alter natural landforms or shorelines and result in associated shoreline erosion. The replacement and lengthening of bridges (San Elijo, Batiquitos, and Buena Vista Lagoons) as well as the removal of culvert structures (Carmel Creek) would result in the restoration of a more natural lagoon and creek shoreline.

NCC PWP/TREP design/development strategies require that lagoon shoreline/bank armoring be allowed only to protect existing legal structures, or where necessary for replacement structures across coastal waterbodies that are proven to be in danger from erosion, and only if less-environmentally damaging alternatives to armoring are not feasible, including relocation of the endangered structure; and armoring has been sited, designed, and accompanied by feasible measures to mitigate any unavoidable negative coastal resource impacts. The NCC PWP/TREP further provides that policy limitations on these shoreline structures should not apply to minor runoff control and dissipater features, where located and designed to convey and discharge runoff in a non-erosive manner. Shoreline (scour) alteration at bridge abutments and piles could be required where rail facility bridges cross waterbodies throughout the corridor.

Through Del Mar, as well as a limited portion of Encinitas, existing and proposed LOSSAN rail corridor improvements occur along, and adjacent to, coastal bluffs and are therefore subject to shoreline and coastal bluff erosion and retreat. The Vision Phase in the NCC PWP/TREP includes rail improvement options in Encinitas that would be set back from Pacific Coast Highway, providing an ample buffer between the rail alignment and the coastal bluffs. In Del Mar, the proposed rail improvements provide a unique opportunity to improve the coastal bluff

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area with an option to remove the existing rail service from the bluffs, thereby alleviating the need for ongoing maintenance of shoreline protection devices previously permitted for stability of the bluffs and rail operations. Should the rail service be removed from the coastal bluffs in the future, there could be an additional opportunity to remove the existing shoreline protective devices and restore the coastal bluffs, thereby reducing long-term shoreline erosion impacts associated with these devices.

### Sea Level Rise

Sea level rise has occurred on a local and global scale over the past century, and projections suggest that its rate may accelerate in the future. Since several of the NCC PWP/TREP improvements are located within, or directly adjacent to, the marine environment, sea level rise considerations must be incorporated into their design to determine and avoid potential sea level rise impacts. Potential effects of sea level rise include increased shoreline erosion and scour, increased near shore wave energy, flooding, and reduced beach area, all of which can affect the long-term stability of the proposed infrastructure. In March 2013, the State of California's California Climate Action Team and Ocean Protection Council established the latest sea level rise guidance – with ranges in sea level rise of 0.13-0.98 ft. between 2000 and 2030, 0.39-2 ft. between 2000 and 2050, and 1.38-5.48 ft. between 2000 and 2100 are projected.<sup>35</sup> This state guidance also recommends a site-specific risk analysis to determine the appropriate sea level rise for design considerations.

To assist in planning and designing of the NCC lagoon bridge crossings, Caltrans and SANDAG prepared the San Diego Region Coastal Sea Level Rise Analysis, which assesses potential drainage, tidal inundation and flooding impacts to transportation infrastructure crossing waterbodies within the NCC that are potentially subject to sea level rise.<sup>36</sup> The results of the study were considered and incorporated in the design of the NCC PWP/TREP infrastructure improvements. Most importantly, both rail and highway facility crossings are considered together in terms of identifying design options and, where necessary, adaptive strategies, that address the potential long-term impacts of sea level rise and related drainage, flooding, and shoreline erosion effects. As such, the proposed bridge replacement projects are designed to accommodate the anticipated increase in sea level rise through the year 2100, both with and without fluvial floods (50-year and 100-year), through design and/or adaptive strategies, which would minimize structure exposure to increased ocean water levels and flooding ([Exhibit 19](#) and [Exhibit 20](#)).

Furthermore, NCC PWP/TREP design/development strategies and implementation measures require future submittals for proposed rail, highway, and community enhancement improvements that may be subject to internal shoreline/bank erosion, tidal inundation and flooding to include a project-specific analysis of improvement location and design in relation to projected future changes in sea level rise. This analysis would ensure new development is sited and designed to eliminate or minimize, to the maximum extent feasible, hazards associated with anticipated sea level rise over the expected 75 year design life of the structures. The NCC PWP/TREP is a 40-year program, so to ensure that improvements are sited and designed to address potential hazards

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<sup>35</sup> Based on the latest and most relevant science presented in the 2012 National Research Council Study

<sup>36</sup> San Diego Region Coastal Sea Level Rise Analysis is Appendix D of the NCC PWP/TREP

associated with the anticipated increase in sea level rise, the design/development strategies and implementation measures provide that proposed improvements are analyzed based on the most current sea level rise projections and best available scientific information at the time of project implementation.

### **Assumption of Risk**

Although NCC PWP/TREP policies, design/development strategies, and implementation measures (Section 5.8.3.2-4) would be applied to all of the specific improvements, which are anticipated to withstand the predictable hazards associated with development in the corridor, it is not possible to remove all risk associated with the uncertainties of natural hazards. For these reasons, even though Caltrans and SANDAG have and/or would minimize risks by engineering the proposed project to avoid, minimize, mitigate, and/or withstand the natural hazards posed by storms, floods, and earthquakes, a degree of risk from natural hazards would remain and could not be fully mitigated. To protect the Coastal Commission and its employees from liability for the hazards posed by the subject structures and project features designed and managed by Caltrans and SANDAG, the NCC PWP/TREP provides that Caltrans and SANDAG acknowledge and accept these risks.

### **Conclusion**

The proposed NCC PWP/TREP policies, design and development strategies, and implementation measures would minimize risks to life and property in areas of high geologic and flood hazards, assure project stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area. Additionally, the proposed improvements would not result in substantial alterations to rivers or streams and would be designed to minimize stream alterations necessary to upgrade and protect existing development for continued public safety. Furthermore, the proposed improvements would not result in construction of new shoreline protective devices that would substantially alter natural shoreline processes. Any lagoon shoreline protective devices associated with the project would be minor and would consist only of the minimum necessary scour protection measures to support existing and/or replacement facility crossings, where designed to eliminate or minimize impacts to shoreline processes. Therefore, the proposed NCC PWP/TREP is consistent with Sections 30253, 30235, and 30236 of the Coastal Act.

## **K. ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES**

Section 30244 of the Coastal Act states:

*Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

Section 30244 of the Coastal Act requires that archaeological and paleontological resources in the Coastal Zone be protected from adverse impacts by applying reasonable mitigation measures. The corridor is located in an area of sensitivity for archaeological and paleontological resources,

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and includes archaeology sites associated with the San Dieguito Complex (dating back to 8,000-10,000 years before present [B.P.]) and the La Jolla Complex (dating 3,000-8,000 B.P., but with some evidence of occupation 1,300-3,000 B.P.). Archaeological resources detected within these sites include milling stations, lithic scatters, shell middens, and quarries. Late period sites (dating back to 200-1,300 B.P.) are less common and include archaeological resources such as midden, rock features, and human burials. Approximately 6 prehistoric and as many as 14 historic (depending on Del Mar tunnel alternative) archaeological sites are located within the Area of Potential Effect (APE) for the rail improvements. There is also a high potential for unknown sites to occur within the corridor – particularly in proximity to the coast and coastal water bodies. Additionally, the corridor is subject to geologic activities that have resulted in surface exposure of many rocks with high paleontological sensitivity. Thus, the corridor contains a full geologic record.

The NCC PWP/TREP has been designed to avoid impacts to archaeological and paleontological resources within the project's Area of Potential Effect (APE). The majority of rail improvements would be limited to previously developed and disturbed areas within the existing right-of-way. In addition, highway improvements were redesigned early in the planning process to avoid known resources in the NCC. Thus, potential impacts to archaeological and paleontological resources have been partially mitigated by design in an otherwise highly sensitive region for cultural resources.

Rail alignment alternatives that include tunneling would generally avoid impacts to cultural resources due to the depth of tunneling; however, at-grade improvements would involve disturbing the ground surface, potentially resulting in resource impacts. Trenching that is necessary for some rail improvements would also result in subsurface disturbance, thereby increasing the potential to disturb unknown archaeological resources. The at-grade and trench alternatives for rail improvements from Solana Beach to Oceanside would be limited to the existing rail corridor alignment, thereby minimizing potential impacts to undisturbed resources; however, the LOSSAN Final Program EIR/EIS also includes the Vision Phase within these areas that includes approximately 2.5 miles of subsurface trenching through downtown Encinitas and downtown Carlsbad, as well as two tunnel alternatives in the Del Mar portion of the railway which could affect archaeological resources. Due to the uncertainty related to these alternatives, future amendment to the NCC PWP/TREP would be required to include updated analysis on potential impacts to coastal resources.

NCC PWP/TREP design and development strategies and implementation measures require paleontological mitigation during construction, including monitoring, macrofossil and microfossil analysis, and report preparation. As part of this mitigation, environmentally sensitive areas (ESAs) for adjacent sites would be identified on construction plans and in the contract specifications. The construction contract would also contain provisions for unanticipated discoveries, including the diversion of activities away from discovered resources until an archaeologist is able to evaluate their nature and significance. If unanticipated discoveries occur, Section 106 consultation with the SHPO would be reopened.

In the event that human remains are discovered, State Health and Safety Code Section 7050.5 requires the applicant to cease construction activities in that area or nearby areas suspected to

overlie the remains, and the county coroner must be contacted. Pursuant to PRC Section 5097.98, if the remains are suspected to be Native American, the coroner must notify the Native American Heritage Commission (NAHC), who would then notify the Native American Most Likely Descendant (MLD). If the remains were discovered during construction of a Caltrans project component, the District 11 Chief of the Environmental Analysis Branch construction would also be contacted so that he or she could work with the MLD on the respectful handling and disposal of the remains. Additional provisions of PRC Section 5097.98 would be followed, as applicable.

Design and development strategies to address potential impacts to archaeological resources would be assessed for future project-specific improvement proposals in accordance with future environmental and federal consistency review, as applicable. These strategies could include creating protocols for fieldwork; identifying, assessing and determining potential impacts to cultural resources in consultation with SHPO and Native American tribes; and on-site monitoring of fieldwork when sites are known or suspected of having cultural resources. Impacts to known archaeological sites would be avoided, wherever feasible. If impacts are unavoidable, the archaeological site would be evaluated using National Register of Historic Places (NRHP) and California Register of Historic Resources (CRHR) eligibility criteria. Where applicable, evaluating archaeological sites would include preparing test plans for archaeological resources that contain regionally relevant research questions. The SHPO would be consulted on test plans and determinations of eligibility for evaluated resources and any required mitigation measures and reporting requirements.

Additionally, design and development strategies to address potential impacts to paleontological resources include developing a paleontological resource assessment program for project-level environmental analyses. This program would include field reconnaissance to determine exposed paleontological resources and more accurately determine potential paleontological sensitivity. A Paleontological Resources Treatment Plan would also be prepared to address the handling of paleontological resources discovered during pre-construction work and construction of the proposed improvements. Mitigation measures for paleontological resources could include education of personnel on resource protection measures, construction monitoring, recovery of fossils identified during field reconnaissance, and development of provisions for handling fossils discovered during construction.

The proposed NCC PWP/TREP improvements would protect archaeological and paleontological resources from significant adverse impacts through sensitive programming, design, and construction. In addition, by applying the policies, design/development strategies and implementation measures included in the NCC PWP/TREP (Section 5.6.3.2-4), and are therefore consistent with Section 30244 of the Coastal Act.

## **L. AGRICULTURAL RESOURCES**

Section 30241 of the Coastal Act states:

*The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the area's agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:*

- (a) By establishing stable boundaries separating urban and rural areas including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban uses.*
- (b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.*
- (c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.*
- (d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.*
- (e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.*
- (f) Assuring that all divisions of prime agricultural lands, except those conversions pursuant to subdivision (b) of this section, and all development adjacent to the prime agricultural lands shall not diminish the productivity of such prime agricultural lands.*

Section 30241.5 of the Coastal Act states:

- (a) If the viability of existing agricultural uses is an issue pursuant to subdivision (b) of Section 30241 as to any local coastal program or amendment to any certified local coastal program submitted for review and approval under this division, the determination of "viability" shall include, but not be limited to, consideration of an economic feasibility evaluation containing at least both of the following elements:*
  - (1) An analysis of the gross revenue from the agricultural products grown in the area for the five years immediately preceding the date of the filing of a proposed local coastal program or an amendment to any local coastal program.*

- (2) *An analysis of the operational expenses, excluding the cost of land, associated with the production of the agricultural products grown in the area for the five years immediately preceding the date of the filing of a proposed local coastal program or an amendment to any local coastal program.*

*For purposes of this subdivision, “area” means a geographic area of sufficient size to provide an accurate evaluation of the economic feasibility of agricultural uses for those lands included in the local coastal program or in the proposed amendment to a certified local coastal program.*

- (b) *The economic feasibility evaluation required by subdivision (a) shall be submitted to the commission, by the local government, as part of its submittal of a local coastal program or an amendment to any local coastal program. If the local government determines that it does not have the staff with the necessary expertise to conduct the economic feasibility evaluation, the evaluation may be conducted under agreement with the local government by a consultant selected jointly by local government and the executive director of the commission.*

Section 30242 of the Coastal Act states:

*All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless: (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.*

Section 30241 of the Coastal Act requires that the maximum amount of prime agricultural land be maintained in agricultural production and that conflicts between urban and agricultural land uses be minimized through specifically identified means. In addition, Section 30242 of the Coastal Act protects non-prime agricultural lands that are nevertheless suitable for agricultural use from conversion to nonagricultural use unless continued or renewed agricultural use is not feasible, or the conversion would preserve prime agricultural land or concentrate development consistent with Section 30250, and any permitted conversion of agricultural land is required to be compatible with continued agricultural use on surrounding lands.

Pursuant to Coastal Act section 30113 and Government Code section 51201(c), farmland within the Coastal Zone must meet one or more of the following criteria in order to be defined as prime agricultural land: (1) the federal Natural Resources Conservation Service (NRCS) has classified the soil as Class I or II soils; (2) it has a Storie Index Rating of 80 through 100; (3) it has the ability to support livestock (at least one animal unit per acre as defined by the USDA); or (4) it is or could be planted with fruit- or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of fewer than five years and that will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than \$200 per acre. Even if land does not meet the prime agricultural land definition, Section 30242 protects all other lands suitable for agricultural uses and prohibits their

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conversion to nonagricultural uses unless agricultural use is not feasible or conversion would preserve prime agricultural land or concentrate development in existing developed areas.

The majority of current agriculture production in San Diego County is located outside of the Coastal Zone in northern and eastern portions of the region. Within the NCC, agricultural parcels are distributed in relatively isolated areas, surrounded by various urban uses and open space areas. Agricultural lands in the corridor generally occur adjacent to lagoon areas and associated open space, and in various patches throughout the otherwise urban landscape. A large portion of agricultural lands in the corridor consist primarily of nursery and greenhouse operations. These types of agriculture are relatively unaffected by typical urban/agricultural interface issues and encroachment. In these operations, cultivation occurs in structures and in pots and not directly in the ground; and, it is the coastal climate, rather than area soils, that provides the resource and benefit for these agricultural commodities.

Proposed NCC PWP/TREP rail improvements would occur adjacent to agricultural areas in Encinitas and Carlsbad. None of these parcels meet the Coastal Act standards for prime agricultural land. NCC PWP/TREP rail improvements would occur within the existing rail corridor right-of-way and, therefore, permanent impacts to the adjacent agricultural lands are not anticipated.

Impacts to agricultural lands from proposed NCC PWP/TREP highway improvements would occur in the cities of Encinitas and Carlsbad. NCC PWP/TREP highway improvements would affect approximately 10.9 total acres of farmland. None of these parcels meet the Section 30241 Coastal Act standards for prime agricultural land, but most are either actively farmed or have recently been in agricultural production and therefore subject to the protections in Coastal Act Section 30242. The proposed NCC PWP/TREP highway improvements within San Diego, Del Mar, Solana Beach, and Oceanside would not result in encroachment or impacts to agricultural lands.

The proposed highway improvements within Encinitas would include a multi-use parking/transit facility and a direct access ramp (DAR) at Manchester Avenue, which would affect active agricultural fields east of and adjacent to I-5. The proposed transit facilities would encroach into a 30.5 acre property that has historically been farmed with strawberries and flowers. The proposed highway facilities would affect approximately 6.9 acres of the western portion of the site adjacent to I-5. To avoid and minimize potential impacts to agricultural land, Caltrans has redesigned the project footprint to reduce previously identified project impacts from 18.5 acres to 6.9 acres ([Exhibit 21](#)). Proposed highway widening improvements would also affect approximately 0.2 acres along the western edge of a parcel located east of the highway that houses greenhouse and nursery operations.

The proposed highway improvements within Carlsbad are located east of I-5 at Cannon Road and would encroach into a 106.2-acre property that is actively farmed with strawberries and flowers. Proposed highway improvements would directly affect approximately 2.3 acres of these agricultural lands; the impact would be linear along the western edge of the property and would not bisect or preclude continued agricultural operation of the remaining 103.9 acres. To avoid and minimize potential impacts to agricultural land, the proposed I-5 alternative includes the

smallest project footprint necessary for the highway improvements and eliminates a previously proposed DAR, thereby reducing impacts to agricultural land within Carlsbad from a previously identified 16 acres to 2.3 acres.

Temporary, construction-related impacts to agricultural resources throughout the corridor could result from conversion of important agricultural lands or other disruption of agricultural activities because of construction/assembly and construction staging areas that may be proposed within an area used for agricultural production. These temporary impacts could be generated by construction activities associated with both proposed rail and highway improvements.

Caltrans conducted an Agricultural Viability Analysis (Appendix F) to address proposed impacts to agricultural lands adjacent to the highway that would be affected at Manchester Avenue in Encinitas (approximately 6.9 acres) and at Cannon Road in Carlsbad (approximately 2.3 acres). The Viability Analysis investigated existing soil and farmland classifications, historic agricultural uses, per acre production cost estimates, and estimated revenue returns, in order to determine if the proposed impacts would affect the long term feasibility of continued agricultural production at the subject sites. The Analysis concluded that potential impacts associated with proposed NCC PWP/TREP transportation improvements would not compromise the ability of the remaining 23.6 and 103.9 acres of land at these two locations, respectively, to remain in agricultural production because there would be sufficient land, resources, and connectivity to necessary infrastructure available to support future agriculture.

Potential impacts to agricultural resources from proposed transportation improvements would be avoided to the maximum extent feasible through project design, which would ensure that the amount of right-of-way required for improvements would be the minimum amount of land required to fulfill the purpose and need of the project, as well as meet operational requirements of the facilities. Wherever possible, the proposed project would follow within the existing rail and I-5 highway corridor alignments to avoid and/or minimize impacts to agricultural lands, which would result in avoidance or minimal encroachment along the edges of agricultural lands located directly adjacent to the existing facilities. As such, proposed project encroachments onto lands containing agricultural resources would not preclude continued agricultural operations of the properties.

Where new development could adversely affect agricultural resources, appropriate mitigation measures shall be required and implemented. The NCC PWP/TREP requires that unavoidable impacts to active coastal agricultural lands within the NCC be mitigated pursuant to a tiered approach that would be submitted with the NOID for applicable specific projects. The highest priority tier includes the acquisition of lands where restoration or enhancement of farming activities could be implemented, or where permanent retirement of the development potential of existing agricultural lands would only allow for continued farming or habitat restoration on the subject site. The second tier includes establishment of specific activities that support “urban agriculture” including community gardens, farm-to-school programs, farm-to-fork restaurants, buy local, farm-to-grocery stores, vertical farming, farmers’ markets or endowments to programs of study in agricultural sciences in the NCC Coastal Zone. Priority for these activities should be given to programs located within the affected jurisdiction. The last tier would be for payment of an in-lieu fee under an approved Agricultural Conversion Mitigation Fee program, such as that

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implemented within the City of Carlsbad. The Commission will be responsible for determining if any of the prioritized tiers described above are not feasible mitigation opportunities available for each individual NOID submittal.

Additionally, the NCC PWP/TEP requires that any temporarily affected agricultural areas or operations would be fully returned to pre-existing agricultural use after project construction is completed, without long-term reduction in productivity or conversion of the subject lands to a nonagricultural use. Potential loss of income or agricultural production from temporary construction-related impacts would require appropriate mitigation.

In conclusion, the proposed NCC PWP/TREP consists primarily of improvements to existing transportation facilities located within existing rail and highway right-of-ways. Given the linear nature of the proposed improvements, the majority of impacts would be contained to only four total agricultural parcels located in areas directly adjacent to the existing highway, and therefore the majority of project impacts would not substantially displace agricultural resources or disrupt or preclude continued agricultural operations of the affected properties. Caltrans and SANDAG have developed project alternatives that minimize impacts in these areas; however, some impacts to coastal agriculture would be unavoidable given the proximity of the transportation corridors to existing agricultural lands. As such, the proposed NCC PWP/TREP would require the conversion of some areas that are suitable for agricultural use and where agricultural use is feasible. Therefore, the Commission finds that the proposed project is not consistent with the agriculture resource protection policies in Section 30242 of the Coastal Act. Altogether, the proposed NCC PWP/TREP policies, design and development strategies, and implementation measures (Section 5.9.3.2-4) would serve to avoid (where feasible), minimize, and mitigate potential impacts to agricultural lands. The only way the Commission could approve this public works plan would be if it finds the project consistent with the Coastal Act through the conflict resolution provision contained in Section 30007.5 (see Section III.M below).

### **M. CONFLICT RESOLUTION**

Coastal Act Section 30007.5 states:

*The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.*

Coastal Act Section 30200(b) states:

*Where the commission or any local government in implementing the provisions of this division identifies a conflict between the policies of this chapter, Section 30007.5 shall be utilized to resolve the conflict and the resolution of such conflicts shall be supported by appropriate findings setting forth the basis for the resolution of identified policy conflicts.*

As noted previously in this report, the proposed project's dredging and filling of wetlands, impacts to ESHA and impacts to coastal agriculture are inconsistent with Coastal Act Sections 30233, 30240 and 30242, respectively. However, as explained below, denying the proposed project to eliminate this inconsistency would be inconsistent with mandates of other Coastal Act policies, namely Sections 30210-30213 and 30252 (public access), 30230 and 30231 (marine biology and water quality), 30250 (concentration of development), and 30253 (air quality).

Even though components of the NCC PWP/TREP would result in impacts to wetlands, ESHA and coastal agriculture, it also includes several benefits to coastal resources that are inherent to the subject plan and would not occur without the proposed development. New and enhanced east/west and north/south bicycle and pedestrian connectivity would significantly improve public access as would the integrated transportation system across the various travel modes included in the plan that would facilitate connectivity and reduce travel times. The ability to link different project types through a phased implementation program provides assurance that development will move forward in a balanced approach that is most protective of coastal resources and public access. Existing bridges that constrain sensitive coastal lagoons within the corridor would be replaced with longer spans to improve the biological health and water quality within these systems. The NCC PWP/TREP would also allow for construction coordination between different transportation infrastructure corridors that would minimize both spatial and temporal impacts to several coastal resources. The proposed plan would facilitate development along existing transportation corridors thereby encouraging Smart Growth and centralized development patterns. The improved transportation system would also create new travel options that would reduce congestion along the highway and parallel roadway and rail arterials while also creating improved transit and non-vehicular transportation opportunities that when combined in total would result in improved air quality conditions. In such a situation, when a proposed project is inconsistent with a Chapter 3 policy, and denial or modification of the project would be inconsistent with another Chapter 3 policy, Section 30007.5 of the Coastal Act provides for resolution of such a policy conflict.

### **Applying Section 30007.5 to the Proposed Project**

As indicated previously, the standard of review for the Commission's decision on a Public Works Plan is whether the proposed project is consistent with the certified LCPs within the project area, and in areas without a certified LCP, the Coastal Act's Chapter 3 policies are the relevant standard of review. The project's inconsistencies with specific certified LCP policies makes it unapprovable unless the subject LCPs can be amended such that they could authorize the proposed work. The standard of review for any such LCP amendments is, in turn, the Chapter 3 policies of the Coastal Act. Those policies are also the standard of review for the federal consistency review. Thus, as indicated previously, the Chapter 3 policies of the Coastal Act are the relevant standard of review for this entire report, both directly (for the LCP amendments and the federal consistency review) and indirectly (for the PWP itself). Finally, whether assessing a consistency certification, an LCP amendment, or a specific development proposal, the proposal must generally be consistent with all relevant standards and policies, in order to be approved. If inconsistent with one or more policies, the proposal must normally be denied or conditioned to make it consistent with all relevant policies.

However, the Legislature recognized through Sections 30007.5 and 30200(b) that conflicts can occur among applicable Coastal Act policies. It therefore declared that when the Commission identifies a conflict among the policies of Chapter 3, the conflict is to be resolved “in a manner which on balance is the most protective of significant coastal resources,” pursuant to Coastal Act Section 30007.5.

The first step in applying this provision is to establish that a project presents a substantial conflict between two statutory directives contained in Chapter 3 of the Coastal Act. The fact that a proposed project is consistent with one policy of Chapter 3 and inconsistent with another policy does not necessarily result in a conflict. Virtually every project will be consistent with *some* Chapter 3 policy, since many Chapter 3 policies prohibit a specific type of development, and almost no project will violate every such prohibition. A project does not present a conflict between two statutory directives simply because it violates some prohibitions and not others. In order to identify a conflict, the Commission must find that, although approval of a project would be inconsistent with a Chapter 3 policy, the denial of the project based on that inconsistency would result in coastal zone effects that are inconsistent with some other Chapter 3 policy. The Commission has identified several additional criteria that must be satisfied in identifying a true conflict that justifies invocation of this process. Thus, before invoking this process for resolving conflicts, the Commission must find that the following seven determinations are all satisfied:

- 1) The project, as proposed, is inconsistent with at least one Chapter 3 policy, as it would have an adverse impact on at least one protected coastal resource (which includes maximum public access);
- 2) If the project is denied or modified to eliminate the inconsistency, the inability to implement the project or the implementation of the modified version of the project would necessarily affect some *other* coastal resource(s) in a manner inconsistent with at least one other Chapter 3 policy that affirmatively requires protection or enhancement of those resources;
- 3) The project, if approved, would be fully consistent with the policy that affirmatively mandates the resource protection or enhancement that would be lost without the project;
- 4) The project, if approved, would result in tangible resource enhancement over existing conditions;
- 5) The benefits of the project are not independently required by some other body of law;
- 6) The benefits that the project will confer on a protected coastal resource(s) must result from the main purpose of the project, rather than from an ancillary component appended to the project to “create a conflict” by offering an irresistible benefit; and,
- 7) There are no feasible alternatives that would achieve the objectives of the project without violating any Chapter 3 policies.

Each element is explained below in greater detail and applied to the proposed project.

**1) The project, as proposed, is inconsistent with at least one Chapter 3 policy, as it would have an adverse impact on at least one protected coastal resource (which includes maximum public access).**

For the Commission to apply Section 30007.5, a proposed project must be inconsistent with an applicable Chapter 3 policy. In the case of this proposed project, the inconsistency is with Coastal Act Sections 30233, 30240 and 30242. The proposed project would result in fill of approximately 24 acres of wetlands and would significantly disrupt 64 acres of potential ESHA, much of it through complete displacement, and is not identified as any of the allowable uses described in either of these Sections (30233 and 30240). Additionally, the proposed project would result in conversion of 9.4 acres of coastal agricultural lands (30242). These impacts would primarily be the result of support fill required for the proposed widening of existing highway and rail corridors where they already cross coastal lagoon systems. Although the proposed infrastructure improvements were designed to avoid and minimize impacts due to the close proximity of these coastal habitats, some level of impacts would be associated with any level of facility expansion.

**2) If the project is denied or modified to eliminate the inconsistency, the inability to implement the project or the implementation of the modified version of the project would necessarily affect some *other* coastal resource(s) in a manner inconsistent with at least one other Chapter 3 policy that affirmatively requires protection or enhancement of those resources;**

A true conflict between Chapter 3 policies results from a proposed project which is inconsistent with one or more policies, and for which denial or modification of the project would be inconsistent with at least one other Chapter 3 policy. Further, the policy inconsistency that would be caused by denial or modification of a project must be with a policy that affirmatively mandates protection or enhancement of certain coastal resources. Denial of the proposed NCC PWP/TREP would be inconsistent with the following Chapter 3 policies: (1) Sections 30210-30213 and Section 30252, which require the protection and provision of public access, including through the provision of public transit systems and adequate parking facilities; (2) Section 30230, which requires the protection and enhancement of marine resources; (3) Section 30231, which requires that adequate biological productivity and water quality to maintain optimum populations of marine organisms and for the protection of human health be maintained; (4) Section 30250, which requires that new development be concentrated around similar existing land uses; and (5) Section 30253(d), which requires that energy consumption be minimized. Benefits to coastal resources that would be directly created by the proposed project would include new or enhanced public access, transit and non-motorized transportation opportunities, optimized (for biological purposes) bridge spans over coastal lagoon systems, expanded water treatment facilities, support for Smart Growth opportunities, and a reduction in harmful air pollutant emissions. In most cases, denying a proposed project will not cause adverse effects on coastal resources for which the Coastal Act mandates protection or enhancement, but will simply maintain the status quo. However, where denial of a project would result in such effects, as is

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the case with the proposed NCC PWP/TREP, a conflict between or among two or more Coastal Act policies is presented.

### **3) The project, if approved, would be fully consistent with the policy that affirmatively mandates the resource protection or enhancement that would be lost without the project;**

For denial of a project to be inconsistent with a Chapter 3 policy, the proposed project would have to protect or enhance the resource values for which the applicable Coastal Act policy includes an affirmative mandate. That is, if denial of a project would conflict with an affirmatively mandated Coastal Act policy, approval of the project would have to conform to that policy. If the Commission were to interpret this conflict resolution provision otherwise, then any proposal, no matter how inconsistent with Chapter 3 that offered a slight incremental improvement over existing conditions could result in a conflict that would allow the use of Section 30007.5. The Commission concludes that the conflict resolution provisions were not intended to apply to such minor incremental improvements.

The NCC PWP/TREP is designed to coordinate and improve various transportation modes through the NCC that provide access to the coast; replace existing bridges with new bridge structures that are designed to optimize benefits to adjacent sensitive lagoon systems; encourage Smart Growth, reduce congestion, and provide alternative transportation options that would decrease harmful emissions; as more specifically described in the report above. The project, as proposed and conditioned, is therefore fully consistent with the provisions of Coastal Act Sections 30210-30214, 30230, 30231, 30250, 30252 and 30253(d).

### **4) The project, if approved, would result in tangible resource enhancement over existing conditions.**

This aspect of the conflict between policies may be viewed from two perspectives – either that approval of the project would result in improved conditions for a coastal resource subject to an affirmative mandate, or that denial or modification of the project would result in continued degradation of that resource.

Project approval would result in significant improvements to the transportation infrastructure in the NCC including expanded rail capacity through double tracking; expanded HOV and transit capacity through additional Express Lanes on I-5; new and improved bicycle and pedestrian facilities including the new NCC Bikeway as well as several improved east/west connections across major transportation corridors and new north/south connections across lagoon systems; and expanded transit opportunities including a new BRT route along I-5 and an enhanced bus route along the coast. The phasing plan for the NCC PWP/TREP would ensure that projects would move forward in a balanced manner that would protect coastal resources and improve public access. The NCC PWP/TREP would also improve linkages between these various transportation modes to maximize connectivity while minimizing impacts during construction – all of which would result in improved public access to coastal resources throughout the subject area as mandated by Coastal Act Sections 30210 – 30213, and 30252. Additionally, project

approval would result in a more concentrated development pattern that would facilitate Smart Growth as supported by Coastal Act Section 30250.

Denial of the project would result in the continued presence of constraints on coastal lagoon systems and watersheds created by existing narrow bridge spans and associated support fill that result in diminished water quality and biological productivity within these sensitive coastal resources and would therefore be in conflict with the policies of Coastal Act Sections 30230 and 30231. Additionally, denial of the project would perpetuate and increase existing congestion along I-5 and other coastal arterial roadways resulting in increased emissions of pollutants and energy consumption thereby diminishing air quality in conflict with Coastal Act Section 30253(d). Approval and implementation of the project would provide some significant relief from these negative influences.

**5) The benefits of the project are not independently required by some other body of law.**

The benefits of a project that would cause it to be inconsistent with a Chapter 3 policy cannot be those that a project proponent is already being required to provide pursuant to another agency's directive under another body of law. In other words, if the benefits would be provided regardless of the Commission's action on the proposed project, the project proponent cannot seek approval of an otherwise unapprovable project on the basis that the project would produce those benefits – that is, the project proponent does not get credit for resource enhancements that it is already being compelled to provide. For this project, Caltrans and SANDAG are proposing improvements to the rail and highway transportation corridors in order to update this infrastructure to be more in step with increases in population growth and land use changes that have occurred over the past fifty or more years since the facilities were originally constructed, to improve water flows, to encourage concentration of development, and to reduce energy consumption associated with the inefficient movement of travelers through the corridor. While the applicants could in the future be compelled to replace these facilities due to the age and deterioration of the facilities, there is nothing requiring that the enhancements or additions proposed as a part of the NCC PWP/TREP be included. Additionally, the inclusion of the proposed transportation improvements within a regional public works plan that allows for coordination among project elements and minimization of impacts is likewise not required by another agency's directive.

**6) The benefits that the project will confer on a protected coastal resource(s) must result from the main purpose of the project, rather than from an ancillary component appended to the project to “create a conflict” by offering an irresistible benefit.**

A project's benefits to coastal resources must be integral to the project purpose. If a project is inconsistent with a Chapter 3 policy, and the main elements of the project do not result in the cessation of ongoing degradation of a resource the Commission is charged with enhancing, the project proponent cannot “create a conflict” by adding to the project an independent component to remedy the resource degradation. The benefits of a project must be inherent in the purpose of the project. If this provision were otherwise, project proponents could regularly provide carrots that are independent of their project to “create conflicts” and then request that the Commission use Section 30007.5 to approve otherwise unapprovable projects. The balancing provisions of

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the Coastal Act could not have been intended to foster such an artificial and easily manipulated process, and were not designed to barter amenities in exchange for project approval. In this case, the project purpose is to address travel through and within the NCC at a regional level in order to best integrate various travel modes and enhance connectivity between these travel modes to best facilitate access to and along the NCC Coastal Zone for all user groups. This incorporation of different infrastructure and transportation types into a single regional public works plan also allows for phasing and coordination across development types that minimizes impacts (both spatially and temporally), reduces energy consumption, and optimizes bridge lengths for improved water quality and biological production.

### **7) There are no feasible alternatives that would achieve the objectives of the project without violating any Chapter 3 policies.**

Finally, a project does not present a conflict among Chapter 3 policies if at least one feasible alternative would meet the project's objectives without violating any Chapter 3 policy. Thus, an alternatives analysis is a condition precedent to invocation of the balancing approach. If there are alternatives available that are consistent with all of the relevant Chapter 3 policies, then the proposed project does not create a true conflict among those policies.

In this instance, and as noted above, given the location of the existing transportation corridors in the NCC, there are no alternatives that would include expansion of this infrastructure without introducing some impacts to the lagoon systems that they bisect, and the agricultural lands that they border; and, without some level of facility expansion, the project objectives of improving travel and coastal access in the NCC could not be achieved. In order to minimize impacts, Caltrans has selected the alternative with the smallest footprint (8+4 buffer) that could achieve these transportation goals, and SANDAG has conducted a Prioritization Study to identify what rail projects and the order these projects should be implemented to achieve these transportation goals in a feasible and timely manner. As described above in the Project Description and Content Section of these Findings, the applicants have proposed compensatory mitigation that is expected to result in significantly greater habitat values throughout the NCC than those impacted areas directly adjacent to transportation right-of-ways.

### **Existence of a Conflict between Chapter 3 Policies**

Based on the above, the Commission finds that the proposed project presents a conflict between Sections 30233, 30240 and 30242 on the one hand, and Sections 30210-30213, 30230, 30231, 30250, 30252 and 30253(d) on the other, that must be resolved through application of Section 30007.5, as described below.

### **Conflict Resolution Summary**

After establishing a conflict among Coastal Act policies, Section 30007.5 requires the Commission to resolve the conflict in a manner that is on balance most protective of coastal resources. As noted previously, the project includes dredging and filling in wetlands as well as unallowable impacts to ESHA and agricultural lands. However, denying the project because of its inconsistency with the cited Coastal Act policies would result in significant adverse effects on

public access, biological resources, water quality and air quality due to the persistence of the existing antiquated transportation system in the NCC. Therefore, the Commission finds that approval of the proposed project notwithstanding its inconsistencies with Coastal Act Sections 30233, 30240 and 30242 is “most protective of coastal resources” for purposes of the conflict resolution provisions of Coastal Act Section 30007.5.

## **N. CONSISTENCY ANALYSIS OF PWP WITH LCPs**

The following discussion addresses the NCC PWP/TREP’s consistency with the certified LCP policies, as they exist now (prior to the LCP amendments proposed as part of this project), for those corridor cities with certified LCPs (San Diego, Encinitas, Carlsbad, Oceanside) affected by the scope of transportation improvements. This LCP consistency analysis identifies where the proposed NCC PWP/TREP improvements present potential conflicts with specific LCP policies, which makes the proposal unapprovable unless the subject LCPs can be modified such that they are consistent with the proposed work. Due to the nature of the project, as well as sensitive programming, design, and construction, and by applying the proposed design/development strategies and mitigation measures, the proposed NCC PWP/TREP is not in conflict with LCP policies related to the following coastal resources: air quality and energy consumption, public access and recreation, smart growth and public transportation, geologic and coastal hazards, and archaeological and paleontological resources. However, approval of the proposed NCC PWP/TREP would result in potential conflicts with certified LCP policies related to ESHA, wetlands, water quality, visual resources and agriculture. Thus, the proposed LCP amendments include a narrowly defined overlay zone specific to the proposed NCC PWP/TREP projects and have been submitted by the applicant to resolve these policy conflicts within the cities with certified LCPs, including San Diego, Encinitas, Carlsbad, and Oceanside.

### **Water Quality and Wetlands**

Most of the corridor LCPs include policies that mirror, in part, the requirements of Coastal Act Sections 30230, 30231, and 30236; however, the LCPs also include a variety of additional, detailed, and city-specific policies and development standards that address potential impacts associated with water quality, wetland resources, and stream channelization. While the proposed NCC improvements have been sited and designed to minimize impacts to water quality, and would include mitigation measures to protect and, where feasible, enhance and restore water quality, it is unlikely that the proposed improvements could be implemented consistent with each specific City’s LCP policy requirement that addresses stormwater treatment standards for new development.

In addition, all of the corridor LCPs include specific policies that require buffers from wetland and riparian habitat areas, and mitigation requirements where impacts to wetland and riparian areas are permitted. The corridor LCPs collectively include a range of policy requirements that address wetland and riparian buffers and mitigation, some of which include buffer requirements without the option to adjust buffers, and others that provide for standard buffer requirements but allow for adjustment if certain criteria are met.

## NCC PWP/TREP

(Caltrans and SANDAG)

The location of existing transportation facilities requires that some of the proposed improvements occur in areas within or adjacent to wetlands; thus, the proposed NCC PWP/TREP would not provide the minimum buffer requirements provided for in the corridor LCPs. Additionally, since the proposed REMP is intended to significantly enhance water quality and wetlands in the corridor by implementing a combination of traditional and non-traditional mitigation measures to enhance and restore coastal resources beyond standard mitigation requirements, the proposed PWP/TREP would not meet all of the traditional mitigation ratio requirements for wetland and riparian habitat areas included in the corridor LCPs. As such, SANDAG and Caltrans have submitted LCP amendments to the LCPs of San Diego, Encinitas, Carlsbad, and Oceanside to ensure consistency of the LCPs with the proposed project. These LCP amendments rely on conflict resolution under Section 30007.5 of the Coastal Act (discussed in greater detail in the Conflict Resolution Section III.M of this report). The conflict resolution analysis concludes that denying or modifying the project to avoid wetland fill impacts or to ensure the full buffers and BMPs would conflict with several other Chapter 3 policies and approving the proposed NCC PWP/TREP on balance is the most protective of significant coastal resources.

### **Environmentally Sensitive Habitat Areas**

In general, proposed NCC PWP/TREP improvements would be designed and implemented consistent with the cities' ESHA protection policies; however, various cities LCP policies that require new development not intrude into open space areas, and that mature trees and other significant existing vegetation be protected, would present potential policy conflicts for the proposed improvements where such impacts cannot be avoided. All of the corridor LCPs include specific policies that require buffers from wetland and riparian habitat areas, and some of the LCPs further address buffers for upland sensitive habitats. The LCPs also collectively require both specified and unspecified mitigation requirements where impacts to wetland, riparian, and sensitive upland habitat areas are permitted.

The existing location of the transportation infrastructure requires the proposed improvements to occur in areas containing ESHA; thus, the proposed PWP/TREP would not provide the minimum buffer requirements required in the corridor LCPs. Additionally, since the proposed REMP is intended to significantly enhance sensitive resources in the corridor by implementing a combination of traditional and non-traditional mitigation measures to enhance and restore resources beyond standard mitigation requirements, the proposed PWP/TREP would not meet all of the traditional mitigation requirements for ESHA where included in the corridor LCPs. As such, SANDAG and Caltrans have submitted LCP amendments to the LCPs of San Diego, Encinitas, Carlsbad, and Oceanside relying on conflict resolution under Section 30007.5 of the Coastal Act, and discussed in greater detail in the Conflict Resolution Section III.M of this report, to support new LCP policies that would allow approval of the project.

### **Visual Resources**

All of the corridor LCPs include policies that mirror, in part, the requirements of Coastal Act Sections 30251 and 30253(b), which require new development be sited and designed to protect views to and along the coast; alteration of natural landforms be minimized; visual compatibility

with the character of surrounding areas; and that construction of protective devices that would substantially alter natural landforms along coastal bluffs and cliffs not be required. However, the certified LCPs also include a range of additional, city-specific policies that address potential impacts to visual resources. The Cities of San Diego, Encinitas, and Carlsbad require that new development not intrude into designated open space areas and that all mature trees, significant natural features, and other significant existing vegetation be protected. Although proposed NCC PWP/TREP improvements have been designed to avoid and minimize encroachment into areas containing open space, mature trees, significant natural features, and significant vegetation, it is not feasible to completely avoid these resources, as required by the corridor LCPs. Thus, these policy requirements present conflicts that require the subject LCP amendments to ensure consistency of the PWP/TREP improvements with the certified LCPs, as proposed to be amended, and discussed in greater detail in the Visual Resources Section III.I of this report.

### **Agricultural Resources**

Since there is no potential for impacts to agricultural lands located within the Cities of San Diego or Oceanside, and the potential impacts within the City of Carlsbad are located in an area of deferred certification, no agriculture-related LCP policy conflicts would occur for these cities; thus, the following discussion focuses only on the certified LCP for the City of Encinitas. Encinitas has a certified LCP that includes policies that mirror, in part, the requirements of Coastal Act Sections 30241 (although the City does not have any areas of “prime” lands as defined by Coastal Act standards) and 30242 with language that preserves and promotes the right to produce unique horticultural crops and community gardens. The proposed NCC PWP/TREP improvements would result in encroachments into agricultural lands along the existing I-5 corridor for a total of 7.1 acres in Encinitas. These impacts would be restricted to the edge of agricultural lands and would not adversely affect the productivity of the sites nor preclude continued agricultural activities on the sites. Although the lands potentially affected by the proposed improvements do not meet the Coastal Act’s standards for prime agricultural land, because the City’s LCP provides for the preservation and promotion of the right to produce crops, a potential policy conflict occurs, requiring the submittal of an LCP amendment to ensure consistency of the proposed NCC PWP/TREP improvements with the certified LCP, as proposed to be amended, and discussed in greater detail in the Agricultural Resources Section III.L of this report.

## **O. ALTERNATIVES ANALYSIS**

SANDAG and Caltrans conducted a number of studies, at both the regional and corridor levels, to evaluate a range of alternatives to the proposed NCC PWP/TREP project. At the regional level, SANDAG prepares a Regional Transportation Plan (RTP) every four years that assesses regional transportation network alternatives, including a system of highway, transit, bicycle, and pedestrian improvements in the NCC (as a subset of the region). These NCC improvements were further evaluated through corridor-level alternatives analyses to determine preferred projects that address the growing demand for transportation in the corridor. The alternatives were evaluated against the project objectives (described in Table 1 below) with consideration given to the characteristics and constraints of the corridor, including: existing and proposed land use and population densities; existing infrastructure; environmental and geographical constraints;

available revenue, given other regional needs and priorities; trip characteristics, including trip purpose, trip length, and origin/destination; and consistency with relevant Coastal Act and LCP policies.<sup>37</sup>

**Table 1: TRANSPORTATION OBJECTIVES FOR THE NCC**

<b>GOAL</b>	<b>DEFINITION</b>
Coastal Access	The NCC’s transportation system should provide improved access to coastal areas for all residents and visitors.
Congestion Reduction	The NCC’s transportation facilities should be free of congestion to the greatest extent possible. This means not only accommodating the transportation needs of today’s residents, but also planning for the transportation needs of future residents, who will be part of the projected 23% growth in population over the next three decades.
Transportation Flexibility	In addition to providing benefits in the near term, the NCC’s transportation should be able to adapt to future changes in demand, transit ridership, technology, land use, and other influential factors.
Value Maximization	The NCC’s transportation investments should maximize value, providing the greatest possible mobility benefits per dollar spent, for both the NCC and the entire region.
Integration into Larger System	The NCC’s transportation system should be maintained and enhanced as an important link in the regional, state, and national transportation system.
Movement of People rather than Vehicles	The NCC’s transportation system should prioritize the movement of people, rather than simply vehicles, to maximize efficiency and reduce per capita pollution, energy consumption, and vehicle miles traveled.
Environmental Protection and Enhancement	The NCC’s transportation system should promote sustainability and quality of life for residents and visitors, and protect the human and natural environments, wherever possible.

The following discussion addresses the NCC alternatives by category and provides a summary of the analyses and conclusions within the context of the corridor constraints/characteristics relative to the project’s transportation objectives as well as consistency with the Chapter 3 policies of the Coastal Act.

**Traditional Freeway Alternatives (Alternatives 5, 8, 9, and 15)**

Historically, freeways have been sized primarily to accommodate future projected demand; thus, several traditional freeway alternatives were analyzed that would add general purpose lanes to I-5 or implement a new freeway in the corridor, consistent with this approach. Alternative 9 would add eight general purpose lanes; Alternative 5 would add two general purposes lanes; Alternative 8 would construct new general purpose lanes in the center of the freeway on a bridge structure elevated over the existing freeway lanes; and Alternative 15 would construct an entirely new east-west freeway serving the corridor at its western end.

<sup>37</sup> NCC PWP/TREP, Appendix J

These traditional freeway alternatives were deemed not to meet the transportation project goals and were inconsistent with relevant Coastal Act policies. While some would address congestion reduction and coastal access objectives, those with the least environmental impacts or smallest footprints would not maintain these objectives over the long term, and the alternatives that do an effective job of reducing congestion would result in significant impacts to sensitive habitats, wetlands, agriculture and visual resources. These general purpose lane-only alternatives do not provide for the transportation flexibility necessary to adapt to future changes in demand, travel behavior, transit ridership, technology, land use, and other influential factors. Additionally, these alternatives focus solely on the movement of SOVs, and therefore, do not meet the NCC PWP/TREP objective to prioritize the movement of people, rather than vehicles, to maximize efficiency and reduce per capita pollution, energy consumption, and VMT. Further, these traditional freeway alternatives were inconsistent with several Coastal Act policies, including those related to air quality and energy consumption; concentration of development and public transportation; coastal access; ESHA; archaeological and paleontological resources; visual resources; agricultural resources; and marine resources.

### **Carpool Alternatives (Alternatives 3, 4, 6, 7, and 8)**

Several alternatives were analyzed that emphasized adding HOV, or carpool lanes. Alternative 3 would add two HOV lanes and require carpools have three or more occupants; Alternative 4 would add two HOV lanes and require carpools have two or more occupants; Alternative 6 would add two HOV lanes and two general purpose lanes; Alternative 7 would add two HOV lanes and four general purpose lanes; and Alternative 8 would elevate four new general purpose lanes in the center of the freeway on a bridge structure.

While superior to the traditional freeway alternatives, carpool alternatives were also deemed not to meet the transportation project goals due to their limited flexibility for addressing growing and evolving travel demand. HOV lanes are difficult to manage as conditions change over time, and this is particularly true in the corridor where weekend and seasonal peaks associated with coastal access and tourism are significantly different in traveler composition than typical commuter related peak periods in the NCC. The inability to manage a fluctuating and evolving demand for HOV lane travel results in these lanes being significantly underutilized sometimes and significantly congested during other times. Thus, the HOV-based alternatives offer less long term flexibility and congestion relief than Express Lanes. Further, these carpool alternatives were inconsistent with several Coastal Act policies, including those related to air quality and energy consumption; concentration of development and public transportation; coastal access; ESHA; archaeological and paleontological resources; agricultural resources; visual resources; and marine resources.

### **Transit Only or Transit Emphasis Alternatives (Alternatives 1, 2, 14, and 16)**

In lieu of automobile focused improvements, “transit only” or “transit emphasis” alternatives were also analyzed for the NCC. Alternative 14 evaluated the feasibility of extending light rail transit (the San Diego Trolley) northward from the University Town Center (UTC) area into the corridor, with alignment alternatives considered along the existing LOSSAN rail right-of-way, parallel to I-5, along El Camino Real, and between I-5 and the railroad. Alternative 2 considered

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(Caltrans and SANDAG)

implementing two BRT only lanes along I-5. Alternative 16 (Urban Area Transit Strategy) included various combinations of commuter rail, light rail, streetcar, BRT, Rapid Bus, and local bus service and facility improvements. The final transit-only alternative was studied in the I-5 EIR/EIS as the NCC No Build Alternative, or Alternative 1. The No Build Alternative deleted all highway improvements in the I-5 corridor, but retained all corridor transit improvements contained in the 2050 RTP. This No Build Alternative is the baseline against which the other I-5 EIR/EIS alternatives, including the Locally Preferred Alternative (8+4) were evaluated to assess the impacts and benefits of the build alternatives. The resulting analysis found that transportation project goals would be met only with a multi-modal (transit and highway) program of improvements in the corridor.

Alternatives need to meet the mobility needs of the wide range of corridor users and variety of trips that include local and interregional, commute, recreational, tourism and coastal access, and goods movement trips, and do so in a way that takes into consideration the unique characteristics of the NCC. Corridor characteristics include existing low density, mostly suburban land use, limited parallel arterials, varying topography, absence of concentrated employment centers, and long distances between residential centers and transit hubs. Many of these characteristics act to inhibit an efficient transit system and have resulted in historically limited viable or cost-effective transit alternatives in the NCC. In general, areas with higher densities and more urban, mixed-use land use patterns, are more conducive to transit ridership and generate higher transit mode shares. Due to these inherent corridor characteristics, transit usage is currently a small part of the transportation solution in the NCC at approximately 2-3%. By comparison, Downtown San Diego has a 24% transit mode share. Additionally, 17 of the nation's 30 largest cities have transit mode shares of 5% or less, with only a few having any significant commute trip transit mode shares (Los Angeles has 11%, Portland has 12%, Chicago has 26%, and San Francisco has 32%). Still, SANDAG's transit mode share goal for the NCC is set at 10-15%, a 400% increase from current levels.

The general conclusion of studies conducted by Caltrans and SANDAG was that while non-automobile alternatives need to be expanded in a way that will significantly increase the current transit mode share, "transit only/transit emphasis" alternatives would result in significantly increased levels and durations of congestion on I-5, as well as nearby local arterials, as the region continues to grow. Traffic analyses developed for these studies further concluded that if I-5 improvements are not pursued, congestion duration and travel times are expected to double by 2040. The resulting congestion would not meet the transportation project goals including improving coastal access, reducing emissions, sustainable economic vitality, and reduced travel times. Further, these transit alternatives were inconsistent with several Coastal Act policies, including those related to air quality and energy consumption; coastal access; ESHA; and marine resources. Significant investments in transit alone in the corridor would also not effectively maximize value – provide the greatest possible mobility benefits per dollar spent – from the region's limited transportation funding for both the NCC and the entire San Diego region. For these reasons, the "transit only/transit emphasis" alternatives were rejected in favor of a balanced set of modal improvements.

### **Express Lane Alternatives (Alternatives 10, 11, 12, and 13)**

These alternatives included the addition of express lanes that allow access to carpools, transit, and SOVs for a fee. Express lanes are managed to ensure free-flow conditions by adjusting the fees and/or the number of occupants required in a carpool. Fees collected on the express lanes cover administration and operations costs, and are reinvested in transit services within the NCC. Alternative 10 would add three to four Express lanes in the median, separated from general purpose lanes by movable, concrete barriers to allow for directional shifts in the lanes to accommodate differences in peak travel demand; Alternative 11 would add four express lanes, separated from general purpose lanes by non-movable, concrete barriers; Alternative 12 would add four express lanes separated from general purpose lanes by a striped buffer; and Alternative 13 would add four express lanes and 2 general purpose lanes.

These Express lane alternatives directly address the transportation project goals by focusing on moving people and not just cars by providing new travel options for HOVs, which would incentivize carpooling and transit use. They also provide the region with much more flexibility to manage its transportation investment over time. As travel demand and characteristics change, the region can set policies to promote changes in the composition of Express lane users (e.g., more or larger carpools, more transit, higher fees, truck access) to achieve the most effective and efficient use of transportation facilities. While all of the Express lane alternatives address transportation goals, the Locally Preferred Alternative (Alternative 13) was selected as the Express lane alternative with the least environmental impacts.

### **No Project Alternative (Alternative 17)**

Finally, a No Project alternative with no new transit, highway, bicycle, or pedestrian projects other than those that were already under construction or development was analyzed. According to the 2050 RTP Environmental Impact Report prepared by SANDAG, the No Project alternative would not accommodate future population, employment, or housing growth. It would significantly hinder the region's ability to manage transportation system demand and efficiency through innovative transportation improvements. It would provide fewer travel choices, and result in longer and less reliable travel times throughout the region, and result in greater impacts to regional air quality. It would not meet any of the NCC objectives and is inconsistent with several Coastal Act policies, including those related to air quality and energy consumption; public transportation; agricultural resources; and coastal access.

### **Selected NCC PWP/TREP Multi-Modal Alternative (Alternative 18)**

For the reasons set forth above, Caltrans and SANDAG recognized that the selected alternative must balance improved mobility, operational and construction costs, as well as community and environmental impacts and Coastal Act policies. Thus, Alternative 18 – double track LOSSAN rail corridor, enhanced regional transit service and four buffer-separated express lanes – was chosen as the preferred alternative that best meets the objectives and goals of the NCC. This alternative was also directed by SB 468, which limits the alternatives that SANDAG can legally adopt for the highway component in the corridor. Specifically, SB 468 provides that SANDAG must select a preferred alternative that is no larger than the 8+4 buffer alternative.

### **Lagoon Optimization Alternatives Analysis**

In addition to the aforementioned alternatives, lagoon optimization studies were conducted for San Elijo, Batiquitos, and Buena Vista Lagoons to identify the optimal length of bridges and channel design configurations to provide for improved hydraulic lift and facilitation of large-scale lagoon restoration efforts. Individual lagoon studies analyzed the potential effects that proposed bridge design alternatives would have on tidal circulation, flood flows and associated scour, sediment transport, sea level rise relative to freeboard, wildlife connectivity, channel protection features, and associated impacts on wildlife habitats and federal or state jurisdictional waters/wetlands. The analysis reviewed all existing infrastructure constraints within a lagoon system in concert with each other in order to identify optimized bridge dimensions to enhance lagoon-wide function and services. The studies confirmed that existing rail and highway bridges at San Elijo, Batiquitos, and Buena Vista Lagoons presented the primary opportunities where significant improvement could be realized through expanded and optimized bridge lengths. Additional technical studies were then undertaken to identify how the replacement bridges could be designed to optimize tidal and fluvial flows in these system. In addition, bridge designs were produced that would not restrict or limit the large-scale restoration efforts at San Elijo and Buena Vista Lagoons currently under consideration for these lagoons. These new, optimized bridge lengths have been incorporated into the NCC PWP/TREP to be included when more specific project design for these bridges is undertaken.

### **P. CALIFORNIA ENVIRONMENTAL QUALITY ACT**

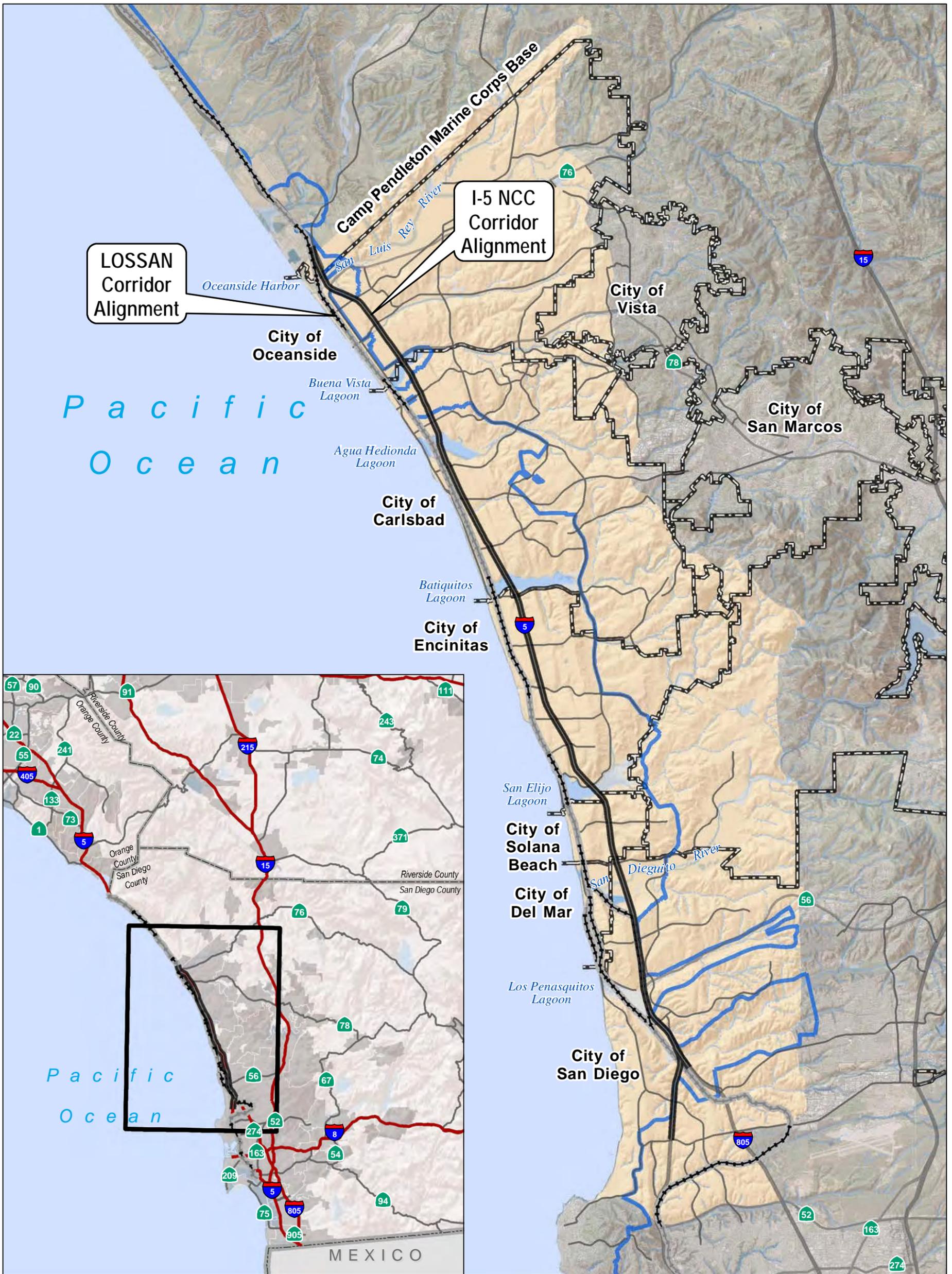
Pursuant to Public Resources Code Section 21067 and Sections 15050 and 15051 of Title 14 of the California Code of Regulations, Caltrans is the lead agency for CEQA purposes, as it is the public agency with principal responsibility for carrying out the I-5 related improvements and the larger NCC PWP/TREP. As the lead agency under CEQA, Caltrans certified a Final Environmental Impact Report addressing the subject plan in October 2013.

As an agency with a certified regulatory program under CEQA Section 21080.5, the Commission must consider alternatives and mitigation measures that would substantially lessen any significant adverse environmental effects that the proposal would otherwise have on the environment. Sections 13371 and 13356(b)(2) of Title 14 of the California Code of Regulations require that the Commission not approve or adopt a PWP unless it can find that: "...there are no feasible alternatives, or feasible mitigation measures,...available which would substantially lessen any significant adverse impact that the development...may have on the environment."

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. For the reasons discussed in this report, the NCC PWP/TREP is consistent with Coastal Act requirements. There are no other feasible alternatives or mitigation measures available that would further lessen any significant adverse effect that the development would have on the environment.

**APPENDIX A – SUBSTANTIVE FILE DOCUMENTS**

1. North Coast Corridor Public Works Plan and Transportation and Resource Enhancement Program, prepared by Caltrans and SANDAG, dated November 2013.
2. Senate Bill 468, introduced by Senator Christine Kehoe, approved September 9, 2011.
3. Sustainable Communities and Climate Protection Act of 2008, Senate Bill 375, Chapter 728, approved September 30, 2008.
4. Global Warming Solutions Act of 2006, Assembly Bill 32, Chapter 488, approved SANDAG 2050 Regional Transportation Plan, dated October 2011.
5. SANDAG 2050 Regional Transportation Plan Final EIR, dated October 2011.
6. SANDAG Regional Comprehensive Plan, adopted in 2004.
7. LOSSAN Final Program EIR/EIS, dated September 2007.
8. I-5 NCC Project Final EIR/EIS, dated October 2013.
9. I-5 NCC Corridor System Management Plan, dated August 2010.
10. I-5 NCC Technical Reports, prepared in support of I-5 NCC Project Draft EIR/EIS, August 2007.
11. Completing the California Coastal Trail, California State Coastal Conservancy, dated January 2003.



**NORTH**

0 5 10 Miles

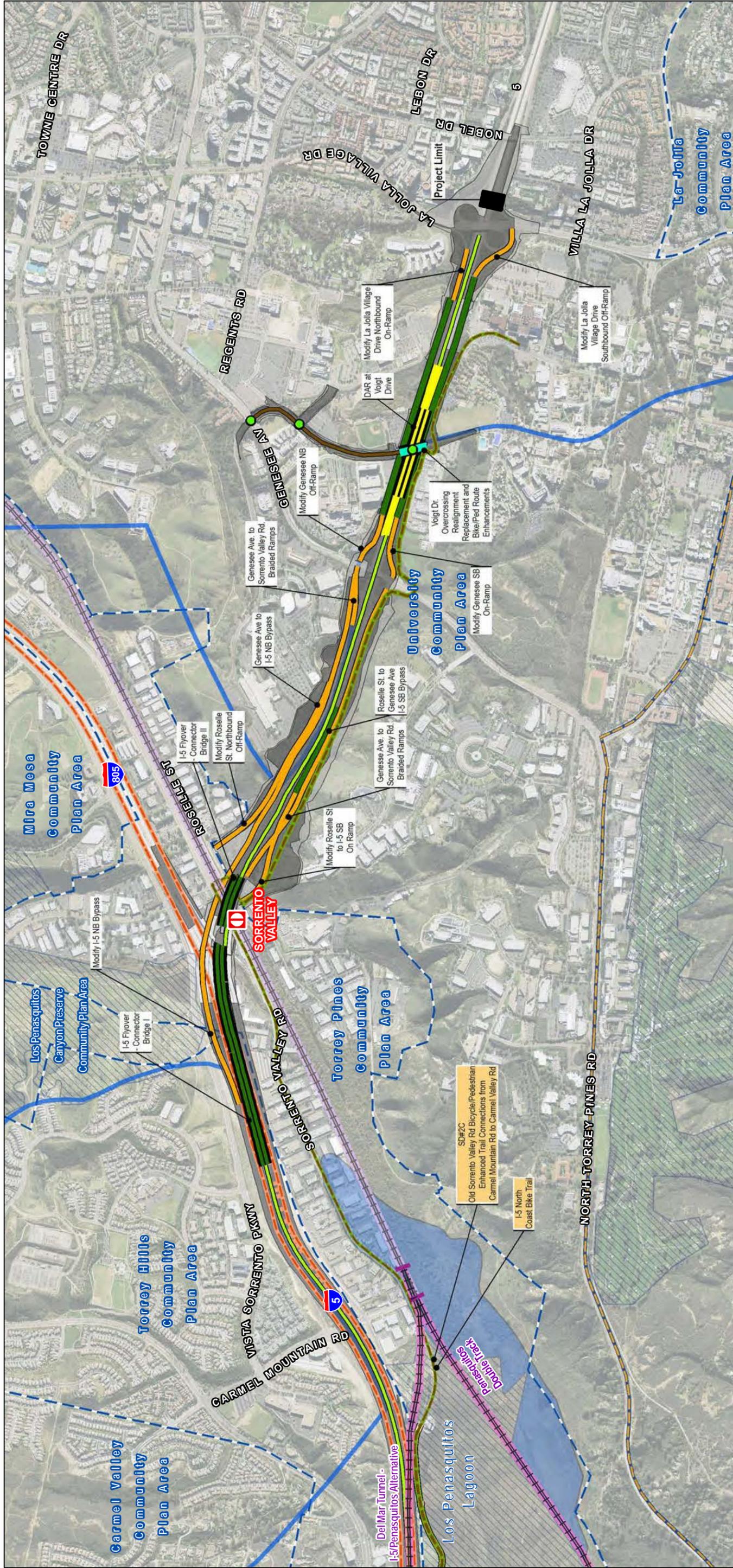
North Coast Corridor Travel Shed	LOSSAN Proposed Track
Coastal Zone Boundary	LOSSAN Existing Track
City Boundary	Interstate
I-5 NCC Project Area	State Route

DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008  
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**EXHIBIT NO. 1**

APPLICATION NO.  
**PWP-6-NCC-13-0203-1**

**Regional & NCC Map**



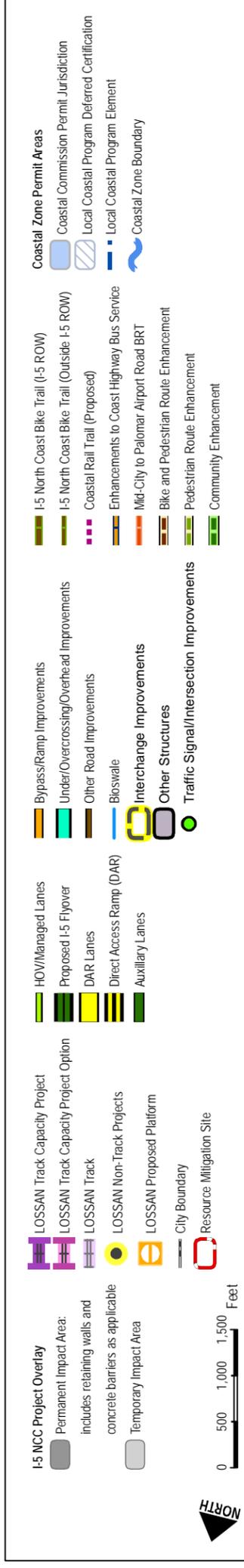
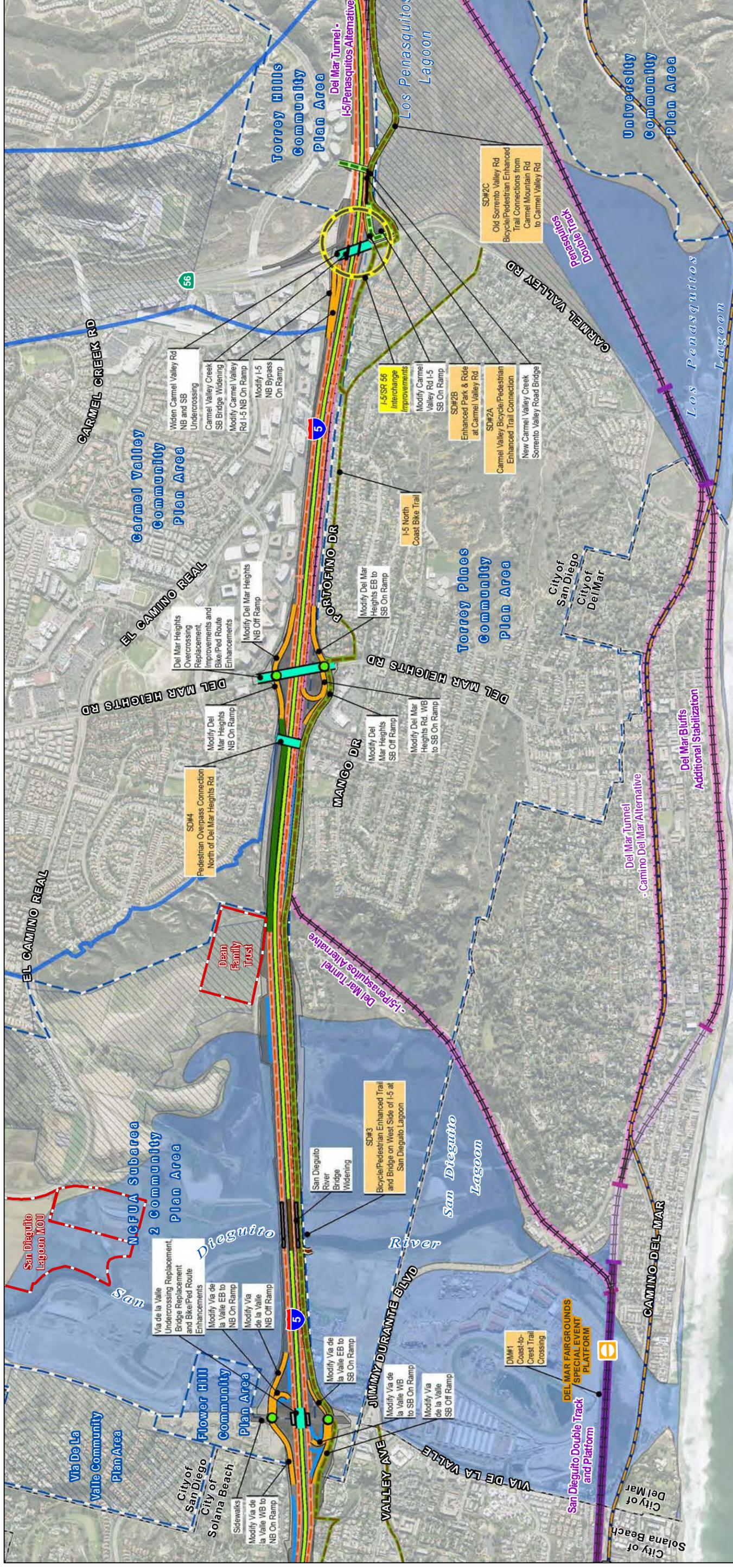
- I-5 NCC Project Overlay**
  - Permanent Impact Area
  - includes retaining walls and concrete barriers as applicable
  - Temporary Impact Area
- LOSSAN Track Capacity Project**
  - LOSSAN Track Capacity Project Option
  - LOSSAN Track
  - Station
  - City Boundary
- HOV/Managed Lanes**
  - Proposed I-5 Flyover
  - DAR Lanes
  - Direct Access Ramp (DAR)
  - Auxiliary Lanes
- Bypass/Ramp Improvements**
  - Under/Overcrossing/Overhead Improvements
  - Other Road Improvements
  - Bioswale
  - Interchange Improvements
  - Other Structures
  - Traffic Signal/Intersection Improvements
- I-5 North Coast Bike Trail (I-5 ROW)**
- I-5 North Coast Bike Trail (Outside I-5 ROW)**
- Coastal Rail Trail (Proposed)**
- Enhancements to Coast Highway Bus Service**
- Mid-City to Palomar Airport Road BRT**
- Bike and Pedestrian Route Enhancement**
- Pedestrian Route Enhancement**
- Community Enhancement**

California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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**EXHIBIT NO. 2**  
 APPLICATION NO.  
**PWP-6-NCC-13-0203-1**  
 Planned Improvements

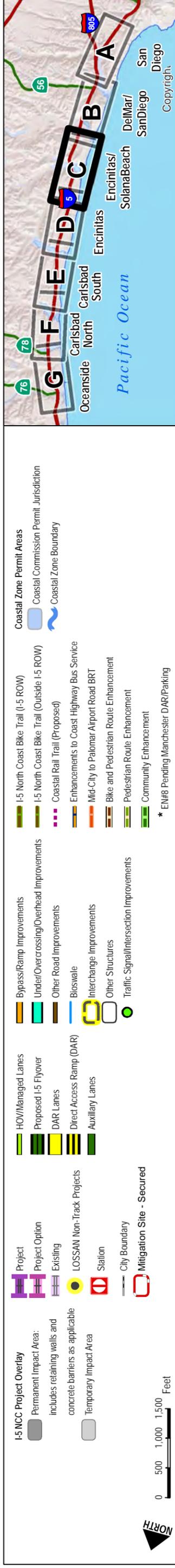
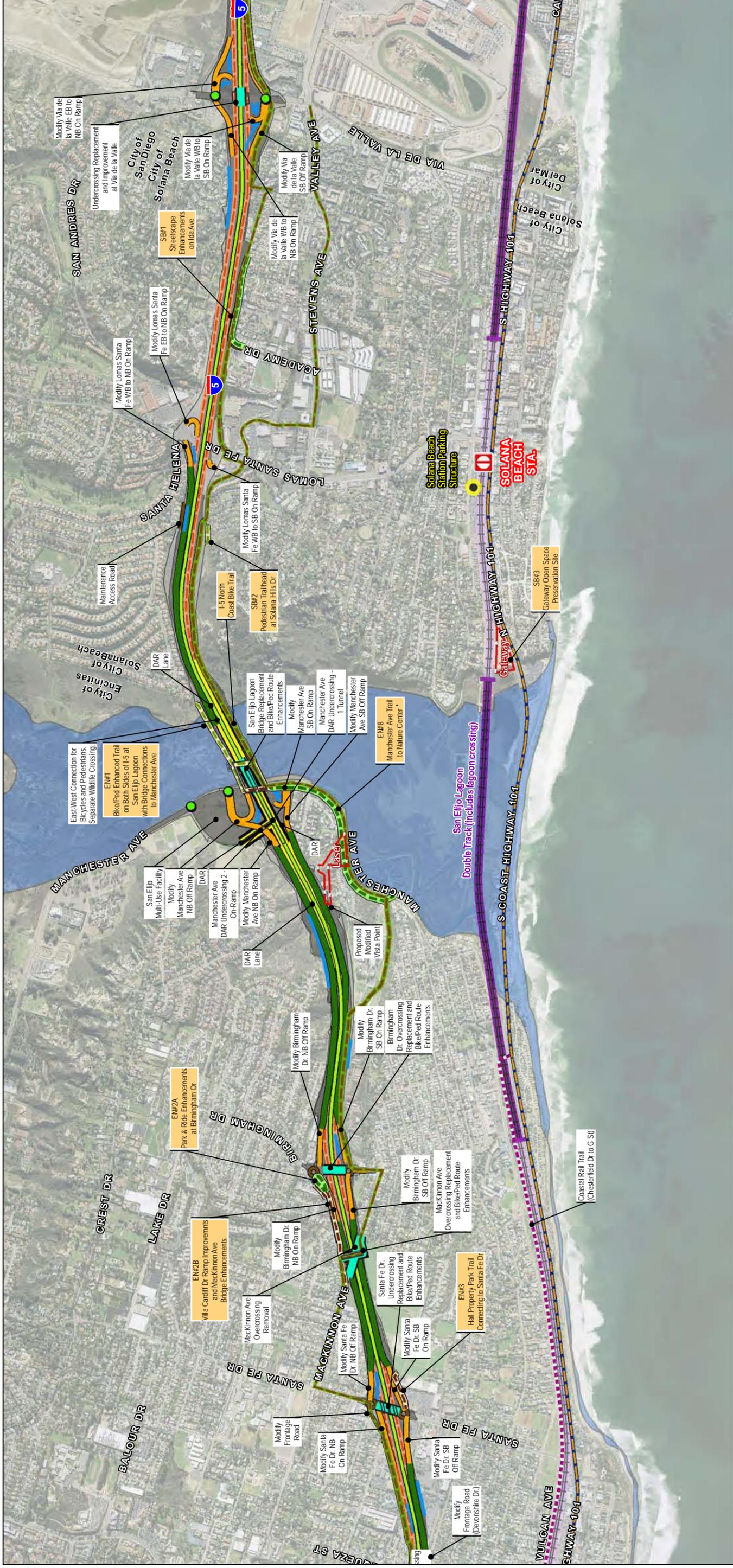
Page 1 of 7  
 California Coastal Commission



**FIGURE 4-2B**  
**Planned Improvements (City of Del Mar / San Diego)**  
**FINAL: JUNE 2014**  
**North Coast Corridor PWP/TREP**  
**Page 4-25**

DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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**FIGURE 4-2C**

**Planned Improvements (City of Encinitas [South] / Solana Beach)**

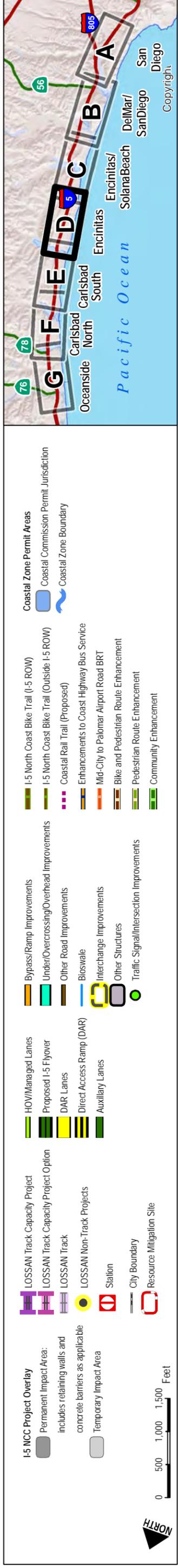
**North Coast Corridor PWP/TREP**

**FINAL: JUNE 2014**

**Page 4-27**

DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

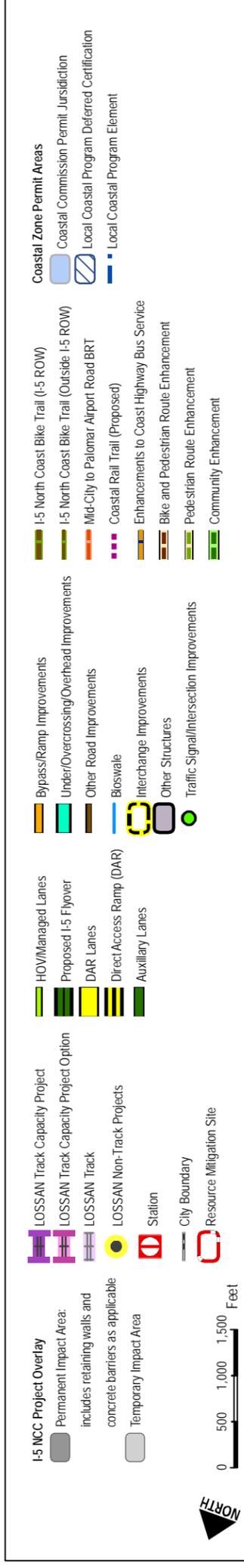
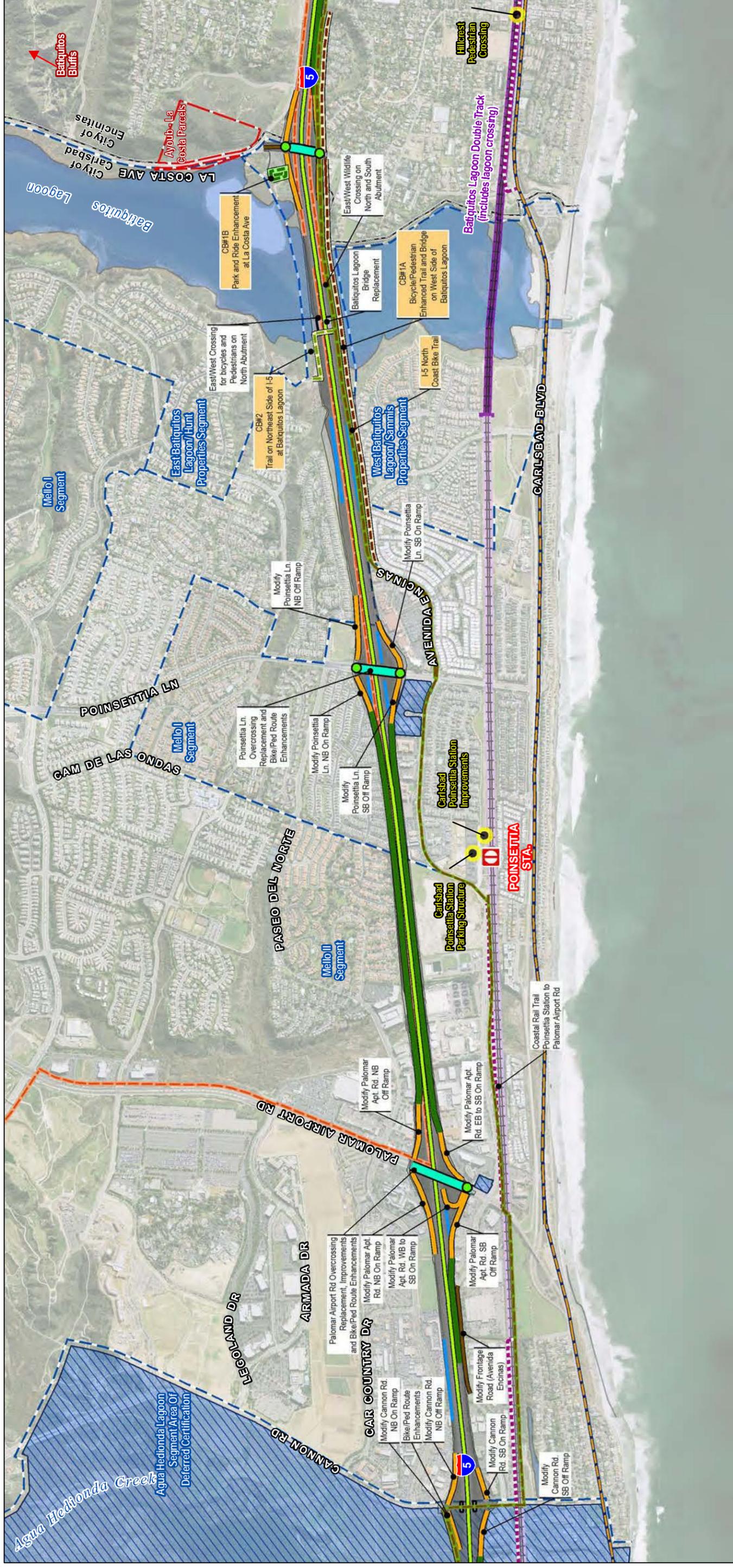
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**FIGURE 4-2D**  
**Planned Improvements (City of Encinitas [North])**  
 FINAL: JUNE 2014  
 North Coast Corridor PWP/TREP  
 Page 4-29

DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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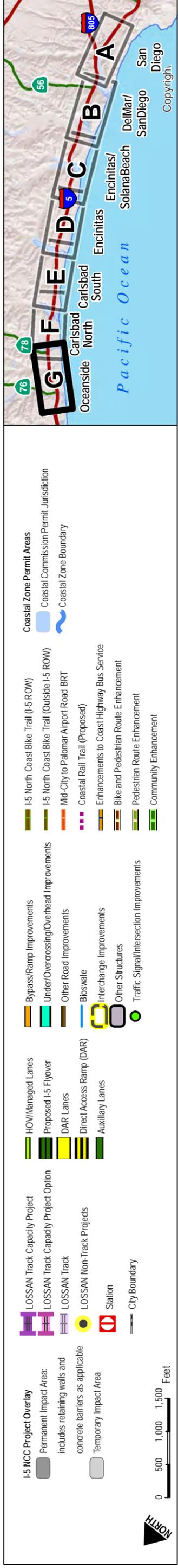
FIGURE 4-2E

**Planned Improvements (City of Carlsbad [South])**

FINAL: JUNE 2014

North Coast Corridor PWP/TREP



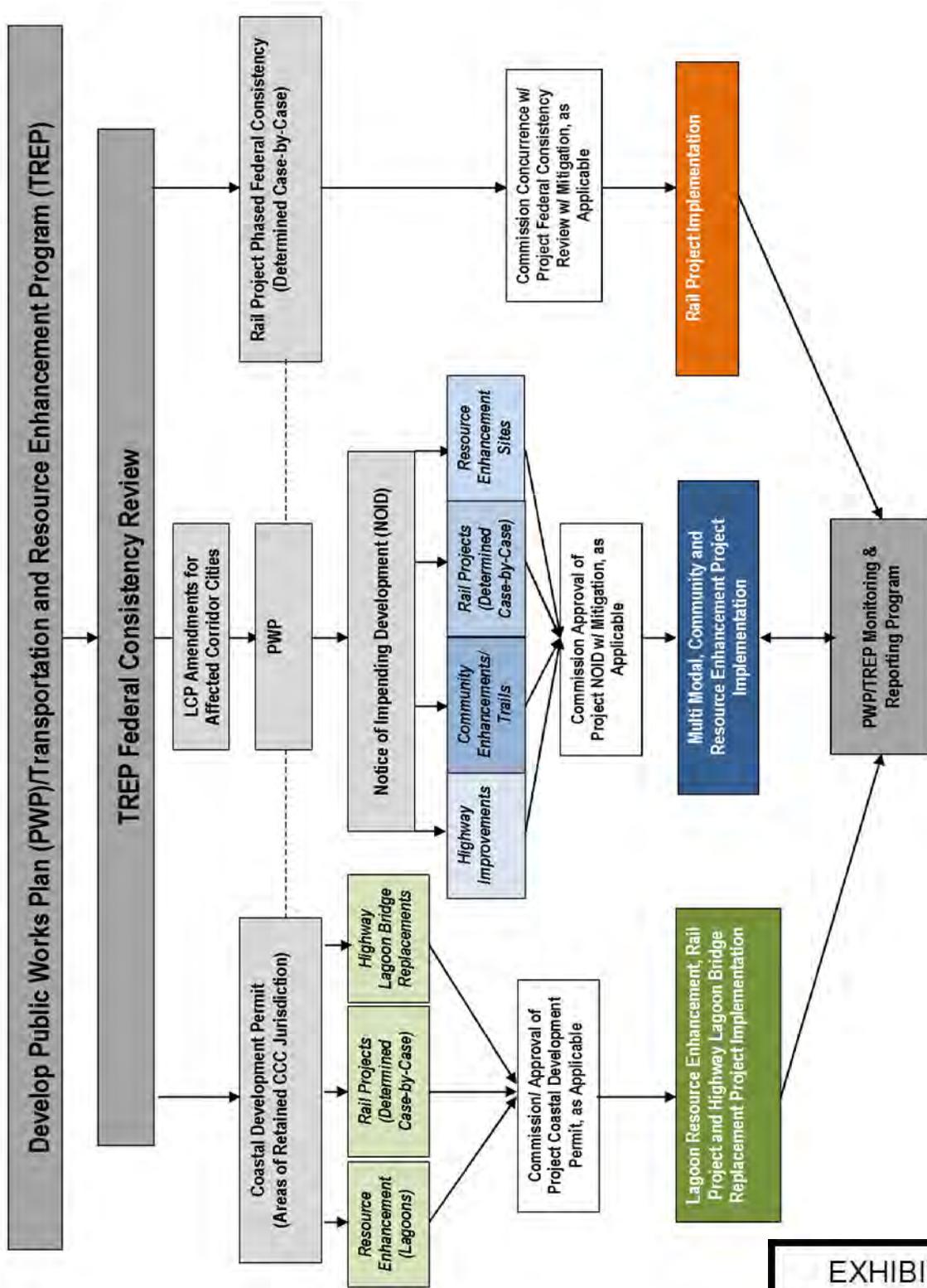


**FIGURE 4-2G**  
**Planned Improvements (City of Oceanside)**  
**FINAL: JUNE 2014**  
**North Coast Corridor PWP/TREP**  
**Page 4-35**

DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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FIGURE 1-1: TREP, PWP/NOID, AND CDP COASTAL COMMISSION APPROVAL PROCESS



for PWP/TREP

EXHIBIT NO. 3	
APPLICATION NO.	
PWP-6-NCC-13-0203-1	
Approval Process	
	California Coastal Commission

**TABLE 6A-3: PROJECT-SPECIFIC FEDERAL CONSISTENCY REVIEW AND/OR PWP OR CDP PROCEDURE REQUIREMENTS (PHASING PLAN)**

Phase	Transportation Improvements	Federal Consistency (FC) and/or PWP or CDP Requirement <sup>1</sup>
Initial-Term	<b>I-5 HIGHWAY</b>	
	2 HOV lanes from Lomas Santa Fe to Union St, including San Elijo Bridge Replacement, Manchester DAR, bike paths/trails and ultimate grading (Phase 1A)	FC/PWP
	1 HOV lane from Union St to SR 78 (Phase 1B)	FC/PWP
	2 HOV lanes from La Jolla Village Dr to I-5/I-805 merge, includes Voigt DAR & I-5/I-805 HOV Flyover Connector (Phase 1C)	FC/PWP
	<b>LOSSAN</b>	
	CP Eastbrook to CP Shell Double Track	FC
	Oceanside Through Track	FC
	Carlsbad Village Double Track, includes Buena Vista Bridge Replacement	FC
	Batiquitos Lagoon Double Track, includes Batiquitos Bridge Replacement	FC
	Encinitas and Solana Beach Station Parking	FC and PWP or CDP
	San Elijo Lagoon Double Track, includes San Elijo Lagoon Bridge Replacement	FC
Mid-Term	<b>I-5 HIGHWAY</b>	
	2 Express Lanes from I-5/I-805 to SR 56, including new Sorrento Valley Road bridge, trails under I-5 at Carmel Creek, widening of I-5 at Carmel Creek, and trail under merge (Phase 2A)	FC/PWP
	2 Express Lanes from SR 56 to Lomas Santa Fe Dr, including San Dieguito River Bridge Widening and bike paths/trails (Phase 2B)	FC/PWP
	2 Express Lanes from Union St to Palomar Airport Rd, including Batiquitos Lagoon Bridge Replacement (Phase 2C; if not advanced)	FC/PWP
	<b>LOSSAN</b>	
	Oceanside, Carlsbad Village, and Carlsbad Poinsettia Station Parking	FC and PWP or CDP
Long-Term	CP Moonlight to CP Swami Double Track	FC
	<b>I-5 HIGHWAY</b>	
	2-4 Express Lanes from Palomar Airport Rd to SR 76, including Agua Hedionda & Buena Vista Lagoon Bridge Replacements (Phase 3A-3C)	FC/PWP
Vision	Braided Ramps from Genesee Avenue to Sorrento Valley Road (Phase 3D)	FC/PWP
	<b>I-5 HIGHWAY</b>	
	I-5/SR 78 Improvements	FC/PWP
	<b>LOSSAN</b>	
	Leucadia Blvd Grade Separation	FC
	Del Mar Tunnel – Camino Del Mar / Peñasquitos Double Track Option – I-5 / Peñasquitos Option	FC
Peñasquitos Double Track	FC	
Two Additional Roadway Grade Separations	FC and PWP or CDP	

<sup>1</sup> The PWP/TREP itself serves as Coastal Commission concurrence with the consistency certification for the non-federal projects that are being approved under the PWP. Therefore, projects listed as requiring both a federal consistency certification and a PWP or CDP will not go through a separate consistency certification process.



TABLE 6A-1: PHASING PLAN

Phase	Project Phase Benefits (Estimated)	Highway	Bicycle & Pedestrian/ Community Enhancements	Rail & Transit*	Environmental
2010-2020	<ul style="list-style-type: none"> <li>29.7 lane-miles of new HOV facilities</li> <li>5.3 miles of new rail double-tracking</li> <li>6.3 miles of new bike/ped facilities (1.3 miles of improved facilities)</li> <li>2 new bike/ped crossings (4 improved crossings)</li> <li>220 acres of environmental mitigation</li> <li>Potential enhancements to San Elijo Lagoon (491-acre system)*</li> <li>Capital investment:                             <ul style="list-style-type: none"> <li>– \$1,037M highway &amp; bike/ped</li> <li>– \$259M rail &amp; transit</li> <li>– \$170M environmental*</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>2 HOV lanes from Manchester Av to SR 78                             <ul style="list-style-type: none"> <li>– San Elijo Lagoon Bridge Replacement</li> <li>– Baitquitos Lagoon Bridge Replacement</li> <li>– Manchester Av DAR</li> <li>– San Elijo Multi-Use Facility</li> </ul> </li> <li>2 HOV lanes from La Jolla Village Dr to I-5/I-805                             <ul style="list-style-type: none"> <li>– Voigt Dr DAR</li> </ul> </li> <li>I-5/I-805 HOV Connectors                             <ul style="list-style-type: none"> <li>– Peñasquitos Creek Bridge</li> <li>– Soledad Creek Bridge</li> </ul> </li> </ul>	<p><b>Highway Adjacent</b></p> <ul style="list-style-type: none"> <li>EN#1 Biker/Ped Trail on Both Sides of I-5 at San Elijo</li> <li>EN#5A Encinitas Blvd Bike/Ped Enhancements</li> <li>EN#2B Villa Cardiff &amp; MacKinnon Bridge Enhancements</li> <li>EN#8 Manchester Avenue Trail to Nature Center</li> <li>SB#3 Gateway Open Space Preservation Site</li> <li>CB#1A Bike/Ped Trail &amp; Bridge on W Side of Baitquitos</li> <li>CB#2 Trail on NE Side of I-5 at Baitquitos Lagoon</li> <li>I-5 North Coast Bike Trail (San Elijo and Baitquitos segments)</li> <li>Manchester Ave Undercrossing Improvements</li> </ul> <p><b>LOSSAN Adjacent</b></p> <ul style="list-style-type: none"> <li>Coastal Rail Trail (Chesterfield Dr to G St)</li> <li>Coastal Rail Trail (G St to Leucadia Blvd)</li> <li>Coastal Rail Trail (Leucadia Blvd to La Costa Av)</li> </ul>	<ul style="list-style-type: none"> <li>Eastbrook to Shell Double Track</li> <li>Oceanside Through Track</li> <li>Baitquitos Lagoon Double Track                             <ul style="list-style-type: none"> <li>– Baitquitos Bridge replacement</li> <li>– San Elijo Lagoon Double Track</li> <li>– San Elijo Bridge replacement</li> </ul> </li> <li>Poinsettia Station Improvements</li> <li>Parking improvements at selected rail stations (currently under prioritization study)</li> </ul>	<ul style="list-style-type: none"> <li>San Dieguito W19 Establishment Site</li> <li>Hallmark (East &amp; West) Establishment Site</li> <li>Dean Family Trust Establishment Site</li> <li>Baitquitos Bluffs Restoration &amp; Preservation/Enhancement Site</li> <li>Deer Canyon II Establishment Site</li> <li>Laser Preservation/Enhancement Site</li> <li>La Costa (Ayoub) Site Preservation &amp; Enhancement</li> <li>San Elijo Lagoon Preservation/Enhancement</li> <li>Lagoon Mgmt/Endowment/Regional Dredging Program</li> </ul>

\* Both the Buena Vista and San Elijo Lagoon restoration projects could be eligible for a \$90M funding pool if all regulatory permits are obtained. The available funds could go to one lagoon or be shared between them. For purposes of this table, the \$90M is split evenly between the two lagoons until actual allocations are determined.

EXHIBIT NO. 5	
APPLICATION NO.	
<b>PWP-6-NCC-13-0203-1</b>	
Phasing Plan	
Pg. 1 of 3	
 California Coastal Commission	

TABLE 6A-1: PHASING PLAN (CONTINUED)

Phase	Project Phase Benefits (Estimated)	Highway	Bicycle & Pedestrian/ Community Enhancements	Rail & Transit	Environmental
2021-2030	<ul style="list-style-type: none"> <li>• 32.6 lane-miles of new HOV facilities</li> <li>• 2.9 miles of new rail double-tracking</li> <li>• 15.8 miles of new bike/ped facilities (15.5 miles of improved facilities)</li> <li>• 7 new bike/ped crossings (11 improved crossings)</li> <li>• Potential enhancements to Buena Vista Lagoon (203-acre system)*</li> <li>• Capital investment:                             <ul style="list-style-type: none"> <li>– \$1,442M highway &amp; bike/ped</li> <li>– \$338M rail &amp; transit</li> <li>– \$45M environmental*</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 2 Express Lanes from I-5/I-805 to SR 56                             <ul style="list-style-type: none"> <li>– Carmel Creek Bridge Widening</li> <li>– I-5/SR 56 Interchange Improvements</li> </ul> </li> </ul>	<p><b>Highway Adjacent</b></p> <ul style="list-style-type: none"> <li>• SD#2A Carmel Valley Bike/Ped Trail Connection</li> <li>• SD#2B Enhanced Park &amp; Ride at Carmel Valley Rd</li> <li>• SD#2C Old Sorrento Valley Road Trail Connections</li> <li>• I-5 North Coast Bike Trail (adjacent segments)</li> </ul> <p><b>Highway</b></p> <ul style="list-style-type: none"> <li>• SD#3 Bike/Ped Trail &amp; Bridge on W Side of I-5 at San Dieguito</li> <li>• SD#4 Ped Overpass Connection N of Del Mar Heights Rd</li> <li>• SB#1 Streetscape Enhancements on Ida Ave</li> <li>• SB#2 Ped Trailhead at Solana Hills Dr</li> <li>• I-5 North Coast Bike Trail (adjacent segments)</li> <li>• Del Mar Heights Rd Overcrossing Improvements</li> <li>• Via de la Valle Undercrossing Improvements</li> <li>• Lomas Santa Fe Dr Undercrossing Improvements</li> </ul>	<ul style="list-style-type: none"> <li>• Moonlight to Swami Double Track</li> <li>• Carlsbad Village Double Track                             <ul style="list-style-type: none"> <li>– Buena Vista Bridge replacement</li> </ul> </li> <li>• San Dieguito Double Track and Platform                             <ul style="list-style-type: none"> <li>– San Dieguito Bridge replacement</li> <li>– Del Mar Fairgrounds Special Event Platform</li> </ul> </li> <li>• Del Mar Bluffs Additional Stabilization</li> <li>• Enhancements to Coast Highway Bus Service</li> <li>• Parking improvements at selected/remaining rail stations (currently under prioritization study)</li> </ul>	<ul style="list-style-type: none"> <li>• Buena Vista Lagoon Preservation/Enhancement</li> </ul>
	<ul style="list-style-type: none"> <li>• 2 Express Lanes from Manchester Av to Palomar Airport Road                             <ul style="list-style-type: none"> <li>– Encinitas Local Gateway Feature at Encinitas Blvd</li> </ul> </li> </ul>	<p><b>Highway</b></p> <ul style="list-style-type: none"> <li>• EN#2A Park &amp; Ride Enhancements at Birmingham Dr</li> <li>• EN#3 Hall Property Park Trail Connecting to Santa Fe Dr</li> <li>• EN#4 Trail Connecting Santa Fe Dr to Requeza St</li> <li>• EN#5B Trail Connecting Requeza St to Encinitas Blvd</li> <li>• EN#6A Union St Ped Overpass</li> <li>• EN#6B Cottonwood Ck Park to Union St Trail Connection</li> <li>• CB#1B Park &amp; Ride Enhancement at La Costa Ave</li> <li>• I-5 North Coast Bike Trail (adjacent segments)</li> <li>• Birmingham Dr Overcrossing Improvements</li> <li>• Santa Fe Dr Undercrossing Improvements</li> <li>• Requeza St Overcrossing Improvements</li> <li>• Encinitas Blvd Undercrossing Improvements</li> <li>• Leucadia Blvd Overcrossing Improvements</li> <li>• La Costa Ave Overcrossing Improvements</li> <li>• Poinsettia Ln Overcrossing Improvements</li> <li>• Palomar Airport Rd Overcrossing Improvements</li> </ul> <p><b>LOSSAN Adjacent</b></p> <ul style="list-style-type: none"> <li>• DM#1 Coast to Crest Trail LOSSAN Crossing</li> <li>• CB#6 Chestnut Ave LOSSAN Pedestrian Crossing</li> <li>• Hillcrest Dr LOSSAN Pedestrian Crossing</li> <li>• Coastal Rail Trail (Poinsettia Station to Palomar Airport Rd)</li> <li>• Coastal Rail Trail (Palomar Airport Rd to Cannon Rd)</li> <li>• Coastal Rail Trail (Cannon Rd to Tamarack Av)</li> </ul>	<p><b>Highway</b></p> <ul style="list-style-type: none"> <li>• EN#2A Park &amp; Ride Enhancements at Birmingham Dr</li> <li>• EN#3 Hall Property Park Trail Connecting to Santa Fe Dr</li> <li>• EN#4 Trail Connecting Santa Fe Dr to Requeza St</li> <li>• EN#5B Trail Connecting Requeza St to Encinitas Blvd</li> <li>• EN#6A Union St Ped Overpass</li> <li>• EN#6B Cottonwood Ck Park to Union St Trail Connection</li> <li>• CB#1B Park &amp; Ride Enhancement at La Costa Ave</li> <li>• I-5 North Coast Bike Trail (adjacent segments)</li> <li>• Birmingham Dr Overcrossing Improvements</li> <li>• Santa Fe Dr Undercrossing Improvements</li> <li>• Requeza St Overcrossing Improvements</li> <li>• Encinitas Blvd Undercrossing Improvements</li> <li>• Leucadia Blvd Overcrossing Improvements</li> <li>• La Costa Ave Overcrossing Improvements</li> <li>• Poinsettia Ln Overcrossing Improvements</li> <li>• Palomar Airport Rd Overcrossing Improvements</li> </ul> <p><b>LOSSAN Adjacent</b></p> <ul style="list-style-type: none"> <li>• DM#1 Coast to Crest Trail LOSSAN Crossing</li> <li>• CB#6 Chestnut Ave LOSSAN Pedestrian Crossing</li> <li>• Hillcrest Dr LOSSAN Pedestrian Crossing</li> <li>• Coastal Rail Trail (Poinsettia Station to Palomar Airport Rd)</li> <li>• Coastal Rail Trail (Palomar Airport Rd to Cannon Rd)</li> <li>• Coastal Rail Trail (Cannon Rd to Tamarack Av)</li> </ul>		

\* Both the Buena Vista and San Elijo Lagoon restoration projects could be eligible for a \$90M funding pool if all regulatory permits are obtained. The available funds could go to one lagoon or be shared between them. For purposes of this table, the \$90M is split evenly between the two lagoons until actual allocations are determined.

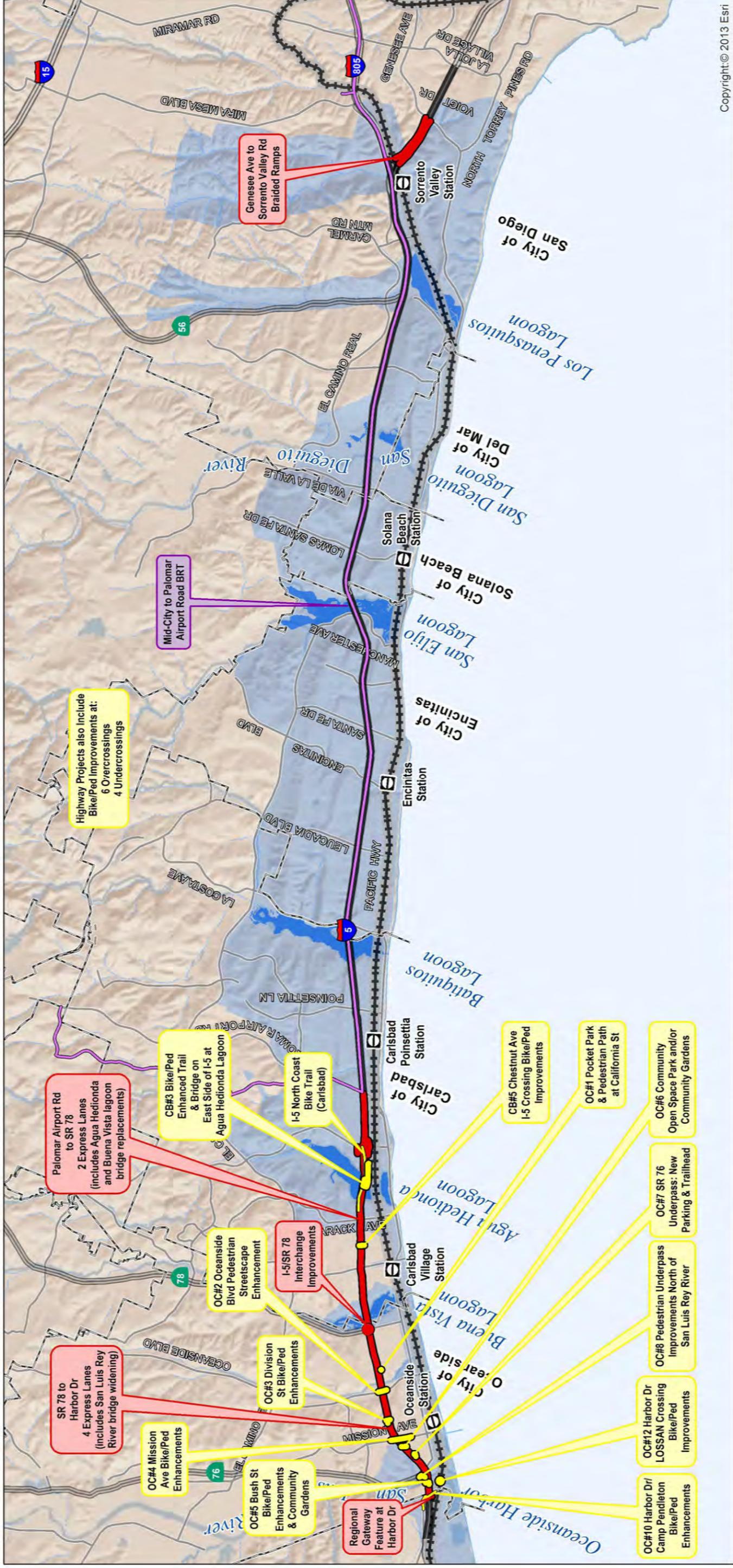
TABLE 6A-1: PHASING PLAN (CONTINUED)

Phase	Project Phase Benefits (Estimated)	Highway	Bicycle & Pedestrian/ Community Enhancements	Rail & Transit	Environmental
2031-2040	<ul style="list-style-type: none"> <li>• 21.1 lane-miles of new HOV facilities</li> <li>• 5.6 miles of new bike/ped facilities (9.2 miles of improved facilities)</li> <li>• 2 new bike/ped crossings (15 improved crossings)</li> <li>• Capital investment: <ul style="list-style-type: none"> <li>– \$1,177M highway &amp; bike/ped</li> <li>– \$10M rail &amp; transit</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• 2 Express Lanes from Palomar Airport Rd to SR 78 <ul style="list-style-type: none"> <li>– Buena Vista Lagoon Bridge Replacement</li> <li>– Agua Hedionda Lagoon Bridge Replacement</li> <li>– I-5/SR 78 Interchange Improvements</li> </ul> </li> <li>• 4 Express Lanes from SR 78 to Harbor Dr <ul style="list-style-type: none"> <li>– San Luis Rey River Bridge Widening</li> <li>– Carlsbad Local Gateway Feature at Carlsbad Village Dr</li> <li>– Oceanside Local Gateway Feature at Mission Ave</li> <li>– Regional Gateway Feature at Harbor Dr</li> </ul> </li> </ul>	<p><b>Highway Adjacent</b></p> <ul style="list-style-type: none"> <li>• CB#3 Bike/Ped Trail &amp; Bridge on E Side of I-5 at Agua Hedionda</li> <li>• CB#5 Chestnut Av I-5 Crossing Bike/Ped Improvements</li> <li>• I-5 North Coast Bike Trail (adjacent segments)</li> <li>• Cannon Rd Undercrossing Improvements</li> <li>• Chinquapin Ave Undercrossing Improvements</li> <li>• Tamarrack Ave Overcrossing Improvements</li> <li>• Carlsbad Village Dr Undercrossing Improvements</li> <li>• Las Flores Dr Overcrossing Improvements</li> <li>• Jefferson St Overcrossing Improvements</li> </ul> <p><b>LOSSAN Adjacent</b></p> <ul style="list-style-type: none"> <li>• OC#1 Pocket Park &amp; Ped Path at California St</li> <li>• OC#2 Oceanside Blvd Ped Streetscape Enhancement</li> <li>• OC#3 Division St Bike/Ped Enhancements</li> <li>• OC#4 Mission Ave Bike/Ped Enhancements</li> <li>• OC#5 Bush St Bike/Ped Enhancements &amp; Community Gardens</li> <li>• OC#6 Community Open Space Park and/or Community Gardens</li> <li>• OC#7 SR76 Underpass: New Parking &amp; Trailhead</li> <li>• OC#8 Ped Underpass Improvements N of San Luis Rey River</li> <li>• OC#10 Harbor Dr/Camp Pen Bike/Ped Enhancements</li> <li>• I-5 North Coast Bike Trail (adjacent segments)</li> <li>• Cassidy St Overcrossing Improvements</li> <li>• Brooks St Overcrossing Improvements</li> <li>• Neptune Way Overcrossing Improvements</li> </ul>	<ul style="list-style-type: none"> <li>• Mid-City to Palomar Airport Road BRT</li> </ul>	<ul style="list-style-type: none"> <li>• Continuation of environmental improvements above</li> </ul>
2041-2050	<ul style="list-style-type: none"> <li>• 1.7 miles of new rail double-tracking</li> <li>• 3 new roadway/bike/ped crossings</li> <li>• Capital investment: <ul style="list-style-type: none"> <li>– \$1.614M rail &amp; transit</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Braided Ramps from Genesee Av to Sorrento Valley Rd</li> </ul>	<p><b>LOSSAN Adjacent</b></p> <ul style="list-style-type: none"> <li>• OC#12 Harbor Dr LOSSAN Crossing Bike/Ped Improvements</li> </ul>	<ul style="list-style-type: none"> <li>• Del Mar Tunnel: <ul style="list-style-type: none"> <li>– Camino Del Mar Alternative</li> <li>– I-5 / Peñasquitos Alternative</li> </ul> </li> <li>• Peñasquitos Double Track <ul style="list-style-type: none"> <li>– Peñasquitos Bridge replacement (Dependent upon Del Mar Tunnel Alternative)</li> </ul> </li> <li>• Leucadia Blvd Grade Separation</li> <li>• Two Additional Roadway Grade Separations</li> </ul>	<ul style="list-style-type: none"> <li>• Continuation of environmental improvements above</li> </ul>

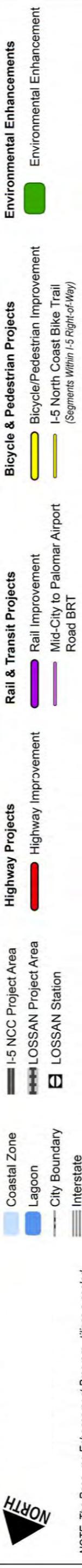
Note: Naming convention used for consistency with maps and other chapters: SD=San Diego, SB=Solana Beach, EN=Encinitas, CB=Carlsbad, OC=Oceanside.







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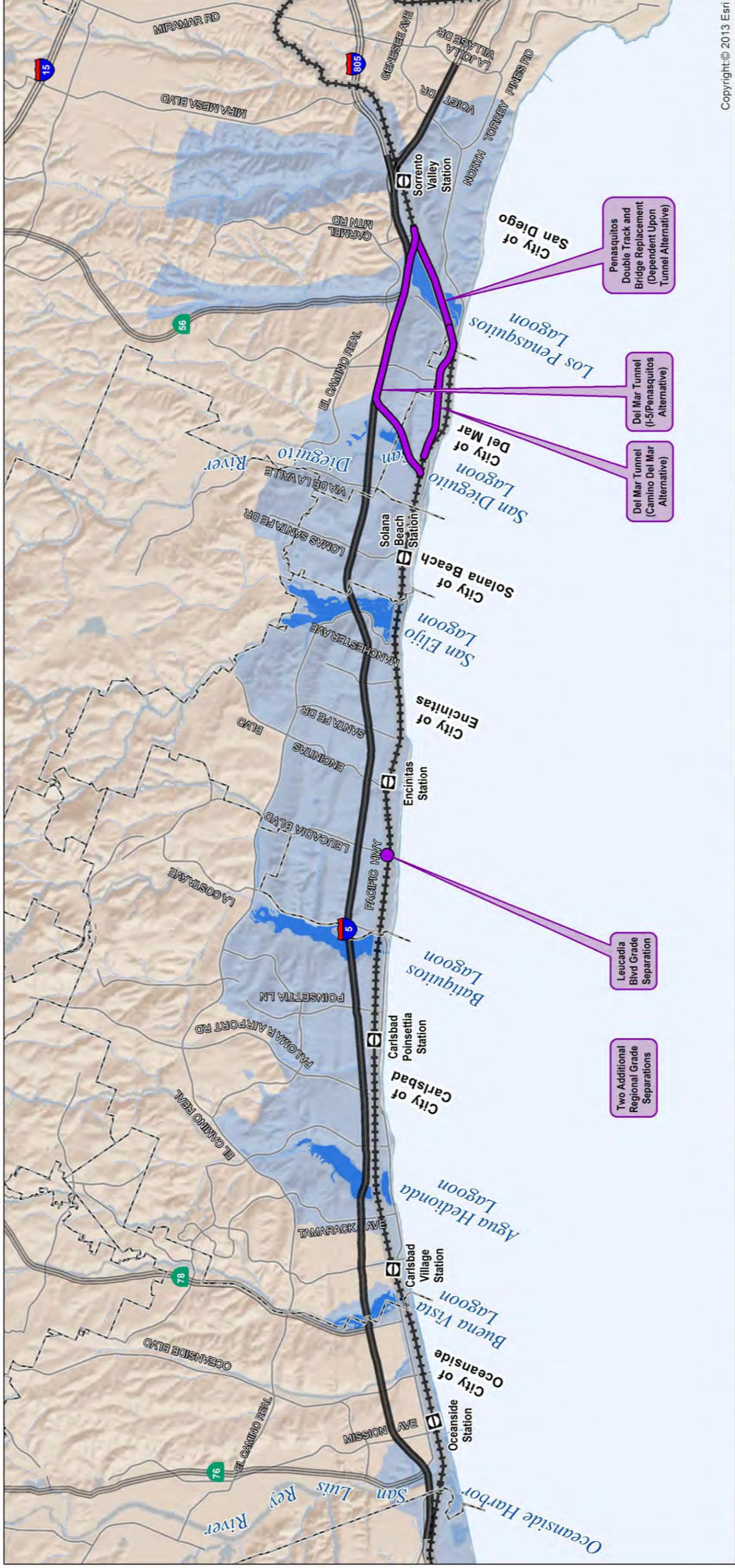


NOTE: The Resource Enhancement Program utilizes a pooled approach to creation, restoration, and preservation opportunities for wetland and ESHA resources throughout the corridor.



DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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**Legend**

- Coastal Zone**
  - Coastal Zone
  - Lagoon
- Rail & Transit Projects**
  - LOSSAN Project Area
  - LOSSAN Station
- Highway Projects**
  - I-5 NCC Project Area
  - Highway Improvement
- Bicycle & Pedestrian Projects**
  - Bicycle/Pedestrian Improvement
- Environmental Enhancements**
  - Environmental Enhancement
- Other**
  - City Boundary
  - Interstate
  - State Route
  - Major Arterial

**NOTE:** The Resource Enhancement Program utilizes a pooled approach to creation, restoration, and preservation opportunities for wetland and ESHA resources throughout the corridor.



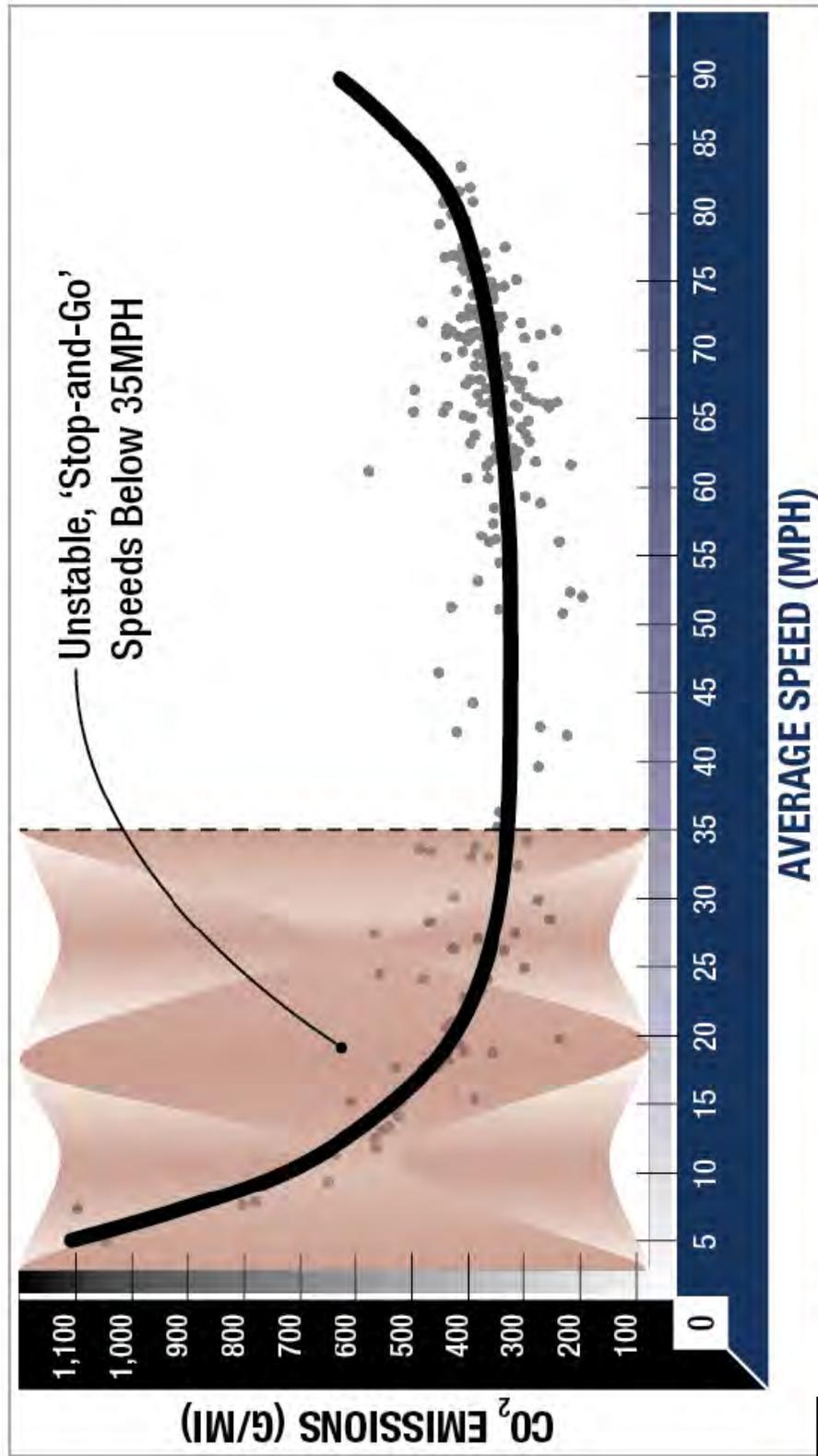
DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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**FIGURE 5.1-3: EMISSION SPEED PLOTS OF INDIVIDUAL TRIPS OR TRIP SEGMENTS**



Source: "Traffic Congestion and Greenhouse Gases," University of California Transportation Center, Access Magazine No. 35, Fall 2009.

EXHIBIT NO. 9
APPLICATION NO. <b>PWP-6-NCC-13-0203-1</b>
Emission Speed Plots
 California Coastal Commission

## EXHIBIT 10 – AIR QUALITY TABLES

**TABLE 5.1-3: DAILY VEHICLE MILES TRAVELED ON I-5 IN THE NORTH COAST CORRIDOR**

	Existing		I-5 No Build		I-5 No Build % Change from Existing	I-5 Build		I-5 Build % Change from I-5 No Build
	2006	2010	2030	2040		2030	2040	
Daily VMT (Series 11)	5.44 million	–	7.05 million	–	29.6%	7.33 million	–	4.0%
Daily VMT (Series 12)	–	5.53 million	–	6.47 million	17.0%	–	7.11 million	9.9%

Source: SANDAG/Caltrans Series 11 Model, August 2010; SANDAG/Caltrans Series 12 Model, November 2011.

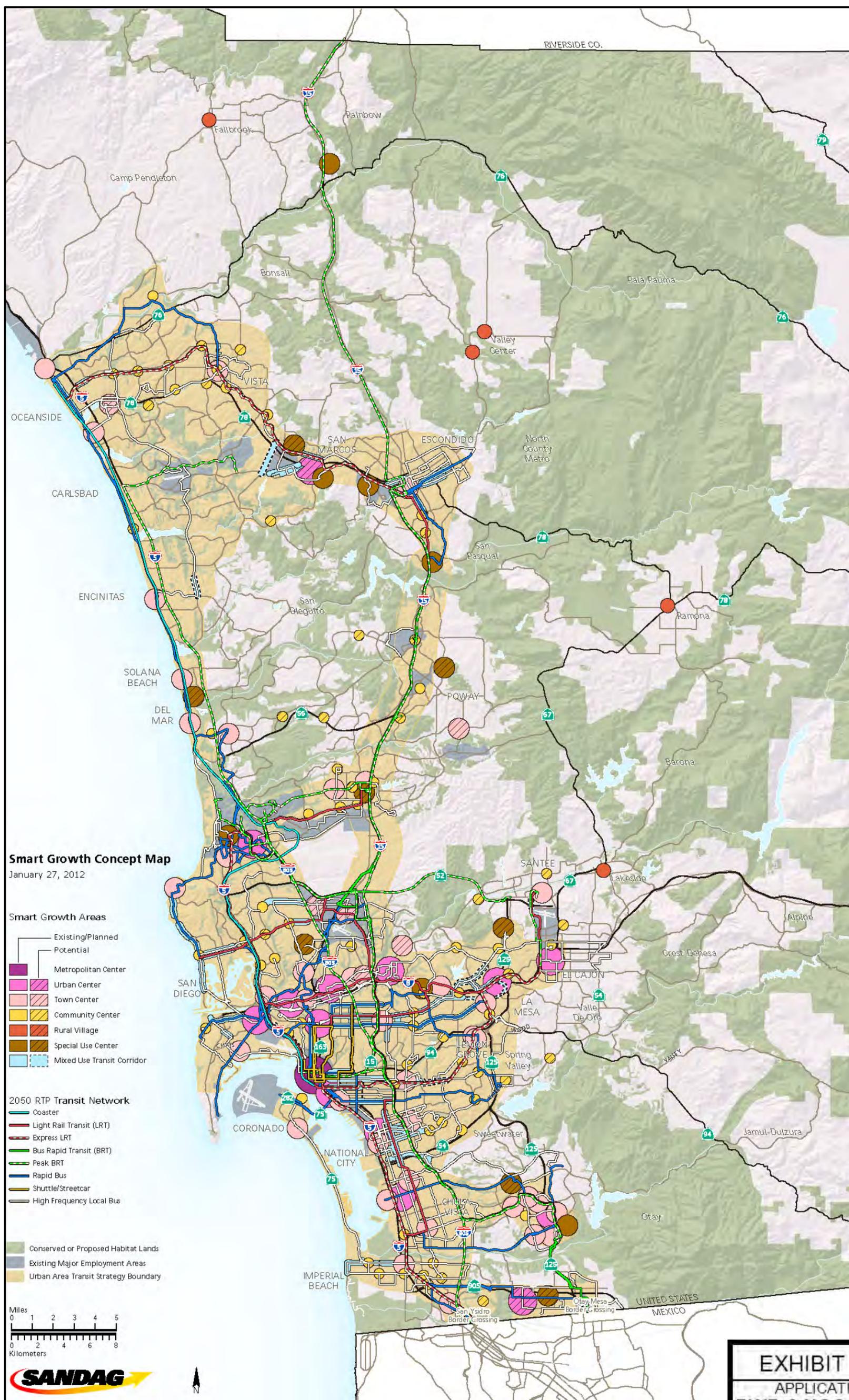
**Table 4.2: Average Difference in Regional CO<sub>2</sub> Emissions**

Alternative	2006 Existing	2030 No Build	2030 10+4 w/DARs	2030 8+4 w/DARs
<b>Model Year</b>	<b>2006</b>	<b>2030</b>	<b>2030</b>	<b>2030</b>
Fuel Consumption (gallons/day)	4,139,840	5,866,570	5,829,250	5,830,190
Efficiency Fuel Savings (gallons/day)	N/A	N/A	37,320	36,380
Diesel Fuel Consumption (gallons/day)	497,950	655,770	657,040	657,150
Efficiency Fuel Savings (gallons/day)	N/A	N/A	-1,270	-1,380
Regional CO <sub>2</sub> Annual Average Emissions (tons/day)	44,940	64,260	63,910	63,920
Efficiency CO <sub>2</sub> Savings (tons/day)	N/A	N/A	350	340

Source: I-5 North Coast Corridor Project Final EIR/EIS, Page 4-28

<b>EXHIBIT NO. 10</b>
APPLICATION NO. <b>PWP-6-NCC-13-0203-1</b>
Air Quality Tables
 California Coastal Commission

FIGURE 2-15: SAN DIEGO REGIONAL COMPREHENSIVE PLAN SMART GROWTH CONCEPT MAP



**EXHIBIT NO. 11**  
APPLICATION NO.  
**PWP-6-NCC-13-0203-1**  
**Smart Growth Map**

## EXHIBIT 12 – SMART GROWTH TABLES

**TABLE 5.2-2: POPULATION GROWTH (NORTH COAST CORRIDOR AND SAN DIEGO REGION)**

Jurisdiction	1970	2010	2040	Percent Change 1970–2010	Percent Change 2010–2040
Oceanside	40,494	179,105	207,237	342%	20%
Carlsbad	14,944	103,491	127,434	593%	23%
Encinitas	17,210	64,599	75,446	275%	17%
Solana Beach	5,744	13,338	15,619	132%	17%
San Diego (NCC only)	23,315	160,290	209,744	587%	31%
Del Mar	3,956	4,455	5,059	13%	14%
<b>North Coast Corridor</b>	<b>105,663</b>	<b>525,278</b>	<b>647,832</b>	<b>397%</b>	<b>23%</b>
<b>San Diego Region</b>	<b>1,357,854</b>	<b>3,224,432</b>	<b>4,163,688</b>	<b>137%</b>	<b>29%</b>

Sources: SANDAG 2050 RTP (Chapter 3), October 2011; SANDAG/Caltrans Series 12 Model, November 2011.

Note: Existing (2010) populations are from the SANDAG/Caltrans Series 12 Model and differ slightly from the final figures published in the 2010 U.S. Census.

**TABLE 5.2-3: PLANNED WEEKDAY SERVICE (LOSSAN RAIL CORRIDOR)**

	Existing (2010)	Near-Term (2015) Service Expansion	Mid-Term (2020) Service Expansion	Long-Term (2030) Service Expansion
Amtrak	22	26	36	36
COASTER	22	30	36	54
Metrolink	16	16	16	20
BNSF	5–7	7	9	9
<b>Total</b>	<b>65–67</b>	<b>79</b>	<b>97</b>	<b>119</b>

Sources: SANDAG 2050 RTP (Chapter 6), October 2011; San Diego – LOSSAN Corridor Project Prioritization Analysis, Final Project Report, July 2009.

<b>EXHIBIT NO. 12</b>
APPLICATION NO. <b>PWP-6-NCC-13-0203-1</b>
Smart Growth Tables
 California Coastal Commission





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**Planned Improvements**

- PWP/TREP Pedestrian and Bicycle Improvement
- I-5 North Coast Bike Trail (I-5 ROW)
- I-5 North Coast Bike Trail (Outside I-5 ROW)
- Traffic Signal/Intersection Improvement
- Direct Access Ramp (DAR)
- Mid-City to Palomar Airport Road BRT
- Enhancements to Coast Highway Bus Service

**Existing Pedestrian and Bicycle Facilities**

- City of Encinitas Recreational Trail
- Local Bicycle Route
- Regional Bicycle Route
- Coastal Rail Trail
- Coast to Crest Trail
- California Coastal Trail

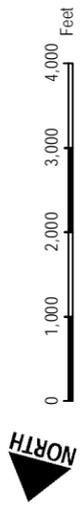
**Existing Parks and Preserves**

- State Beach/Park/Preserve
- Open Space & Parks

**Project Areas and Boundaries**

- I-5 Project Area
- LOSSAN Project Area
- LOSSAN Rail Station
- City Boundary
- California Coastal Zone Boundary

- Community Enhancement
- Other Bike/Ped Improvement (OC = Overcrossing UC = Undercrossing)



2012 San Diego Imagery Acquisition Partnership. Flight Dates: May 20 - June 6, 2012

DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

The Coastal Zone boundary, jurisdiction and Local Coastal Program data in this map are for planning and engineering study purposes only. Data are derived from multiple sources. The digital Coastal Zone boundary, jurisdiction and Local Coastal Program data in this map have not been adopted by the Coastal Commission, and do not supersede the official versions certified by the Coastal Commission. The State of California makes no representations or warranties regarding the accuracy or completeness of the files or the data from which they were derived. The State shall not be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of these Coastal Zone boundary, jurisdiction and Local Coastal Program files or the data from which they were derived. Because the Coastal Zone boundary, jurisdiction and Local Coastal Program data files are merely representational, they and the data from which they were derived are not binding and may be revised at any time.

**FIGURE 5.3-1B**

**Planned Coastal Access Improvements (North San Diego, Del Mar, Solana Beach, and South Encinitas)**

North Coast Corridor PWP/TREP

FINAL: JUNE 2014







**TABLE 5.4-8A: SAN ELIJO HOV PROJECT-SPECIFIC STANDARD DESIGN TREATMENT BMPs (PRELIMINARY DESIGN)**

EXISTING		PROPOSED			POST-CONSTRUCTION		
Existing Pavement Treated (AC)	Existing Pavement Treated (%)	New Pavement Treated (AC)	New Pavement Treated (%)	Net New Equivalent <sup>1</sup> Pavement Treated (AC)	Post-Construction Pavement Treated (AC)	Post-Construction Pavement Treated (%)	
53	7	13%	39	21	54%	92	23%

Note:

1. Percent treatment relative to net new equivalent impervious area added.

**TABLE 5.4-8B: SAN ELIJO HOV PROJECT-SPECIFIC STANDARD DESIGN TREATMENT BMPs (60% DESIGN)**

EXISTING		PROPOSED			ENHANCED INFILTRATION THROUGH THE NATURAL ENVIRONMENT <sup>1</sup>			TOTAL			
Existing Pavement Treated (AC)	Existing Pavement Treated (%)	New Pavement Treated (AC)	New Pavement Treated (%)	Net New Equivalent <sup>2</sup> Pavement Treated (AC)	Pavement Treated (AC)	Net New Equivalent <sup>2</sup> Pavement Treated (%)	% Total Pavement Treated	Total Post-Construction Pavement Treated by Approved BMPs (%)			
56	7	13%	42	69	4.6	164%	10	24%	10%	188%	81%

Notes:

1. Quantification of enhanced infiltration via conveyance through the natural environment has not been provided for all watersheds with respect to Table 5.4-7 above; however, it is documented herein as having a quantifiable benefit to stormwater quality.

2. Percent treatment relative to net new equivalent impervious area added.

**TABLE 5.4-8C: SAN ELIJO HOV PROJECT-SPECIFIC HEIGHTENED DESIGN TREATMENT BMPs (60% DESIGN WITH 3 ADDITIONAL BIOSWALES)**

EXISTING		PROPOSED			POST CONSTRUCTION		ENHANCED INFILTRATION THROUGH THE NATURAL ENVIRONMENT <sup>1</sup>		TOTAL		
Existing Pavement Treated (AC)	Existing Pavement Treated (%)	New Pavement Treated (AC)	New Pavement Treated (%)	Net New Equivalent <sup>2</sup> Pavement Treated (AC)	Post-Construction Pavement Treated (AC)	Post-Construction Pavement Treated (%)	Pavement Treated (AC)	Net New Equivalent <sup>2</sup> Pavement Treated (%)	% Total Pavement Treated	Total Net New Equivalent <sup>2</sup> Pavement Treated by Approved BMPs (%)	Total Post-Construction Pavement Treated by Approved BMPs (%)
56	7	13%	42	88	4.6	210%	0	0%	0%	210%	90%

Notes:

1. Quantification of enhanced infiltration via conveyance through the natural environment has not been provided for all watersheds with respect to Table 5.4-7 above; however, it is documented herein as having a quantifiable benefit to stormwater quality.

2. Percent treatment relative to net new equivalent impervious area added.



San Elijo Treatment BMPs

**EXHIBIT NO. 14**

APPLICATION NO. **PWP-6-NCC-13-0203-1**

TABLE 5.4-6: PERMANENT WETLAND IMPACTS VS. MITIGATION (BY YEAR/PHASE)

Phase <sup>a</sup>	Transportation Improvements	Impacts <sup>c</sup> (Acres)	Mitigation Site	Wetland Establishment (Acres)	Wetland Restoration (Acres)	Available No-Net- Loss Mitigation (Releases 1 & 2 @ 30%)	Available No-Net- Loss Mitigation (Release 3 @ 10%)	Available No-Net- Loss Mitigation (Release 4 @ 10%)	Available No-Net- Loss Mitigation (Release 5 @ 25%)	Available No-Net- Loss Mitigation (Final @ 25%)	Total Mitigation (Acres)	
2010-2020	<b>YEAR 2013</b>											
	Oceanside Through Track (2013)	0	None underway	0	0	0						
	Poinsettia Station Improvements (2013)	0										
	<b>TOTAL IMPACT (2013)</b>	<b>0</b>	<b>TOTAL AVAILABLE MITIGATION (2013)</b>	<b>0</b>	<b>0</b>	<b>0</b>						
	<b>TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)</b>											
	<b>YEAR 2014</b>											
	No improvements scheduled for 2014.	0	Hallmark (Agua Hedionda)	4.37	0.97	1.31						
			Regional Lagoon Maintenance Program (Endowment Established; *10% Proposed for Release Upon Establishment, Contingency Pool project)	20.7	0	2.07*						
	<b>TOTAL IMPACT (2014)</b>	<b>0</b>	<b>TOTAL AVAILABLE MITIGATION (2014)</b>	<b>3.38</b>	<b>3.38</b>							
	<b>TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER 2013 + 2014 IMPACTS SUBTRACTED)</b>											
	<b>YEAR 2015</b>											
	2 HOV lanes from Lomas Santa Fe to Birmingham Dr, including San Elijo Bridge Replacement, Manchester direct access ramp (DAR), bike paths/trails & ultimate grading (Phase 1- Unit 1)	0	Hallmark (Agua Hedionda)		Ongoing; year 1 monitoring	0.53						
San Elijo Lagoon Double Track, includes San Elijo Bridge Replacement (2014)	4.47	Regional Lagoon Maintenance Program	Ongoing; credit released when adequate funds established in escrow account and/or contingencies required									
CP Eastbrook to CP Shell Double Track (2015)	0.36	San Dieguito W19 (San Dieguito) (Release 1 only)*	47.3	0	7.1*							
Carlsbad Village Double Track, includes Buena Vista Bridge Replacement (2015)	0.26											
<b>TOTAL IMPACT (2015)</b>	<b>5.09</b>	<b>MITIGATION RELEASED BY YEAR (2015)</b>	<b>7.1</b>	<b>0.53</b>	<b>7.63</b>							
<b>TOTAL AVAILABLE MITIGATION (2015)</b>												
<b>AVAILABLE MITIGATION SUBTOTAL (2014 ROLLOVER + 2015)</b>												
<b>TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER 2015 IMPACTS SUBTRACTED)</b>												

EXHIBIT NO. 15  
 APPLICATION NO.  
**PWP-6-NCC-13-0203-1**  
 Wetland Impacts/Mitigation  
 Page 1 of 4  
 California Coastal Commission

TABLE 5.4-6: PERMANENT WETLAND IMPACTS VS. MITIGATION (BY YEAR/PHASE) (CONTINUED)

Phase <sup>a</sup>	Transportation Improvements	Impacts <sup>c</sup> (Acres)	Mitigation Site	Wetland Establishment (Acres)	Wetland Restoration (Acres)	Available No-Net-Loss Mitigation (Releases 1 & 2 @ 30%)	Available No-Net-Loss Mitigation (Release 3 @ 10%)	Available No-Net-Loss Mitigation (Release 4 @ 10%)	Available No-Net-Loss Mitigation (Release 5 @ 25%)	Available No-Net-Loss Mitigation (Final @ 25%)	Total Mitigation (Acres)
2010-2020 (continued)	1 HOV/Managed Lane (ML) from Birmingham Dr to Palomar Airport Rd (Phase 1 – Units 2 and 3: 2016)	1.32	Hallmark (Agua Hedionda)		Ongoing; year 2 monitoring			0.53			
	2 HOV/Managed Lanes from La Jolla Village Dr to I-5/I-805 merge, includes Voigt DAR & I-5/I-805 HOV Flyover Connector (Phase 1 – Units 4 and 5: 2017-2020)	0.13									
	Advanced Batiquitos Lagoon Bridge Replacement	3.62	Regional Lagoon Maintenance Program		Ongoing; credit released when adequate funds established in escrow account and/or contingencies required						
	Batiquitos Lagoon Double Track, includes Batiquitos Bridge Replacement (2016)	0.01	San Dieguito W19 (San Dieguito)		Ongoing; year 1 monitoring (Release 2 + Release 3)*	11.83*					
	Encinitas Station Parking	0									
	Solana Beach Station Parking	0									
	San Dieguito Double Track and Platform, includes San Dieguito Bridge Replacement (2016)	2.35									
	<b>TOTAL IMPACT (2016-2020)</b>	<b>7.43</b>			<b>MITIGATION RELEASED BY YEAR (2016-2020)</b>	<b>11.83</b>	<b>0.53</b>	<b>12.36</b>	<b>18.28</b>	<b>10.85</b>	
					<b>TOTAL AVAILABLE MITIGATION (2016-2020)</b>						
					<b>AVAILABLE MITIGATION SUBTOTAL (2015 ROLLOVER + 2016-2020)</b>						
					<b>TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER 2016-2020 IMPACTS SUBTRACTED)</b>						
					<b>INITIAL-TERM TOTAL IMPACT</b>	<b>12.52</b>	<b>INITIAL-TERM TOTAL MITIGATION</b>				

TABLE 5.4-6: PERMANENT WETLAND IMPACTS VS. MITIGATION (BY YEAR/PHASE) (CONTINUED)

Phase <sup>a</sup>	Transportation Improvements	Impacts <sup>c</sup> (Acres)	Mitigation Site	Wetland Establishment (Acres)	Wetland Restoration (Acres)	Available No-Net- Loss Mitigation (Releases 1 & 2 @ 30%)	Available No-Net- Loss Mitigation (Release 3 @ 10%)	Available No-Net- Loss Mitigation (Release 4 @ 10%)	Available No-Net- Loss Mitigation (Release 5 @ 25%)	Available No-Net- Loss Mitigation (Final @ 25%)	Total Mitigation (Acres)
2021-2030	2 Managed Lanes (ML) from I-5/I-805 to SR 56, including new Sorrento Valley Road bike/maintenance vehicle bridge, trails under I-5 at Carmel Creek, widening of I-5 at Carmel Creek, and trail under merge (Phase 2A: 2020-2022)	+0.41 (creation)	Hallmark (Agua Hedionda) San Dieguito W19 (San Dieguito) Regional Lagoon Maintenance Program	Ongoing							
	2 ML from SR 56 to Lomas Santa Fe Dr, including San Dieguito River Bridge Widening and bike paths/trails (Phase 2B: 2020-2025)	3.59									
	2 ML from Union St to Palomar Airport Rd (Phase 2C: 2025-2030)	1.33									
	Oceanside Station Parking	0									
	Carlsbad Village Station Parking	0									
	Carlsbad Poinsettia Station Parking	0									
	CP Moonlight to CP Swami Double Track	0									
	<b>MID-TERM TOTAL IMPACT</b>	<b>4.51</b>									<b>60.29</b>
						<b>TOTAL MID-TERM ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)</b>					<b>55.78</b>
2031-2040	2-4 ML from Palomar Airport Rd to SR 76, includes Agua Hedionda & Buena Vista Lagoon Bridge Replacements (Phase 3A-3C: 2030-2035)	5.76	Hallmark (Agua Hedionda) San Dieguito W19 (San Dieguito) Regional Lagoon Maintenance Program	Ongoing					Full mitigation /sign-off anticipated by 2021		
	Braided Ramps from Roselle to Genesee (Phase 3D: 2030-2035)	1.11									
		<b>LONG-TERM TOTAL IMPACT</b>	<b>6.87</b>								<b>55.78</b>
		<b>TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)</b>									<b>48.91</b>
	<b>NCC TOTALS (ALL PHASES EXCLUDING VISION PHASE<sup>b</sup>)</b>	<b>23.9</b>	<b>Sites identified above.</b>	<b>71.84</b>	<b>0.97</b>	<b>TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)</b>				<b>72.81</b>	<b>55.78</b>

**TABLE 5.4-6: PERMANENT WETLAND IMPACTS VS. MITIGATION (BY YEAR/PHASE) (CONTINUED)**

Phase <sup>a</sup>	Transportation Improvements	Impacts <sup>c</sup> (Acres)	Mitigation Site	Wetland Establishment (Acres)	Wetland Restoration (Acres)	Available No-Net- Loss Mitigation (Releases 1 & 2 @ 30%)	Available No-Net- Loss Mitigation (Release 3 @ 10%)	Available No-Net- Loss Mitigation (Release 4 @ 10%)	Available No-Net- Loss Mitigation (Release 5 @ 25%)	Available No-Net- Loss Mitigation (Final @ 25%)	Total Mitigation (Acres)	
2041-2050	Leucadia Blvd Grade Separation	0	Hallmark (Agua Hedionda)	Ongoing								
	Del Mar Tunnel	2.01-2.77	San Dieguito W19 (San Dieguito) Regional Lagoon Maintenance Program									
	- Camino Del Mar / Peñasquitos Double Track Option											
	- I-5 / Peñasquitos Option											
	Peñasquitos Double Track	9.87										
I-5/SR 78	3.5											
<b>VISION PHASE<sup>b</sup> TOTAL IMPACT</b>		<b>15.38 – 16.14</b>				<b>VISION PHASE TOTAL AVAILABLE MITIGATION</b>						<b>48.91</b>
						<b>TOTAL "ENHANCEMENT" FOLLOWING PROGRAM IMPLEMENTATION</b>						<b>32.77 – 33.53</b>

**Notes:**

<sup>a</sup> Phasing presented in this table is for general mitigation accounting purposes only. The reader is referred to Chapter 6A for the RTP-approved project phasing plan and maps.

<sup>b</sup> "Vision" Phase projects are programmatic in nature, and currently scheduled for implementation in years 2041 to 2050. At a future date and prior to their implementation, project-specific information would be made available to further refine the impact estimates presented herein.

<sup>c</sup> Impacts presented within this column have been (conservatively) calculated and rounded to the nearest acre. Specifically, net acreage amounts currently depicted for bridge replacement projects at San Elijo Lagoon, Batiquitos Lagoon and Buena Vista Lagoon reflect both creation of new wetland from removal of road bed fill, as well as any new road bed fill required for widening and/or related construction. For example, proposed I-5 bridge construction across San Elijo Lagoon with a 261-foot channel bottom width during year 2015 would result in creation of 1.1 ac of new wetland; however, the project would require placement of 1.01 ac of additional fill within State wetlands, for a net result of creation of +0.09 ac, which was rounded to 0 ac impact.

TABLE 5.5-2: PERMANENT UPLAND HABITAT IMPACTS VS. NO-NET-LOSS MITIGATION (BY YEAR/PHASE)

Phase	Transportation Improvements	Impacts (Acres)	Mitigation Site	Upland Habitat Establishment (Acres)	Upland Habitat Restoration (Acres)	Total Available No Net Loss Mitigation (Releases 1 & 2 @ 30%)	Total Available No Net Loss Mitigation (Release 3 @ 10%)	Total Available No Net Loss Mitigation (Release 4 @ 10%)	Total Available No Net Loss Mitigation (Release 5 @ 25%)	Total Available No Net Loss Mitigation (Final @ 25%)	Total Mitigation (Acres)	
2010-2020	<b>YEAR 2013</b>											
	Oceanside Through Track (2013)	0	Deer Canyon II (Los Peñasquitos)	14	0	4.2						
	Poinsettia Station Improvements (2013)	0	Dean Family Trust (San Dieguito)	20.8	0	6.24						
	<b>TOTAL IMPACT (2013)</b>	<b>0</b>		<b>TOTAL AVAILABLE MITIGATION (2013)</b>		<b>10.44</b>						
	<b>TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER 2013 IMPACTS SUBTRACTED)</b>											<b>10.44</b>
	<b>YEAR 2014</b>											
	No improvements scheduled for 2014.	0	Deer Canyon II (Los Peñasquitos)		Ongoing; year 1 monitoring		1.4					
			Dean Family Trust (San Dieguito)		Ongoing; year 1 monitoring		2.08					
			Hallmark (Agua Hedionda )	3.5	6.6	3.03						
	<b>TOTAL IMPACT (2014)</b>	<b>0</b>		<b>MITIGATION RELEASED BY YEAR (2014)</b>		<b>3.03</b>	<b>3.48</b>					
	<b>TOTAL AVAILABLE MITIGATION (2014)</b>											<b>6.51</b>
	<b>AVAILABLE MITIGATION SUBTOTAL (2013 ROLLOVER + 2014)</b>											<b>16.95</b>
<b>TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER 2014 IMPACTS SUBTRACTED)</b>											<b>16.95</b>	
<b>YEAR 2015</b>												
2 HOV lanes from Lomas Santa Fe to Birmingham Dr, including San Elijo Bridge Replacement, Manchester direct access ramp (DAR), bike paths/trails & ultimate grading (Phase 1- Unit 1)	22.08	Deer Canyon II (Los Peñasquitos)		Ongoing; year 2 monitoring		1.4						
San Elijo Lagoon Double Track, includes San Elijo Bridge Replacement (2014)	0	Dean Family Trust (San Dieguito)		Ongoing; year 2 monitoring		2.08						
CP Eastbrook to CP Shell Double Track (2015)	0	Hallmark (Agua Hedionda )		Ongoing; year 1 monitoring		1.01						
Carlsbad Village Double Track, includes Buena Vista Bridge Replacement (2015)	0											
<b>TOTAL IMPACT (2015)</b>	<b>22.08</b>		<b>MITIGATION RELEASED BY YEAR (2015)</b>		<b>1.01</b>	<b>3.48</b>						
<b>TOTAL AVAILABLE MITIGATION (2015)</b>											<b>4.49</b>	
<b>AVAILABLE MITIGATION SUBTOTAL (2014 ROLLOVER + 2015)</b>											<b>21.44</b>	
<b>TOTAL ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)</b>											<b>-0.64<sup>b</sup></b>	

EXHIBIT NO. 16  
 APPLICATION NO.  
**PWP-6-CCN-13-0203-1**  
 Upland Impacts/Mitigation  
 Page 1 of 3  
 California Coastal Commission

id: PWP/TREP



TABLE 5.5-2: PERMANENT UPLAND HABITAT IMPACTS VS. NO-NET-LOSS MITIGATION (By Year/Phase) (CONTINUED)

Phase <sup>a</sup>	Transportation Improvements	Impacts (Acres)	Mitigation Site	Upland Habitat Establishment (Acres)	Upland Habitat Restoration (Acres)	Total Available No Net Loss Mitigation (Releases 1 & 2 @ 30%)	Total Available No Net Loss Mitigation (Release 3 @ 10%)	Total Available No Net Loss Mitigation (Release 4 @ 10%)	Total Available No Net Loss Mitigation (Release 5 @ 25%)	Total Available No Net Loss Mitigation (Final @ 25%)	Total Mitigation (Acres)	
2031-2040	2-4 ML from Palomar Airport Rd to SR 76, includes Agua Hedionda & Buena Vista Lagoon Bridge Replacements (Phase 3A-3C: 2030-2035)	0.77	Deer Canyon II (Los Peñasquitos) Dean Family Trust (San Dieguito) Hallmark (Agua Hedionda) San Dieguito W19 (San Dieguito)	Ongoing						Full mitigation/sign-off anticipated by 2021		
	Construct Braided Ramps from Roselle to Genesee (Phase 3D: 2030-2035)	5.57										
	<b>LONG-TERM TOTAL IMPACT</b>	6.34										
<b>NCC Totals (All Phases Excluding Vision Phase<sup>b</sup>)</b>						<b>63.76</b>	<b>Sites identified above.</b>		<b>27.1</b>	<b>47.2</b>	<b>74.3</b>	<b>TOTAL LONG-TERM ROLLOVER MITIGATION AVAILABLE (AFTER IMPACTS SUBTRACTED)</b>
2041-2050	Leucadia Blvd Grade Separation	0	Deer Canyon II (Los Peñasquitos) Dean Family Trust (San Dieguito) Hallmark (Agua Hedionda) San Dieguito W19 (San Dieguito)	Ongoing						Full mitigation/sign-off anticipated by 2021		
	Del Mar Tunnel	0.03 – 10.13										
	- Camino Del Mar / Peñasquitos Double Track Option											
	- I-5 / Peñasquitos Option	0										
	Peñasquitos Double Track	0										
I-5/SR 78	0											
<b>VISION PHASE<sup>c</sup> TOTAL IMPACT</b>						<b>0.03 – 10.13</b>	<b>VISION PHASE TOTAL AVAILABLE MITIGATION</b>		<b>10.54</b>	<b>TOTAL "ENHANCEMENT" FOLLOWING PROGRAM IMPLEMENTATION</b>	<b>0.41 – 10.51</b>	

Notes:

<sup>a</sup> Phasing presented in this table is for general mitigation accounting purposes only. The reader is referred to Chapter 6A for the RTP-approved project phasing plan and maps.

<sup>b</sup> In the event contingency mitigation credit is needed to ensure no net loss standards can be met in advance of project impacts, as established by Section 6B.4 above, traditional mitigation ratios would be triggered and applied as follows: 2:1 (mitigation to impact) for uplands. Additionally, the Batiquitos Bluffs site is being assessed for mitigation potential contingent upon a willing seller, and reasonable price.

<sup>c</sup> "Vision" Phase projects are programmatic in nature, and currently scheduled for implementation in years 2041 to 2050. At a future date and prior to their implementation, project-specific information would be made available to further refine the impact estimates presented herein.



# EXHIBIT 18 – VISUAL SIMULATIONS



Planned Phase: 2021-2030  
North Coast Corridor PWP/TREP

**Northbound I-5 - North of Del Mar Heights Road (Existing View)**

FINAL: JUNE 2014

FIGURE 5.7-6A

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Planned Phase: 2021-2030  
North Coast Corridor PWP/TREP

**Northbound I-5 - North of Del Mar Heights Road**

FINAL: JUNE 2014

**EXHIBIT NO. 18**

APPLICATION NO.

**PWP-6-NCC-13-0203-1**

**Visual Simulations**

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California Coastal Commission



FIGURE 5.7-22A

**Batiquitos Navigator Circle (Existing View)**

Planned Phase: 2021-2030

North Coast Corridor PWP/TREP

FINAL: JUNE 2014

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FIGURE 5.7-22B

**Batiquitos Navigator Circle (3D Simulation)**

Planned Phase: 2021-2030

North Coast Corridor PWP/TREP

FINAL: JUNE 2014

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FIGURE 5.7-23A

Planned Phase: 2021-2030

### I-5 Southbound at Batiquitos Lagoon (Existing View)

North Coast Corridor PWP/TREP

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FIGURE 5.7-23B

Planned Phase: 2021-2030

### I-5 Southbound at Batiquitos Lagoon (3D Simulation)

North Coast Corridor PWP/TREP

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FIGURE 5.7-30A

Planned Phase: 2021-2030

### California Street Bridge View 2 (Existing View)

North Coast Corridor PWP/TREP

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FIGURE 5.7-30B

Planned Phase: 2031-2040

### California Street Bridge View 2 (3D Simulation)

North Coast Corridor PWP/TREP

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**Northbound I-5 at San Elijo Lagoon (Existing View)**



**Northbound I-5 at San Elijo Lagoon (3D Simulation)**



**Northbound I-5 at Manchester Off-ramp looking East (Existing View)**



**Northbound I-5 at Manchester Off-ramp looking East (3D Simulation)**

**TABLE 5.8-3: I-5 BRIDGE SEA LEVEL RISE (SLR) RISK ASSESSMENT**

Waterbody/Bridge Location	Construction Timeline	Flood Risk Under Sea Level Rise Without Fluvial Flood		Flood Risk Under Current Sea Level With Fluvial Flood		Flood Risk Under Sea Level Rise With Fluvial Flood			Risk Assessment
		66" SLR	0" SLR	0" SLR	18" SLR	36" SLR	66" SLR		
Los Peñasquitos Creek Bridge Widening	2010-2020	✓	✓	✓	✓	✓	✓	✓	Built in 1970. Proposed bridge is upstream of tidal influence. SLR is not expected to pose any risk to the proposed bridge.
Carmel Creek Bridge Widening	2021-2030	✓	✓	✓	✓	✓	✓	✓	Project requires only nominal widening of existing bridge. Bridge profile set by existing 12-lane facility. SLR in the absence of a flood event is not expected to pose any risk to the proposed bridge. Under existing sea level the proposed bridge is expected to be at risk during flood events, which are of short duration. A flood occurring with higher sea levels is expected to pose some short duration risk to the proposed bridge. These risks will be managed via storm monitoring and operational restrictions.
Carmel Creek Bike Bridge (Culvert Replacement)	2021-2030	✓	✓	✓	✓	✓	✓	✓	As a bike bridge there is minimal risk associated with periodic closure during large storm events. SLR in the absence of a flood is not expected to pose any risk to the proposed bridge. Under existing sea level the proposed bridge is not expected to be at risk under a flood. A flood occurring with higher sea levels is expected to pose some short-duration risk to the proposed bridge. This risk will be managed via storm monitoring and operational restrictions.
San Dieguito Lagoon Bridge Widening	2021-2030	✓	✓	✓	✓	✓	✓	✓	Built in 1964 and widened in 1994. Project requires nominal widening of existing bridge. Bridge profile set by existing 12-lane facility. SLR in the absence of a flood is not expected to pose any risk to the proposed bridge. Under existing sea level the proposed bridge is not expected to be at risk under a flood. A flood occurring with higher sea levels is expected to pose some short-duration risk to the proposed bridge. This risk will be managed via storm monitoring and operational restrictions.

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APPLICATION NO. <b>PWP-6-NCC-13-0203-1</b>
I-5 Risk Assessment
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California Coastal Commission

**TABLE 5.8-3: I-5 BRIDGE SEA LEVEL RISE (SLR) RISK ASSESSMENT (CONTINUED)**

Waterbody/Bridge Location	Construction Timeline	Flood Risk Under Sea Level Rise Without Fluvial Flood	Flood Risk Under Current Sea Level With Fluvial Flood	Flood Risk Under Sea Level Rise With Fluvial Flood			Risk Assessment
		66" SLR	0" SLR	18" SLR	36" SLR	66" SLR	
San Elijo Lagoon Bridge Replacement	2010–2020	✓	✓	✓	✓	✓	SLR is not expected to pose any risk to the proposed bridge.
Batiquitos Lagoon Bridge Replacement	2010–2020	✓	✓	✓	✓	✓	SLR in the absence of a flood is not expected to pose any risk to the proposed bridge. Under existing sea level the proposed bridge is not expected to be at risk under a flood. A flood occurring with higher sea levels is expected to pose some short-duration risk to the proposed bridge. This risk will be managed via storm monitoring and operational restrictions.
Agua Hedionda Lagoon Bridge Replacement	2031-2040	✓	✓	✓	✓	✓	SLR in the absence of a flood event is not expected to pose any risk to the proposed bridge. Under existing sea level the proposed bridge is expected to be at risk during flood events, which are of short durations. A flood occurring with higher sea levels is expected to pose some short-duration risk to the proposed bridge. These risks will be managed via storm monitoring and operational restrictions.
Buena Vista Lagoon Bridge Replacement	2031-2040	✓	✓	✓	✓	✓	SLR in the absence of a flood event is not expected to pose any risk to the proposed bridge. Under existing sea level the proposed bridge is expected to be at risk during flood events, which are of short durations. A flood occurring with higher sea levels is expected to pose some short-duration risk to the proposed bridge. These risks will be managed via storm monitoring and operational restrictions.

Source: San Diego Region Coastal Sea Level Analysis, September 2013 (included as Appendix D of the PWP/TREP).

Blue indicates PWP/TREP Phase 1 bridge.

✓ No risk; projected water surface elevation below soffit by two feet or more

✓ Short duration (matter of hours) risk to operation of transportation facility; projected water surface elevation above bridge soffit elevation, but not impacting travel lanes

✓ Short duration (matter of hours) risk to operation of transportation facility; projected water surface elevation above soffit and potential short duration impact to travel lanes

**TABLE 5.8-1: LOSSAN RAIL BRIDGE SEA LEVEL RISE RISK ASSESSMENT**

Waterbody/Bridge Location	Construction Timeline	Flood Risk Under SLR Without Fluvial Flood	Flood Risk Under Current Sea Level With Fluvial Flood	Flood Risk Under Sea Level Rise With Fluvial Flood			Risk Assessment
		66" SLR	0" SLR	18" SLR	36" SLR	66" SLR	
San Diego River Bridge Replace & Double-Track (South Abutment)/MP 243.2	2021–2030	✓	✓	✓	✓	✓	Built in 1916. SLR is not expected to pose any risk to the proposed bridge.
San Diego River Bridge Replace & Double-Track(North Abutment)/MP 243	2021–2030	✓	✓	✓	✓	✓	Built in 1916. SLR is not expected to pose any risk to the proposed bridge.
San Elijo Lagoon Bridge Replacement & Double-Track (New Inlet Scenario)/MP 240.6	2010–2020	✓	✓	✓	✓	✓	SLR is not expected to pose any risk to the proposed bridge.
San Elijo Lagoon Bridge Replacement & Double-Track/MP 240.4	2010–2020	✓	✓	✓	✓	✓	Built in 1942. Short duration (a matter of hours) flood risk to rail facility remaining operational; flood risk can be managed via storm monitoring and operational restrictions.
Batiquitos Lagoon Bridge Replacement & Double-Track/MP 234.8	2010–2020	✓	✓	✓	✓	✓	SLR is not expected to pose any risk to the proposed bridge.
Buena Vista Lagoon Bridge Replacement Double-Track/MP 228.6	2010–2020	✓	✓	✓	✓	✓	Bridge currently under design but is expected to be designed such that SLR is not expected to pose any risk to the proposed bridge based on the March 2013 CO-CAT SLR values. Assuming a proposed soffit elevation similar to existing soffit elevation (a worst-case design outcome), a short-duration risk to the operation of the facility could be projected to occur during fluvial event and has been used in the presentation herein.
San Luis Rey River/MP	2010–2020	✓	✓	✓	✓	✓	SLR is not expected to pose any risk to the proposed bridge due to height of bridge.

San Diego Region Coastal Sea Level Analysis, September 2013 (included as Appendix D of the PWP/TREP). Blue indicates PWP/TREP Phase 1 bridge.

Projected water surface elevation below top of rail subgrade  
 (matter of hours) risk to operation of transportation facility; projected water surface elevation above top of rail subgrade but below top of rail  
 (matter of hours) risk to operation of transportation facility; projected water surface elevation above top of rail

EXHIBIT NO. 20

APPLICATION NO.  
PWP-6-NCC-13-0203-1

LOSSAN Risk Assessment

California Coastal Commission

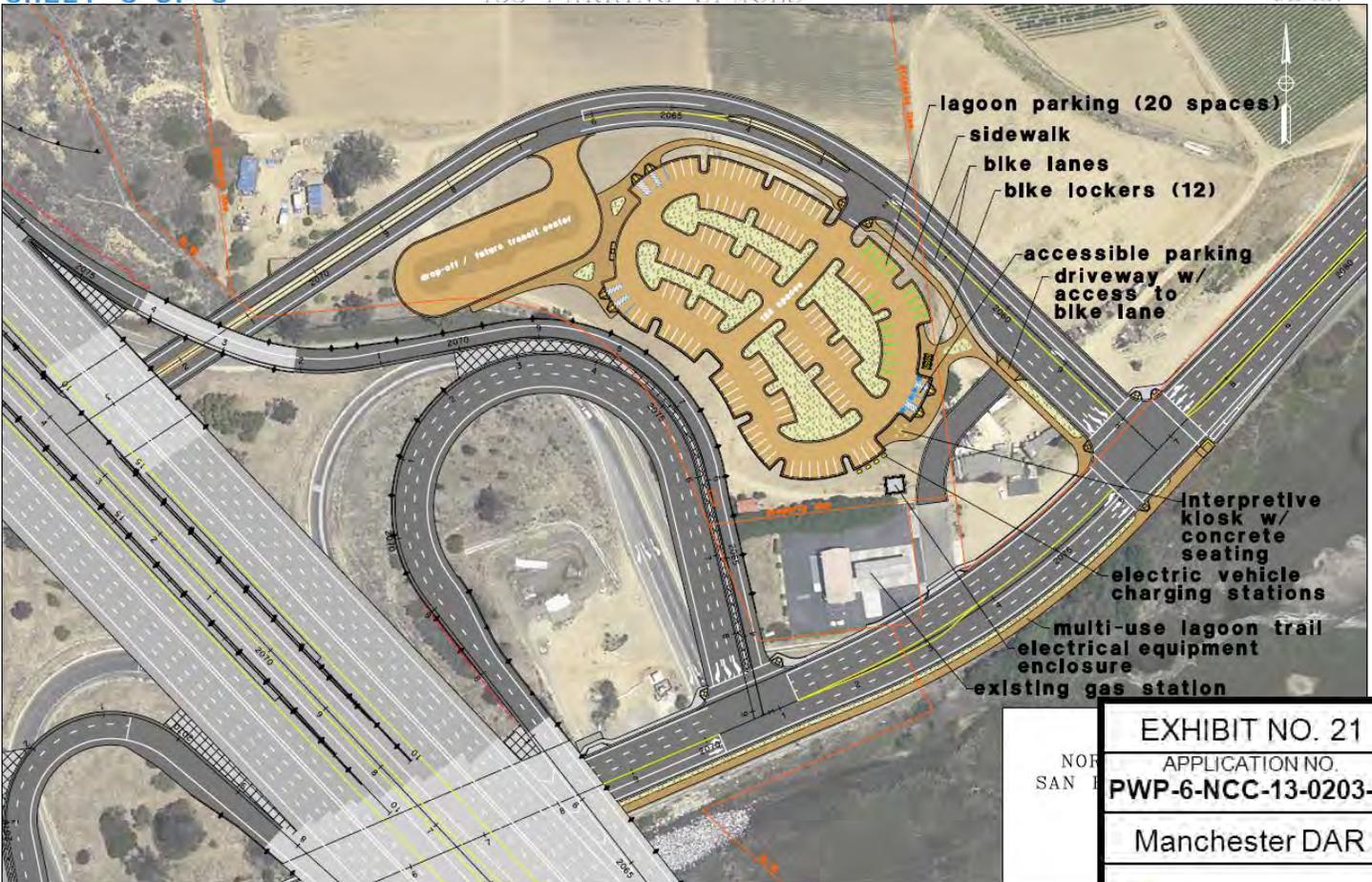
# EXHIBIT 21 – MANCHESTER DIRECT ACCESS RAMP



CURRENT DESIGN  
155 PARKING SPACES

INTERSTATE 5 / MANCHESTER AVENUE  
PROPERTY IMPACT EXHIBIT  
4/18/2014

SHEET 3 OF 3



NO SAN I	EXHIBIT NO. 21
	APPLICATION NO. PWP-6-NCC-13-0203-1
	Manchester DAR

**North Coast Corridor PWP Overlay  
Local Coastal Program Land Use Plan Amendment  
May 2014**

**CITY OF SAN DIEGO LOCAL COASTAL PROGRAM AMENDMENT- LAND USE PLAN**

**1. Land Use Maps**

Amend the City of San Diego Local Coastal Program – Coastal Land Use Maps to include the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) Project Overlay Map and Project Overlay Improvements Map.

**1.1 North Coast Corridor PWP/TREP Overlay Land Use Plan Map**

The City of San Diego Local Coastal Program Land Use Maps and Circulation Element illustrate the Local Coastal Program land use designation for each property. The land use designation denotes the type, density and intensity of development and uses that may be permitted for each property, consistent with applicable Local Coastal Program policies. In addition to the land use designations included in the certified Land Use Maps, an overlay is applied to those land areas within the City of San Diego as identified on the NCC PWP/TREP Project Overlay Map (Map 1A-1E). The NCC PWP/TREP Project Overlay provides the applicable standard of review for the NCC PWP/TREP, which, if approved, will authorize the development, operation, and maintenance of specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects defined therein. The goals of the NCC PWP/TREP are to improve and maintain regional mobility and access to coastal resources in the North Coast Corridor, to implement a program to protect, restore, and enhance sensitive coastal resources along the North Coast Corridor and to mitigate potential resource impacts caused by implementation of the transportation and community enhancement projects. The City of San Diego Local Coastal Program NCC Project Overlay Improvements Map (Map 2A-2B) identifies those specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects envisioned to occur within the jurisdictional boundaries of the City of San Diego pursuant to the NCC PWP/TREP. In areas within the NCC Project Overlay Map where the Local Coastal Program land use designation currently does not allow for transportation and restoration related uses, these uses would now be identified as an allowable use, with the portions of the NCC PWP/TREP that are incorporated into the overlay serving as the standard of review for all proposed development that is outside of the Coastal Commission's retained jurisdiction and not handled solely through federal consistency review. If the NCC PWP/TREP is approved, subsequent regulatory reviews shall be processed under the framework and guidance provided within the NCC PWP/TREP.

**2. North Coast Corridor PWP/TREP Overlay Project Components and Land Use Plan Policies**

2.1 Pursuant to Senate Bill (SB) 468, the NCC Project is defined as a 27-mile long series of projects within the coastal zone that includes improvements to a segment of I-5 and the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor. The NCC PWP/TREP includes 27-miles of regional mobility, community and resource enhancement projects planned in Northern San Diego County, a portion of which are located within, or partially within, the City of San Diego ("City") coastal zone.

The NCC Public Works Plan ("PWP") is integrated, within a single document,



Transportation and Resource Enhancement Program (“TREP”), which collectively provide the coastal policy framework under which the City, Coastal Commission, and other affected agencies and interested parties can evaluate overall NCC PWP/TREP benefits and potential impacts to coastal zone resources, phased implementation, mitigation measures, and feasible alternatives in the context of the City’s local coastal program, the California Coastal Act, regional mobility plans and coastal resource enhancement goals.

The TREP provides the basis for Coastal Commission federal consistency review and informs conflict resolution to ensure the overall NCC PWP/TREP is consistent with applicable California Coastal Management Program/Coastal Act policies. Chapter 3 policies of the Coastal Act provide the standard of review for the federal consistency review and, pursuant to the TREP, rail projects, will be evaluated on a case-by-case basis to determine whether the Coastal Commission’s review of those projects will be limited to the federal consistency review process only.

In addition to providing an overall summary of the NCC projects for purposes of Coastal Act review, the PWP also provides authorization for future development and guidance for future coastal development permitting of other development within the NCC Project Overlay area and informs how the Coastal Commission may resolve any conflicts between Coastal Act policies. The PWP incorporates projects (including highway projects, rail projects other than those subject to the federal consistency review process only, and community and resource enhancement projects) that are both subject to coastal development permit and/or local coastal program requirements and that are located outside the areas of the Commission’s retained jurisdiction. Following Coastal Commission approval of the PWP, project-specific Notice of Impending Developments (NOIDs) provide the mechanism by which the project proponent will bring forward specific projects for Coastal Commission review (except for those projects occurring within areas of the Coastal Commission’s original jurisdiction and rail projects subject to the federal consistency review process only). The approved PWP provides the standard of review for those specific NCC Project NOIDs, as applicable.

- 2.2 The NCC PWP/TREP includes public works projects that: 1) will meet the public needs of an area greater than that included in the City’s certified local coastal program area, and 2) which were not anticipated when the local coastal program was certified by the California Coastal Commission. The policies, development/design strategies and implementation measures of the NCC PWP/TREP are intended to efficiently plan and implement the corridor projects located in the City of San Diego coastal zone as integral elements of the NCC Project, all of which are necessary to implement a balanced, integrated approach to maintain and improve regional mobility as well as enhancement and continued use and enjoyment of coastal resources, while addressing potential unavoidable and minimized project impacts and/or conflicts with the coastal resources planning and management policies of the City’s local coastal program and California Coastal Act.

The policies and implementation measures of the NCC PWP/TREP provide the applicable standard of review for implementation of projects to be reviewed and approved pursuant to the PWP. The policies and design/development strategies of the NCC PWP/TREP will serve as guidance for Coastal Commission review of rail projects, evaluated on a case-by-case basis to determine whether the Coastal Commission’s review of those projects will be limited to the federal consistency review process only, and provides guidance for obtaining federal consistency for those identified rail projects, as applicable. The NCC PWP/TREP will also serve as guidance for Coastal

Commission review of projects located within the Coastal Commission's retained jurisdiction pursuant to § 30519, which will be subject to separate coastal development permits reviewed by the Coastal Commission.

- 2.3 The NCC PWP/TREP is comprised of various elements including transportation infrastructure improvements as well as community and resource enhancement projects that in their totality would result in significant benefits to the Coastal Zone. The PWP/TREP provides the mechanism to ensure that the various specific project types included within the NCC Project Overlay are implemented in such a manner that maximum benefits to sensitive resources are achieved while impacts are avoided and/or minimized to the greatest extent feasible. The following components are included within the NCC Project Overlay.
- 2.3.1 **Highway Improvements.** The NCC PWP/TREP includes Interstate Highway 5 improvements that consist of an 8+4 highway design that provides eight general purpose lanes and four managed lanes along with other associated highway improvements, including but not limited to, interchanges, direct access ramps, auxiliary lanes, signage, and other safety and maintenance elements. These improvements would improve public access through the NCC PWP/TREP area while also enhancing carpool and public transit usage, and result in decreased vehicle hours traveled and energy consumption.
- 2.3.2 **Mass Transit Improvements.** The NCC PWP/TREP includes carefully phased improvements to the LOSSAN rail corridor that would result in the double-tracking of the rail corridor, as well as other operational and station improvements. The NCC Project also includes road and intersection improvements that would facilitate the introduction of enhanced bus service along the Coast Highway. These improvements would result in enhanced mass transit opportunities through the corridor and result in improved public access while minimizing energy consumption.
- 2.3.3 **Non-motorized Transportation and Community Enhancements.** The NCC PWP/TREP establishes a 27 mile-long North Coast Corridor bikeway, and includes concurrent construction of primary segments of the bikeway within the I-5 right-of-way, that would provide a new connected north-south accessway for bicyclists and pedestrians through the corridor. The NCC PWP/TREP also includes other path and trail linkages and community enhancements designed to provide enhanced connectivity between all travel modes within the NCC PWP/TREP area, including segments of the Coastal Rail Trail located within the LOSSAN right-of-way. These improvements would result in enhanced public access opportunities while at the same time reducing energy consumption and vehicle miles traveled.
- 2.3.4 **Restoration Enhancements.** The NCC PWP/TREP includes significant restoration enhancement with specific projects located within coastal lagoon systems throughout the NCC Coastal Zone. Specific projects include:
- A. Habitat establishment, restoration, enhancement and preservation for upland ESHA and wetland resource impacts
  - B. Optimized bridge projects (lagoon bridge lengthening along the I-5 and LOSSAN rail corridors) designed to improve lagoon system function and values and facilitate large-scale lagoon restoration
  - C. Endowment that is intended to increase the capacity for long-term management of the Los

- Peñasquitos and Batiquitos Lagoons inlet maintenance projects and/or other significant resources in the corridor, and support stewardship of these resources in perpetuity
- D. Funding for large-scale lagoon restoration programs for San Elijo Lagoon and/or Buena Vista Lagoon

This suite of restoration enhancements would result in important biological and hydrological improvements to sensitive coastal resources.

- 2.4 The NCC PWP/TREP includes detailed procedural and implementation requirements related to the phasing of specific project construction. These linkages within the PWP/TREP are intended to ensure that the infrastructure components do not outpace the necessary resource and community enhancement components of the NCC PWP/TREP. The PWP/TREP includes project phasing that links the various specific project types encapsulated within the NCC Project in such a manner to provide maximum benefits for the coastal resources within the NCC PWP/TREP area while at the same time achieving the transportation goals for the NCC corridor. These phasing requirements relate both to the successful completion of resource enhancement projects as well as demonstrated interconnectivity between transportation systems. The PWP/TREP Phasing Plan and Implementation Framework is divided into short, mid, and long term project phases; and, in order for a specific project to be initiated, all of the components of the prior phase must be completed, as defined in the PWP/TREP, before the subject project can be initiated. Project shifts between phases may be allowed if they would not result in impacts to coastal resources that were not accounted for in this LCP and NCC PWP/TREP and would result in equivalent or greater multi-modal and coastal access improvements as compared to the PWP/TREP Phasing Plan and Implementation Framework approved by the Coastal Commission. Amendments to the NCC PWP to authorize such project shifts are therefore permitted if they are in conformance with Section 2.5 of the NCC Overlay.
- 2.5 The NCC PWP project scope and resource protection policies, design/development strategies, and implementation measures may require amendment by Caltrans, SANDAG and the Coastal Commission to address modified project designs, changes in available project funding and/or phasing needs, to incorporate new, high priority resource enhancement opportunities, and/or to address changed site conditions and resource protection requirements within the NCC Project Overlay area. The NCC PWP, as may be amended from time-to-time, shall continue to provide the standard of review for implementation of projects reviewed and approved pursuant to the PWP/TREP. Amendment of the NCC PWP that would not result in conflicts with the policies contained within the NCC Project Overlay would not require future amendment to the City's Local Coastal Program.

Although the following list is not exhaustive, these changes to the NCC PWP would trigger the need for an amendment to the City's Local Coastal Program:

- A. The addition of new projects not consistent with NCC Project Overlay Policy 2.3, or that involve significant impacts to coastal resources not considered in the original PWP or not addressed by PWP policies, development/design strategies and implementation measures.
- B. Alteration of resource protection policies or mitigation ratio standards within the NCC PWP inconsistent with the policies contained within the NCC Project Overlay

- C. Project shifts between phases that would result in reduced multi-modal performance and coastal access, or without necessary mitigation or coordination between other transportation modes as compared to the PWP/TREP Phasing Plan and Implementation Framework approved by the Coastal Commission, or project shifts that would result in significant unmitigated impacts to coastal resources not considered in the original PWP or not addressed by PWP policies, development/design strategies and implementation measures..

- 2.6 Rail, highway, bicycle, pedestrian, community and resource enhancement projects, as defined within and permitted by the NCC PWP are permitted uses on lands subject to the NCC Project Overlay, and shall be permitted to be constructed, opened, operated and maintained for intended public use or benefit pursuant to the PWP and NOID, as provided in Sections 30605 and 30606 of the Coastal Act. All projects specifically defined within and permitted by the NCC PWP, upon approval by the Coastal Commission are herein incorporated by reference.
- 2.7 Specific rail projects not handled solely through federal consistency review and conceptual highway, bike and pedestrian enhancement components of the PWP may be altered through future PWP amendments and then ultimately authorized by subsequent NOIDs, or SANDAG/Caltrans may, in consultation with the City and Coastal Commission, choose to submit a coastal development permit application to the City for these projects, in which case the standard of review will be the City's certified Local Coastal Program.

### **3. North Coast Corridor PWP/TREP Coastal Resource Protection Policies**

If the Commission approves the NCC PWP all projects and programs as defined within and undertaken pursuant to that document within the City of San Diego shall conform to the following resource protection policies:

#### **3.1 Coastal Access and Recreation**

- 3.1.1 Maximum public access to coastal and inland recreational resources in the North Coast Corridor shall be protected, and where feasible, enhanced, consistent with public safety needs and sensitive coastal resource protection policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG and dated XXX). Any future amendment of the original PWP shall not decrease the level of public access improvements guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

#### **3.2 Energy Conservation and Emissions Reduction**

- 3.2.1 New transportation and associated community and resource enhancement projects in the North Coast Corridor shall seek to minimize increases in energy consumption, vehicle hours traveled and person hours of travel, and be consistent with San Diego County Air Pollution Control District and California Air Resources Board requirements. Where North Coast Corridor development may potentially increase energy consumption or be inconsistent with air pollution requirements, feasible mitigation measures shall be required and implemented consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG and dated XXX). Any future amendment of the original PWP shall not decrease the energy conservation and emissions reduction improvements

guaranteed by the policies in the NCC Corridor PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.3 Transit and Smart Growth**

3.3.1 Measures to improve public access to beaches and recreation areas through the use of transit and alternative means of transportation in the North Coast Corridor shall be developed in coordination with the Coastal Commission, City, Caltrans, SANDAG and any other appropriate transit providers, and may include, where determined feasible and consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG dated XXX):

- A. Provision of parking facilities for bicycles, motorcycles and transit vehicles at recreation areas and transit stations;
- B. Development of park-and-ride or other staging facilities at points along Interstate Highway Route 5;
- C. Construction of road and intersection improvements to Interstate Highway Route 5 and arterial streets to facilitate bus travel;
- D. Installing or improving bicycle and pedestrian overpasses and/or undercrossings along State Highway Route 5 and the LOSSAN rail corridor where determined feasible; and,
- E. Providing bicycle and pedestrian facilities and routes that connect with public transit centers, thereby promoting access to and use of carpooling and other public transit opportunities.

Any future amendment of the original PWP shall not decrease improvements that support and facilitate mass transit, other alternative means of transportation and smart growth guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.4 Marine Resources: Water Quality and Wetlands**

3.4.1 North Coast Corridor transportation and community enhancement projects shall be sited and designed such that marine resources are maintained, enhanced, and, where feasible, restored. North Coast Corridor water quality shall be restored by minimizing wastewater discharges, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas, and minimizing alteration of natural watercourses, where feasible. North Coast Corridor transportation and community enhancement projects shall be planned and designed to protect and, where feasible, enhance water quality of the North Coast Corridor's lagoons, streams, and smaller watershed drainages which support open water, wetland, and riparian habitats, consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG dated XXX). Where otherwise approvable new development may potentially result in negative impacts to open coastal waters, wetlands, and estuaries, appropriate mitigation measures shall be required and implemented. North Coast Corridor project development in and adjacent to open water, wetland and riparian habitats shall be limited to the uses specified in Sections 30233 and 30236 of the Coastal Act, as applicable, and/or uses specifically defined within and permitted by the NCC Project Overlay. Any future amendment of the original PWP shall not decrease the level of water quality improvements or protection of wetlands guaranteed by the policies in the NCC PWP/TREP such that the project

as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.5 Environmentally Sensitive Habitat Areas (ESHA)**

- 3.5.1 North Coast Corridor transportation and community enhancement projects shall be sited and designed to ensure that ESHAs are protected against any significant disruption of habitat values, and development in areas adjacent to ESHAs shall be sited and designed to prevent impacts that would significantly degrade those areas, and be compatible with the continuance of those habitat and recreation areas, consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG dated XXX). Where otherwise approvable new development may potentially result in negative impacts to ESHAs and other sensitive coastal habitats, appropriate mitigation measures shall be required and implemented. North Coast Corridor project development in and adjacent to ESHAs shall be limited to the uses specified in Section 30240 of the Coastal Act and/or uses specifically defined within and permitted by the NCC Project Overlay. Any future amendment of the original PWP shall not decrease the level of protection of ESHA guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.6 Agricultural Resources**

- 3.6.1 North Coast Corridor transportation, community and resource enhancement projects shall minimize impacts to agricultural resources consistent with the policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG dated XXX). Where otherwise approvable new development may potentially convert agricultural uses to non-agricultural uses, appropriate mitigation measures shall be required and implemented. North Coast Corridor project development in areas containing significant agricultural resources shall be limited to the uses and circumstances specified in Sections 30241, 30241.5 and 30242 of the Coastal Act and/or uses specifically defined within and permitted by the NCC Project Overlay. Any future amendment of the original PWP shall not decrease the level of protection of agricultural resources guaranteed by the policies in the NCC PWP/TREP that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.7 Archaeological and Paleontological Resources**

- 3.7.1 Transportation, community and resource enhancement projects in the North Coast Corridor shall strive to protect and minimize impacts to archaeological and paleontological resources. Where North Coast Corridor projects may potentially adversely impact archaeological or paleontological resources, appropriate mitigation measures shall be required and implemented consistent with the policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG and dated). Any future amendment of the original PWP shall not decrease the level of protection of archaeological and paleontological resources guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.8 Coastal Visual Resources**

- 3.8.1 North Coast Corridor project development shall be sited and designed in a manner that avoids and minimizes negative impacts to visual resources and protects, to the extent feasible, scenic public

views to significant coastal resources, including views of the ocean and coastline, coastal lagoons and river valleys, and significant open space areas. North Coast Corridor project development shall be sited and designed to be compatible with existing development and surrounding areas such that potential impacts of grading, operational activities, community enhancement improvements and direct lighting on public views outside of the transportation facilities are limited to the greatest extent feasible. North Coast Corridor project development shall be planned to be consistent with the visual resource protection policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG and dated XXX). Any future amendment of the original PWP shall not decrease the level of protection of coastal visual resources guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

- 3.8.2 In scenic public view areas in the North Coast Corridor, roadway improvements, including culverts, retaining walls, bridges or overpasses shall be designed and constructed to protect public views and avoid or minimize visual impacts and to blend in with the natural setting as viewed from adjoining public view points, to the extent feasible.

### **3.9 Conflict Resolution**

- 3.9.1 The NCC Project Overlay authorizes development that, in isolation, is recognized to be inconsistent with the Chapter 3 policies of the Coastal Act. However, denial of the project would result in Coastal Zone effects that are inconsistent with other Chapter 3 policies. The project as a whole resolves these conflicts in a manner that is most protective of significant coastal resources. Due to the fact that the NCC PWP/TREP raises conflicts between Coastal Act policies, and the recognition of the Coastal Act's conflict resolution process as it pertains to this project in Streets and Highways Code section 103(f)(2), conflict resolution, including under Coastal Act section 30007.5, may be used to resolve conflicts between coastal resources protection policies with respect to the PWP/TREP. The conflict resolution provisions relied upon by the Coastal Commission in reviewing the NCC PWP/TREP provide support and rationale as to why the coastal resource protection policies of the NCC Project Overlay could be considered consistent with the Coastal Act, on balance, despite inconsistencies with individual Chapter 3 policies.

### **3.10 Precedential Effect of Overlay**

Where there are conflicts between the policies set forth in the NCC PWP/TREP, as may be amended by Caltrans, SANDAG and the Coastal Commission from time-to-time, and those set forth in any other element of the City's certified Local Coastal Program, General Plan, zoning or any other ordinance, the policies of the NCC Project Overlay and the policies, design/development strategies, and implementation measures of the NCC PWP/TREP shall take precedence for any project and/or use included in the NCC PWP/TREP as approved by the Coastal Commission for the North Coast Corridor except in cases where an amendment to the NCC Project Overlay would be required as previously described above in NCC Overlay Policy 2.5 .

**North Coast Corridor PWP Overlay  
Local Coastal Program Land Use Plan Amendment –  
San Diego Community Plan References  
May 2014**

**North City Coastal LUP (p.2 Introduction Text) – Addressing Carmel Valley Community Plan (Area of Deferred Certification) and Overall City of San Diego Land Use Plan Amendment**

The North City LCP addresses the goals, policies and requirements of the California Coastal Act. The issues discussed were identified by the Coastal Commission and the City of San Diego, and generally pertain to each geographic segment. The Plan is presented in geographic segments to enhance the organization, clarification, and understanding of the specific plan language recommended for each issue. Also, as this LCP serves as an addendum to four community plans, and an amendment to one community plan, and the general plan, presentation of the Plan by geographic segments enhances the community planning process now and in the future. All recommendations can be incorporated into the community's plan separately as a geographic segment, or in total, as the North City LCP. The approval of the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) by the California Coastal Commission in 2014 (Doc. No. XXXXX) amended the City's Local Coastal Program, and requires that subsequent regulatory reviews of projects encompassed by the NCC PWP/TREP be processed under the framework and guidance provided within the NCC PWP/TREP. This amendment of the City of San Diego Local Coastal Program included amendments to the Coastal Land Use Maps contained within the North City LCP to include the NCC PWP/TREP Project Overlay Map (Map 1A-1E) and Project Overlay Improvements Map (Map 2A-2B). The NCC PWP/TREP Project Overlay provides the applicable standard of review for the NCC PWP/TREP, which authorizes the development, operation, and maintenance of specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects defined therein. The City of San Diego Local Coastal Program NCC Project Overlay Improvements Map identifies those specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects envisioned to occur within the jurisdictional boundaries of the North City Coastal LUP pursuant to the NCC PWP/TREP. To the extent any other provisions of the community plan conflict with the NCC PWP/TREP, the provisions of the NCC PWP/TREP shall prevail.

**University Community Plan (p. 5 Framework/Preface)**

VII. North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program.

The approval of the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) by the California Coastal Commission in 2014 (Doc. No. XXXXX) amended the City's Local Coastal Program, and requires that subsequent regulatory reviews of projects encompassed by the NCC PWP/TREP be processed under the framework and guidance provided within the NCC PWP/TREP. This amendment of the City of San Diego Local Coastal Program included amendments to the

Coastal Land Use Maps contained within the University Community Plan to include the NCC PWP/TREP Project Overlay Map (Map 1A) and Project Overlay Improvements Map (Map 2B). The NCC PWP/TREP Project Overlay provides the applicable standard of review for the NCC PWP/TREP, which authorizes the development, operation, and maintenance of specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects defined therein. The City of San Diego Local Coastal Program NCC Project Overlay Improvements Map identifies those specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects envisioned to occur within the jurisdictional boundaries of the University Community Plan pursuant to the NCC PWP/TREP. To the extent any other provisions of the community plan conflict with the NCC PWP/TREP, the provisions of the NCC PWP/TREP shall prevail.

### **Torrey Pines Community Plan (p.17 Local Coastal Program)**

The California Coastal Act of 1976 established a coastal zone boundary within which certain planning and development requirements must be met. These requirements have been designed to protect and enhance California's coastal resources. The North City Local Coastal Program Land Use Plan (LCP) was adopted by the San Diego City Council in March 1981, revised in May 1985, and revised again in March 1987. The LCP, as amended, remains in full force and effect. However, should any policies contained in this document conflict with the previously adopted LCP Land Use Plan, this document shall take precedence.

The LCP encompasses all of the Torrey Pines planning area, except for a small portion at the very southern tip of Sorrento Valley. The LCP also encompasses portions of the community planning areas of Mira Mesa, Carmel Valley, University, Sorrento Hills, and Via De La Valle, as well as open space and urban reserve areas identified in the City's Progress Guide and General Plan (General Plan). These areas were grouped because of considerations of drainage into the San Dieguito and Los Peñasquitos Lagoon, impacts on traffic volume and traffic circulation in the area, and the cumulative impacts of development.

The recommendations and development criteria of the LCP have been incorporated into the individual elements of this Plan. Due to the standard of review established in the Coastal Act of 1976, an LCP Land Use Plan must contain a great deal of specificity to direct the formulation of suitable implementing ordinances. Therefore, more specific and detailed supplemental coastal development policies not contained within the main body of this Plan can be found in Appendix E. These policies apply to all development with the coastal zone and take precedence over any policies contained elsewhere in the document that may conflict with the coastal development policies.

The approval of the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) by the California Coastal Commission in 2014 (Doc. No. XXXXX) amended the City's Local Coastal Program, and requires that subsequent regulatory reviews of projects encompassed by the NCC PWP/TREP be processed under the framework and guidance provided within the NCC PWP/TREP. This amendment of the City of San Diego Local Coastal Program included amendments to the Coastal Land Use Maps contained within the Torrey Pines Community Plan to include the NCC PWP/TREP Project Overlay Map (Map 1B) and Project Overlay Improvements Map (Map 2A-2B). The NCC PWP/TREP Project Overlay provides the applicable standard of review for the NCC PWP/TREP, which authorizes the

development, operation, and maintenance of specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects defined therein. The City of San Diego Local Coastal Program NCC Project Overlay Improvements Map identifies those specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects envisioned to occur within the jurisdictional boundaries of the Torrey Pines Community Plan pursuant to the NCC PWP/TREP. To the extent any other provisions of the community plan conflict with the NCC PWP/TREP, the provisions of the NCC PWP/TREP shall prevail.

### **Torrey Hills Community Plan (p.19 Local Coastal Program)**

The passage of the Coastal Initiative in 1972 established temporary Coastal Commissions to prepare a plan for sound conservation and development of coastline areas. The plan was completed in late 1975 and served as the basis for the California Coastal Act of 1976. This legislation established state policies on coastal issues and the requirements for local coastal program preparation by government entities. The local coastal programs include local government land use plans, zoning ordinances, zoning maps and other implementing actions. When the local plans have been certified by the Coastal Commission as being consistent with Coastal Act policies, the permitting controls now exercised by the Coastal Commission will be returned to local governments, subject to a system of appeals to the Coastal Commission.

The northern portion and the southern perimeter of the plan area, consisting of approximately 123 acres, are included within the Coastal Zone, as defined by the Coastal Act of 1976 (see Figure 3, Coastal Zone Boundaries). The primary reason for this inclusion is to provide additional upstream protection for the environmentally sensitive wetland of Los Peñasquitos Lagoon. Because portions of the community are situated within the Coastal Zone, this Plan has the additional responsibility of containing specific land use and development policies pursuant to the adoption of a Local Coastal Program (LCP). These are contained in the Coastal Zone Policies Element of this Plan.

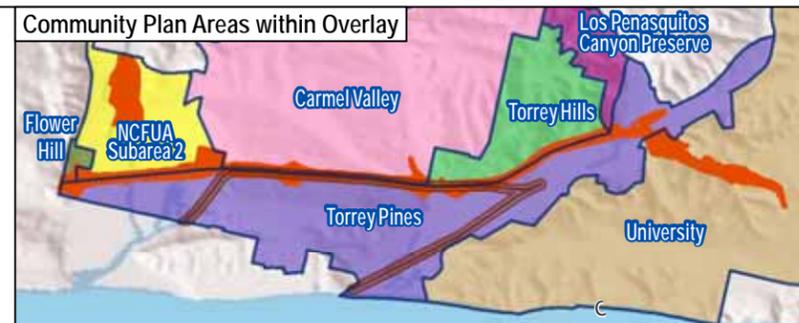
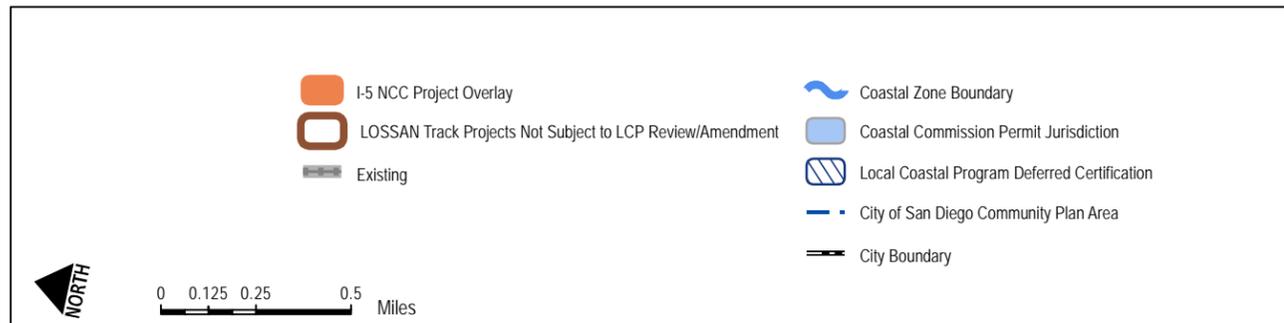
The City of San Diego has prepared and submitted the North City Local Coastal Program Land Use Plan and the related Implementation Ordinances. The Land Use Plan (LUP) includes land uses for those portions of the communities of University City, Mira Mesa, Torrey Pines, Carmel Valley, and Torrey Hills, which are located within the Coastal Zone. Subsequent to adoption of the North City Local Coastal Program, and in conjunction with approval of the 1994 amendment of this Plan, the state Coastal Commission certified this Plan as superseding the Coastal Zone Policies specific to the Torrey Hills portion of the North City Local Coastal Program. Development proposals that occur in the Coastal Zone will require approval of a Coastal Development Permit (CDP) from the City. Improvements associated with portions of the extension of Vista Sorrento Parkway occurring within the Coastal Zone have been approved by the state Coastal Commission.

The approval of the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) by the California Coastal Commission in 2014 (Doc. No. XXXXX) amended the City's Local Coastal Program, and requires that subsequent regulatory reviews of projects encompassed by the NCC PWP/TREP be processed under the framework and guidance provided within the NCC PWP/TREP. This amendment of the City of San Diego Local Coastal Program included amendments to the Coastal Land Use Maps contained within the Torrey Hills Community Plan to include the NCC PWP/TREP Project Overlay Map (Map 1C) and Project Overlay Improvements Map (Map 2B). The NCC PWP/TREP Project Overlay provides the applicable standard of review for the NCC PWP/TREP, which authorizes the

development, operation, and maintenance of specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects defined therein. The City of San Diego Local Coastal Program NCC Project Overlay Improvements Map identifies those specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects envisioned to occur within the jurisdictional boundaries of the Torrey Hills Community Plan pursuant to the NCC PWP/TREP. To the extent any other provisions of the community plan conflict with the NCC PWP/TREP, the provisions of the NCC PWP/TREP shall prevail.

**North City Future Urbanizing Area Framework Plan (p.36-37, Section 3.4 Planning Subareas, Subarea II San Dieguito of the February 2006 posted version)**

3.4x The approval of the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) by the California Coastal Commission in 2014 (Doc. No. XXXXX) amended the City's Local Coastal Program, and requires that subsequent regulatory reviews of projects encompassed by the NCC PWP/TREP be processed under the framework and guidance provided within the NCC PWP/TREP. This amendment of the City of San Diego Local Coastal Program included amendments to the Coastal Land Use Maps contained within the North City Future Urbanizing Area Plan to include the NCC PWP/TREP Project Overlay Map (Map 1E) and Project Overlay Improvements Map (Map 2A). The NCC PWP/TREP Project Overlay provides the applicable standard of review for the NCC PWP/TREP, which authorizes the development, operation, and maintenance of specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects defined therein. The City of San Diego Local Coastal Program NCC Project Overlay Improvements Map identifies those specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects envisioned to occur within the jurisdictional boundaries of the North City Future Urbanizing Area Plan pursuant to the NCC PWP/TREP. To the extent any other provisions of the community plan conflict with the NCC PWP/TREP, the provisions of the NCC PWP/TREP shall prevail.



DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

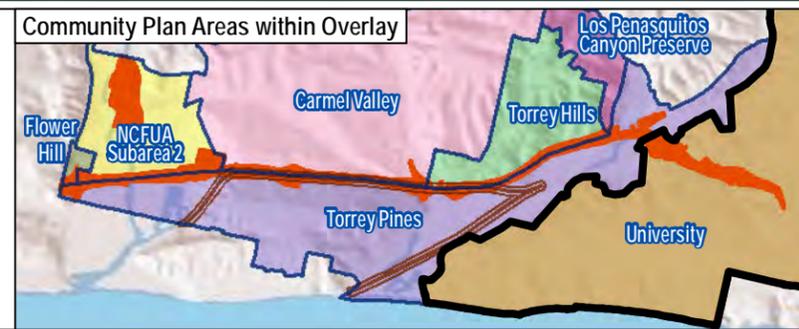
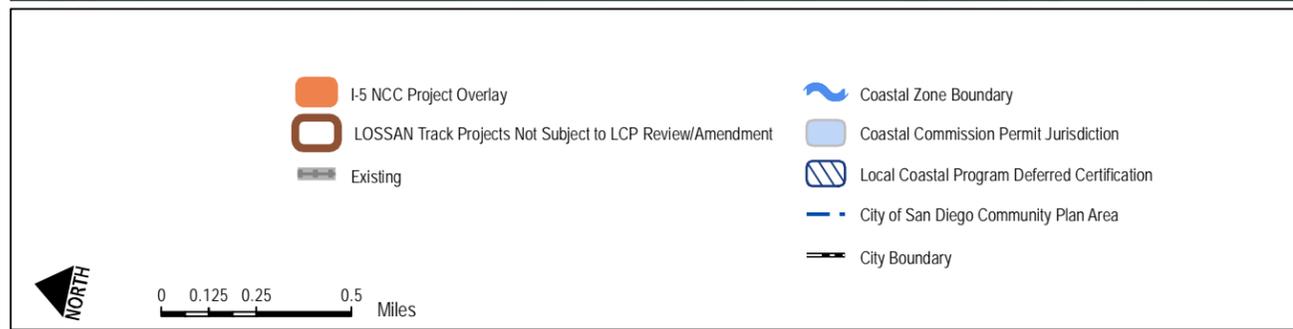
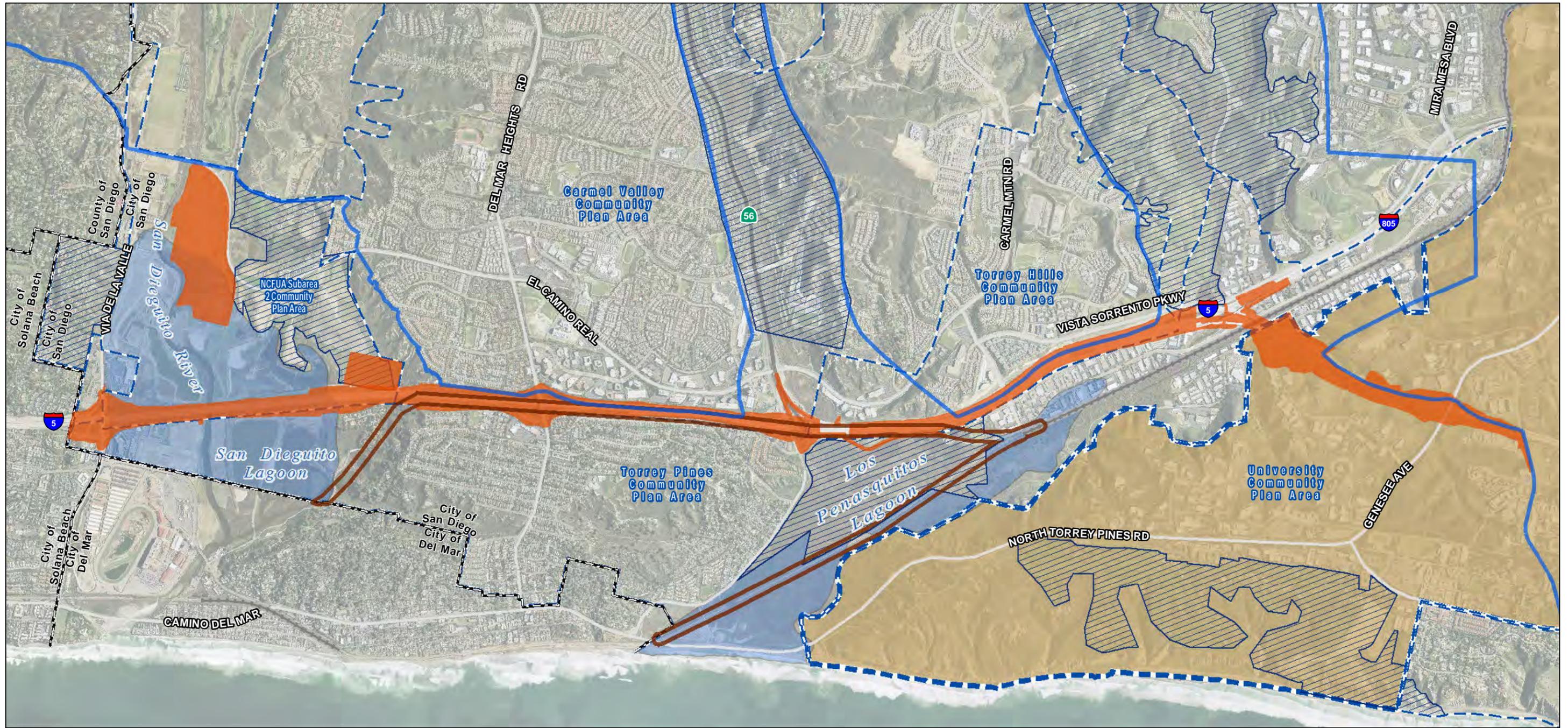
The Coastal Zone boundary, jurisdiction and Local Coastal Program data in this map are for planning and engineering study purposes only. Data are derived from multiple sources. The digital Coastal Zone boundary, jurisdiction and Local Coastal Program data in this map have not been adopted by the Coastal Commission, and do not supersede the official versions certified by the Coastal Commission as may be amended from time to time. Disclaimer: The State of California makes no representations or warranties regarding the accuracy or completeness of the files or the data from which they were derived. The State shall not be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of these Coastal Zone boundary, jurisdiction and Local Coastal Program files or the data from which they were derived. Because the Coastal Zone boundary, jurisdiction and Local Coastal Program data files are merely representational, they and the data from which they were derived are not binding and may be revised at any time.

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North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay

MAP 1

City of San Diego



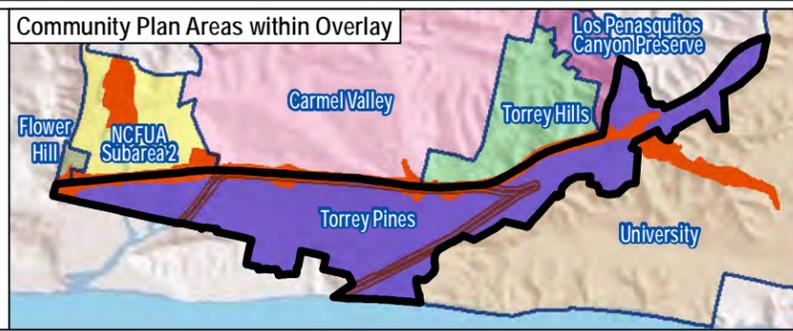
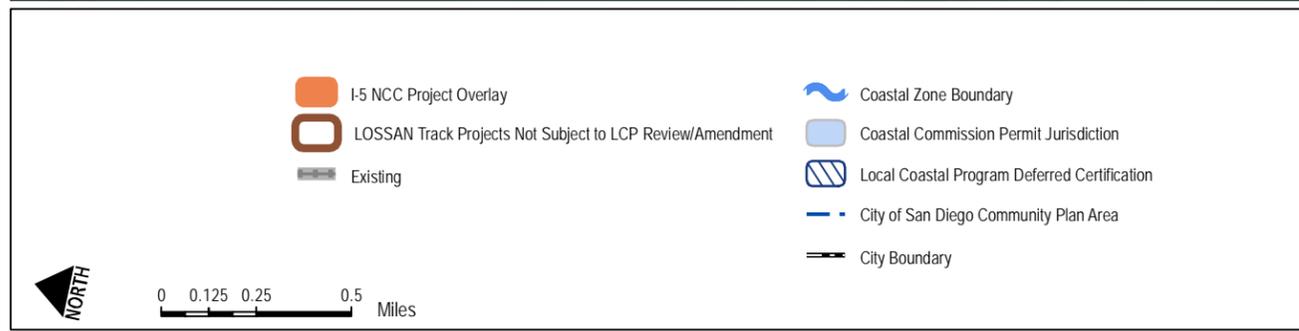
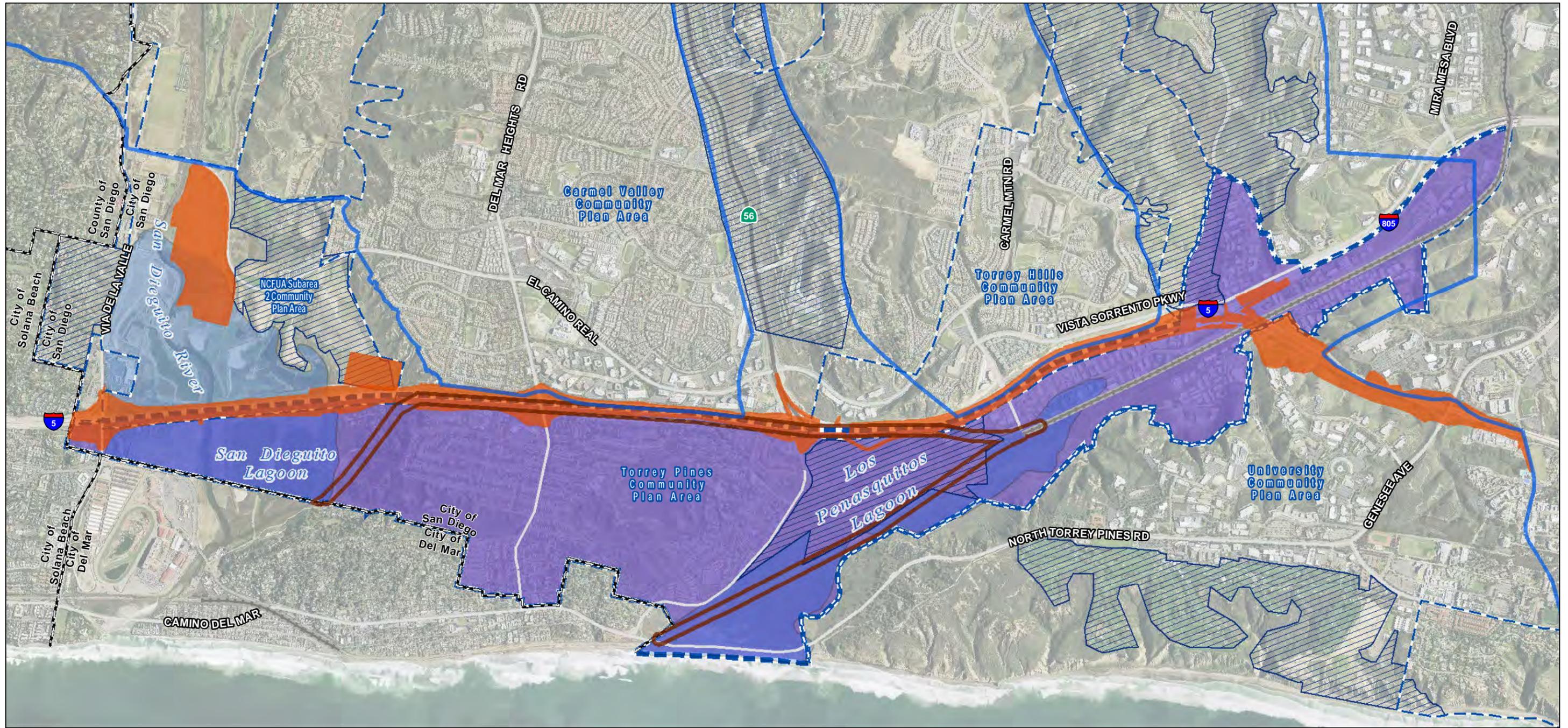
DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay

MAP 1A - University Community Plan Area  
City of San Diego



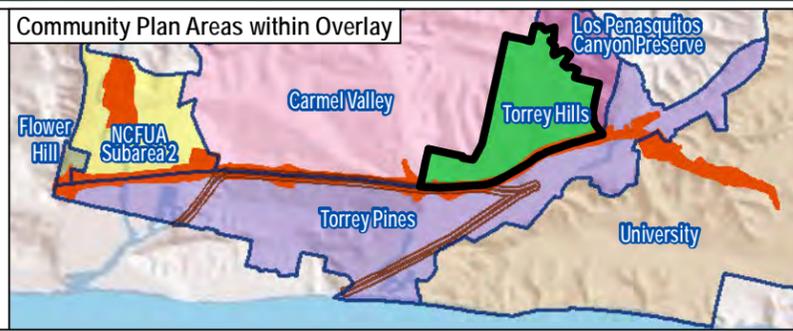
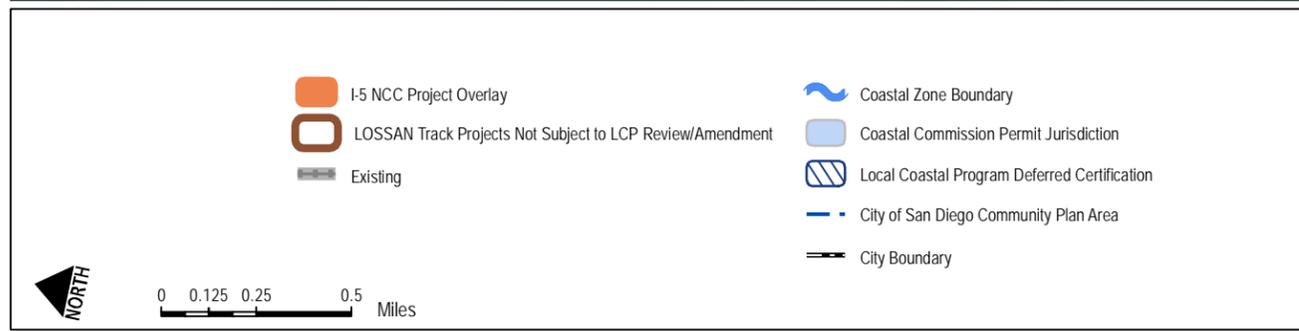
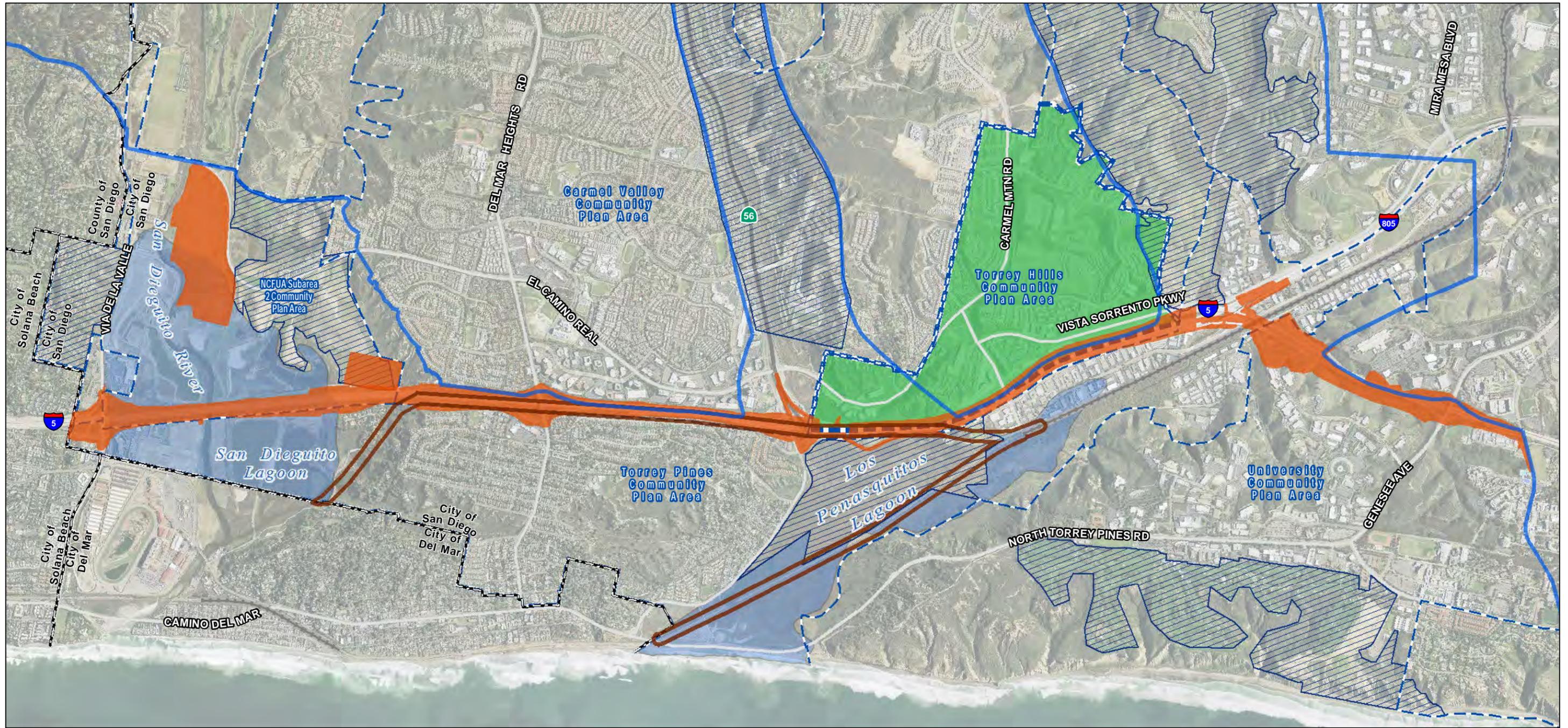
DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay

**MAP 1B - Torrey Pines Community Plan Area  
City of San Diego**



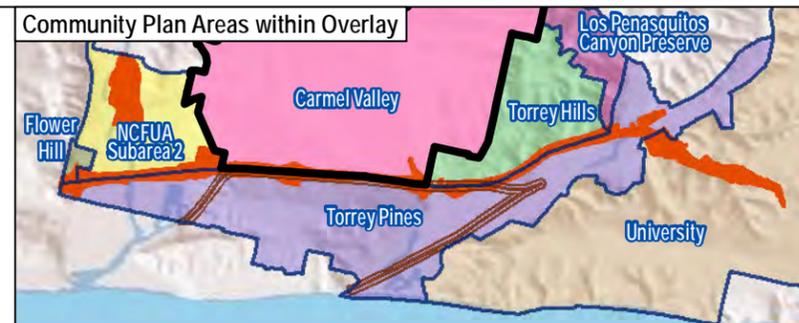
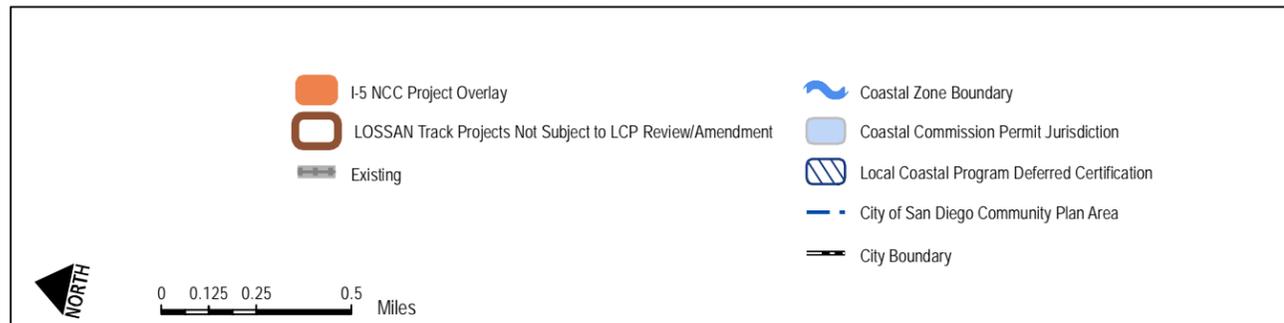
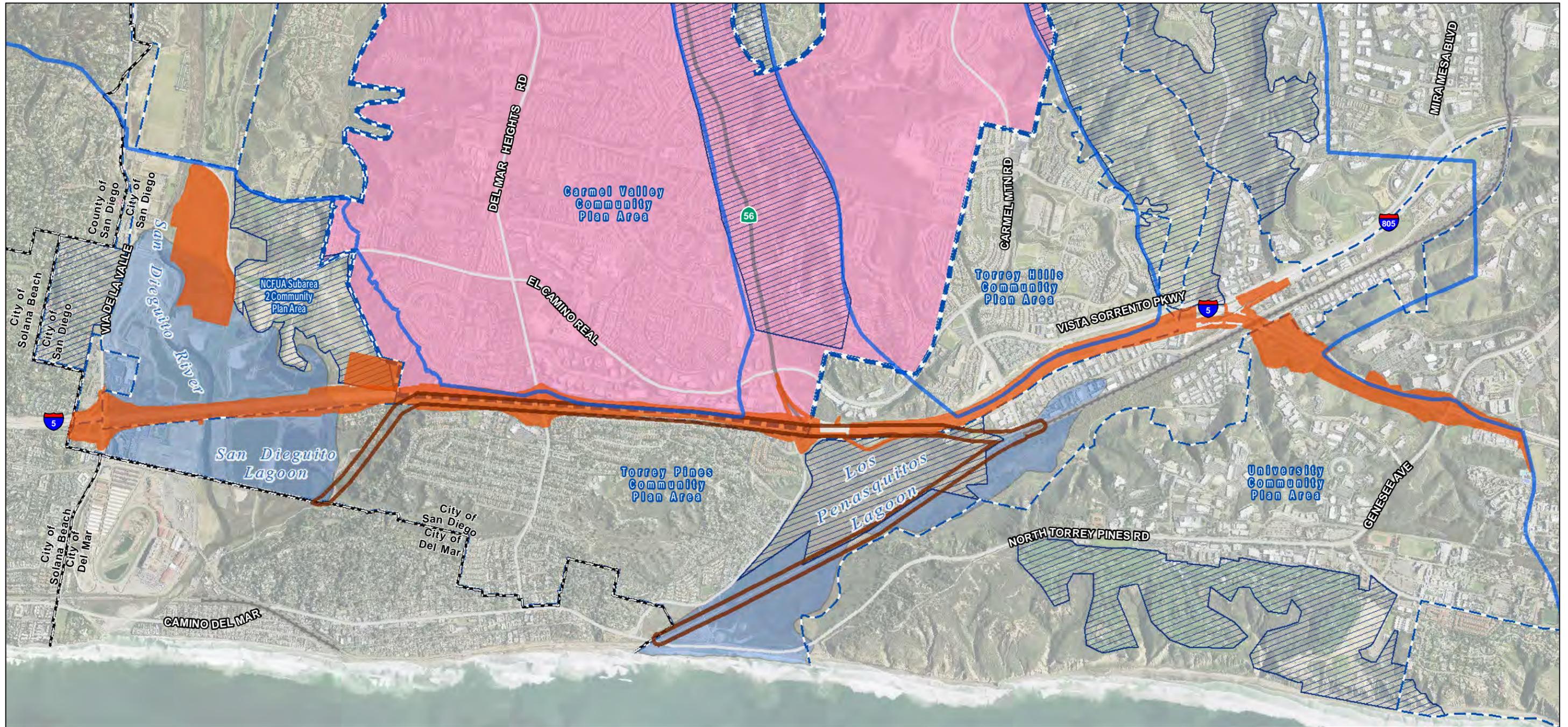
DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay

MAP 1C - Torrey Hills Community Plan Area  
City of San Diego



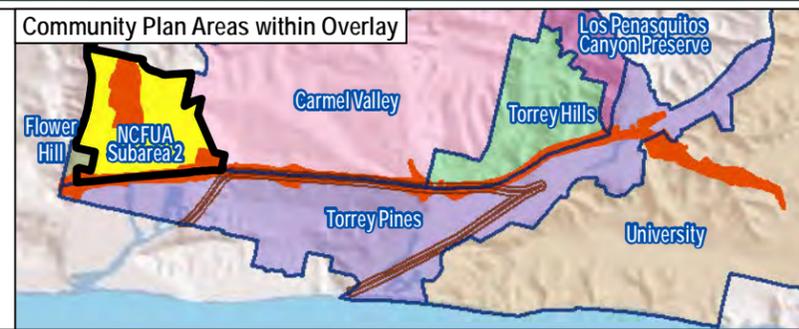
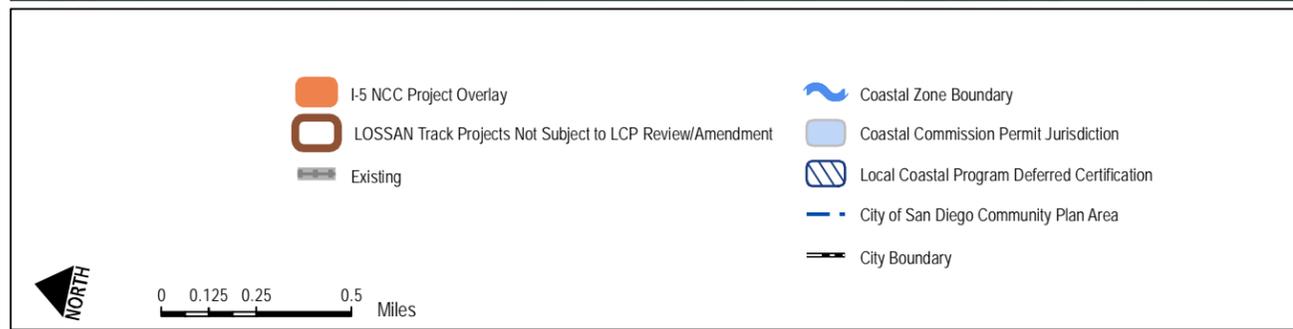
DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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**MAP 1D - Carmel Valley Community Plan Area  
City of San Diego**

North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay



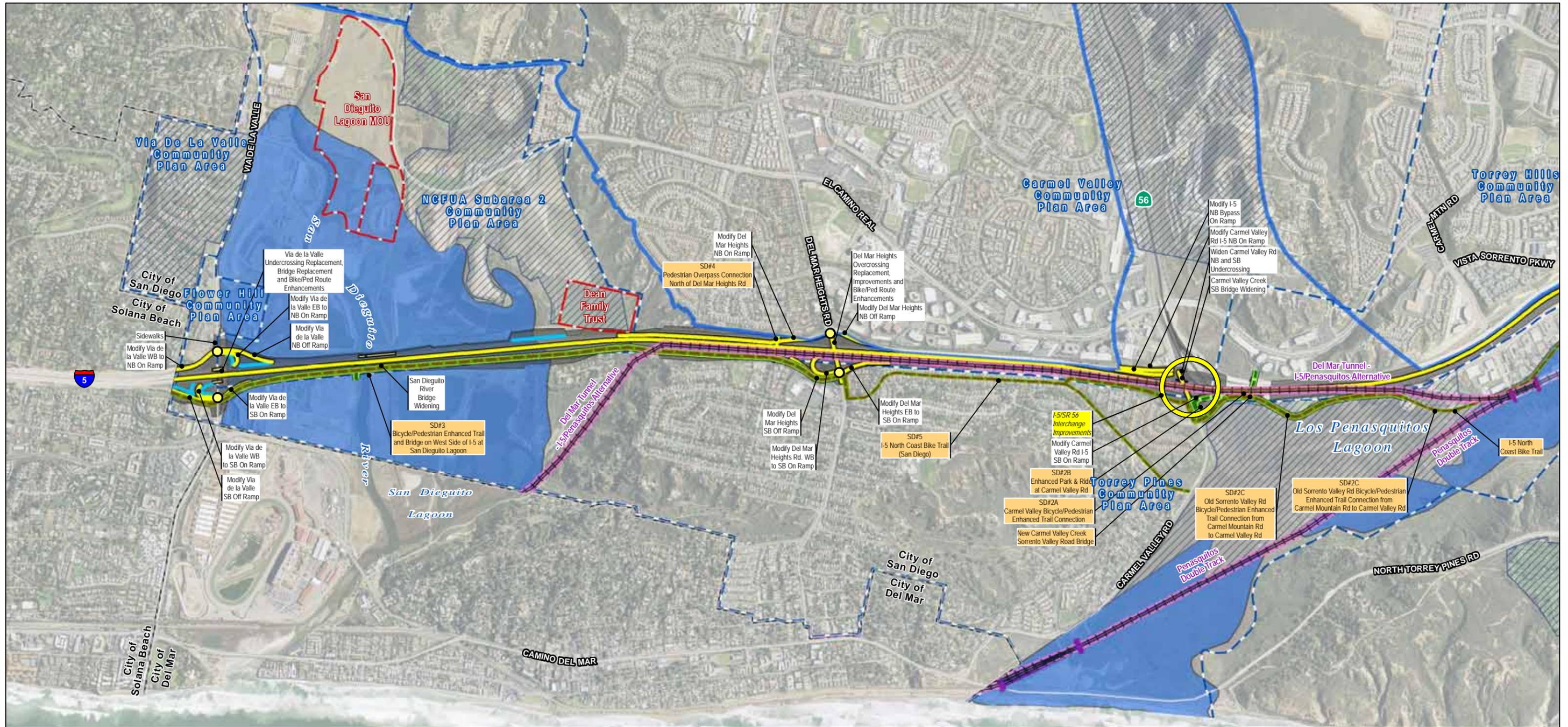
DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay

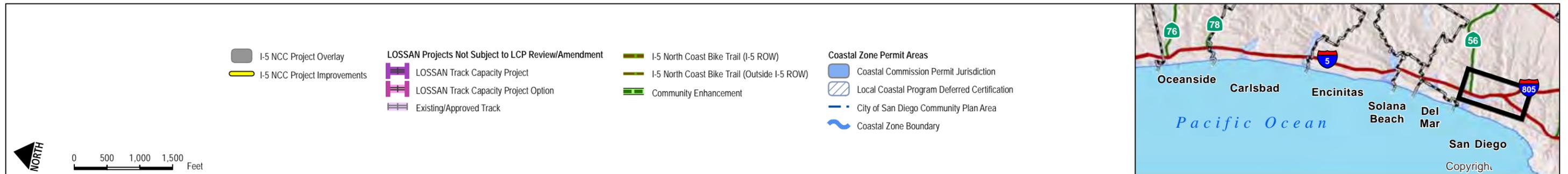
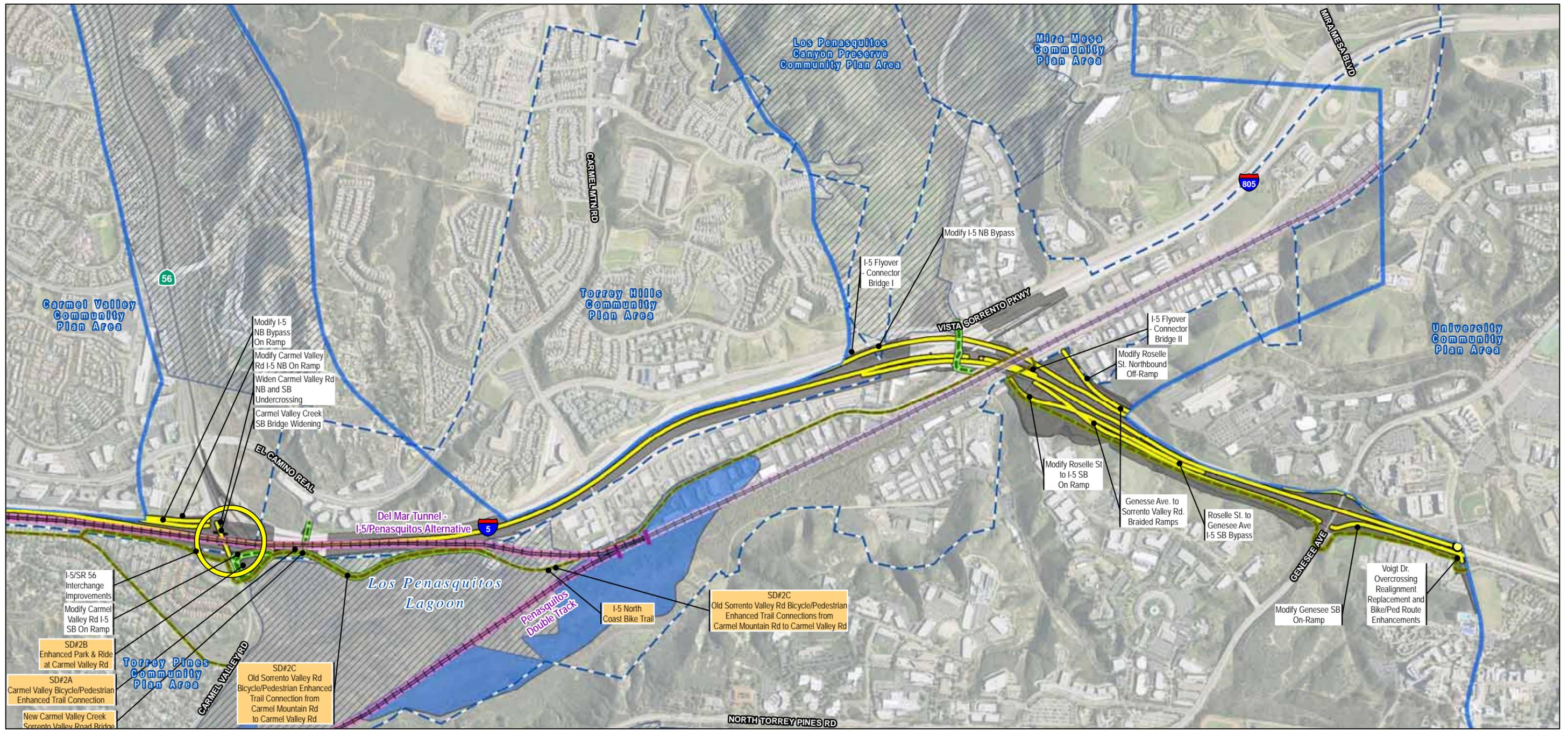
MAP 1E - NCFUA Subarea 2 Community Plan Area  
City of San Diego



DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay Improvements

MAP 2B

City of San Diego (South)

Copyright

**North Coast Corridor PWP Overlay  
Local Coastal Program Land Use Plan Amendment  
May 2014**

**CITY OF ENCINITAS LOCAL COASTAL PROGRAM AMENDMENT- LAND USE PLAN**

**1. Land Use Maps**

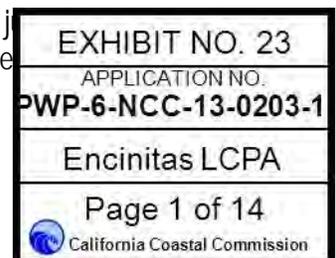
Amend the City of Encinitas Local Coastal Program – Coastal Land Use Maps to include the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) Project Overlay Map and Project Overlay Improvements Map.

Amend the City of Encinitas Recreation Element Figure 3, Recreational Trails Master Plan Map to include the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) Project Overlay bicycle and pedestrian improvements.

Amend the City of Encinitas Circulation Element Figure 7, Bikeway Facilities Map to include the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) Project Overlay bicycle and pedestrian improvements.

**1.1 North Coast Corridor PWP/TREP Overlay Land Use Plan Map**

The City of Encinitas Local Coastal Program Land Use Maps and Circulation Element illustrate the Local Coastal Program land use designation for each property. The land use designation denotes the type, density and intensity of development and uses that may be permitted for each property, consistent with applicable Local Coastal Program policies. In addition to the land use designations included in the certified Land Use Maps, an overlay is applied to those land areas within the City of Encinitas as identified on the NCC PWP/TREP Project Overlay Map (Map 1). The NCC PWP/TREP Project Overlay provides the applicable standard of review for the NCC PWP/TREP, which, if approved, will authorize the development, operation, and maintenance of specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects defined therein. The goals of the NCC PWP/TREP are to improve and maintain regional mobility and access to coastal resources in the North Coast Corridor, to implement a program to protect, restore, and enhance sensitive coastal resources along the North Coast Corridor and to mitigate potential resource impacts caused by implementation of the transportation and community enhancement projects. The City of Encinitas Local Coastal Program NCC Project Overlay Improvements Map (Map 2) identifies those specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects envisioned to occur within the jurisdictional boundaries of the City of Encinitas pursuant to the NCC PWP/TREP. The City of Encinitas Recreation Element, Figure 3 Map Changes (Map 3) and the City of Encinitas Circulation Element, Figure 7 Map Changes (Map 4) identify new pedestrian and bikeway facilities envisioned to occur within the jurisdictional boundaries of the City of Encinitas pursuant to the NCC PWP/TREP in relation to existing and planned pedestrian and bikeway facilities. In areas within the NCC Project Overlay Map where the Local Coastal Program land use designation currently does not allow for transportation and restoration related uses, these uses would now be identified as an allowable use, with the portions of the NCC PWP/TREP that are incorporated into the overlay serving as the standard of review for all proposed development that is outside of the Coastal Commission's retained jurisdiction. If the NCC PWP/TREP is approved, these uses would not be handled solely through federal consistency review. If the NCC PWP/TREP is approved,



regulatory reviews shall be processed under the framework and guidance provided within the NCC PWP/TREP.

## **2. North Coast Corridor PWP/TREP Overlay Project Components and Land Use Plan Policies**

- 2.1 Pursuant to Senate Bill (SB) 468, the NCC Project is defined as a 27-mile long series of projects within the coastal zone that includes improvements to a segment of I-5 and the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor. The NCC PWP/TREP includes 27-miles of regional mobility, community and resource enhancement projects planned in Northern San Diego County, a portion of which are located within, or partially within, the City of Encinitas ("City") coastal zone.

The NCC Public Works Plan ("PWP") is integrated, within a single document, with the NCC Transportation and Resource Enhancement Program ("TREP"), which collectively provide the coastal policy framework under which the City, Coastal Commission, and other affected agencies and interested parties can evaluate overall NCC PWP/TREP benefits and potential impacts to coastal zone resources, phased implementation, mitigation measures, and feasible alternatives in the context of the City's local coastal program, the California Coastal Act, regional mobility plans and coastal resource enhancement goals.

The TREP provides the basis for Coastal Commission federal consistency review and informs conflict resolution to ensure the overall NCC PWP/TREP is consistent with applicable California Coastal Management Program/Coastal Act policies. Chapter 3 policies of the Coastal Act provide the standard of review for the federal consistency review and, pursuant to the TREP, rail projects, will be evaluated on a case-by-case basis to determine whether the Coastal Commission's review of those projects will be limited to the federal consistency review process only.

In addition to providing an overall summary of the NCC projects for purposes of Coastal Act review, the PWP also provides authorization for future development and guidance for future coastal development permitting of other development within the NCC Project Overlay area and informs how the Coastal Commission may resolve any conflicts between Coastal Act policies. The PWP incorporates projects (including highway projects, rail projects other than those subject to the federal consistency review process only, and community and resource enhancement projects) that are both subject to coastal development permit and/or local coastal program requirements and that are located outside the areas of the Commission's retained jurisdiction. Following Coastal Commission approval of the PWP, project-specific Notice of Impending Developments (NOIDs) provide the mechanism by which the project proponent will bring forward specific projects for Coastal Commission review (except for those projects occurring within areas of the Coastal Commission's original jurisdiction and rail projects subject to the federal consistency review process only). The approved PWP provides the standard of review for those specific NCC Project NOIDs, as applicable.

- 2.2 The NCC PWP/TREP includes public works projects that: 1) will meet the public needs of an area greater than that included in the City's certified local coastal program area, and 2) which were not anticipated when the local coastal program was certified by the California Coastal Commission. The policies, development/design strategies and implementation measures of the NCC PWP/TREP are intended to efficiently plan and implement the corridor projects located in the City of Encinitas coastal zone as integral elements of the NCC Project, all of which are necessary to implement a

balanced, integrated approach to maintain and improve regional mobility as well as enhancement and continued use and enjoyment of coastal resources, while addressing potential unavoidable and minimized project impacts and/or conflicts with the coastal resources planning and management policies of the City's local coastal program and California Coastal Act.

The policies and implementation measures of the NCC PWP/TREP provide the applicable standard of review for implementation of projects to be reviewed and approved pursuant to the PWP. The policies and design/development strategies of the NCC PWP/TREP will serve as guidance for Coastal Commission review of rail projects, evaluated on a case-by-case basis to determine whether the Coastal Commission's review of those projects will be limited to the federal consistency review process only, and provides guidance for obtaining federal consistency for those identified rail projects, as applicable. The NCC PWP/TREP will also serve as guidance for Coastal Commission review of projects located within the Coastal Commission's retained jurisdiction pursuant to § 30519, which will be subject to separate coastal development permits reviewed by the Coastal Commission.

- 2.3 The NCC PWP/TREP is comprised of various elements including transportation infrastructure improvements as well as community and resource enhancement projects that in their totality would result in significant benefits to the Coastal Zone. The PWP/TREP provides the mechanism to ensure that the various specific project types included within the NCC Project Overlay are implemented in such a manner that maximum benefits to sensitive resources are achieved while impacts are avoided and/or minimized to the greatest extent feasible. The following components are included within the NCC Project Overlay.
  - 2.3.1 **Highway Improvements.** The NCC PWP/TREP includes Interstate Highway 5 improvements that consist of an 8+4 highway design that provides eight general purpose lanes and four managed lanes along with other associated highway improvements, including but not limited to, interchanges, direct access ramps, auxiliary lanes, signage, and other safety and maintenance elements. These improvements would improve public access through the NCC PWP/TREP area while also enhancing carpool and public transit usage, and result in decreased vehicle hours traveled and energy consumption.
  - 2.3.2 **Mass Transit Improvements.** The NCC PWP/TREP includes carefully phased improvements to the LOSSAN rail corridor that would result in the double-tracking of the rail corridor, as well as other operational and station improvements. The NCC Project also includes road and intersection improvements that would facilitate the introduction of enhanced bus service along the Coast Highway. These improvements would result in enhanced mass transit opportunities through the corridor and result in improved public access while minimizing energy consumption.
  - 2.3.3 **Non-motorized Transportation and Community Enhancements.** The NCC PWP/TREP establishes a 27 mile-long North Coast Corridor bikeway, and includes concurrent construction of primary segments of the bikeway within the I-5 right-of-way, that would provide a new connected north-south accessway for bicyclists and pedestrians through the corridor. The NCC PWP/TREP also includes other path and trail linkages and community enhancements designed to provide enhanced connectivity between all travel modes within the NCC PWP/TREP area, including segments of the Coastal Rail Trail located within the LOSSAN right-of-way. These improvements would result in enhanced public access opportunities while at the same time reducing energy

consumption and vehicle miles traveled.

2.3.4 **Restoration Enhancements.** The NCC PWP/TREP includes significant restoration enhancement with specific projects located within coastal lagoon systems throughout the NCC Coastal Zone. Specific projects include:

- A. Habitat establishment, restoration, enhancement and preservation for upland ESHA and wetland resource impacts
- B. Optimized bridge projects (lagoon bridge lengthening along the I-5 and LOSSAN rail corridors) designed to improve lagoon system function and values and facilitate large-scale lagoon restoration
- C. Endowment that is intended to increase the capacity for long-term management of the Los Peñasquitos and Batiquitos Lagoons inlet maintenance projects and/or other significant resources in the corridor, and support stewardship of these resources in perpetuity
- D. Funding for large-scale lagoon restoration programs for San Elijo Lagoon and/or Buena Vista Lagoon

This suite of restoration enhancements would result in important biological and hydrological improvements to sensitive coastal resources.

2.4 The NCC PWP/TREP includes detailed procedural and implementation requirements related to the phasing of specific project construction. These linkages within the PWP/TREP are intended to ensure that the infrastructure components do not outpace the necessary resource and community enhancement components of the NCC PWP/TREP. The PWP/TREP includes project phasing that links the various specific project types encapsulated within the NCC Project in such a manner to provide maximum benefits for the coastal resources within the NCC PWP/TREP area while at the same time achieving the transportation goals for the NCC corridor. These phasing requirements relate both to the successful completion of resource enhancement projects as well as demonstrated interconnectivity between transportation systems. The PWP/TREP Phasing Plan and Implementation Framework is divided into short, mid, and long term project phases; and, in order for a specific project to be initiated, all of the components of the prior phase must be completed, as defined in the PWP/TREP, before the subject project can be initiated. Project shifts between phases may be allowed if they would not result in impacts to coastal resources that were not accounted for in this LCP and NCC PWP/TREP and would result in equivalent or greater multi-modal and coastal access improvements as compared to the PWP/TREP Phasing Plan and Implementation Framework approved by the Coastal Commission. Amendments to the NCC PWP to authorize such project shifts are therefore permitted if they are in conformance with Section 2.5 of the NCC Overlay.

2.5 The NCC PWP project scope and resource protection policies, design/development strategies, and implementation measures may require amendment by Caltrans, SANDAG and the Coastal Commission to address modified project designs, changes in available project funding and/or phasing needs, to incorporate new, high priority resource enhancement opportunities, and/or to address changed site conditions and resource protection requirements within the NCC Project Overlay area. The NCC PWP, as may be amended from time-to-time, shall continue to provide the standard of review for implementation of projects reviewed and approved pursuant to the PWP/TREP. Amendment of the NCC PWP that would not result in conflicts with the policies

contained within the NCC Project Overlay would not require future amendment to the City's Local Coastal Program.

Although the following list is not exhaustive, these changes to the NCC PWP would trigger the need for an amendment to the City's Local Coastal Program:

- A. The addition of new projects not consistent with NCC Project Overlay Policy 2.3, or that involve significant impacts to coastal resources not considered in the original PWP or not addressed by PWP policies, development/design strategies and implementation measures.
- B. Alteration of resource protection policies or mitigation ratio standards within the NCC PWP inconsistent with the policies contained within the NCC Project Overlay
- C. Project shifts between phases that would result in reduced multi-modal performance and coastal access, or without necessary mitigation or coordination between other transportation modes as compared to the PWP/TREP Phasing Plan and Implementation Framework approved by the Coastal Commission, or project shifts that would result in significant unmitigated impacts to coastal resources not considered in the original PWP or not addressed by PWP policies, development/design strategies and implementation measures..

2.6 Rail, highway, bicycle, pedestrian, community and resource enhancement projects, as defined within and permitted by the NCC PWP are permitted uses on lands subject to the NCC Project Overlay, and shall be permitted to be constructed, opened, operated and maintained for intended public use or benefit pursuant to the PWP and NOID, as provided in Sections 30605 and 30606 of the Coastal Act. All projects specifically defined within and permitted by the NCC PWP, upon approval by the Coastal Commission are herein incorporated by reference.

2.7 Specific rail projects not handled solely through federal consistency review and conceptual highway, bike and pedestrian enhancement components of the PWP may be altered through future PWP amendments and then ultimately authorized by subsequent NOIDs, or SANDAG/Caltrans may, in consultation with the City and Coastal Commission, choose to submit a coastal development permit application to the City for these projects, in which case the standard of review will be the City's certified Local Coastal Program.

### 3. North Coast Corridor PWP/TREP Coastal Resource Protection Policies

If the Commission approves the NCC PWP all projects and programs as defined within and undertaken pursuant to that document within the City of Encinitas shall conform to the following resource protection policies:

#### 3.1 Coastal Access and Recreation

3.1.1 Maximum public access to coastal and inland recreational resources in the North Coast Corridor shall be protected, and where feasible, enhanced, consistent with public safety needs and sensitive coastal resource protection policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG and dated XXX). Any future amendment of the original PWP shall not decrease the level of public access improvements guaranteed by the policies in the NCC PWP/TREP such that the project as a

whole would no longer be, on balance, most protective of significant coastal resources.

### **3.2 Energy Conservation and Emissions Reduction**

- 3.2.1 New transportation and associated community and resource enhancement projects in the North Coast Corridor shall seek to minimize increases in energy consumption, vehicle hours traveled and person hours of travel, and be consistent with San Diego County Air Pollution Control District and California Air Resources Board requirements. Where North Coast Corridor development may potentially increase energy consumption or be inconsistent with air pollution requirements, feasible mitigation measures shall be required and implemented consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG and dated XXX). Any future amendment of the original PWP shall not decrease the energy conservation and emissions reduction improvements guaranteed by the policies in the NCC Corridor PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.3 Transit and Smart Growth**

- 3.3.1 Measures to improve public access to beaches and recreation areas through the use of transit and alternative means of transportation in the North Coast Corridor shall be developed in coordination with the Coastal Commission, City, Caltrans, SANDAG and any other appropriate transit providers, and may include, where determined feasible and consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG dated XXX):

- A. Provision of parking facilities for bicycles, motorcycles and transit vehicles at recreation areas and transit stations;
- B. Development of park-and-ride or other staging facilities at points along Interstate Highway Route 5;
- C. Construction of road and intersection improvements to Interstate Highway Route 5 and arterial streets to facilitate bus travel;
- D. Installing or improving bicycle and pedestrian overpasses and/or undercrossings along State Highway Route 5 and the LOSSAN rail corridor where determined feasible; and,
- E. Providing bicycle and pedestrian facilities and routes that connect with public transit centers, thereby promoting access to and use of carpooling and other public transit opportunities.

Any future amendment of the original PWP shall not decrease improvements that support and facilitate mass transit, other alternative means of transportation and smart growth guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.4 Marine Resources: Water Quality and Wetlands**

- 3.4.1 North Coast Corridor transportation and community enhancement projects shall be sited and designed such that marine resources are maintained, enhanced, and, where feasible, restored. North Coast Corridor water quality shall be restored by minimizing wastewater discharges, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging wastewater reclamation, maintaining natural vegetation buffer

areas, and minimizing alteration of natural watercourses, where feasible. North Coast Corridor transportation and community enhancement projects shall be planned and designed to protect and, where feasible, enhance water quality of the North Coast Corridor's lagoons, streams, and smaller watershed drainages which support open water, wetland, and riparian habitats, consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG dated XXX). Where otherwise approvable new development may potentially result in negative impacts to open coastal waters, wetlands, and estuaries, appropriate mitigation measures shall be required and implemented. North Coast Corridor project development in and adjacent to open water, wetland and riparian habitats shall be limited to the uses specified in Sections 30233 and 30236 of the Coastal Act, as applicable, and/or uses specifically defined within and permitted by the NCC Project Overlay. Any future amendment of the original PWP shall not decrease the level of water quality improvements or protection of wetlands guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.5 Environmentally Sensitive Habitat Areas (ESHA)**

3.5.1 North Coast Corridor transportation and community enhancement projects shall be sited and designed to ensure that ESHAs are protected against any significant disruption of habitat values, and development in areas adjacent to ESHAs shall be sited and designed to prevent impacts that would significantly degrade those areas, and be compatible with the continuance of those habitat and recreation areas, consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG dated XXX). Where otherwise approvable new development may potentially result in negative impacts to ESHAs and other sensitive coastal habitats, appropriate mitigation measures shall be required and implemented. North Coast Corridor project development in and adjacent to ESHAs shall be limited to the uses specified in Section 30240 of the Coastal Act and/or uses specifically defined within and permitted by the NCC Project Overlay. Any future amendment of the original PWP shall not decrease the level of protection of ESHA guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.6 Agricultural Resources**

3.6.1 North Coast Corridor transportation, community and resource enhancement projects shall minimize impacts to agricultural resources consistent with the policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG dated XXX). Where otherwise approvable new development may potentially convert agricultural uses to non-agricultural uses, appropriate mitigation measures shall be required and implemented. North Coast Corridor project development in areas containing significant agricultural resources shall be limited to the uses and circumstances specified in Sections 30241, 30241.5 and 30242 of the Coastal Act and/or uses specifically defined within and permitted by the NCC Project Overlay. Any future amendment of the original PWP shall not decrease the level of protection of agricultural resources guaranteed by the policies in the NCC PWP/TREP that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.7 Archaeological and Paleontological Resources**

3.7.1 Transportation, community and resource enhancement projects in the North Coast Corridor shall

strive to protect and minimize impacts to archaeological and paleontological resources. Where North Coast Corridor projects may potentially adversely impact archaeological or paleontological resources, appropriate mitigation measures shall be required and implemented consistent with the policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG and dated). Any future amendment of the original PWP shall not decrease the level of protection of archaeological and paleontological resources guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.8 Coastal Visual Resources**

- 3.8.1 North Coast Corridor project development shall be sited and designed in a manner that avoids and minimizes negative impacts to visual resources and protects, to the extent feasible, scenic public views to significant coastal resources, including views of the ocean and coastline, coastal lagoons and river valleys, and significant open space areas. North Coast Corridor project development shall be sited and designed to be compatible with existing development and surrounding areas such that potential impacts of grading, operational activities, community enhancement improvements and direct lighting on public views outside of the transportation facilities are limited to the greatest extent feasible. North Coast Corridor project development shall be planned to be consistent with the visual resource protection policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG and dated XXX). Any future amendment of the original PWP shall not decrease the level of protection of coastal visual resources guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.
- 3.8.2 In scenic public view areas in the North Coast Corridor, roadway improvements, including culverts, retaining walls, bridges or overpasses shall be designed and constructed to protect public views and avoid or minimize visual impacts and to blend in with the natural setting as viewed from adjoining public view points, to the extent feasible.

### **3.9 Conflict Resolution**

- 3.9.1 The NCC Project Overlay authorizes development that, in isolation, is recognized to be inconsistent with the Chapter 3 policies of the Coastal Act. However, denial of the project would result in Coastal Zone effects that are inconsistent with other Chapter 3 policies. The project as a whole resolves these conflicts in a manner that is most protective of significant coastal resources. Due to the fact that the NCC PWP/TREP raises conflicts between Coastal Act policies, and the recognition of the Coastal Act's conflict resolution process as it pertains to this project in Streets and Highways Code section 103(f)(2), conflict resolution, including under Coastal Act section 30007.5, may be used to resolve conflicts between coastal resources protection policies with respect to the PWP/TREP. The conflict resolution provisions relied upon by the Coastal Commission in reviewing the NCC PWP/TREP provide support and rationale as to why the coastal resource protection policies of the NCC Project Overlay could be considered consistent with the Coastal Act, on balance, despite inconsistencies with individual Chapter 3 policies.

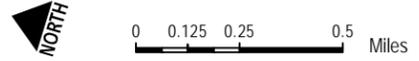
### **3.10 Precedential Effect of Overlay**

Where there are conflicts between the policies set forth in the NCC PWP/TREP, as may be

amended by Caltrans, SANDAG and the Coastal Commission from time-to-time, and those set forth in any other element of the City's certified Local Coastal Program, General Plan, zoning or any other ordinance, the policies of the NCC Project Overlay and the policies, design/development strategies, and implementation measures of the NCC PWP/TREP shall take precedence for any project and/or use included in the NCC PWP/TREP as approved by the Coastal Commission for the North Coast Corridor except in cases where an amendment to the NCC Project Overlay would be required as previously described above in NCC Overlay Policy 2.5.



- I-5 NCC Project Overlay
- LOSSAN Track Projects Not Subject to LCP Review/Amendment
- LOSSAN Non-Track Projects - CCC Review on Case-by-Case Basis
- Existing
- Coastal Zone Boundary
- Coastal Commission Permit Jurisdiction
- City Boundary



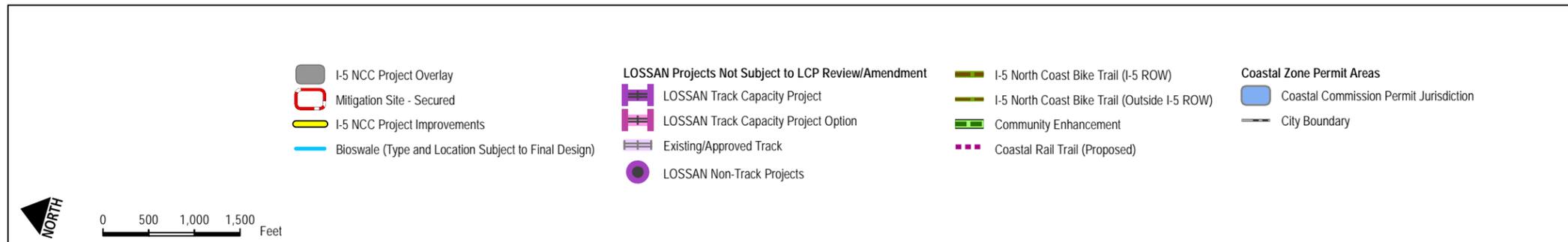
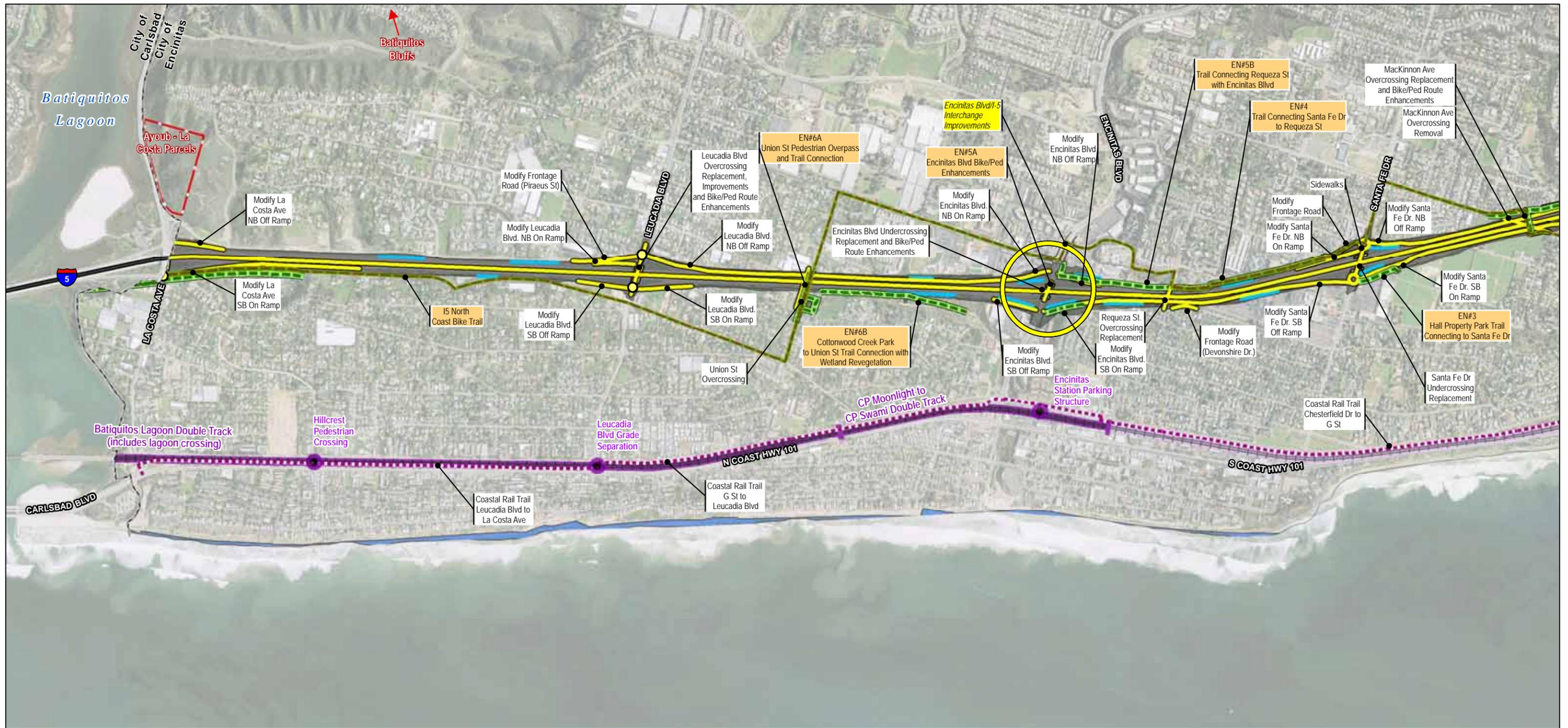
DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

The Coastal Zone boundary, jurisdiction and Local Coastal Program data in this map are for planning and engineering study purposes only. Data are derived from multiple sources. The digital Coastal Zone boundary, jurisdiction and Local Coastal Program data in this map have not been adopted by the Coastal Commission, and do not supersede the official versions certified by the Coastal Commission as may be amended from time to time.

Disclaimer: The State of California makes no representations or warranties regarding the accuracy or completeness of the files or the data from which they were derived. The State shall not be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of these Coastal Zone boundary, jurisdiction and Local Coastal Program files or the data from which they were derived. Because the Coastal Zone boundary, jurisdiction and Local Coastal Program data files are merely representational, they and the data from which they were derived are not binding and may be revised at any time.

**DRAFT**

North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay



DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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**DRAFT**

North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay Improvements

MAP 2A

City of Encinitas (North)

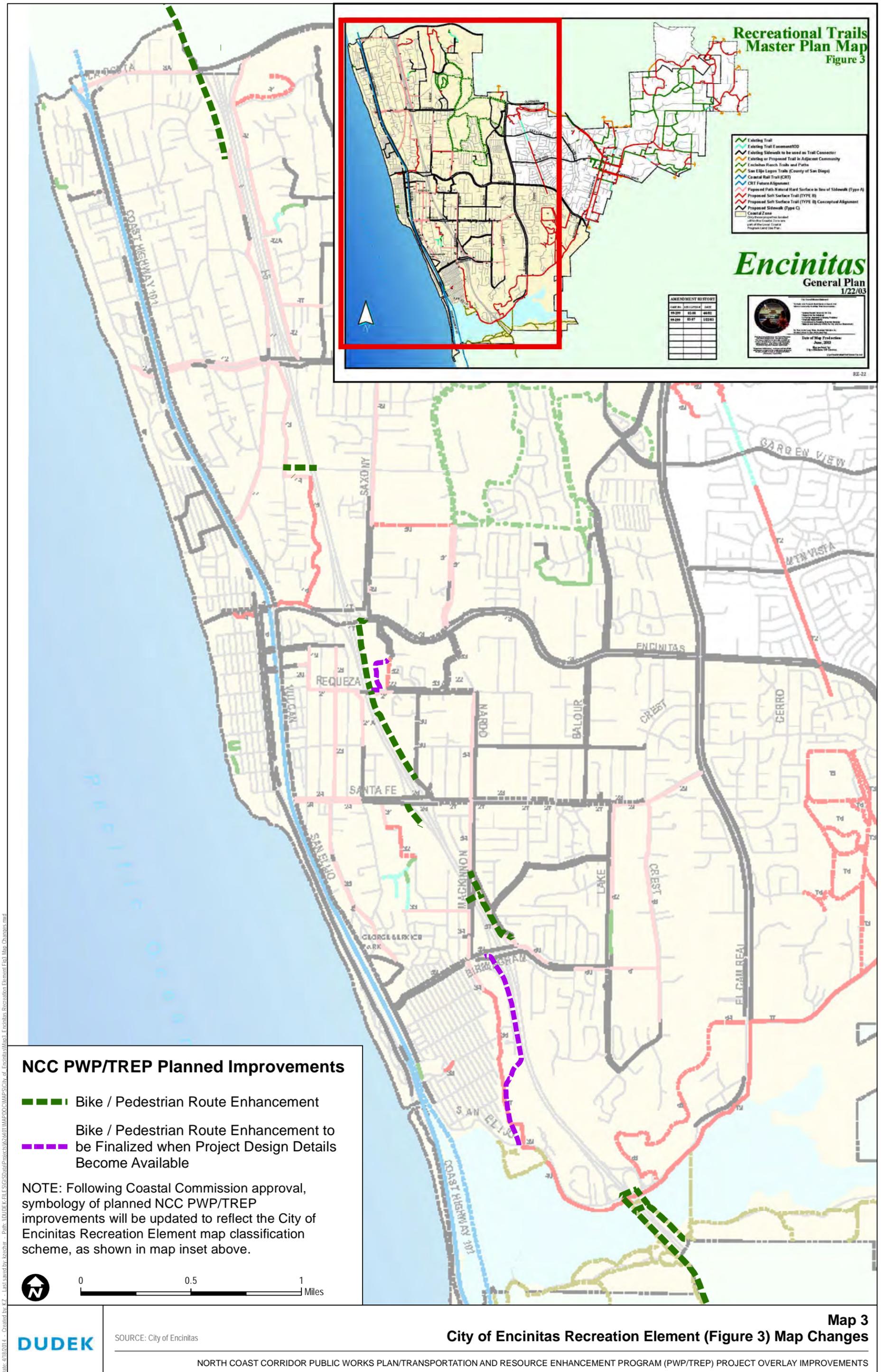
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DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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**DRAFT**



Recreational Trails Master Plan Map Figure 3

- Existing Trail
- Existing Trail Extension
- Existing Sidewalk to be used as Trail Connector
- Existing or Proposed Trail in Adjacent Community
- Facilities French Trails and Paths
- San Diego Legume Trails (County of San Diego)
- Coastal Rail Trail (CRT)
- CRT Future Alignment
- Proposed Path Natural Hard Surface in lieu of Sidewalk (Type A)
- Proposed Soft Surface Trail (Type B)
- Proposed Soft Surface Trail (Type B) Conceptual Alignment
- Proposed Sidewalk (Type C)
- Coastal Zone
- City of Encinitas Landmark
- City of Encinitas Coastal Zone
- City of Encinitas Coastal Program Land Use Plan

**Encinitas**  
General Plan  
1/22/03

AMENDMENT HISTORY

DATE	DESCRIPTION	DATE
03/29/03	03/28	04/02
03/29/03	03/27	03/28

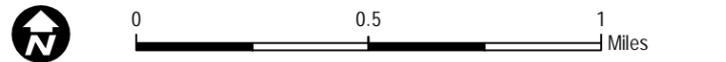


RE-22

**NCC PWP/TREP Planned Improvements**

- — — — — Bike / Pedestrian Route Enhancement
- — — — — Bike / Pedestrian Route Enhancement to be Finalized when Project Design Details Become Available

NOTE: Following Coastal Commission approval, symbology of planned NCC PWP/TREP improvements will be updated to reflect the City of Encinitas Recreation Element map classification scheme, as shown in map inset above.

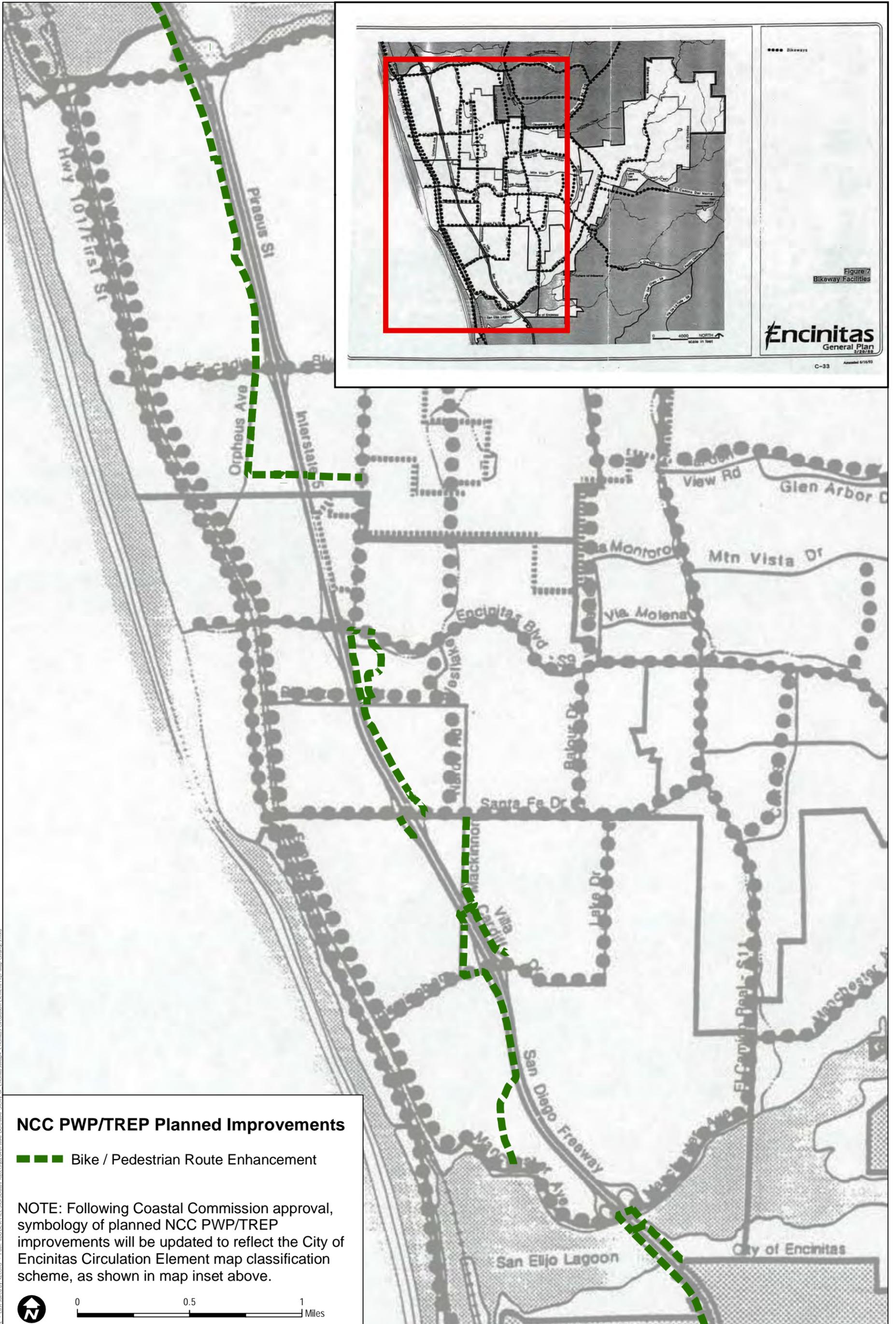


SOURCE: City of Encinitas

**Map 3**  
**City of Encinitas Recreation Element (Figure 3) Map Changes**

NORTH COAST CORRIDOR PUBLIC WORKS PLAN/TRANSPORTATION AND RESOURCE ENHANCEMENT PROGRAM (PWP/TREP) PROJECT OVERLAY IMPROVEMENTS

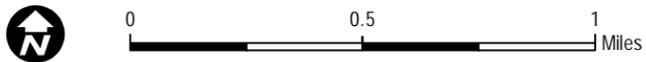
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**NCC PWP/TREP Planned Improvements**

█ █ █ █ Bike / Pedestrian Route Enhancement

NOTE: Following Coastal Commission approval, symbology of planned NCC PWP/TREP improvements will be updated to reflect the City of Encinitas Circulation Element map classification scheme, as shown in map inset above.



●●●● Bikeways

Figure 7  
Bikeway Facilities

**Encinitas**  
General Plan  
2/20/13

C-33 Amended 6/16/13

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**North Coast Corridor PWP Overlay  
Local Coastal Program Land Use Plan Amendment  
May 2014**

**CITY OF CARLSBAD LOCAL COASTAL PROGRAM AMENDMENT- LAND USE PLAN**

**1. Land Use Maps**

Amend the City of Carlsbad Local Coastal Program – Coastal Land Use Maps to include the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) Project Overlay Map and Project Overlay Improvements Map.

Amend the City of Carlsbad Habitat Management Plan (HMP) Map/s to include the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) HMP Map Changes.

**1.1 North Coast Corridor PWP/TREP Overlay Land Use Plan Map**

The City of Carlsbad Local Coastal Program Land Use Maps and Circulation Element illustrate the Local Coastal Program land use designation for each property. The land use designation denotes the type, density and intensity of development and uses that may be permitted for each property, consistent with applicable Local Coastal Program policies. In addition to the land use designations included in the certified Land Use Maps, an overlay is applied to those land areas within the City of Carlsbad as identified on the NCC PWP/TREP Project Overlay Map (Map 1). The NCC PWP/TREP Project Overlay provides the applicable standard of review for the NCC PWP/TREP, which, if approved, will authorize the development, operation, and maintenance of specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects defined therein. The goals of the NCC PWP/TREP are to improve and maintain regional mobility and access to coastal resources in the North Coast Corridor, to implement a program to protect, restore, and enhance sensitive coastal resources along the North Coast Corridor and to mitigate potential resource impacts caused by implementation of the transportation and community enhancement projects. The City of Carlsbad Local Coastal Program NCC Project Overlay Improvements Map (Map 2) identifies those specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects envisioned to occur within the jurisdictional boundaries of the City of Carlsbad pursuant to the NCC PWP/TREP. The City of Carlsbad Habitat Management Plan (HMP) Map Changes (Map 3) identify project impacts and the addition of new HMP Hardline Preserve area to offset those impacts, as well as technical map corrections required to remove HMP Hardline Preserve currently located within Caltrans/LOSSAN right of ways that are not subject to the HMP. In areas within the NCC Project Overlay Map where the Local Coastal Program land use designation currently does not allow for transportation and restoration related uses, these uses would now be identified as an allowable use, with the portions of the NCC PWP/TREP that are incorporated into the overlay serving as the standard of review for all proposed development that is outside of the Coastal Commission's retained jurisdiction and not handled solely through federal consistency review. If the NCC PWP/TREP is approved, subsequent regulatory reviews shall be processed under the framework and guidance provided within the NCC PWP/TREP.

**2. North Coast Corridor PWP/TREP Overlay Project Components and Land Use P**

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APPLICATION NO. <b>PWP-6-NCC-13-0203-1</b>
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 California Coastal Commission

2.1 Pursuant to Senate Bill (SB) 468, the NCC Project is defined as a 27-mile long series of projects within the coastal zone that includes improvements to a segment of I-5 and the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor. The NCC PWP/TREP includes 27-miles of regional mobility, community and resource enhancement projects planned in Northern San Diego County, a portion of which are located within, or partially within, the City of Carlsbad ("City") coastal zone.

The NCC Public Works Plan ("PWP") is integrated, within a single document, with the NCC Transportation and Resource Enhancement Program ("TREP"), which collectively provide the coastal policy framework under which the City, Coastal Commission, and other affected agencies and interested parties can evaluate overall NCC PWP/TREP benefits and potential impacts to coastal zone resources, phased implementation, mitigation measures, and feasible alternatives in the context of the City's local coastal program, the California Coastal Act, regional mobility plans and coastal resource enhancement goals.

The TREP provides the basis for Coastal Commission federal consistency review and informs conflict resolution to ensure the overall NCC PWP/TREP is consistent with applicable California Coastal Management Program/Coastal Act policies. Chapter 3 policies of the Coastal Act provide the standard of review for the federal consistency review and, pursuant to the TREP, rail projects, will be evaluated on a case-by-case basis to determine whether the Coastal Commission's review of those projects will be limited to the federal consistency review process only.

In addition to providing an overall summary of the NCC projects for purposes of Coastal Act review, the PWP also provides authorization for future development and guidance for future coastal development permitting of other development within the NCC Project Overlay area and informs how the Coastal Commission may resolve any conflicts between Coastal Act policies. The PWP incorporates projects (including highway projects, rail projects other than those subject to the federal consistency review process only, and community and resource enhancement projects) that are both subject to coastal development permit and/or local coastal program requirements and that are located outside the areas of the Commission's retained jurisdiction. Following Coastal Commission approval of the PWP, project-specific Notice of Impending Developments (NOIDs) provide the mechanism by which the project proponent will bring forward specific projects for Coastal Commission review (except for those projects occurring within areas of the Coastal Commission's original jurisdiction and rail projects subject to the federal consistency review process only). The approved PWP provides the standard of review for those specific NCC Project NOIDs, as applicable.

2.2 The NCC PWP/TREP includes public works projects that: 1) will meet the public needs of an area greater than that included in the City's certified local coastal program area, and 2) which were not anticipated when the local coastal program was certified by the California Coastal Commission. The policies, development/design strategies and implementation measures of the NCC PWP/TREP are intended to efficiently plan and implement the corridor projects located in the City of Carlsbad coastal zone as integral elements of the NCC Project, all of which are necessary to implement a balanced, integrated approach to maintain and improve regional mobility as well as enhancement and continued use and enjoyment of coastal resources, while addressing potential unavoidable and minimized project impacts and/or conflicts with the coastal resources planning and management policies of the City's local coastal program and California Coastal Act.

The policies and implementation measures of the NCC PWP/TREP provide the applicable standard of review for implementation of projects to be reviewed and approved pursuant to the PWP. The policies and design/development strategies of the NCC PWP/TREP will serve as guidance for Coastal Commission review of rail projects, evaluated on a case-by-case basis to determine whether the Coastal Commission's review of those projects will be limited to the federal consistency review process only, and provides guidance for obtaining federal consistency for those identified rail projects, as applicable. The NCC PWP/TREP will also serve as guidance for Coastal Commission review of projects located within the Coastal Commission's retained jurisdiction pursuant to § 30519, which will be subject to separate coastal development permits reviewed by the Coastal Commission.

- 2.3 The NCC PWP/TREP is comprised of various elements including transportation infrastructure improvements as well as community and resource enhancement projects that in their totality would result in significant benefits to the Coastal Zone. The PWP/TREP provides the mechanism to ensure that the various specific project types included within the NCC Project Overlay are implemented in such a manner that maximum benefits to sensitive resources are achieved while impacts are avoided and/or minimized to the greatest extent feasible. The following components are included within the NCC Project Overlay.
- 2.3.1 **Highway Improvements.** The NCC PWP/TREP includes Interstate Highway 5 improvements that consist of an 8+4 highway design that provides eight general purpose lanes and four managed lanes along with other associated highway improvements, including but not limited to, interchanges, direct access ramps, auxiliary lanes, signage, and other safety and maintenance elements. These improvements would improve public access through the NCC PWP/TREP area while also enhancing carpool and public transit usage, and result in decreased vehicle hours traveled and energy consumption.
- 2.3.2 **Mass Transit Improvements.** The NCC PWP/TREP includes carefully phased improvements to the LOSSAN rail corridor that would result in the double-tracking of the rail corridor, as well as other operational and station improvements. The NCC Project also includes road and intersection improvements that would facilitate the introduction of enhanced bus service along the Coast Highway. These improvements would result in enhanced mass transit opportunities through the corridor and result in improved public access while minimizing energy consumption.
- 2.3.3 **Non-motorized Transportation and Community Enhancements.** The NCC PWP/TREP establishes a 27 mile-long North Coast Corridor bikeway, and includes concurrent construction of primary segments of the bikeway within the I-5 right-of-way, that would provide a new connected north-south accessway for bicyclists and pedestrians through the corridor. The NCC PWP/TREP also includes other path and trail linkages and community enhancements designed to provide enhanced connectivity between all travel modes within the NCC PWP/TREP area, including segments of the Coastal Rail Trail located within the LOSSAN right-of-way. These improvements would result in enhanced public access opportunities while at the same time reducing energy consumption and vehicle miles traveled.
- 2.3.4 **Restoration Enhancements.** The NCC PWP/TREP includes significant restoration enhancement with specific projects located within coastal lagoon systems throughout the NCC Coastal Zone. Specific projects include:

- A. Habitat establishment, restoration, enhancement and preservation for upland ESHA and wetland resource impacts
- B. Optimized bridge projects (lagoon bridge lengthening along the I-5 and LOSSAN rail corridors) designed to improve lagoon system function and values and facilitate large-scale lagoon restoration
- C. Endowment that is intended to increase the capacity for long-term management of the Los Peñasquitos and Batiquitos Lagoons inlet maintenance projects and/or other significant resources in the corridor, and support stewardship of these resources in perpetuity
- D. Funding for large-scale lagoon restoration programs for San Elijo Lagoon and/or Buena Vista Lagoon

This suite of restoration enhancements would result in important biological and hydrological improvements to sensitive coastal resources.

2.4 The NCC PWP/TREP includes detailed procedural and implementation requirements related to the phasing of specific project construction. These linkages within the PWP/TREP are intended to ensure that the infrastructure components do not outpace the necessary resource and community enhancement components of the NCC PWP/TREP. The PWP/TREP includes project phasing that links the various specific project types encapsulated within the NCC Project in such a manner to provide maximum benefits for the coastal resources within the NCC PWP/TREP area while at the same time achieving the transportation goals for the NCC corridor. These phasing requirements relate both to the successful completion of resource enhancement projects as well as demonstrated interconnectivity between transportation systems. The PWP/TREP Phasing Plan and Implementation Framework is divided into short, mid, and long term project phases; and, in order for a specific project to be initiated, all of the components of the prior phase must be completed, as defined in the PWP/TREP, before the subject project can be initiated. Project shifts between phases may be allowed if they would not result in impacts to coastal resources that were not accounted for in this LCP and NCC PWP/TREP and would result in equivalent or greater multi-modal and coastal access improvements as compared to the PWP/TREP Phasing Plan and Implementation Framework approved by the Coastal Commission. Amendments to the NCC PWP to authorize such project shifts are therefore permitted if they are in conformance with Section 2.5 of the NCC Overlay.

2.5 The NCC PWP project scope and resource protection policies, design/development strategies, and implementation measures may require amendment by Caltrans, SANDAG and the Coastal Commission to address modified project designs, changes in available project funding and/or phasing needs, to incorporate new, high priority resource enhancement opportunities, and/or to address changed site conditions and resource protection requirements within the NCC Project Overlay area. The NCC PWP, as may be amended from time-to-time, shall continue to provide the standard of review for implementation of projects reviewed and approved pursuant to the PWP/TREP. Amendment of the NCC PWP that would not result in conflicts with the policies contained within the NCC Project Overlay would not require future amendment to the City's Local Coastal Program.

Although the following list is not exhaustive, these changes to the NCC PWP would trigger the need for an amendment to the City's Local Coastal Program:

- A. The addition of new projects not consistent with NCC Project Overlay Policy 2.3, or that involve significant impacts to coastal resources not considered in the original PWP or not addressed by PWP policies, development/design strategies and implementation measures.
- B. Alteration of resource protection policies or mitigation ratio standards within the NCC PWP inconsistent with the policies contained within the NCC Project Overlay
- C. Project shifts between phases that would result in reduced multi-modal performance and coastal access, or without necessary mitigation or coordination between other transportation modes as compared to the PWP/TREP Phasing Plan and Implementation Framework approved by the Coastal Commission, or project shifts that would result in significant unmitigated impacts to coastal resources not considered in the original PWP or not addressed by PWP policies, development/design strategies and implementation measures..

2.6 Rail, highway, bicycle, pedestrian, community and resource enhancement projects, as defined within and permitted by the NCC PWP are permitted uses on lands subject to the NCC Project Overlay, and shall be permitted to be constructed, opened, operated and maintained for intended public use or benefit pursuant to the PWP and NOID, as provided in Sections 30605 and 30606 of the Coastal Act. All projects specifically defined within and permitted by the NCC PWP, upon approval by the Coastal Commission are herein incorporated by reference.

2.7 Specific rail projects not handled solely through federal consistency review and conceptual highway, bike and pedestrian enhancement components of the PWP may be altered through future PWP amendments and then ultimately authorized by subsequent NOIDs, or SANDAG/Caltrans may, in consultation with the City and Coastal Commission, choose to submit a coastal development permit application to the City for these projects, in which case the standard of review will be the City's certified Local Coastal Program.

### 3. North Coast Corridor PWP/TREP Coastal Resource Protection Policies

If the Commission approves the NCC PWP all projects and programs as defined within and undertaken pursuant to that document within the City of Carlsbad shall conform to the following resource protection policies:

#### 3.1 Coastal Access and Recreation

3.1.1 Maximum public access to coastal and inland recreational resources in the North Coast Corridor shall be protected, and where feasible, enhanced, consistent with public safety needs and sensitive coastal resource protection policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG and dated XXX). Any future amendment of the original PWP shall not decrease the level of public access improvements guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

#### 3.2 Energy Conservation and Emissions Reduction

3.2.1 New transportation and associated community and resource enhancement projects in the North

Coast Corridor shall seek to minimize increases in energy consumption, vehicle hours traveled and person hours of travel, and be consistent with San Diego County Air Pollution Control District and California Air Resources Board requirements. Where North Coast Corridor development may potentially increase energy consumption or be inconsistent with air pollution requirements, feasible mitigation measures shall be required and implemented consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG and dated XXX). Any future amendment of the original PWP shall not decrease the energy conservation and emissions reduction improvements guaranteed by the policies in the NCC Corridor PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.3 Transit and Smart Growth**

3.3.1 Measures to improve public access to beaches and recreation areas through the use of transit and alternative means of transportation in the North Coast Corridor shall be developed in coordination with the Coastal Commission, City, Caltrans, SANDAG and any other appropriate transit providers, and may include, where determined feasible and consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG dated XXX):

- A. Provision of parking facilities for bicycles, motorcycles and transit vehicles at recreation areas and transit stations;
- B. Development of park-and-ride or other staging facilities at points along Interstate Highway Route 5;
- C. Construction of road and intersection improvements to Interstate Highway Route 5 and arterial streets to facilitate bus travel;
- D. Installing or improving bicycle and pedestrian overpasses and/or undercrossings along State Highway Route 5 and the LOSSAN rail corridor where determined feasible; and,
- E. Providing bicycle and pedestrian facilities and routes that connect with public transit centers, thereby promoting access to and use of carpooling and other public transit opportunities.

Any future amendment of the original PWP shall not decrease improvements that support and facilitate mass transit, other alternative means of transportation and smart growth guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.4 Marine Resources: Water Quality and Wetlands**

3.4.1 North Coast Corridor transportation and community enhancement projects shall be sited and designed such that marine resources are maintained, enhanced, and, where feasible, restored. North Coast Corridor water quality shall be restored by minimizing wastewater discharges, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas, and minimizing alteration of natural watercourses, where feasible. North Coast Corridor transportation and community enhancement projects shall be planned and designed to protect and, where feasible, enhance water quality of the North Coast Corridor's lagoons, streams, and smaller watershed drainages which support open water, wetland, and riparian habitats, consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG dated XXX). Where otherwise

approvable new development may potentially result in negative impacts to open coastal waters, wetlands, and estuaries, appropriate mitigation measures shall be required and implemented. North Coast Corridor project development in and adjacent to open water, wetland and riparian habitats shall be limited to the uses specified in Sections 30233 and 30236 of the Coastal Act, as applicable, and/or uses specifically defined within and permitted by the NCC Project Overlay. Any future amendment of the original PWP shall not decrease the level of water quality improvements or protection of wetlands guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.5 Environmentally Sensitive Habitat Areas (ESHA)**

- 3.5.1 North Coast Corridor transportation and community enhancement projects shall be sited and designed to ensure that ESHAs are protected against any significant disruption of habitat values, and development in areas adjacent to ESHAs shall be sited and designed to prevent impacts that would significantly degrade those areas, and be compatible with the continuance of those habitat and recreation areas, consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG dated XXX). Where otherwise approvable new development may potentially result in negative impacts to ESHAs and other sensitive coastal habitats, appropriate mitigation measures shall be required and implemented. North Coast Corridor project development in and adjacent to ESHAs shall be limited to the uses specified in Section 30240 of the Coastal Act and/or uses specifically defined within and permitted by the NCC Project Overlay. Any future amendment of the original PWP shall not decrease the level of protection of ESHA guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.6 Agricultural Resources**

- 3.6.1 North Coast Corridor transportation, community and resource enhancement projects shall minimize impacts to agricultural resources consistent with the policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG dated XXX). Where otherwise approvable new development may potentially convert agricultural uses to non-agricultural uses, appropriate mitigation measures shall be required and implemented. North Coast Corridor project development in areas containing significant agricultural resources shall be limited to the uses and circumstances specified in Sections 30241, 30241.5 and 30242 of the Coastal Act and/or uses specifically defined within and permitted by the NCC Project Overlay. Any future amendment of the original PWP shall not decrease the level of protection of agricultural resources guaranteed by the policies in the NCC PWP/TREP that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.7 Archaeological and Paleontological Resources**

- 3.7.1 Transportation, community and resource enhancement projects in the North Coast Corridor shall strive to protect and minimize impacts to archaeological and paleontological resources. Where North Coast Corridor projects may potentially adversely impact archaeological or paleontological resources, appropriate mitigation measures shall be required and implemented consistent with the policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG and dated). Any future amendment of the original PWP shall not decrease the level of protection of archaeological and

paleontological resources guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.8 Coastal Visual Resources**

3.8.1 North Coast Corridor project development shall be sited and designed in a manner that avoids and minimizes negative impacts to visual resources and protects, to the extent feasible, scenic public views to significant coastal resources, including views of the ocean and coastline, coastal lagoons and river valleys, and significant open space areas. North Coast Corridor project development shall be sited and designed to be compatible with existing development and surrounding areas such that potential impacts of grading, operational activities, community enhancement improvements and direct lighting on public views outside of the transportation facilities are limited to the greatest extent feasible. North Coast Corridor project development shall be planned to be consistent with the visual resource protection policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG and dated XXX). Any future amendment of the original PWP shall not decrease the level of protection of coastal visual resources guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

3.8.2 In scenic public view areas in the North Coast Corridor, roadway improvements, including culverts, retaining walls, bridges or overpasses shall be designed and constructed to protect public views and avoid or minimize visual impacts and to blend in with the natural setting as viewed from adjoining public view points, to the extent feasible.

### **3.9 Conflict Resolution**

3.9.1 The NCC Project Overlay authorizes development that, in isolation, is recognized to be inconsistent with the Chapter 3 policies of the Coastal Act. However, denial of the project would result in Coastal Zone effects that are inconsistent with other Chapter 3 policies. The project as a whole resolves these conflicts in a manner that is most protective of significant coastal resources. Due to the fact that the NCC PWP/TREP raises conflicts between Coastal Act policies, and the recognition of the Coastal Act's conflict resolution process as it pertains to this project in Streets and Highways Code section 103(f)(2), conflict resolution, including under Coastal Act section 30007.5, may be used to resolve conflicts between coastal resources protection policies with respect to the PWP/TREP. The conflict resolution provisions relied upon by the Coastal Commission in reviewing the NCC PWP/TREP provide support and rationale as to why the coastal resource protection policies of the NCC Project Overlay could be considered consistent with the Coastal Act, on balance, despite inconsistencies with individual Chapter 3 policies.

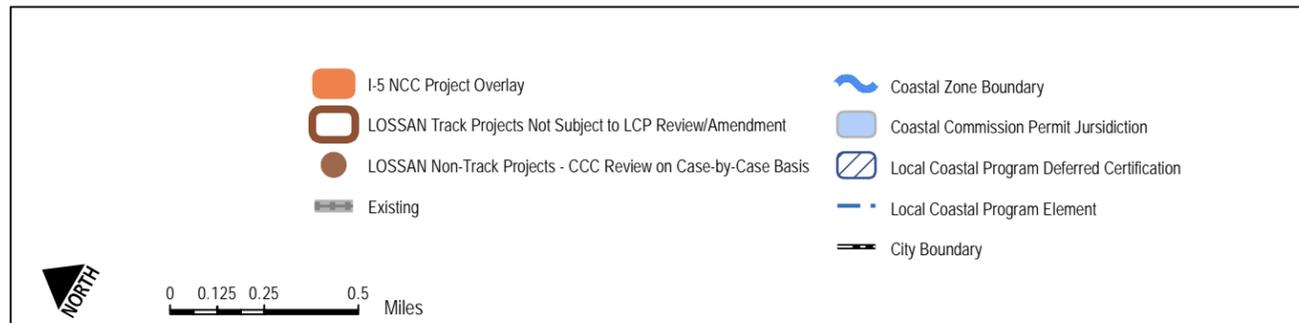
### **3.10 Precedential Effect of Overlay**

Where there are conflicts between the policies set forth in the NCC PWP/TREP, as may be amended by Caltrans, SANDAG and the Coastal Commission from time-to-time, and those set forth in any other element of the City's certified Local Coastal Program, General Plan, zoning or any other ordinance, the policies of the NCC Project Overlay and the policies, design/development strategies, and implementation measures of the NCC PWP/TREP shall take precedence for any project and/or use included in the NCC PWP/TREP as approved by the Coastal Commission for

the North Coast Corridor except in cases where an amendment to the NCC Project Overlay would be required as previously described above in NCC Overlay Policy 2.5 .



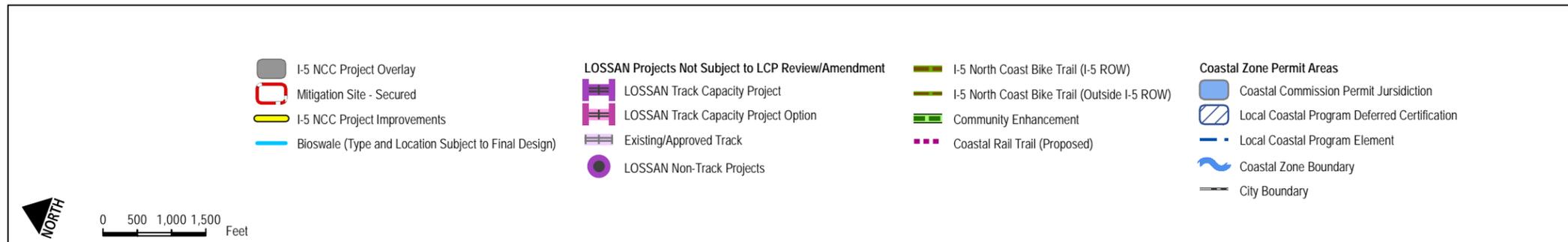
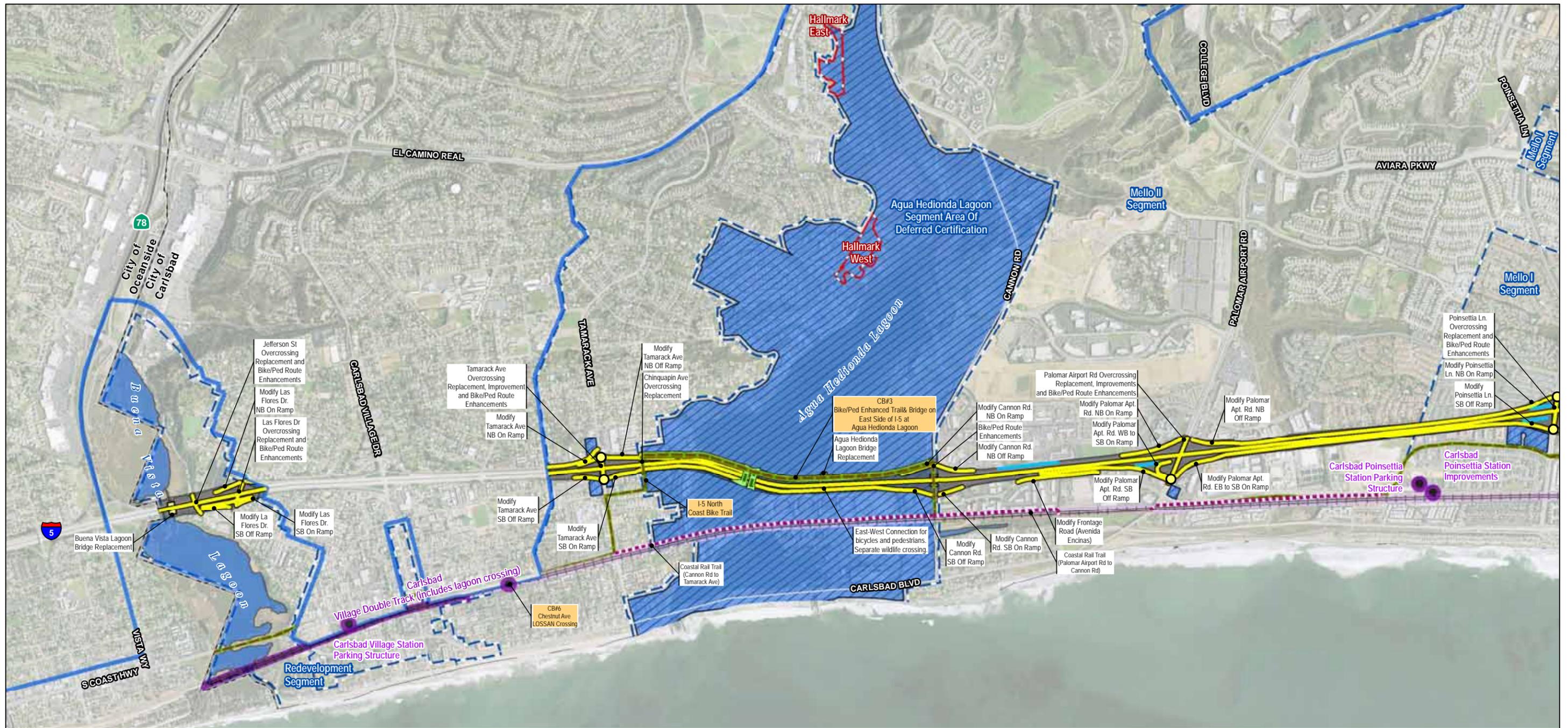
	Agua Hedionda Lagoon		Mello II
	East Batiquitos Lagoon/ Hunt Properties		Redevelopment
	Mello I		West Batiquitos Lagoon/ Sammis Properties



DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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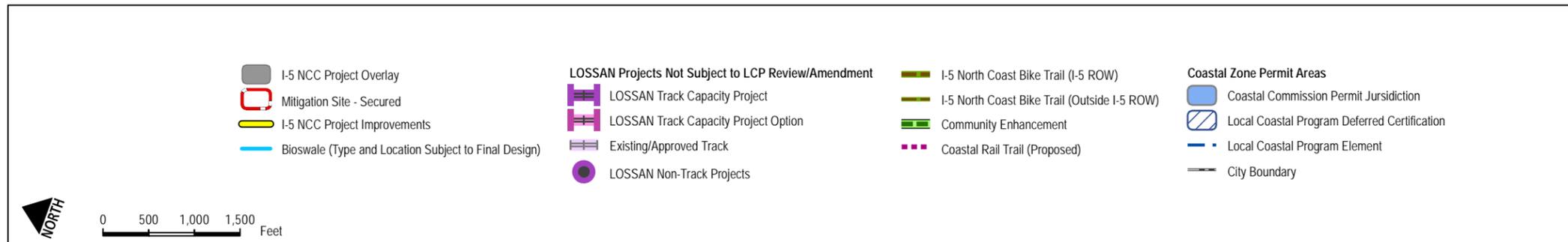
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North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay Improvements

MAP 2A

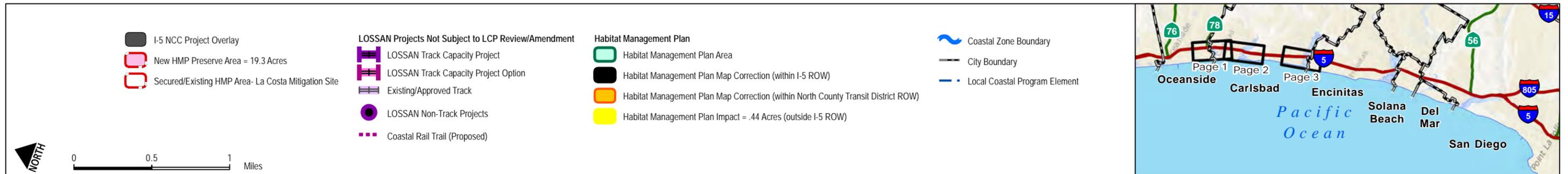
City of Carlsbad (North)



DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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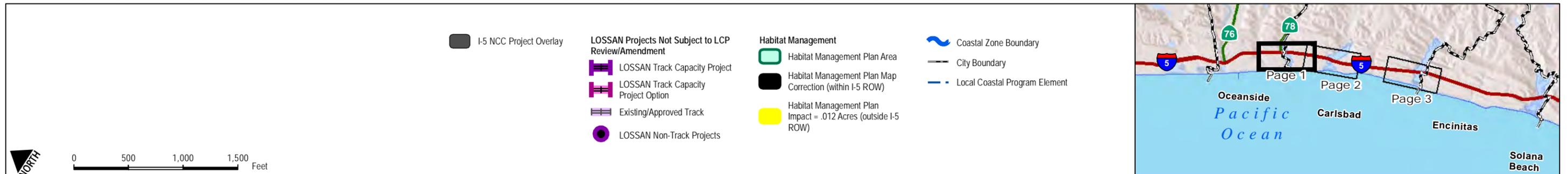
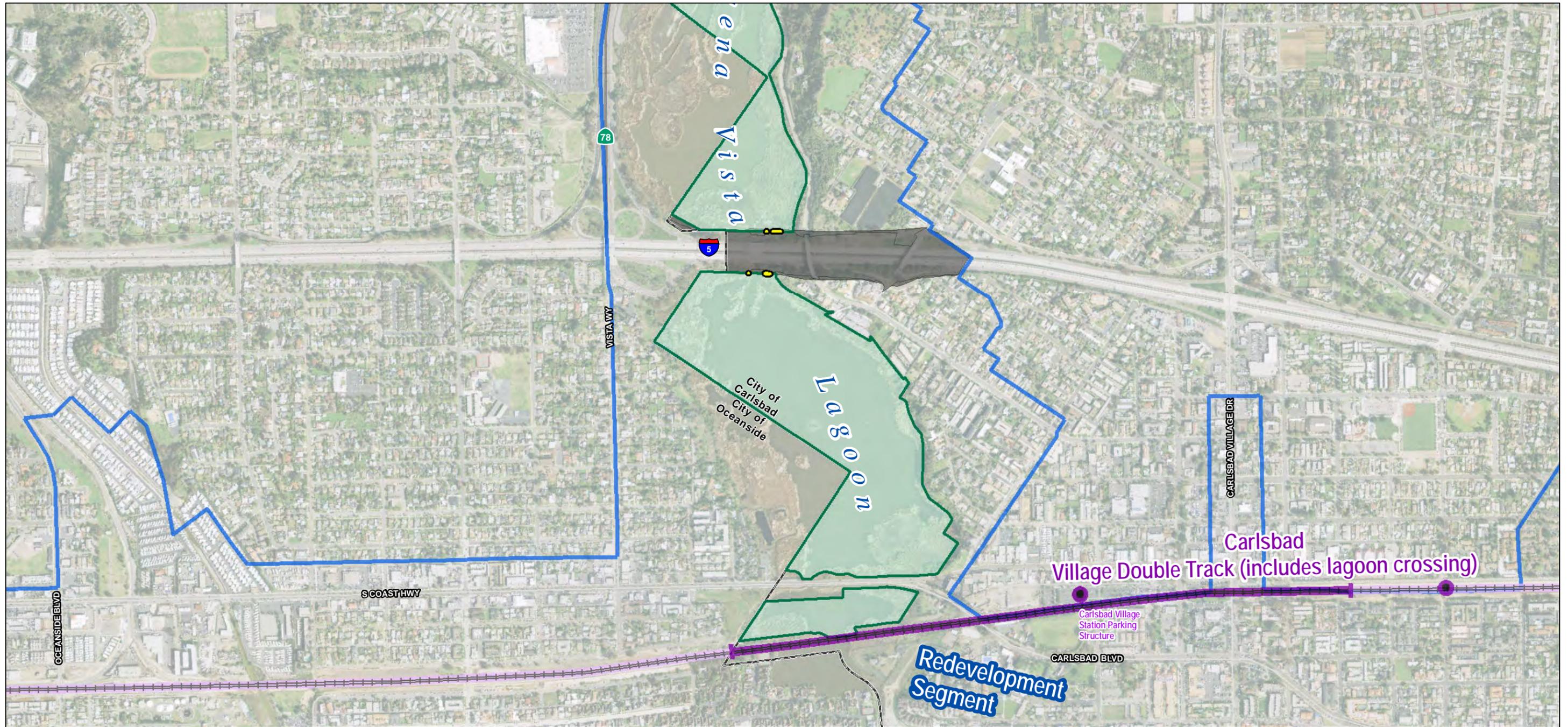
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**City of Carlsbad Habitat Management Plan Map Changes- Index**

North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay Improvements

MAP 3



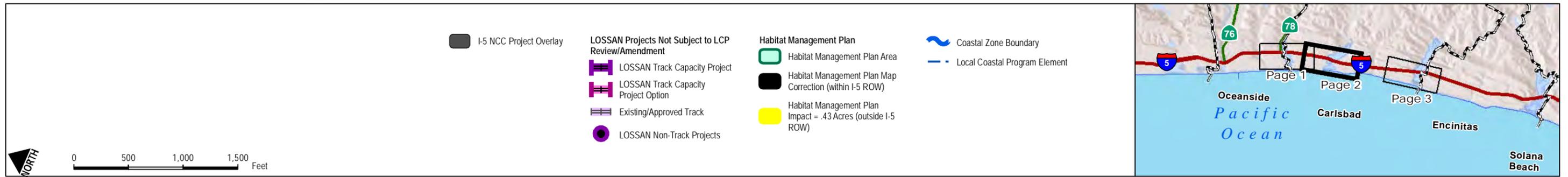
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**City of Carlsbad Habitat Management Plan Map Changes**

North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay Improvements



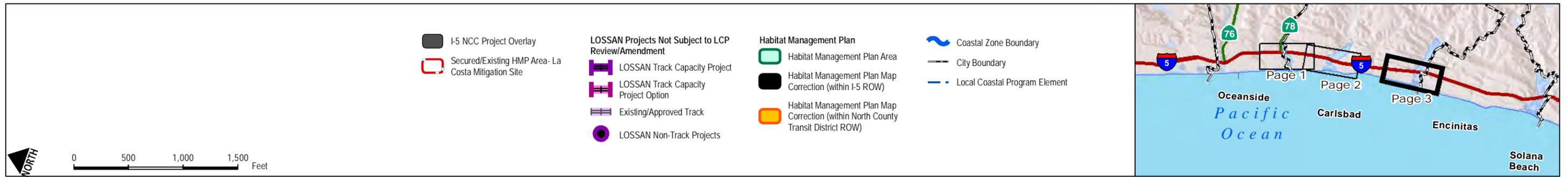
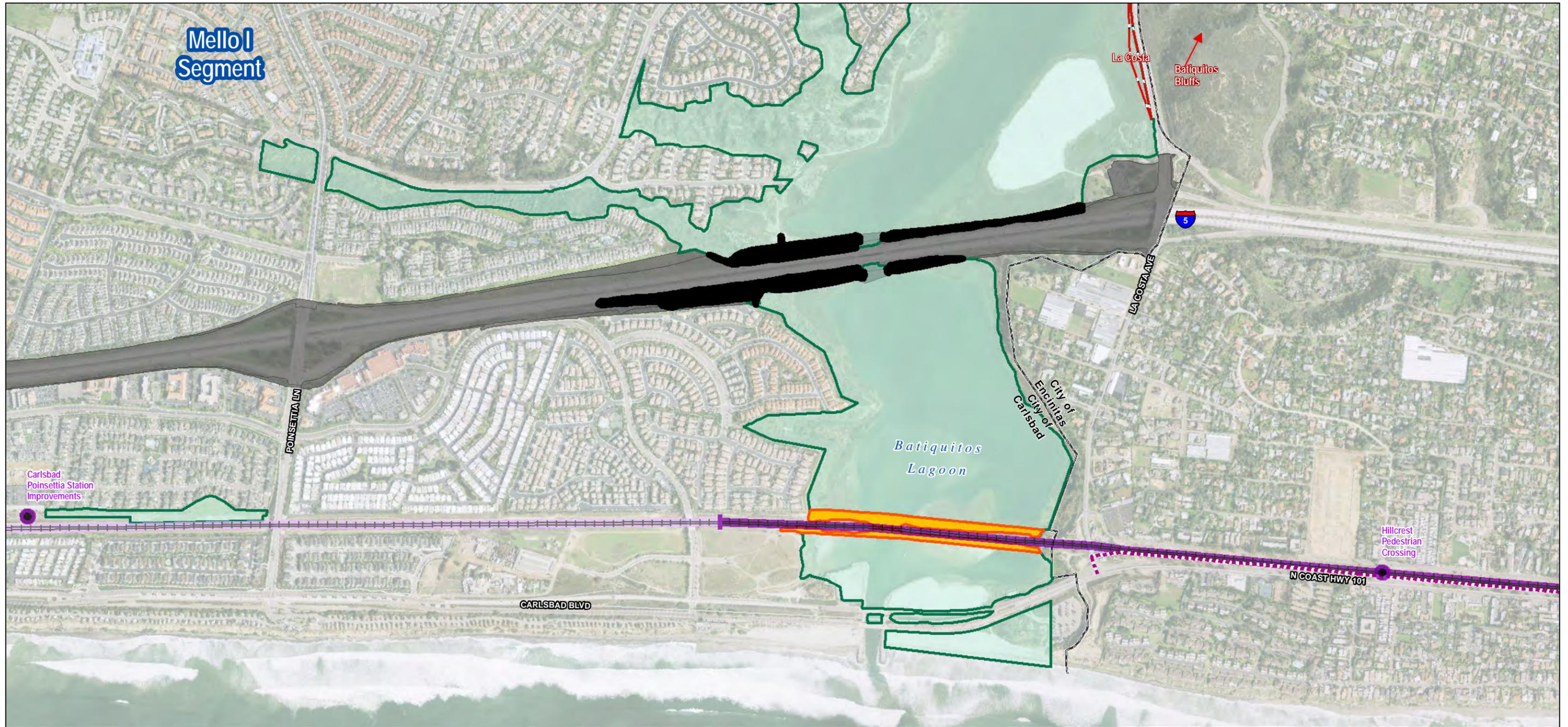
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**DRAFT**

**City of Carlsbad Habitat Management Plan Map Changes**

North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay Improvements



DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

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**City of Carlsbad Habitat Management Plan Map Changes**

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**North Coast Corridor PWP Overlay  
Local Coastal Program Land Use Plan Amendment  
May 2014**

**CITY OF OCEANSIDE LOCAL COASTAL PROGRAM AMENDMENT- LAND USE PLAN**

**1. Land Use Maps**

Amend the City of Oceanside Local Coastal Program – Coastal Land Use Maps to include the North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (NCC PWP/TREP) Project Overlay Map and Project Overlay Improvements Map.

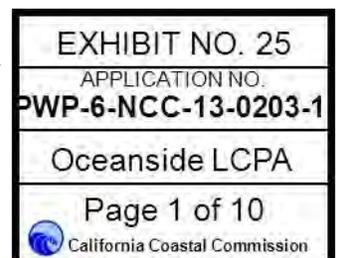
**1.1 North Coast Corridor PWP/TREP Overlay Land Use Plan Map**

The City of Oceanside Local Coastal Program Land Use Maps and Circulation Element illustrate the Local Coastal Program land use designation for each property. The land use designation denotes the type, density and intensity of development and uses that may be permitted for each property, consistent with applicable Local Coastal Program policies. In addition to the land use designations included in the certified Land Use Maps, an overlay is applied to those land areas within the City of Oceanside as identified on the NCC PWP/TREP Project Overlay Map (Map 1). The NCC PWP/TREP Project Overlay provides the applicable standard of review for the NCC PWP/TREP, which, if approved, will authorize the development, operation, and maintenance of specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects defined therein. The goals of the NCC PWP/TREP are to improve and maintain regional mobility and access to coastal resources in the North Coast Corridor, to implement a program to protect, restore, and enhance sensitive coastal resources along the North Coast Corridor and to mitigate potential resource impacts caused by implementation of the transportation and community enhancement projects. The City of Oceanside Local Coastal Program NCC Project Overlay Improvements Map (Map 2) identifies those specific rail, highway, transit, bicycle, pedestrian, community and resource enhancement projects envisioned to occur within the jurisdictional boundaries of the City of Oceanside pursuant to the NCC PWP/TREP. In areas within the NCC Project Overlay Map where the Local Coastal Program land use designation currently does not allow for transportation and restoration related uses, these uses would now be identified as an allowable use, with the portions of the NCC PWP/TREP that are incorporated into the overlay serving as the standard of review for all proposed development that is outside of the Coastal Commission's retained jurisdiction and not handled solely through federal consistency review. If the NCC PWP/TREP is approved, subsequent regulatory reviews shall be processed under the framework and guidance provided within the NCC PWP/TREP.

**2. North Coast Corridor PWP/TREP Overlay Project Components and Land Use Plan Policies**

2.1 Pursuant to Senate Bill (SB) 468, the NCC Project is defined as a 27-mile long series of projects within the coastal zone that includes improvements to a segment of I-5 and the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor. The NCC PWP/TREP includes 27-miles of regional mobility, community and resource enhancement projects planned in Northern San Diego County, a portion of which are located within, or partially within, the City of Oceanside ("City") coastal zone.

The NCC Public Works Plan ("PWP") is integrated, within a single document,



Transportation and Resource Enhancement Program (“TREP”), which collectively provide the coastal policy framework under which the City, Coastal Commission, and other affected agencies and interested parties can evaluate overall NCC PWP/TREP benefits and potential impacts to coastal zone resources, phased implementation, mitigation measures, and feasible alternatives in the context of the City’s local coastal program, the California Coastal Act, regional mobility plans and coastal resource enhancement goals.

The TREP provides the basis for Coastal Commission federal consistency review and informs conflict resolution to ensure the overall NCC PWP/TREP is consistent with applicable California Coastal Management Program/Coastal Act policies. Chapter 3 policies of the Coastal Act provide the standard of review for the federal consistency review and, pursuant to the TREP, rail projects, will be evaluated on a case-by-case basis to determine whether the Coastal Commission’s review of those projects will be limited to the federal consistency review process only.

In addition to providing an overall summary of the NCC projects for purposes of Coastal Act review, the PWP also provides authorization for future development and guidance for future coastal development permitting of other development within the NCC Project Overlay area and informs how the Coastal Commission may resolve any conflicts between Coastal Act policies. The PWP incorporates projects (including highway projects, rail projects other than those subject to the federal consistency review process only, and community and resource enhancement projects) that are both subject to coastal development permit and/or local coastal program requirements and that are located outside the areas of the Commission’s retained jurisdiction. Following Coastal Commission approval of the PWP, project-specific Notice of Impending Developments (NOIDs) provide the mechanism by which the project proponent will bring forward specific projects for Coastal Commission review (except for those projects occurring within areas of the Coastal Commission’s original jurisdiction and rail projects subject to the federal consistency review process only). The approved PWP provides the standard of review for those specific NCC Project NOIDs, as applicable.

- 2.2 The NCC PWP/TREP includes public works projects that: 1) will meet the public needs of an area greater than that included in the City’s certified local coastal program area, and 2) which were not anticipated when the local coastal program was certified by the California Coastal Commission. The policies, development/design strategies and implementation measures of the NCC PWP/TREP are intended to efficiently plan and implement the corridor projects located in the City of Oceanside coastal zone as integral elements of the NCC Project, all of which are necessary to implement a balanced, integrated approach to maintain and improve regional mobility as well as enhancement and continued use and enjoyment of coastal resources, while addressing potential unavoidable and minimized project impacts and/or conflicts with the coastal resources planning and management policies of the City’s local coastal program and California Coastal Act.

The policies and implementation measures of the NCC PWP/TREP provide the applicable standard of review for implementation of projects to be reviewed and approved pursuant to the PWP. The policies and design/development strategies of the NCC PWP/TREP will serve as guidance for Coastal Commission review of rail projects, evaluated on a case-by-case basis to determine whether the Coastal Commission’s review of those projects will be limited to the federal consistency review process only, and provides guidance for obtaining federal consistency for those identified rail projects, as applicable. The NCC PWP/TREP will also serve as guidance for Coastal

Commission review of projects located within the Coastal Commission's retained jurisdiction pursuant to § 30519, which will be subject to separate coastal development permits reviewed by the Coastal Commission.

- 2.3 The NCC PWP/TREP is comprised of various elements including transportation infrastructure improvements as well as community and resource enhancement projects that in their totality would result in significant benefits to the Coastal Zone. The PWP/TREP provides the mechanism to ensure that the various specific project types included within the NCC Project Overlay are implemented in such a manner that maximum benefits to sensitive resources are achieved while impacts are avoided and/or minimized to the greatest extent feasible. The following components are included within the NCC Project Overlay.
- 2.3.1 **Highway Improvements.** The NCC PWP/TREP includes Interstate Highway 5 improvements that consist of an 8+4 highway design that provides eight general purpose lanes and four managed lanes along with other associated highway improvements, including but not limited to, interchanges, direct access ramps, auxiliary lanes, signage, and other safety and maintenance elements. These improvements would improve public access through the NCC PWP/TREP area while also enhancing carpool and public transit usage, and result in decreased vehicle hours traveled and energy consumption.
- 2.3.2 **Mass Transit Improvements.** The NCC PWP/TREP includes carefully phased improvements to the LOSSAN rail corridor that would result in the double-tracking of the rail corridor, as well as other operational and station improvements. The NCC Project also includes road and intersection improvements that would facilitate the introduction of enhanced bus service along the Coast Highway. These improvements would result in enhanced mass transit opportunities through the corridor and result in improved public access while minimizing energy consumption.
- 2.3.3 **Non-motorized Transportation and Community Enhancements.** The NCC PWP/TREP establishes a 27 mile-long North Coast Corridor bikeway, and includes concurrent construction of primary segments of the bikeway within the I-5 right-of-way, that would provide a new connected north-south accessway for bicyclists and pedestrians through the corridor. The NCC PWP/TREP also includes other path and trail linkages and community enhancements designed to provide enhanced connectivity between all travel modes within the NCC PWP/TREP area, including segments of the Coastal Rail Trail located within the LOSSAN right-of-way. These improvements would result in enhanced public access opportunities while at the same time reducing energy consumption and vehicle miles traveled.
- 2.3.4 **Restoration Enhancements.** The NCC PWP/TREP includes significant restoration enhancement with specific projects located within coastal lagoon systems throughout the NCC Coastal Zone. Specific projects include:
- A. Habitat establishment, restoration, enhancement and preservation for upland ESHA and wetland resource impacts
  - B. Optimized bridge projects (lagoon bridge lengthening along the I-5 and LOSSAN rail corridors) designed to improve lagoon system function and values and facilitate large-scale lagoon restoration
  - C. Endowment that is intended to increase the capacity for long-term management of the Los

- Peñasquitos and Batiquitos Lagoons inlet maintenance projects and/or other significant resources in the corridor, and support stewardship of these resources in perpetuity
- D. Funding for large-scale lagoon restoration programs for San Elijo Lagoon and/or Buena Vista Lagoon

This suite of restoration enhancements would result in important biological and hydrological improvements to sensitive coastal resources.

- 2.4 The NCC PWP/TREP includes detailed procedural and implementation requirements related to the phasing of specific project construction. These linkages within the PWP/TREP are intended to ensure that the infrastructure components do not outpace the necessary resource and community enhancement components of the NCC PWP/TREP. The PWP/TREP includes project phasing that links the various specific project types encapsulated within the NCC Project in such a manner to provide maximum benefits for the coastal resources within the NCC PWP/TREP area while at the same time achieving the transportation goals for the NCC corridor. These phasing requirements relate both to the successful completion of resource enhancement projects as well as demonstrated interconnectivity between transportation systems. The PWP/TREP Phasing Plan and Implementation Framework is divided into short, mid, and long term project phases; and, in order for a specific project to be initiated, all of the components of the prior phase must be completed, as defined in the PWP/TREP, before the subject project can be initiated. Project shifts between phases may be allowed if they would not result in impacts to coastal resources that were not accounted for in this LCP and NCC PWP/TREP and would result in equivalent or greater multi-modal and coastal access improvements as compared to the PWP/TREP Phasing Plan and Implementation Framework approved by the Coastal Commission. Amendments to the NCC PWP to authorize such project shifts are therefore permitted if they are in conformance with Section 2.5 of the NCC Overlay.
- 2.5 The NCC PWP project scope and resource protection policies, design/development strategies, and implementation measures may require amendment by Caltrans, SANDAG and the Coastal Commission to address modified project designs, changes in available project funding and/or phasing needs, to incorporate new, high priority resource enhancement opportunities, and/or to address changed site conditions and resource protection requirements within the NCC Project Overlay area. The NCC PWP, as may be amended from time-to-time, shall continue to provide the standard of review for implementation of projects reviewed and approved pursuant to the PWP/TREP. Amendment of the NCC PWP that would not result in conflicts with the policies contained within the NCC Project Overlay would not require future amendment to the City's Local Coastal Program.

Although the following list is not exhaustive, these changes to the NCC PWP would trigger the need for an amendment to the City's Local Coastal Program:

- A. The addition of new projects not consistent with NCC Project Overlay Policy 2.3, or that involve significant impacts to coastal resources not considered in the original PWP or not addressed by PWP policies, development/design strategies and implementation measures.
- B. Alteration of resource protection policies or mitigation ratio standards within the NCC PWP inconsistent with the policies contained within the NCC Project Overlay

- C. Project shifts between phases that would result in reduced multi-modal performance and coastal access, or without necessary mitigation or coordination between other transportation modes as compared to the PWP/TREP Phasing Plan and Implementation Framework approved by the Coastal Commission, or project shifts that would result in significant unmitigated impacts to coastal resources not considered in the original PWP or not addressed by PWP policies, development/design strategies and implementation measures..

- 2.6 Rail, highway, bicycle, pedestrian, community and resource enhancement projects, as defined within and permitted by the NCC PWP are permitted uses on lands subject to the NCC Project Overlay, and shall be permitted to be constructed, opened, operated and maintained for intended public use or benefit pursuant to the PWP and NOID, as provided in Sections 30605 and 30606 of the Coastal Act. All projects specifically defined within and permitted by the NCC PWP, upon approval by the Coastal Commission are herein incorporated by reference.
- 2.7 Specific rail projects not handled solely through federal consistency review and conceptual highway, bike and pedestrian enhancement components of the PWP may be altered through future PWP amendments and then ultimately authorized by subsequent NOIDs, or SANDAG/Caltrans may, in consultation with the City and Coastal Commission, choose to submit a coastal development permit application to the City for these projects, in which case the standard of review will be the City's certified Local Coastal Program.

### **3. North Coast Corridor PWP/TREP Coastal Resource Protection Policies**

If the Commission approves the NCC PWP all projects and programs as defined within and undertaken pursuant to that document within the City of Oceanside shall conform to the following resource protection policies:

#### **3.1 Coastal Access and Recreation**

- 3.1.1 Maximum public access to coastal and inland recreational resources in the North Coast Corridor shall be protected, and where feasible, enhanced, consistent with public safety needs and sensitive coastal resource protection policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG and dated XXX). Any future amendment of the original PWP shall not decrease the level of public access improvements guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

#### **3.2 Energy Conservation and Emissions Reduction**

- 3.2.1 New transportation and associated community and resource enhancement projects in the North Coast Corridor shall seek to minimize increases in energy consumption, vehicle hours traveled and person hours of travel, and be consistent with San Diego County Air Pollution Control District and California Air Resources Board requirements. Where North Coast Corridor development may potentially increase energy consumption or be inconsistent with air pollution requirements, feasible mitigation measures shall be required and implemented consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG and dated XXX). Any future amendment of the original PWP shall not decrease the energy conservation and emissions reduction improvements

guaranteed by the policies in the NCC Corridor PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.3 Transit and Smart Growth**

3.3.1 Measures to improve public access to beaches and recreation areas through the use of transit and alternative means of transportation in the North Coast Corridor shall be developed in coordination with the Coastal Commission, City, Caltrans, SANDAG and any other appropriate transit providers, and may include, where determined feasible and consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG dated XXX):

- A. Provision of parking facilities for bicycles, motorcycles and transit vehicles at recreation areas and transit stations;
- B. Development of park-and-ride or other staging facilities at points along Interstate Highway Route 5;
- C. Construction of road and intersection improvements to Interstate Highway Route 5 and arterial streets to facilitate bus travel;
- D. Installing or improving bicycle and pedestrian overpasses and/or undercrossings along State Highway Route 5 and the LOSSAN rail corridor where determined feasible; and,
- E. Providing bicycle and pedestrian facilities and routes that connect with public transit centers, thereby promoting access to and use of carpooling and other public transit opportunities.

Any future amendment of the original PWP shall not decrease improvements that support and facilitate mass transit, other alternative means of transportation and smart growth guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.4 Marine Resources: Water Quality and Wetlands**

3.4.1 North Coast Corridor transportation and community enhancement projects shall be sited and designed such that marine resources are maintained, enhanced, and, where feasible, restored. North Coast Corridor water quality shall be restored by minimizing wastewater discharges, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas, and minimizing alteration of natural watercourses, where feasible. North Coast Corridor transportation and community enhancement projects shall be planned and designed to protect and, where feasible, enhance water quality of the North Coast Corridor's lagoons, streams, and smaller watershed drainages which support open water, wetland, and riparian habitats, consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG dated XXX). Where otherwise approvable new development may potentially result in negative impacts to open coastal waters, wetlands, and estuaries, appropriate mitigation measures shall be required and implemented. North Coast Corridor project development in and adjacent to open water, wetland and riparian habitats shall be limited to the uses specified in Sections 30233 and 30236 of the Coastal Act, as applicable, and/or uses specifically defined within and permitted by the NCC Project Overlay. Any future amendment of the original PWP shall not decrease the level of water quality improvements or protection of wetlands guaranteed by the policies in the NCC PWP/TREP such that the project

as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.5 Environmentally Sensitive Habitat Areas (ESHA)**

- 3.5.1 North Coast Corridor transportation and community enhancement projects shall be sited and designed to ensure that ESHAs are protected against any significant disruption of habitat values, and development in areas adjacent to ESHAs shall be sited and designed to prevent impacts that would significantly degrade those areas, and be compatible with the continuance of those habitat and recreation areas, consistent with the policies of the NCC PWP/TREP (prepared by Caltrans/SANDAG dated XXX). Where otherwise approvable new development may potentially result in negative impacts to ESHAs and other sensitive coastal habitats, appropriate mitigation measures shall be required and implemented. North Coast Corridor project development in and adjacent to ESHAs shall be limited to the uses specified in Section 30240 of the Coastal Act and/or uses specifically defined within and permitted by the NCC Project Overlay. Any future amendment of the original PWP shall not decrease the level of protection of ESHA guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.6 Agricultural Resources**

- 3.6.1 North Coast Corridor transportation, community and resource enhancement projects shall minimize impacts to agricultural resources consistent with the policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG dated XXX). Where otherwise approvable new development may potentially convert agricultural uses to non-agricultural uses, appropriate mitigation measures shall be required and implemented. North Coast Corridor project development in areas containing significant agricultural resources shall be limited to the uses and circumstances specified in Sections 30241, 30241.5 and 30242 of the Coastal Act and/or uses specifically defined within and permitted by the NCC Project Overlay. Any future amendment of the original PWP shall not decrease the level of protection of agricultural resources guaranteed by the policies in the NCC PWP/TREP that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.7 Archaeological and Paleontological Resources**

- 3.7.1 Transportation, community and resource enhancement projects in the North Coast Corridor shall strive to protect and minimize impacts to archaeological and paleontological resources. Where North Coast Corridor projects may potentially adversely impact archaeological or paleontological resources, appropriate mitigation measures shall be required and implemented consistent with the policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG and dated). Any future amendment of the original PWP shall not decrease the level of protection of archaeological and paleontological resources guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

### **3.8 Coastal Visual Resources**

- 3.8.1 North Coast Corridor project development shall be sited and designed in a manner that avoids and minimizes negative impacts to visual resources and protects, to the extent feasible, scenic public

views to significant coastal resources, including views of the ocean and coastline, coastal lagoons and river valleys, and significant open space areas. North Coast Corridor project development shall be sited and designed to be compatible with existing development and surrounding areas such that potential impacts of grading, operational activities, community enhancement improvements and direct lighting on public views outside of the transportation facilities are limited to the greatest extent feasible. North Coast Corridor project development shall be planned to be consistent with the visual resource protection policies of the NCC PWP/TREP (as prepared by Caltrans/SANDAG and dated XXX). Any future amendment of the original PWP shall not decrease the level of protection of coastal visual resources guaranteed by the policies in the NCC PWP/TREP such that the project as a whole would no longer be, on balance, most protective of significant coastal resources.

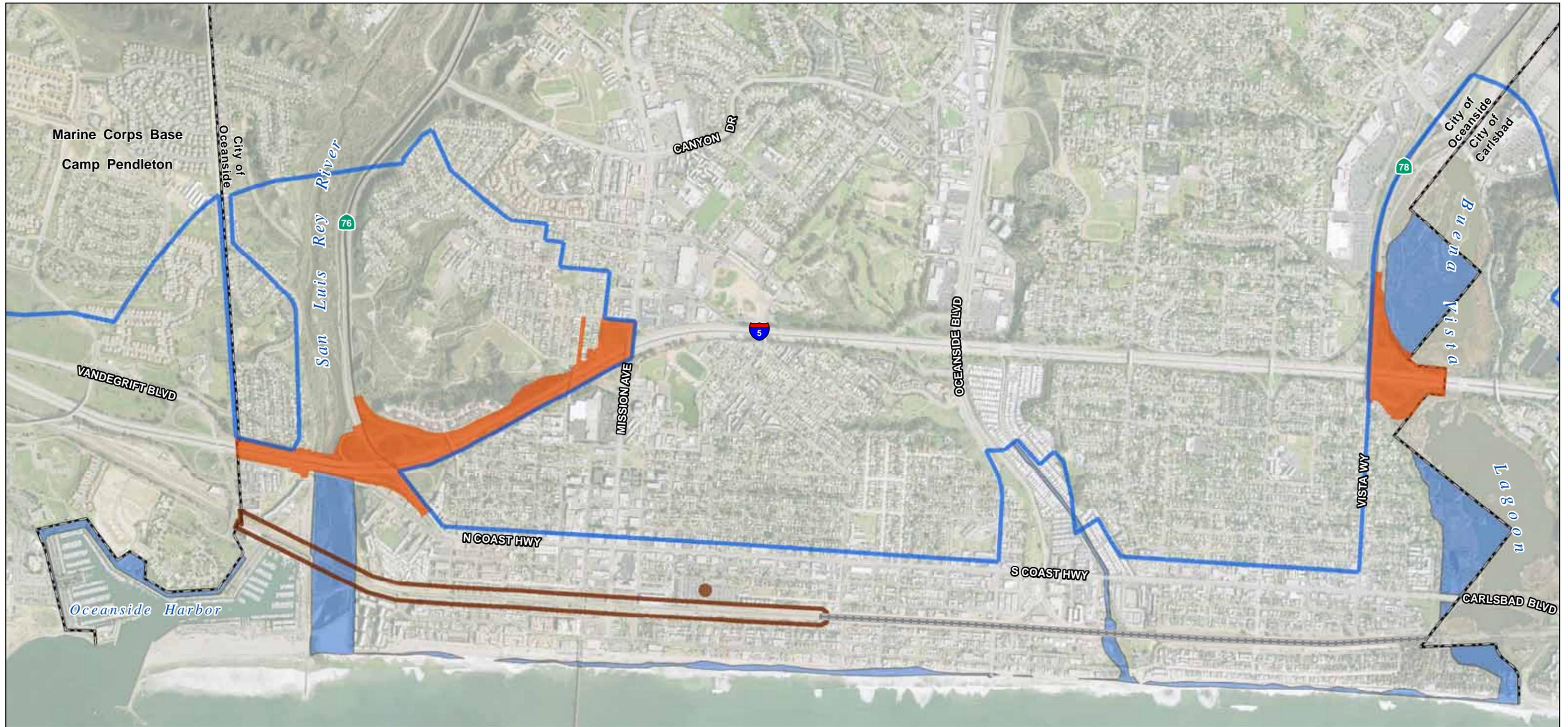
- 3.8.2 In scenic public view areas in the North Coast Corridor, roadway improvements, including culverts, retaining walls, bridges or overpasses shall be designed and constructed to protect public views and avoid or minimize visual impacts and to blend in with the natural setting as viewed from adjoining public view points, to the extent feasible.

### **3.9 Conflict Resolution**

- 3.9.1 The NCC Project Overlay authorizes development that, in isolation, is recognized to be inconsistent with the Chapter 3 policies of the Coastal Act. However, denial of the project would result in Coastal Zone effects that are inconsistent with other Chapter 3 policies. The project as a whole resolves these conflicts in a manner that is most protective of significant coastal resources. Due to the fact that the NCC PWP/TREP raises conflicts between Coastal Act policies, and the recognition of the Coastal Act's conflict resolution process as it pertains to this project in Streets and Highways Code section 103(f)(2), conflict resolution, including under Coastal Act section 30007.5, may be used to resolve conflicts between coastal resources protection policies with respect to the PWP/TREP. The conflict resolution provisions relied upon by the Coastal Commission in reviewing the NCC PWP/TREP provide support and rationale as to why the coastal resource protection policies of the NCC Project Overlay could be considered consistent with the Coastal Act, on balance, despite inconsistencies with individual Chapter 3 policies.

### **3.10 Precedential Effect of Overlay**

Where there are conflicts between the policies set forth in the NCC PWP/TREP, as may be amended by Caltrans, SANDAG and the Coastal Commission from time-to-time, and those set forth in any other element of the City's certified Local Coastal Program, General Plan, zoning or any other ordinance, the policies of the NCC Project Overlay and the policies, design/development strategies, and implementation measures of the NCC PWP/TREP shall take precedence for any project and/or use included in the NCC PWP/TREP as approved by the Coastal Commission for the North Coast Corridor except in cases where an amendment to the NCC Project Overlay would be required as previously described above in NCC Overlay Policy 2.5 .



- I-5 NCC Project Overlay
- LOSSAN Track Projects Not Subject to LCP Review/Amendment
- LOSSAN Non-Track Projects - CCC Review on Case-by-Case Basis
- Existing
- Coastal Zone Boundary
- Coastal Commission Permit Jurisdiction
- City Boundary



DATA SOURCES: Caltrans, California Coastal Commission, Local Jurisdictions, SanGIS, SANDAG, Imagery: DigitalGlobe March 2008

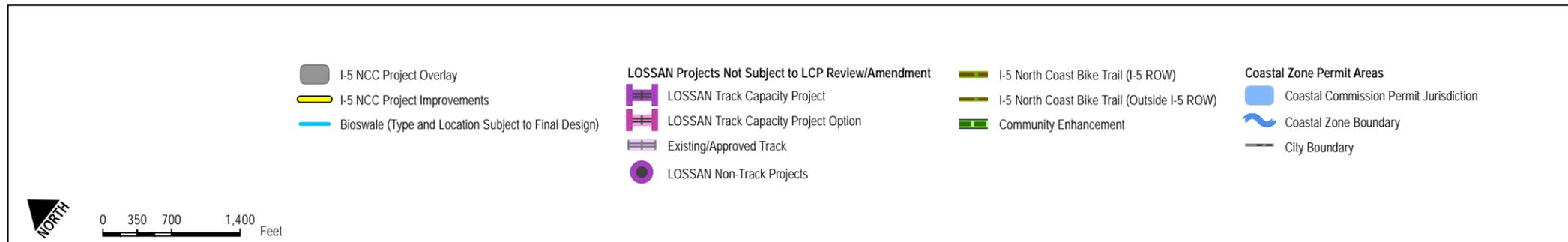
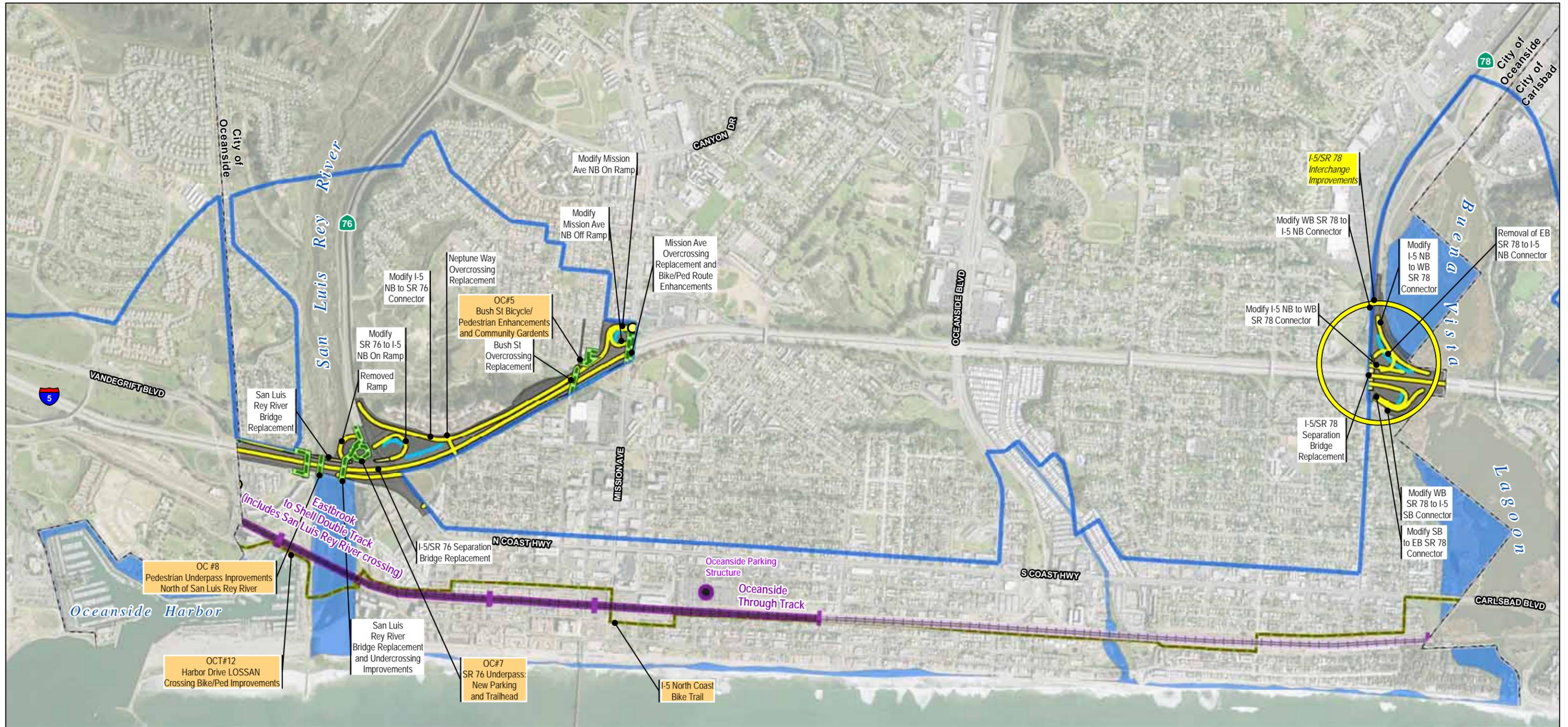
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North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program (PWP/TREP) Project Overlay

MAP 1

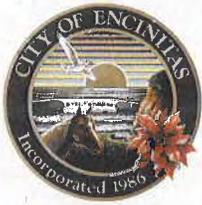
City of Oceanside



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# City of Encinitas

Office of  
The Mayor

June 16, 2014

California Coastal Commission  
7575 Metropolitan Drive, Suite 103  
San Diego, CA 92108-4402

*Kristin Gaspar*  
Mayor

## RE: I-5 NORTH COAST CORRIDOR PROJECT

*Tony Kranz*  
Deputy Mayor

Members of the California Coastal Commission:

As Mayor, and on behalf of City of Encinitas, we appreciate your agency's engagement on this important project. City of Encinitas staff has been an active participant in state and regional transportation planning processes, and believes it is important to provide comments on these important planning documents to assist in the overall planning effort and to help protect the City's stunning natural and coastal environments. Through developed and open preserved areas, the I-5 North Coast Corridor maintains unique opportunities to experience views. The ocean, beaches, lagoons, coastal bluffs, canyons, agricultural fields, and natural upland areas provide prominent landscape features within the corridor viewshed.

*Teresa Arballo Barth*  
Council Member

*Mark Muir*  
Council Member

The quantity and type of visual resources experienced by those traveling in the North Coast Corridor is unlike any other urban Southern California freeway. One of the most important things that our governing bodies deal with is development and protection of our coastal resources. To date, the City of Encinitas has conducted an extensive review of the impacts (both positive and negative) that the North Coast Corridor Project will have on the local community. These comments are reflected in the enclosed attachment. Some of the areas of major areas of concern are identified below.

*Lisa Shaffer*  
Council Member

- Layout of retaining walls must be compatible with the surrounding natural environment (refer to comments B1 and B2 in the attachment). Enhanced treatment, in the form of sculpted shotcrete, is needed in high visibility areas.
- Quiet Grind or other quieter pavement technologies should be considered for future construction within the Encinitas section of the I-5 Freeway Express Lanes Project (comment C1).
- The San Elijo Lagoon Restoration Project should receive funding commitment and be considered as part of the overall NCC Program. Refer to and D3.

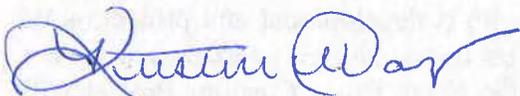
*Gus Vina*  
City Manager

EXHIBIT NO. 26
APPLICATION NO.
<b>PWP-6-NCC-13-0203-1</b>
City Correspondence
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California Coastal Commission

- Community enhancement projects on the LOSSAN rail corridor should be identified and phased together with other rail-related projects (refer to comments G2 and G3).
- The direct access ramp and park and ride facility will be supported only if all adjacent Strawberry Field properties are acquired and/or preserved for agricultural uses. Refer to comment I1.
- The applicant must clearly differentiate between “enhanced” features, “standard” features, and mitigation features utilized to reduce the impact of the project. If some treatment is needed to mitigate the project, then it should be maintained by the applicant. Refer to comments F3, J1, and J2.
- There should be increased opportunities for project review coordination and enhanced communication with the public (refer to comments A1, C3, F2, and I3).
- Additional comments on the PWP are provided as an attachment.

Public participation is based in part on the belief that those who are affected by a decision have a right to be involved in the decision making process. The hope is that decision making body will review City and public comments for potential inclusion into the PWP’s guiding framework or for review in consideration of the project. Again, the City appreciates the opportunity to comment on the North Coast Corridor PWP. Encinitas staff would be happy to meet with you or your staff/consultants to review the comments in more detail.

Respectfully submitted,



Kristin Gaspar  
Mayor  
City of Encinitas

cc: City Council

**A. PWP - Procedural Comments**

**A1. Process notification:**

The local amendment process should satisfy the requirements of Section 13515, subdivision (c) and (d), which applies to governing authorities. Notice of availability of review drafts/materials should be made at least 6 weeks (minimum) prior to the Coastal Commission hearing date. The suggested notice should include publication in newspapers of general circulation.

**B. Retaining Walls**

**B1. Slope preservation:**

The PWP should be conditioned so that project implementation advances contoured grading as the preferred landform treatment; and it should occur wherever possible within the Caltrans ROW to ensure that proposed development will not adversely affect hillsides.

**B2. Mitigating the impact of large retaining walls:**

Given the high importance of preserving the scenic public views all feasible mitigation measures should be considered in the design, placement and treatment of retaining walls:

- All retaining walls must be faced with local stone or of "banded" earth-tone colors and textured concrete and plantable walls to minimize visual impacts.
- Retaining walls over 20 feet should be divided into separate structures, to the extent feasible and sufficiently offset from one another to create a planting area. In those instances where retaining wall placement is constrained by existing Caltrans ROW, then use of sculpted shotcrete should be used with a texture that matches the surrounding landscaping units.
- Regardless of wall height, walls within the Manchester north view shed should feature sculpted shotcrete, emulating an inland buff, sandstone appearance.
- Retaining walls proposed along the boundary of the project shall be landscaped and/or constructed with quality materials.
- The visual cadence of texture type of retaining walls and noise walls should be at harmony. If some retaining walls receive special treatment, others in close proximity should as well. Logical, natural transition areas should be identified to create break points to move from special treatment segments (e.g. by use of shotcrete) to standard South Mesa themed segments.
- The layout of walls will consist of long radius curves, and the use of tangent sections (straight lines) must be avoided at all possible. Due to existing natural slopes and bluffs on the east side of the freeway and north of Manchester

Avenue, it is critical to require contoured retaining walls in this area to mitigate significant visual impacts.

## **C. Soundwalls and Noise**

### **C1. Quiet grind pavement techniques:**

The most-used abatement measure is the noise barrier or soundwall; however, alternative noise abatement solutions should be further explored. Quiet Grind or other quieter pavements should be considered for future construction within the Encinitas section of the I-5 Freeway Express Lanes Project.

### **C2. Soundwall 670:**

Soundwall S670 should be constructed. The soundwall would be located on Caltrans right-of-way along the northbound side of I-5, just south of Requeza Street. This area is represented by receiver sites R10.14 (Aviara Health Care Center) and R10.15 (Humane Society). However, the 120-bed congregate care facility was not factored into the analysis. The revised analysis makes the soundwall "reasonable" and should be recommended for construction.

### **C3. "Secondary" soundwalls:**

There are some soundwalls that are identified for "secondary consideration", which were relatively close to meeting the prescriptive "reasonable" and "feasible" tests. At this time it is not known if they will be built or not. This Final EIR/EIS designation entails reviewing the reasonableness of the soundwall during final design. Based on the 2007 NADR analysis, seven soundwalls total were close to meeting the allowance per benefitted residence but were not proposed as part of this project. Three of the seven "secondary soundwalls" are located in Encinitas. City Council must be informed and/or involved in the consideration process as the final design process moves forward. Any soundwalls recommended through the NADR that are not ultimately built should transfer funding opportunities to "secondary soundwalls" located in Encinitas.

### **C4. Noise insulation of private residences – early notification:**

In cases where a soundwall is not constructed and severe impacts are expected (exceeding 75 dBA), individual abatement measures are evaluated on a case-by-case basis. Caltrans should identify the list of receptors (i.e. property addresses) that will receive special individual abatement and clearly discuss what treatments might be used to reduce sound levels. This list should be provided to local agencies and be utilized for citizen-direct, early design notification.

## **D. San Elijo Lagoon**

### **D1. Restoration project:**

The San Elijo Lagoon Restoration Project that is currently underway is evaluating the infrastructure factors that affect tidal circulation including the lagoon inlet, bridges, rail and highway facilities, etc. Based on the flood conveyance factor of the interchange at Manchester Avenue, major NCC improvements will be impacted by lagoon rehabilitation design. There should be additional study and investigation aimed at understanding the tidal circulation, exchange dynamics, and estimating the instantaneous and residual fluxes of water, salt and nutrients throughout the lagoon area so that the appropriate policy considerations can be made.

One of the benefits of master planning the NCC is to link projects together to achieve maximum benefits to coastal resources. From a comprehensive planning standpoint, the lagoon restoration project should be rolled into the list of planned PWP improvements and be considered by the Coastal Commission concurrently.

### **D2. Lagoon Rail Bridge and sea level rise:**

It is anticipated that there would be some potential short term flood risk associated with the rail facilities as they cross over the lagoon in a 36-inch sea level rise scenario. If the project should be designed to anticipate future sea-level rise conditions then actions should be identified to lessen the impact of rising waters on coastal infrastructure. Appropriate long-term, rail-related measures and mitigation strategies can still be developed. Careful review and permitting of these PWP/TREP projects can increase the likelihood that these projects will be able to accommodate future coastal hazards.

### **D3. Coast Highway 101 Bridge and scour:**

The Coast Highway 101 Bridge was recently found to be susceptible to collapse during a significant seismic event. The Coast Highway 101 Bridge must be replaced as part of the Lagoon Restoration Project. In an effort to avoid future issues, the new bridge should be prioritized for scour risk in relation to lagoon rehabilitation efforts (i.e. annual dredging). This may lead to future implementation of scour countermeasures should the inlet location remain in the same location.

### **D4. Staging areas:**

As proposed, it is anticipated that the proposed park and ride facility area near the San Elijo Lagoon would be utilized over a 2-3 year period for Freeway/Manchester area improvements; however, it is not known if this staging area will be utilized for other mid-term or long-term NCC projects. The only other nearby, potential staging areas include park and ride facilities at Birmingham Drive (Encinitas) and La Costa Avenue (Carlsbad).

Construction activity is likely to temporarily displace animals from the construction zone due to nighttime lighting, noise, human presence, and heavy equipment. Additional analysis and project phasing information may be needed to address this issue so that site specific noise studies and lighting mitigation measures are in place before construction moves forward.

**E. Agriculture**

**E1. Agriculture Mitigation:**

Unavoidable impacts to agricultural lands would be addressed pursuant to a tiered approach. The first tier would be for implementation of in-kind, project-specific action located within the City. Should a project within the affected jurisdiction not be feasible, the second tier would be implemented, which includes payment of an Agricultural Resource Impact Mitigation Fee, pursuant to an approved in-lieu fee program. The City of Encinitas does not have an agricultural conversion mitigation fee. Therefore, an in-kind acquisition and/or project-specific school or community garden within the City is the highest priority. Mitigation must occur in the City, rather than elsewhere in the Coastal Zone Corridor. Mitigation of these agriculture impacts should be identified and considered by the Coastal Commission concurrent with PWP. If the acreages can't be obtained, the sum of all parts should yield similar community and agriculture value.

**F. Landscaping**

**F1. Landscaping buffer program:**

Since landscaping placement will be used to reduce the visual impact of large walls, it is important to spatially identify the location for this treatment within each affected community. Addressing and developing a landscaping buffer program seems appropriate at the PWP/TREP level since all things situated within the NCC view contributes to the overall quality of the view. As of now, it is not known if newly planted areas will be clustered or well-integrated. Specific tree loss as a result of the rail and highway improvements is also not known. A landscaping buffer program can address many related issues such as tree replacement ratio policies, enhanced landscaping area locations, transitional areas between new and existing landscaping. A landscaping buffer program may also address community buffer areas or areas of mitigation where Caltrans has the assigned maintenance responsibility. (Similar treatment proposed on the freeway side for all noise and retaining walls should be proposed on the City right-of-way side.)

**F2. Monitoring program:**

To meet PWP long-term phasing requirements, a specified timeline of vegetation monitoring should be required.

### **F3. "Enhanced" vs. "standard" gateway landscaping:**

The Encinitas Boulevard interchange is designated as an enhanced gateway with Category IV ("enhanced" landscaping). In most instances, cultivars/plantings are listed under multiple category designations in PWP Design Guidelines. Categories I, II, and III are to be maintained by Caltrans; Category IV is to be maintained by the local agency). The only plants listed as unique to Category IV is 1) the California Fan Palm and 2) the Creeping California Coffeeberry. Decorative rock mulches can be utilized in Category III landscaping (which is maintained by Caltrans) and Category IV (which is maintained by local agencies). The City does not see much benefit to this landscaping designation at this interchange and therefore does not want to maintain these sections of the Freeway. If there is any value to enhanced landscaping, then City is only interested in its placement on the west side of the southbound off-ramp. This is the only area that the City will agree to maintain.

### **G. LOSSAN Corridor Rail-Related Projects**

#### **G1. Signs within the LOSSAN Rail Corridor:**

The project should also be conditioned to prohibit signs greater than eight feet tall within the LOSSAN corridor as part of rail double tracking improvements. Also, these signs should also be prohibited in scenic areas, expansive visual gateway areas or near lagoon crossings.

#### **G2. Phasing of projects:**

The PWP should carefully address the phasing and timing of coastal access improvements to mitigate any local impact based on projected LOSSAN rail corridor improvements. For example if transit service is to increase to 20 minute headway (or something with greater frequency) east-west connectivity and coastal access will be impacted on a local level. The PWP notes increased rail service in the mid-term (2021-2030). The Hillcrest Drive pedestrian undercrossing is also scheduled to be completed in the 2021-2030 time frame. However, Leucadia Boulevard roadway grade-separation is to be completed in the years 2041-2050. The Leucadia Boulevard roadway grade-separated project and other grade-separation projects should be aligned to correspond to location and enable concurrent construction, provide cost savings, and help ensure that any existing facilities impacted by construction are immediately replaced and improved.

As a result of double-tracking, the PWP should identify project phasing and implementation priorities for rail improvements and identify mitigation targets and establish criteria for when community enhancement projects are recommended to be built. New implementation measures could be added to Chapter 5.2 of the PWP that

allows the NCC Program to respond to ridership demand in a measurable way (and at the right time).

### **G3. Identifying additional roadway grade separation projects:**

Chapter 4.1.3 of the PWP defines potential rail projects including the planning of two additional roadway grade separations. However, the locations of these grade separations have yet to be determined as part of the regional planning process. However, the City believes that early determination on their placement in the NCC is an important component in terms of evaluating the overall scope and phasing of double-tracking improvements and its potential impact on the transportation mobility system.

Based on a LOSSAN Rail Corridor Improvements Final EIR/EIS (2007), at-grade double-tracking in the rail corridor was eliminated in the Cardiff community planning area (at Birmingham Drive and Chesterfield Drive) because it compounded east-west barriers and created additional safety issues. The 2007 environmental document also notes that rail improvements could create long-term noise impacts along the rail corridor from increased train operations. The FRA's Record of Decision states that existing noise impacts would be reduced or eliminated in sections of the corridor where tunnel options were implemented, or where existing at-grade crossings were grade separated. Substantial noise decreases would occur at these locations by eliminating the need for warning horns and bells at crossings (*LOSSAN Proposed Rail Corridor Improvements, Record of Decision, US Dept. of Transportation, Federal Rail Administration, February 2009, page 17*). Therefore, Birmingham/Chesterfield is a good starting point for identifying these "roadway grade separation" locations.

## **H. Community Enhancement Projects**

### **H1. Suspension bridge:**

Maintenance of the suspension bridge that crosses over the San Elijo Lagoon should be handled by Caltrans.

### **H2. Gateway feature:**

In previous versions of the NCC Design Guidelines a vertical gateway element was proposed. At the time, the City was unclear on the overall benefit of the proposed gateway features. The gateway element has since been removed from the NCC Guidelines; however the PWP makes note of gateway locations that could infer potential landmark installation. It is hoped that the PWP will be worded in a manner (or conditioned) to control future changes to the project so these types of potential improvements in the future are carefully coordinated with local agencies, stakeholders, and public.

## I. Highway-Related Projects

### 11. **Direct access ramp and park and ride facility:**

Although there have been significant efforts to minimize the visual massing of the retaining walls and proposed direct access ramp and park and ride facility, there will be significant changes to the semi-rural character and land use type of this area. At one point, in the screening process for RTP prioritization projects a bi-directional BRT service on I-5 Freeway did not have sufficiently high ridership projections to remain in the revenue constrained priority list. This was largely due to commuter accommodation and close proximity of the LOSSAN corridor to I-5 Freeway. All day, bi-directional BRT on El Camino Real was also considered; and was also removed from the revenue constrained model. Furthermore, the City also expressed some concerns because the proposed park and ride facility represents a change in land use on a parcel. The Coastal Commission will have to determine if this land use type change requires a vote of the people, as specified by a local initiative known as Proposition A.

However, the City will support the development of the proposed direct access ramp and park and ride facility, under certain restrictions. Support is based on the following conditions:

- A Class I (Bike Path) is constructed entirely separate from the roadway (on the north side of the lagoon and south of Manchester Avenue) for use by both cyclists and pedestrians. At a minimum, the Class I Bike Path must connect from the park and ride facility (from the east) to the San Elijo Lagoon Nature Center (to the west); and provide intuitive access and/or connection points to these facilities and other community enhancement projects in the area;
- Permanent public restroom provisions must be added to park and ride facility to support all potential users;
- Minimum real property acquisition of, and/or agricultural preservation easements are placed over, all adjacent Strawberry Field properties; and
- All community enhancement projects near the Manchester Avenue interchange are fully implemented.

## **I2. Construction impacts:**

Caltrans will develop a Traffic Management Plan addresses any ramp or road closures, any streets in the city that will be affected by increased truck traffic or hauling materials, and any streets that may have limited access, reduced lane widths, and a timeline of expected hours of operation. While the Environmental Commitments Report notes that one of many outreach tools may be utilized to increase public awareness, direct mailings have been proven to be the most effective form of notification in the City of Encinitas. Therefore, direct mailings is the preferred form of outreach in the City of Encinitas (mailed at key milestones or phases of implementation), and it should complement other public awareness program tools.

## **I3. Designing the park and ride facility:**

Should the park and ride facility be approved as part of the PWP, it is recommended that Caltrans/SANDAG conduct stakeholder interviews and public outreach early in the process to ensure that it is developed with input from multiple stakeholders in the community. The PWP should require that a public meeting be arranged to gather input to what support facilities are needed (i.e. wayfinding signage, trail educational material, short-term and long-term bike parking/storage areas, water supply and drinking fountains, restrooms, trash receptacles, benches, equestrian support facilities, etc.). The community would most likely like to weigh in on the relative importance of each of these components and their placement.

## **I4. Transportation demand management:**

The 4-year Transportation Report Package as discussed in Chapters 5.2.3.2 and Chapter 6 of the PWP should further define Transportation Demand Management Program objectives, define the criteria used to evaluate program performance, and detail what things will be monitored in terms of Transportation Demand Management.

## **J. Design Guidelines**

### **J1. "Enhanced" vs. "standard" features:**

The Coastal Commission should be able to assess the visual effects of a project only when they understand how the project will be designed in a "base" option format. Therefore, design renderings should represent the "base" option so that the Coastal Commission can consider the design elements appropriately. If no other options are provided, then those renderings should constitute as the Caltrans "standard", and therefore be responsible for their maintenance.

**J2. "Enhanced" features utilized as mitigation:**

If the feature is mitigating the impact of a project component, then clearly it is necessary to the project's near-term and long-term design. Therefore, Caltrans should be the responsible agency for all associated maintenance issues in these specific circumstances (i.e. when the feature is mitigating an impact). It is recommended that the NCC Design Guidelines and PWP be revised to consider mitigation strategies for landscaping placement and on-going maintenance.

**K. Environmental Comments**

**K1. Programmatic versus project-based environmental work:**

The NCC Final EIR/EIS document is more of a programmatic impact analysis, not project-level. That is, analyses are not site-specific. Caltrans contends the NCC Final EIR/EIS is a project-level document; however, when responding to the lack of site-specific analyses, Caltrans indicates that plans are conceptual (e.g. direct access ramp, soundwalls, etc.) or final design/details have not yet been determined. Assuming the document is analyzed at a project-level, localized site-specific analyses should be conducted for impacts. Site-specific analyses are lacking for air quality, hydrology, traffic circulation, noise, and community impacts. For example, parking structures are proposed as part of the project in the near-term (by 2020). Parking structure improvements could increase the structural mass of the stations as viewed by passengers. Station parking improvements for the Oceanside, Carlsbad Village, Carlsbad Poinsettia, Encinitas, and Solana Beach stations could increase the scale, mass, and overall visibility of stations from surrounding areas. Since the site for a future parking structure has not been identified in Encinitas, it has not been analyzed as part of NEPA/CEQA. Because of this and other reasons, the EIR's impact analysis is more programmatic.

**K2. Adequacy of detail:**

The NCC Draft EIR/EIS document's format and content focuses more on satisfying NEPA requirements and less on meeting CEQA's provisions. City staff expressed some concerns regarding relevant resource impacts and if they are sufficiently analyzed in the broader document. This is a fairly important concern since Caltrans and SANDAG will rely on that analysis in subsequent, implementation projects. There should be sufficient amount of detail to adequately apprise the public and decision-makers of potential NCC Project-related impacts. For example, mitigation measures should be clearly defined and clearly demonstrate how impacts would be reduced to less than significant levels.

**K3. Response to comments:**

Public comments were submitted to Caltrans during each of the CEQA public review periods. Those comments (from agencies, organizations, and individuals) are a part of the public record and are provided in Appendix H to the Final EIR/EIS for the NCC Project. Responses to City comments were provided by Caltrans. Specific comments are individually addressed in the April 23<sup>rd</sup> City Council Agenda Report (link provided below).

[http://encinitas.granicus.com/MetaViewer.php?view\\_id=7&clip\\_id=986&meta\\_id=38513](http://encinitas.granicus.com/MetaViewer.php?view_id=7&clip_id=986&meta_id=38513)

March 13, 2014

Sherilyn Sarb, Deputy Director  
California Coastal Commission  
San Diego Coast District Office  
7575 Metropolitan Drive, Ste 103  
San Diego, CA 92108-4402

**North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program  
Third Party Initiated Local Coastal Program Amendment 90-Day Review Request**

Dear Ms. Sarb,

Thank you for the opportunity to review and comment on the Draft North Coast Corridor Public Works Plan and Transportation and Resource Enhancement Program (PWP/TREP) and the Third Party Initiated Local Coastal Program Amendment (LCPA Overlay) during its 90-Day Review period. This letter serves as the City of Carlsbad's response for the LCPA 90-day review period. We are respectfully submitting the following comments and appreciate the California Coastal Commission's careful consideration of these comments as well as the PWP/TREP project as a whole.

The City of Carlsbad understands the community enhancement projects proposed by Caltrans and SANDAG for Carlsbad in the PWP/TREP are as follows:

1. Bicycle/pedestrian enhanced trail and bridge on west side of Batiquitos Lagoon
2. Park-and-ride enhancement at La Costa Avenue
3. Trail on northeast side of I-5 at Batiquitos Lagoon
4. Bicycle/pedestrian enhanced trail and bridge on east side of I-5 at Agua Hedionda Lagoon
5. Chestnut Avenue I-5 crossing bicycle/pedestrian improvements
6. Chestnut Avenue LOSSAN crossing<sup>1</sup>

The city would like to express its support for the above projects and believes they will be beneficial additions to Carlsbad.

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<sup>1</sup> This project does not currently have identified funding, but is included in the PWP/TREP should additional funding become available in the future.



Additionally, the city understands that the North Coast Bike Trail throughout the North Coast Corridor and within Carlsbad is no longer identified as a specific community enhancement for the various communities, but remains in the PWP/TREP as a general component of the project.

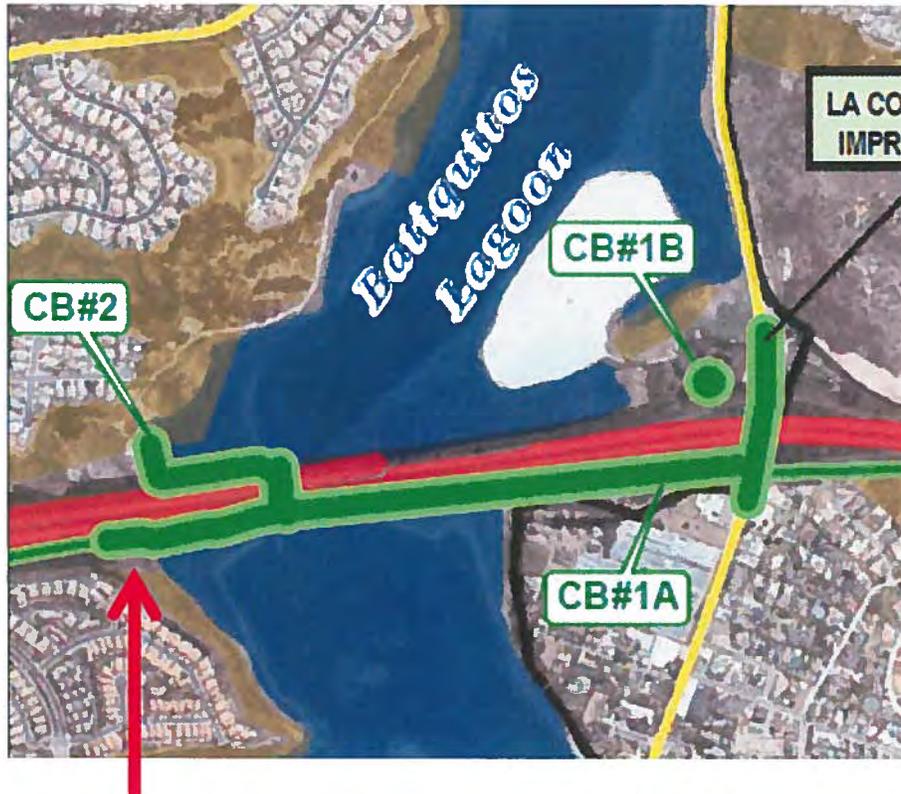
The PWP/TREP also includes the following environmental resource mitigation sites in Carlsbad: Hallmark East and West properties and the portion of Ayoub-La Costa Parcels within city boundaries. These properties are important resource sites and will be valuable additions to the open space system that exists within Carlsbad.

The city would like to submit the following comments on the PWP/TREP document and the LCPA Overlay. Some comments are repeated from previous letters as staff would like to reiterate the importance of the issues covered in those comments.

1. The city supports the inclusion into the PWP/TREP of “quiet zone” improvements at all the at-grade railroad crossings throughout Carlsbad.
2. The city supports the concept of incorporation of a San Diego Regional Rail Crossing Management Program within the PWP/TREP, as it may be instrumental toward improving rail safety within our region (see Feb. 11, 2014 letter from the California Public Utilities Commission to the California Coastal Commission RE: PWP/TREP and Railroad Crossing Safety).
3. Carlsbad places a high priority for pedestrian and bicycle connectivity and safety across the LOSSAN corridor and the access this connectivity provides to the coastal areas. As such, the city would encourage the consideration of these aspects in the design and construction of all LOSSAN crossings that are to be improved as part of the PWP/TREP implementation projects.
4. Chapter 5.7 Coastal Visual Resources – Design and development strategies and implementation measures should incorporate, to the extent feasible, landform alteration techniques such as contour grading that minimize the visual impact of large manufactured slopes, especially in places that transition to natural areas around lagoons and open space. This will help soften the transition from these natural areas to the future PWP/TREP improvements, and help avoid long expanses of uniform manufactured slopes.
5. Chapter 5.7 Coastal Visual Resources – The option for transparent soundwalls should be expanded to all areas of Carlsbad and especially where there could be elevated soundwalls that would be highly visible from adjacent areas, not just on private property (Implementation Measure 5.7.1). Areas of concern include the northern part of the city, such as the Holiday Park area, where soundwall improvements may be on public property.

6. Carlsbad intends to connect its Rosalena Trail with the North Coast Bike Trail west of I-5 and north of Batiquitos Lagoon. In the PWP/TREP and future construction designs for the North Coast Bike Trail, please ensure that an opening will be created for a future Rosalena Trail connection (see Figure A below) and that no barriers will be created.

Figure A



Red arrow shows approximate Rosalena Trail connection

7. The City of Carlsbad requests that all interchange and crossings of the freeway have enhanced and maximized bicycle and pedestrian designs according to the materials and resources provided by Caltrans headquarters to address AB 1358 Complete Streets Act and to enhance safety for all roadway users. The I-5 Freeway creates a barrier to access the coast for our city's strategic focus area of livable streets and these facilities need to be enhanced to connect and improve mobility for all roadway users.
8. Thank you for adding the Chestnut Avenue I-5 undercrossing to PWP/TREP as a community enhancement. This is important as Chestnut Avenue east of I-5 now has bike lanes so City of Carlsbad would expect these are continued west under the freeway to connect to Pine Ave Park and Chase Field and a potential railroad crossing at Chestnut Avenue.
9. Chapter 4 - The City of Carlsbad Parks and Recreation Department is in the process of updating the Trails Master Plan. A copy of the updated plan is anticipated to be available

at the end of calendar year 2014. Please provide KTU +A a copy (or web link) of the draft NCC PWP/TREP plan as part of those efforts so that it is current to the proposed plans outlined herein for the NCC PWP/TREP. A copy of the updated Trails Master Plan will be provided to you when the plan is completed.

10. Chapter 4 - The section discussing the Coastal Rail Trail (CRT) connections for the various cities in the North Coast Corridor and indicates the connections for Tamarack Ave. to Poinsettia Station. The connection and many of the details are yet to be worked out for Reach 4 of the CRT from Tamarack to Cannon Rd. west of I-5, so staff will need to be diligent as this project moves forward to coordinate on these connections.

The conceptual alignments shown on the plans for the North Coast Corridor Bikeway need to connect at both the north and south end of the proposed new bridge at the Agua Hedionda Lagoon in order to provide an east/west connection to the CRT and other trails yet to be developed around the lagoon. Those connections have been identified in the city's trails master plan as well as the Local Coastal Program for coastal access to water recreation along the north shore of the lagoon and for access to Tamarack State Beach.

11. An important community enhancement of the project is the proposed I-5 North Coast Bike Trail running the entire length and parallel to I-5. Future planning for the connections of the NCC to the lagoon trails identified as CB #2 and CB #3 will need to be coordinated closely with the City to ensure pedestrian and bicycle safety and connectivity as the design development moves forward for the project.

The PWP indicates that east/west connections under the Agua Hedionda Lagoon and Batiquitos Lagoon bridges are to be provided as part of the I-5 Widening project. The connection from the NCC to the east/west trail connection at the south end of the bridge abutment is crucial as it will provide a connection to the Coastal Rail Trail further to the west. Currently plans are underway to build a pedestrian bridge across the lagoon as part of the Carlsbad/Vista Interceptor project that will serve as the crossing for the future CRT Reach 4. An east/west connection at the north end of the bridge is also desired. This appears to be shown on Figure 4-2F, please confirm that those east/west connections are still being proposed.

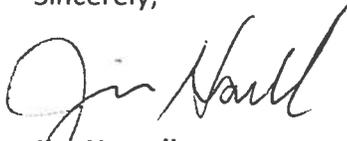
12. Design Guidelines pg. 20 and 22 - Carlsbad requests that the Corridor Theme Unit boundaries be adjusted to so that the southern boundary of the Coastal Mesa Theme Unit is the La Costa Ave. intersection instead of the Poinsettia Lane intersection. Staff understands that the design theme units are assigned to topographical boundaries; however we disagree that Poinsettia Lane intersection is the best transition point. Batiquitos Lagoon provides a much more natural break in the topography. Our city is bounded by lagoons at the north and south ends, which is a feature unique to Carlsbad. Buena Vista and Batiquitos lagoons are important topographic landmarks that identify

Carlsbad's location along the I-5 corridor, and therefore are natural beginning and end points for the Coastal Mesa Theme Unit.

13. Design Guidelines – Thank you for including the Enhancement Policy Guidance into the Design Guidelines. Staff would like to reiterate that this policy guidance should be maintained in all future versions of the Design Guidelines and that it describes future steps and an implementation process for determining the use of enhanced features such as the art elements shown on retaining wall concept on pg. 44 and the use of the enhanced landscape treatment. This policy guidance should include steps for incorporating local jurisdiction input on the use of enhanced features, as well as incorporating relevant ideas from any locally developed design concepts for the I-5 corridor. For example, the City Council has adopted a comprehensive design plan for art and landscape elements within the I-5 corridor that has a primary goal of creating a "unique visual identity within the I-5 corridor, with special emphasis on the north and south gateways to the city."

Should you have any questions, please contact me at (760) 602-2751. We look forward to working with you and your staff on future steps of the PWP/TREP.

Sincerely,



**Jim Howell**  
Interim Public Works Director

CF:bg

- c: Deborah Lee, District Manager, California Coastal Commission, San Diego Coast District Office, 7575 Metropolitan Drive, Ste 103, San Diego, CA 92108-4402  
Gabriel Buhr, Coastal Program Manager, California Coastal Commission, San Diego Coast District Office, 7575 Metropolitan Drive, Ste 103, San Diego, CA 92108-4402  
Gary Barberio, Assistant City Manager  
Kathy Dodson, Assistant City Manager  
Glen Van Peski, Community and Economic Development Director



## THE CITY OF SAN DIEGO

March 12, 2014

Arturo Jacobo  
Project Manager  
California Department of Transportation  
4050 Taylor Street, MS 122  
San Diego Ca, 92110  
Tel. (619) 688-6816

Dear Mr. Jacobo,

The City of San Diego Planning, Neighborhoods and Economic Development Department appreciates the opportunity to participate in the preparation of the North Coast Corridor Public Works Plan and Transportation and Resource Enhancement Program (PWP/TREP) Local Coastal Program Land Use Plan Amendment (LCPA). The North Coast Corridor Project, to be implemented by the San Diego Association of Governments (SANDAG) and the California Department of Transportation (Caltrans), is a 27-mile long series of inter-related projects within the coastal zone that includes improvements to a segment of Interstate 5 and the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor coastal access improvements and environmental enhancements including wetland and upland habitat restoration, and is slated to take up to 40 years to complete.

The proposed PWP/TREP traverses several community planning areas within the City of San Diego. These community planning areas include University, Torrey Hills, Torrey Pines, Carmel Valley and North City Future Urbanizing Area Subarea II. With the exception of the NCFUA Subarea II, the adopted community plans for these areas serve, in part, as the City's Local Coastal Program. The North City Local Coastal Program – Land Use Plan is the adopted Local Coastal Program for the NCFUA Subarea II planning area.

The City of San Diego's Local Coastal Program (LCP), includes certified coastal community land use plans and sets forth policies and measures to regulate development in the City of San Diego's Coastal Zone, consistent with the California Coastal Act and in partnership with the California Coastal Commission. The California coastal zone is a unique natural resource, the protection of which is recognized as a shared responsibility of the state, local governments, and regional entities. State, local, and regional agencies desiring to make investments in transportation infrastructure within the coastal zone have an affirmative obligation to ensure that

### **Planning, Neighborhoods & Economic Development Department**

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Tel (619) 235-5200 • Fax (619) 236-6478



improvements avoid and minimize impacts to existing natural resources, including the coastal zone flora and fauna, water quality, and scenic public views.

The coastal lagoons in the North Coast Corridor have historically experienced adverse impacts to water quality and the sensitive habitat areas within and adjacent to the lagoons. Historical alteration of lagoon areas from construction of highway and rail crossings and realignment or channelization of inland waterways have affected water quality and directly impacted sensitive habitat areas. These impacts have occurred over decades and require substantial resources and major restoration efforts to remedy. Population growth and development pressures in the North Coast Corridor (NCC) have resulted in the loss of public access and recreational opportunities. As the population continues to grow in the NCC, County residents and adjacent regions will seek access to the remaining supply of coastal resources in the NCC, increasing demand for access to and use of recreational facilities. The California Coastal Act recognizes the necessity and benefit of providing varied transportation choices for all people to access the coast.

On October 7, 2011, the State of California adopted Senate Bill 468, acknowledging that the North Coast Corridor Project and its PWP/TREP will meet the public needs of an area greater than that included in any local permitting agency's certified LCP and that the breadth of those needs was not anticipated by the City of San Diego when its local coastal program was certified by the California Coastal Commission. Senate Bill 468 acknowledges the California Coastal Commission's role to apply a regional or statewide perspective to projects impacting coastal resources where the project's significance extends beyond the limits of the local jurisdiction's LCP and/or across multiple LCPs, and thereby authorizes the California Coastal Commission to utilize Section 30515 of the Public Resources Code for the North Coast Corridor Project as it relates to filing a third-party initiated LCP amendment and streamlining the process referenced in that section pursuant to agreement between the California Coastal Commission and the North Coast Corridor jurisdictions with an approved local coastal program.

The policies, development/design strategies and implementation measures of the North Coast Corridor PWP/TREP are meant to ensure efficient planning and implementation of the corridor projects located in the City of San Diego coastal zone as integral elements of the larger North Coast Corridor Project, all of which are necessary to implement a balanced, integrated approach to maintain and improve regional mobility, and to maintain and enhance public use and enjoyment of coastal resources, while addressing potential project impacts and/or conflicts with the coastal resource protection policies of the City of San Diego LCP and California Coastal Act.

Though the City generally supports the PWP/TREP and the associated LCPA, we are taking this opportunity to reiterate our concerns regarding the potential cumulative impacts of the projects and the need for focused mitigation that will protect and enhance the coastal resources affected by the PWP.

To that end, we are incorporating our original comment letter (Harrison, May 29, 2013) as an enclosure to this letter and encourage Caltrans to also reference similar letters submitted by the Los Penasquitos Lagoon Foundation and the office of San Diego City Councilmember Sherri Lightner. The intent of including these documents is to illustrate the City's concerns regarding

the protection and enhancement of coastal resources and to allow Caltrans to illustrate how it has addressed those concerns in amendments to earlier versions of the PWP.

The City of San Diego, California Coastal Commission, SANDAG, and Caltrans have collaborated to develop the proposed PWP/TREP and associated LCP amendments. The City is satisfied with the progress made in that effort and supports the LCPA being requested. This support is linked to the robust and ongoing attention promised by Caltrans in response to the City's initial statements of concern to address city-specific and regional coastal policy goals while meeting state and regional transportation needs. Our expectation is that Caltrans will continue to collaborate with the City of San Diego to ensure projects within the PWP/TREP are implemented in a balanced manner with respect to transportation and environment needs, and allow for additional opportunities for input to respond to unanticipated changes to communities, technology, and the environment. As specified in the PWP/TREP, pre-consultation meetings, notice of impending development submittals, and 4-year performance monitoring procedures will be conducted to ensure continued City involvement and public input in the North Coast Corridor Project implementation to ensure projects are consistent with the vision, goals and objectives of the City of San Diego LCP's and the California Coastal Act.

The City of San Diego agrees Caltrans and SANDAG may proceed to file the proposed amendments to the City's LCP's with the California Coastal Commission invoking the third-party-initiated LCP amendment procedure provided for in Senate Bill 468 and Section 30515 of the California Coastal Act.

The City of San Diego will continue to work with SANDAG and Caltrans to help ensure the projects in the PWP/TREP are designed and constructed to ultimately provide the public an efficient multi-modal transportation system to improve quality of life for the region's residents, visitors and businesses while protecting and enhancing our natural coastal resources.

Sincerely,



William Fulton, Director  
Planning, Neighborhoods & Economic Development Department  
City of San Diego

DMM/dmm

Enclosure: NCC PWP Letter to Shay Lynn Harrison, dated April 29, 2013

Cc (copies sent via email):

Mel Millstein, Council Representative, Council District 1  
Mike Westlake, Deputy Director, Development Services  
Dan Normandin, Senior Planner, Development Services  
Bill Harris, Supervising Public Information Officer, Transportation & Storm Water

Christine Rothman, Project Officer III, Transportation & Storm Water  
Nancy Bragado, Deputy Director, Planning, Neighborhoods & Economic Development  
Cathy Winterrowd, Deputy Director, Planning, Neighborhoods & Economic Development  
Myra Herrmann, Senior Planner, Development Services  
Gabriel Buhr, Coastal Program Analyst III, California Coastal Commission  
Linda Culp, Principal Planner, SANDAG



Enclosure

**THE CITY OF SAN DIEGO**

April 29, 2013

Shay Lynn Harrison  
Environmental Analysis Branch Chief  
CalTrans District 11  
4050 Taylor Street  
Division of Environmental Analysis, MS 242  
San Diego, CA 92110

Re: North Coast Corridor Public Works Plan

Dear Ms. Harrison:

Please accept this letter as official comment from the City of San Diego (City) regarding the North Coast Corridor Public Works Plan/ Transportation and Resource Enhancement Program as issued for review in March 2013.

Though the City fully supports the concept (and potential adoption) of a broad ranging multi-year plan for the North Coast Corridor, we do not believe the plan as written adequately acknowledges current conditions and development constraints for areas within the City's boundaries. Our concerns are focused on the area generally in and around the Los Peñasquitos Lagoon.

In brief, the plan:

- Fails to consider existing research about sedimentation deposition in the Los Peñasquitos Lagoon.
- Fails to accurately account for the full range of impacts of rail facilities running adjacent to or through the Lagoon.
- Does not acknowledge or consider implications of more than 23 years of biological and habitat-related studies conducted on behalf of the Los Peñasquitos Lagoon Foundation, its predecessors and partners.



**Transportation & Storm Water Department**

9370 Chesapeake Drive, Suite 100, MS 1900 • San Diego, CA 92123  
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- Would impede the City and its partners (including CalTrans itself) from achieving compliance with the Total Maximum Daily Load (TMDL) requirements for sedimentation in the Lagoon.
- Inappropriately dismisses mitigation measures in the Lagoon itself in favor of “regional” mitigation efforts that will not adequately compensate for project impacts.
- Is not a fair representation of the actual work proposed for the Lagoon – specifically failing to adequately describe and account for the bridge replacements and initial double tracking efforts scheduled to begin within the next 18 months.
- The Public Works Plan and related environmental document do not adequately address how the Plan will impact flooding risk in Sorrento Valley. This is an area with a history of flooding and any increase in flooding risk caused by the Plan should be both thoroughly studied and mitigated accordingly.

Having recently completed the development and adoption process for a multi-year maintenance program for City flood control facilities, we are aware of the limitations of planning documents like this. We understand the need to balance specificity with the flexibility necessary to accommodate changing conditions over the long life of the plan. We do not believe the Public Works Plan you have created strikes that balance for properties within the City.

The City requests greater acknowledgement and reliance on planning work already completed for the Los Peñasquitos Lagoon. The Public Works Plan should include reference to the TMDL adopted by the San Diego Regional Water Quality Control Board on June 13, 2012. Caltrans is listed as a responsible party on the TMDL, and North County Transit District is also a responsible party because it is enrolled in the Phase II Municipal Separate Storm Sewer (MS4) Permit issued by the State Water Resources Control Board on February 5, 2013. The responsible parties for this TMDL are required to meet specific targets for restoration of salt marsh in the Lagoon, which should be both acknowledged and facilitated by the Public Works Plan (See TMDL pages A-16 to A-17).

The City also requests that the Public Works Plan offer assurances that any project work – including that slated to begin in the next 24 months – be aligned with the goals and objectives of the updated Lagoon Restoration and Enhancement plan developed by the Los Peñasquitos Lagoon Foundation in cooperation with the City and Torrey Pines Association.

The City requests that the Public Works Plan incorporate assurances that public outreach and participation efforts will be conducted in some regular and measurable fashion throughout the entire life of the plan. Because this is a multi-generational planning document, the City requests that SANDAG and Caltrans commit themselves to outreach efforts among school-aged children and adults alike throughout each decade covered by the plan.

The City also has concerns regarding specific sections of plan as described below.

#### 5.4 Marine Resources: Water Quality and Wetlands

The City requests more thorough documentation of claims that the bridge/culvert replacement and bridge lengthening projects being proposed will “improve water quality and the ecological value” of the Los Peñasquitos Lagoon.

The City requests that the Draft Public Works Plan be amended to assure that the “regionally significant wetland restoration and enhancement” opportunities it promises include significant restoration and enhancement (in addition to lagoon mouth maintenance efforts) within the Los Peñasquitos Lagoon.

##### 5.4.2.1 Existing Water Quality Deficiencies

The City requests that the Draft Public Works Plan be amended in this section to reference and include the goals and objectives of the Los Peñasquitos Watershed Comprehensive Load Reduction Plan as drafted.

The City requests that the Plan also be amended to change references to pollutants “...considered treatable by Caltrans’ approved treatment BMPs...” (page 5.4-28 last paragraph) to “considered treatable by treatment BMPs approved by the Regional Water Quality Control Board and the MS4 copermittee responsible for water quality improvements in the project area.”

##### 5.4.2.2 Potential PWP/TREP Project Impacts

The City requests the Public Works Plan be amended to require best management practices and low impact development options that will eliminate any “impacts to water quality due to increased runoff and erosion from grading and vegetation removal” (page 5.4-30, first paragraph).

The City requests that the Plan also provide more specific information to substantiate the assertion that “without the proposed PWP/TREP infrastructure improvements, the corridor’s water quality, and lagoon, wetland and riparian habitat areas will continue to degrade” (page 5.4-30, second paragraph).

#### 5.4.2.3 LOSSAN Rail Corridor Impact Assessment

The City requests that the Public Works Plan be amended to better acknowledge and assess the impacts arising from the mobilization or impoundment of sediment that may occur with projects included in the Plan. The City does not believe the Plan adequately accounts for changes in sedimentation patterns that will occur during and following construction of rail facilities adjacent to or through the Los Peñasquitos Lagoon.

The City requests the Plan be amended to remove "...long-term beneficial impact to the lagoon,..." (second to last paragraph on page 5.4-31) until the "project-level analyses" promised for the causeway structure reference are complete.

#### 5.4.3.1 PWP/TREP Lagoon, Wetland and Riparian Enhancement Opportunities

And

#### 5.5.3.1 PWP/TREP Lagoon, Wetland and Riparian and Upland Enhancement Opportunities

The City requests that the Public Works Plan be amended to ensure that projects anticipated in the Plan cannot wholly avoid "...ratio-based mitigation..." (last paragraph, page 5.4.38) or "...traditional in-kind habitat replacement mitigation ratios..." (second paragraph, page 5.5-33).

#### 5.7 Coastal Visual Resources

From conversations and meetings with staff at SANDAG, the City is aware that improvements and expansion of rail facilities adjacent to and through the Los Peñasquitos Lagoon may not conform to the Public Works Plan promise that the "majority of proposed rail improvements would be at or below grade and within the existing right-of-way..." (last paragraph, page 5.7-31) and requests that the Plan be amended to acknowledge the range of potential impacts that may occur should the rail corridor be raised or shifted to a new alignment.

#### 5.8 Site Stability and Management

The City requests that the Public Works Plan be amended to acknowledge and account for the substantial impact of sedimentation on the Los Peñasquitos Lagoon. The City specifically requests the addition of language assuring that projects anticipated in the plan will conform to the goals and objectives of the Lagoon TMDL.

Page 5

North Coast Corridor Public Works Plan

April 29, 2013

The City is also concerned that SANDAG, Caltrans and their partners in rail planning, both the North County Transit District and the Metropolitan Transit System of San Diego are moving forward with short-term projects that will have significant impacts on the hydrology, biological resources and long-term health of the Los Peñasquitos Lagoon eco-system. The City does not see these projects adequately described or accounted for in the Public Works Plan, especially as they relate to cumulative impacts.

The City requests that the bridge replacement project and station rail enhancement project currently in late design phases be shared with stakeholders before any further phases are allowed. The City requests a complete analysis of the short and long-term direct and cumulative impacts that may arise with these projects and a better description of how those impacts will be accounted for in the Public Works Plan.

The concerns and requests described above capture the City's general concerns regarding the Public Works Plan as currently drafted. The City is interested in greater participation in the planning process for each of the projects anticipated in the plan. The City is interested in assuring that long-term cumulative impacts are considered as the Plan is being finalized. Furthermore, the City requests that a broader communication program be initiated to ensure that all interested stakeholders be kept informed during the entire life-time of the Plan.

The City is encouraged by SANDAG and Caltrans' interest in long-term planning and will provide any and all supporting research, documentation and input necessary to move forward with the Plan once the requested amendments have been made.

We do intend on offering additional comments regarding the plan once it is docketed before the Coastal Commission. We are also in communication with many other stakeholders interested in the Plan (Los Peñasquitos Foundation, Torrey Pines Association, the offices of Councilmember Sheri Lightner, etc.) and will be developing cooperative commentary to share with the Commission in the future.

Page 6  
North Coast Corridor Public Works Plan  
April 29, 2013

Please feel free to contact my office staff should you have any questions or concerns about the City's comments regarding the Public Works Plan.

Sincerely,



Kris McFadden  
Deputy Director

cc: Mayor Bob Filner  
City Attorney Jan Goldsmith  
Councilmember Sherri Lightner  
Garth K. Sturdevan  
Mike Hastings  
Lee McEachern

Attachments:

1. CARWQCB Resolution R-9-2012-0033 "A Resolution Water Quality Control Plan for the San Diego Basin (9) to Incorporate the Total Maximum Daily Load for Sedimentation in Los Peñasquitos Lagoon"
2. CARWQCB "Attachment A to Resolution R-9-2012-0033 Amendment to the Water Quality Control Plan for the San Diego Basin (9) to Incorporate the Total Maximum Daily Load for Sedimentation in Los Peñasquitos Lagoon"
3. National Pollution Discharge Elimination System, General Permit for Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems, Order No. 2013-0001-DWQ, NPDES NO. CAS000004

SS  
CC:GB

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SAN DIEGO COAST DISTRICT



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March 27, 2014

Sherilyn Sarb  
Deputy Director, San Diego Coast District Office  
California Coastal Commission  
7575 Metropolitan Drive, Suite 103  
San Diego, CA 92108

Re: Support of North Coast Corridor Public Works Plan

Dear Ms. Sarb:

On behalf of the San Diego County Taxpayers Association (SDCTA), I would like to express our support for the North Coast Corridor Program's Public Works Plan/Transportation Resource Enhancement Program (PWP/TREP). The PWP/TREP enables streamlined implementation of needed transportation, coastal access and environmental improvements for North County.

Without improvements to the transportation network along the North Coast Corridor, the growth of high-skilled, high-wage job opportunities and the movement of goods will each be curtailed. Both are of extreme importance to our regional economy and tax base.

A coastal commission permit for the plan in its entirety would result in eliminating the need for each project to go through a lengthy process. A streamlined permitting process would allow for the infrastructure improvements we need as a region to be constructed in a timelier manner, and at a lesser cost to taxpayers. In addition, we are encouraged by the checks and balances built into the PWP/TREP that provide taxpayer protections including the pre-consultations with city staffs and the four year performance reporting measure to ensure the project stays on track and public dollars are being used efficiently.

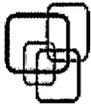
The PWP/TREP is a balanced coastal development program of landmark size, and the unprecedented outreach effort already performed ensures the transparency deserved by the region.

If you have any questions, please feel free to contact me at (619) 234-6423 or [sean@sdcta.org](mailto:sean@sdcta.org).

Sincerely,

Sean Karafin  
Interim President and CEO

EXHIBIT NO. 27
APPLICATION NO.
<b>PWP-6-NCC-13-0203-1</b>
Letters of Support
Page 1 of 6
California Coastal Commission



BLA Member Organizations

- Asian Business Association
- Associated Builders & Contractors
- Associated General Contractors
- BIOCOM
- Building Industry Association of San Diego
- Building Owners & Managers Association
- California Apartment Association, SD Chapter
- CleanTECH
- CommNexus
- CONNECT
- Downtown San Diego Partnership
- Engineering & General Contractors Association
- Filipino American Chamber of Commerce
- Klein Leadership Foundation
- Mexico Business Center
- NAIOP San Diego
- NextGen
- San Diego Association of Realtors
- San Diego County Apartment Association
- San Diego East County Chamber of Commerce
- San Diego East County EDC
- San Diego North Chamber of Commerce
- San Diego Port Tenants Association
- San Diego Regional Chamber of Commerce
- San Diego Regional EDC
- San Diego Software Industry Council
- San Diego Venture Group
- Strategic Roundtable
- Tech America
- Tijuana EDC

Ex Officio

- Junior Achievement
- LEAD San Diego
- San Diego County Taxpayers Association
- San Diego Workforce Partnership
- Urban League of San Diego County

March 6, 2012

Mary K. Shallenberger, Chair  
California Coastal Commission  
45 Fremont Street, Suite 200  
San Francisco, CA 94105-2219

Re: SANDAG proposed 1-5 North Corridor Improvement Project

Dear Ms. Shallenberger –

The San Diego Business Leadership Alliance (BLA) is comprised of 35 business, economic development and trade organizations, representing over 17,000 business members and several thousand employees in the County of San Diego. BLA is strongly supportive of the SANDAG North Coast Corridor Program.

The planned North Corridor improvements will improve an important transportation corridor in our County that serves employees driving and taking transit to and from work, visitors coming to the San Diego region, and goods movement - valued at \$89 billion annually - into and out of our County. This vital transportation infrastructure improvement program represents a \$6.5 billion investment in the San Diego region and will create thousands of much needed jobs over the next decade.

For all of these reasons, and because the North Corridor Plan reflects implementation of a region-wide transportation plan that represents years of planning, public outreach and consensus building, BLA urges the Coastal Commission to support this critical transportation infrastructure project.

Sincerely,

**Bill Geppert**  
**BLA Co-Chairman**

**Ben Haddad**  
**BLA Co-Chairman**

cc: California Coastal Commissioners  
Charles Lester, Executive Director  
Sherilyn Sarb, Deputy Director, San Diego Coast District

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CALIFORNIA  
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SAN DIEGO COAST DISTRICT

*at hearing*

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April 28, 2014

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CALIFORNIA  
COASTAL COMMISSION  
SAN DIEGO COAST DISTRICT

Sherilyn Sarb  
Deputy Director, San Diego Coast District Office  
California Coastal Commission  
7575 Metropolitan Drive, Suite 103  
San Diego, CA 92108

RE: North Coast Corridor Project

Dear Ms. Sarb:

On behalf of Biocom, I am writing to express my support for the Public Works Plan/Transportation and Resource Enhancement Program for the Interstate 5 (I-5) North Coast Corridor (NCC) Program in San Diego County.

Biocom is the largest regional life science association in the world, representing over 600 member companies in Southern California. Many of our member companies are located in the Golden Triangle area and along the I-5 North County corridor and employ thousands of skilled workers and educators in the biotechnology, pharmaceutical, and medical device sectors. It is my hope that the NCC Program's transportation investments, including the construction of new Express Lanes on I-5, double tracking the coastal rail corridor to improve rail transit efficiency, and environmental and coastal access improvements, will improve circulation, reduce travel times, and relieve congestion in the corridor.

An efficient transportation system is an important part of business attraction and retention. The Public Works Plan/Transportation and Resource Enhancement Program plans to deliver transportation solutions and preserve our coastal environment. Biocom supports transportation investments such as the NCC Program in order to provide traffic relief and transportation alternatives to our members' employees.

Biocom appreciates SANDAG and Caltrans working together on this comprehensive regional transportation improvement project and encourages your approval.

Sincerely,

Joe Panetta  
President & CEO  
Biocom

## Buhr, Gabriel@Coastal

---

**From:** leon juskalian <drbig@me.com>  
**Sent:** Thursday, April 24, 2014 2:25 PM  
**To:** Buhr, Gabriel@Coastal; lshaffer@encinitasca.gov  
**Subject:** I-5 ENCINITAS

dear mr. buhr,

i have lived here since 1998, having moved from san diego. in 1975, whilst studying for my master's in urban/regional planning at u. of colorado(1971), i was on the exec. board of sierra club, rocky mtn. chapter. i am still a member, but disagree w/s.d. chapter on 3 main issues.

1. i was/am still in favor of triple fencing at the mexican border.
2. i am totally in favor of the new gas-fired encina plant in carlsbad.
3. i am anxiously waiting for the widening of I-5 from manchester exit in cardiff to camp pendleton.

back in 2007 or 08, i remember attending a sandag hearing at paul ecke school, saying construction would begin in 2009! what happened?

since i moved here, so. of manchester has be improved 3 times, creating a bottleneck at manchester. then frustrated drivers exit there and drive east on manchester, till it curves north, becoming el camino real.

“ “ “ , thousands of homes have been built north of us in carlsbad, elfin forest, san marcos(all inland areas). when these new residents encounter congestion, they bail between 3-6 p.m.

this has made el camino a 6 lane freeway. i drive from my house north 2 miles to the health club, near the post office, i track these cars to home depot, where they “get in line”(-right lane) to make the turn east onto olivenhein road, which then curves north, becoming rancho santa fe road.

95% of the cars on el camino go through this exercise daily, leaving gridlock for us locals, who wish to do errands.

the sierra club doesn't take this into consideration, nor the pollution created by stop/go driving on the I-5 during rush hours, by cars designed to go 65 mph! we're not all going to bicycle to san diego anytime soon.

so please take all that i've stated into consideration and approve this project soon. just opening up the tidal flow of the lagoons alone, justifies this project.

p.s. i have not worked in 4 years, and have no financial interests to gain: thanks for listening.

sincerely,

leon juskalian  
[drbig@me.com](mailto:drbig@me.com)  
312 harrisburg dr  
encinitas, ca 92024  
(760)944-0072



California State University  
SAN MARCOS

Office of  
the President

Office of the President California State University San Marcos 333 S. Twin Oaks Valley Road San Marcos, CA 92096-0001  
Tel: 760.750.4040 Fax: 760.750.4033 pres@csusm.edu www.csusm.edu/president

April 11, 2014

California Coastal Commission  
c/o Sherilyn Sarb  
Deputy Director, San Diego Coast District Office  
California Coastal Commission  
7575 Metropolitan Drive, Suite 103  
San Diego, CA 92108

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APR 17 2014

CALIFORNIA  
COASTAL COMMISSION  
SAN DIEGO COAST DISTRICT

Dear Deputy Director Sarb:

I am writing to express my support of the North Coast Corridor Project – a comprehensive package of rail, transit, highway, environmental and coastal access improvements along San Diego County's North Coast Corridor.

Upgrading the North Coast Corridor is critical in helping this region accommodate the education, work, and lifestyle demands of our growing communities. California State University San Marcos (CSUSM) increasingly serves as the region's public four-year university, attracting a growing number of commuter students, employees and community partners from the coastal and south county regions. In fact, nearly all of the University's new freshmen and transfer students come from San Diego and southwest Riverside counties, and 85% of our graduates remain in this region, building our workforce and fueling our economy. Indeed, Cal State San Marcos has become a hub for community activities and meetings, research and scholarship, partnerships with industry from across the region and a number of activities that impact the economic, social and cultural development of the region; clearly, efficient regional transportation is vital to sustaining and growing CSUSM's future.

CSUSM invests in and supports a number of initiatives that promote alternative modes of transportation. Student use of the Sprinter has grown exponentially each year since its inception. However, the reality is that many of our students have family care or work requirements that require them to drive to campus. Roughly half our students, faculty and staff commute over 10 miles to campus. The North Coast Corridor Project will invest more than \$6 billion in San Diego's regional economy and support a balanced approach to transportation demand management for the region. The project includes the construction of new Express Lanes in the I-5 corridor for carpools, vanpools and public transit, double tracking the coastal rail corridor and enhancing COASTER service, and more than \$200 million in environmental preservation and coastal access improvements. CSUSM is an active member in

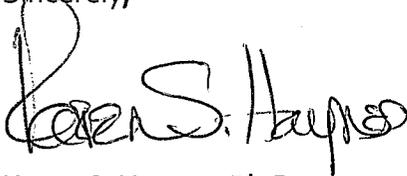
The California State University

Bakersfield | Channel Islands | Chico | Dominguez Hills | East Bay | Fresno | Fullerton | Humboldt | Long Beach | Los Angeles | Maritime Academy  
Monterey Bay | Northridge | Pomona | Sacramento | San Bernardino | San Diego | San Francisco | San Jose | San Luis Obispo | San Marcos | Sonoma | Stanislaus

the CSU Council on Ocean Affairs, Science and Technology (COAST) and appreciates the inclusion of environmental preservation in the project.

The North Coast Corridor Project will provide a boost to our regional economy and a much needed connection to Cal State San Marcos from our partners and students in the coastal and south county areas. Therefore, Cal State San Marcos lends its support in favor of the North Coast Corridor Program.

Sincerely,

A handwritten signature in black ink that reads "Karen S. Haynes". The signature is written in a cursive style with a large initial "K" and "H".

Karen S. Haynes, Ph.D.  
President

Cc: Hon. Greg Cox, County Supervisor

**Buhr, Gabriel@Coastal**

---

**From:** Christian Marcotte <scoob@mindinmotiontech.com>  
**Sent:** Saturday, February 15, 2014 11:07 AM  
**To:** Buhr, Gabriel@Coastal  
**Subject:** Feedback on the proposal to add another (HOV) lane to I-5

Hello.

My name is Christian Marcotte and I live in Encinitas.

Lisa Shaffer informed us in her latest newsletter that we are invited to submit our comments to the Coastal Commission staff regarding the proposed addition of a lane on I-5.

Here are my comments.

I am not in favor of a highway widening. It increases traffic, noise, pollution, is very ugly and very expensive. There of course the argument that adding lanes to a freeway never really relieves traffic, it only increases volume until the same chocking point is achieved.... But I don't know if this is myth or reality.

What I would LOVE to see instead is a light rail ([http://en.wikipedia.org/wiki/Light\\_rail](http://en.wikipedia.org/wiki/Light_rail)) system (similar to the lovely electric trains serving the downtown San Diego and the I-8 corridor. I could see something running alongside the freeway (where there would otherwise be a extra lanes). A service that runs from San Diego to Carlsbad / Oceanside, that would run FREQUENTLY, be cheap and have a carpool parking lot at milestone stations. The Coaster is NOT a solution. It is slow, expensive, runs infrequently. Let us put our resources where they will truly be scalable (you can always add more wagons or run more frequently if you need to increase capacity) and have a POSITIVE impact on the environment (global warming, noise pollution etc...).

I understand that there are plans to double the tracks of the existing rail corridor and increase the frequency of trains. But as stated earlier, the coaster is an ugly solution. Increasing the frequency of trains will increase the noise pollution from the train. Not a pleasant experience for those living/working in proximity of this beast. However, given the choice between more highway lanes (HOV or otherwise), I would pick the train, ugly/loud/expensive as it is, any day!

Thank you!  
- Christian

-----  
Christian Marcotte  
Chief Technologist  
(831) 621-3788

Mind In Motion Technology  
[scoob@MindInMotionTech.com](mailto:scoob@MindInMotionTech.com)  
[www.MindinMotionTech.com](http://www.MindinMotionTech.com)

EXHIBIT NO. 28
APPLICATION NO. <b>PWP-6-NCC-13-0203-1</b>
Letters of Opposition
Page 1 of 20  California Coastal Commission

## Buhr, Gabriel@Coastal

---

**From:** bev roc <bevroc1@gmail.com>  
**Sent:** Sunday, February 16, 2014 8:40 AM  
**To:** Buhr, Gabriel@Coastal  
**Subject:** adding freeway lanes

I feel that adding freeway lanes is a bandaid approach. I have lived in the North County area long enough to have seen that approach taken in the past on many of our existing freeways only to experience the currently predictable bumper to bumper commutes that we all have. San Diego county will only continue to grow and the need to travel the coastal corridor will increase faster than lane widening can keep up with. It is not the true answer.

Perhaps taking those funds that would have been used for the HOV lane and pressing forward on a mass transit that works would be a better idea. Running a fast and efficient rail along side the freeway would be my 1st choice. I understand that there would need to be a plan for intercity transit at each point. With some further development of a system similar to downtown's San Diego's Trolley and with the advent of the car and bike sharing companies it could be done.

The coaster just misses since it doesn't run as often or as late as needed. To arrange an evening out in SD for a ballgame or theatre or just to eat, I would need to plan everything to be back at the station before 9:00. Too early if I work until 5:00 on a Friday. So I am then one of those same cars jamming the southern route in bumper to bumper traffic for an hour rather than 35 minutes. Please don't add another lane. Please start some serious mass transit beyond busses.

Thank you for allowing me to share my opinion.

Beverly Rochelle  
Encinitas resident for 25 years and North County resident for 55 years.

**Buhr, Gabriel@Coastal**

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**From:** Arnold Markman <arnoldmarkman@cox.net>  
**Sent:** Thursday, February 20, 2014 8:15 PM  
**To:** Buhr, Gabriel@Coastal  
**Subject:** railroad corridor

Dear Ms Buhr:

I am a Board Certified physician specializing in Occupational and Environmental Medicine who has lived in Encinitas, just east of the railroad right of way for 35 years. I am writing this e mail to give my input on the issues involving our railroad corridor.

My concern is the increasing noise pollution from the trains that run through Encinitas. Where I live, when an Amtrak passes through and the motorman sounds his horn, the noise level borders on being unbearable. Noise at this level permanently damages hearing. Research also has shown that there are many non-auditory effects of noise including high blood pressure, stress, increased susceptibility to other toxic exposures, and poorer learning in children ( reminder: there are two elementary schools that border the railroad right of way in Encinitas).

I urge you to improve the livability of Encinitas and to take action on this issue. Your involvement becomes more urgent as rail traffic steadily increases.

There are thousands of people who live within a few hundred feet of this busy rail corridor who are adversely effected by the loud noise. To preserve our coast not only requires clean beaches and water and beach access but also the serenity that comes from living here.

Sincerely,

Arnold Markman MD

## Buhr, Gabriel@Coastal

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**From:** Jan Mail <janhillmail@gmail.com>  
**Sent:** Tuesday, April 01, 2014 12:20 PM  
**To:** Buhr, Gabriel@Coastal  
**Subject:** I-5 widening in San Diego County

I submitted the text below to the Encinitas City Council. It was suggested I also convey my concerns to you.

Thanks for your consideration.  
Jan Hill, Encinitas resident

It makes no sense to keep buying up land to build more freeway lanes. It's costly to purchase the land, especially here where land is so expensive. It's costly to maintain the extra lanes. It wastes our precious limited land that could be used for better purposes. It adds to the blighted look of our communities. Do we really want to continue our steady march to becoming another Los Angeles?

Instead, planners should consider the use of reversible lanes. This method uses existing lanes to better manage traffic during rush hour, special events, crash aftermath, and law enforcement activity. It helps to reduce gas consumption and emission pollution because vehicles are not stalled in traffic for long periods of time. Just imagine all the time commuters could be spending with their families instead of being in traffic for 1.5 hours when the trip should take no more than 30 minutes!

One of California's best-known examples of reversible lanes is on the Golden Gate Bridge. Some states with reversible lanes are Alabama, Alaska, Georgia, Kentucky, Indiana, Maryland, Nebraska, New York, Ohio, Pennsylvania and Texas. Reversible lanes are also used in other countries including Australia, Bermuda, Canada, England, Germany and Wales.

For information on reversible lanes, please do online searches for "reversible lanes" and "reversible lane examples." Here are just a couple.

[http://ops.fhwa.dot.gov/freewaymgmt/publications/frwy\\_mgmt\\_handbook/chapter8\\_01.htm](http://ops.fhwa.dot.gov/freewaymgmt/publications/frwy_mgmt_handbook/chapter8_01.htm)

To best use existing facilities, a number of jurisdictions have instituted reversible-lane flow (also known in Europe as *tidal* flow lanes). Reversible lanes change the directional capacity of a freeway to accommodate peak directional traffic demands. To warrant reversible lanes, peak-period traffic volumes should exhibit or anticipated to exhibit significant directional imbalance (e.g., 70/30 percent, Reference 40). If warranted, reversible lanes can use right-of-way more efficiently and economically.

This link doesn't seem to work, so try entering the following in your search box:  
[http://filebox.vt.edu/users/rkishore/pdf/paper\\_ates\\_raj.pdf](http://filebox.vt.edu/users/rkishore/pdf/paper_ates_raj.pdf)

Reversible lanes are a type of managed lanes which is assumed by Institute of Transportation Engineers to be one of the most effective methods to increase peak-hour capacities of roadways [5]. It is defined as the type of roadway in which one or more lanes or lane-segment reverses its flow direction to accommodate changes in direction of peak traffic flow [6]. Lane reversal technique has been used for over 75 years to mitigate congestion problems in various scenarios which can be grouped into three main needs: unbalanced peak- hour traffic volumes, planned events and emergency evacuations.

Jan Hill  
Encinitas resident

**Buhr, Gabriel@Coastal**

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**From:** Laurie Baum <laurie@lauriebaum.com>  
**Sent:** Thursday, April 17, 2014 10:03 PM  
**To:** Buhr, Gabriel@Coastal  
**Cc:** mstrong@encinitasca.gov  
**Subject:** Manchester Interchange Park-n-Ride

To: Gabriel Buhr  
California Coastal Commission

Re: Manchester Interchange Park-n-Ride

Dear Mr. Buhr,

Given the fragility of the San Elijo Lagoon, its status as one of the last places of open space and wide open vistas in Encinitas, potential run-off into the lagoon from the parking lot, and the importance of preserving what is left of agricultural land as a legacy for future generations, please take the considerate step of preventing the placement of the proposed Park-n-Ride lot on Manchester Avenue. This parking lot will more effectively serve commuters if it is located in a more commercial area, where it will provide more access to commuters to retail shops and services.

Thank you for your kind consideration.

Sincerely,

Laurie Baum, MSW  
17-year Encinitas Resident

**Buhr, Gabriel@Coastal**

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**From:** Carol Wolf <seawolfbeach@gmail.com>  
**Sent:** Monday, April 21, 2014 10:54 AM  
**To:** Buhr, Gabriel@Coastal  
**Cc:** mstrong@encinitasca.gov; council@encinitasca.gov  
**Subject:** Please don't put the proposed Manchester Avenue Park-n-Ride near San Elijo Lagoon

Please support the natural beauty of the San Elijo Lagoon by NOT placing the proposed Manchester Park-n-Ride near this preserved open space. Please put it in a commercial area where commuters would have access to retail and other commercial services. It would be better to locate it away from Encinitas because it is an incursion upon our community character. It would impinge upon the fragile eco-system and upon what remains of open space. It would impede wide open natural vistas and take away agricultural land that would be a legacy to future generations.

Thank you,

*Carol Wolf*  
858-245-9916  
[SeaWolfBeach@gmail.com](mailto:SeaWolfBeach@gmail.com)

**Buhr, Gabriel@Coastal**

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**From:** Penny Walls <walls.penny25@gmail.com>  
**Sent:** Wednesday, April 23, 2014 3:49 PM  
**To:** Buhr, Gabriel@Coastal  
**Subject:** Proposed Manchester Ave. Park and Ride

Please don't create a park and ride in this area. It's wonderful to have the wide open vistas of the lagoon, and there is already so much traffic in Encinitas, please don't center a giant lump of cars on Manchester. Air quality, some quiet, and the natural sanctuary of the lagoon are all so important.

Thank you for your consideration of this.

Penny Walls

**Buhr, Gabriel@Coastal**

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**From:** Don Lee <drsurf1@cox.net>  
**Sent:** Thursday, April 24, 2014 10:18 AM  
**To:** Buhr, Gabriel@Coastal  
**Subject:** Manchester park n ride

Joni Mitchell said it 40+ years ago....they will pave paradise and put up a parking lot. NO PARK AND RIDE PLEASE!

## Buhr, Gabriel@Coastal

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**From:** McCoy, Rhonda <rmccoy@ucsd.edu>  
**Sent:** Monday, April 21, 2014 9:24 AM  
**To:** Buhr, Gabriel@Coastal  
**Cc:** mstrong@encinitasca.gov; council@encinitasca.gov  
**Subject:** Pls. pt the Manchester Park-n-Ride in a commercial area ONLY

Dear Garbriel Buhr

Please

- Support creating the proposed Manchester Avenue Park-n-Ride in a commercial area where commuters would have access to retail and other commercial services.
- Request that the Manchester Avenue Park-n-Ride not be located in our community because:
  - It's yet another incursion upon community character.
  - It impinges upon the fragile eco-system and upon what remains of open space.
  - It impedes wide open natural vistas.
  - It will take away agricultural land that would be a legacy to future generations.

Rhonda McCoy

Encinitas resident for over 25 years.  
760-670-7501

**Buhr, Gabriel@Coastal**

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**From:** Michael Wohlfeld <michaelnora@gmail.com>  
**Sent:** Monday, April 28, 2014 2:41 PM  
**To:** Buhr, Gabriel@Coastal  
**Cc:** mstrong@encinitasca.gov  
**Subject:** Manchester Avenue Park-n-Ride

Dear Mr. Buhr,

- Support creating the proposed Manchester Avenue Park-n-Ride in a commercial area where commuters would have access to retail and other commercial services.
- Request that the Manchester Avenue Park-n-Ride not be located in our community because:
- It's yet another incursion upon community character.
- It impinges upon the fragile eco-system and upon what remains of open space.
- It impedes wide open natural vistas.
- It will take away agricultural land that would be a legacy to future generations.
- Please let us all work to create harmony and maintain as much of the natural beauty that attracts so many here each year.

Thank you for your time.

Sincerely,

Michael & Nora Wohlfeld

760-436-1842

Encinitas Residents since 1979

*“Natural forces within us are the true healers of disease.” Hippocrates*

**"In God We Trust"**

## Buhr, Gabriel@Coastal

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**From:** Philip Marks <philip.c.marks@gmail.com>  
**Sent:** Wednesday, April 30, 2014 11:20 AM  
**To:** Buhr, Gabriel@Coastal  
**Cc:** mstrong@encinitasca.gov  
**Subject:** Please NO on Manchester Avenue Park-n-Ride

Greeting Mr. Buhr,

My name is Philip Marks and I'm a resident of Encinitas. I'm 28, I work as a nurse at Palomar Medical Center, and I plan on raising a family here in this beautiful area. I want to take a quick moment to urge you to consider the detrimental impact the proposed Manchester Avenue Park-n-Ride will have. The San Elijo Lagoon is so unique for this part of San Diego- not only to we have the beach, but we have a beautiful lagoon to explore as well. I hope to one day take my children here, and my hope is it can remain in its natural state, without the incursion of development. This important open-space area and fragile eco-system must be given the respect it deserves. I encourage the proposal to be revised to relocate the development to a commercial area. This will not only protect the legacy of future generations, but support local businesses with more foot traffic.

Thank you for your time and consideration,

Philip Marks

**RECEIVED**

California Coastal Commission  
December 12, 2013

**DEC 12 2013**

45 Fremont Street  
Suite 2000  
San Francisco, CA 94105-2219  
FAX (415) 904-5400

CALIFORNIA  
COASTAL COMMISSION

Managed Lanes equipped freeways are proliferating at high expense in California and the Nation with citations about reduced carbon footprint, energy and land use reductions. Proof offered cites more travelers in the toll for SOV Express Lanes compared to the General Purpose lanes, and higher vehicle occupancy.

While correct and laudable, the detriments to overall total freeway numbers of vehicle, and people throughputs are not explained. Particularly at peak hours of highest demand where highest total freeway capacity is needed, and environmental impact should be minimized.

The enclosed analysis, "Managed Lanes' Impact on the Environment and Congestion" using performance from actual typical freeways, shows superiority for the same number of Freeflow lanes induced to operate at feasible uniform smooth flow for all lanes.

Areas of Freeflow superiority.

Total freeway vehicle flow.

Total people flow per fuel unit.

Fuel MPG .

CO2 per mile.

For direct comparison with favorable citations about managed lanes in : "Managed Lanes in Los Angeles County", this report uses the same baseline data for mpg, and CO2/mile for the analysis. The conclusion is considerably different when the total freeway including all lanes and performance factors is examined.

Extra costs to build and operate managed lanes are not examined.

I realize managed lanes funds from some sources may be withheld for new or expanded freeways. Thus additional trade off analysis is needed to evaluate the less costly Freeflow design considering fund availability and possibility of additional lanes.

Also extension of the analysis is desirable with additional data including improved fuel and emissions for future urban personal public transportation systems.

Hopefully these initial indicators will prompt a thorough review of managed lanes commitments in the light of what are less costly alternative providing better performance for travel and for the environment.

Walter B. Brewer

[catcar38@verizon.net](mailto:catcar38@verizon.net)

Why am I interested in this, I live now in Western NY, near Buffalo? But for about 40 years I lived and worked in So. California, the last ten in San Diego, when I retired.

I became concerned with the California regions' inability to cope logically with urban travel needs, so have devoted more than a dozen years to identifying alternative approaches.

I'm an MIT degreed aeronautical engineer. Most of my career I has been heavily involved with system trade offs and analyses of very complex military missile and space projects.

I retired as a Vice President of The Aerospace Corp. in El Segundo, a Research Center with National technical management responsibilities in those fields.

In transportation, I am concerned about lack of facts-based rational in allocation of efforts.

California Coastal Commission      December 12, 2013

For Your General Information.

MANAGED LANES' IMPACT ON THE ENVIRONMENT & CONGESTION

The numerical evidence about Managed Lane equipped freeways' deficient performance as attached to this message, I believe is sufficient for the Coastal Commission to not approve such facilities, North Coast I-5 for example, within its jurisdiction.

These deficiencies are evident when managed lanes equipped freeways are compared to same number of lanes in Freeflow, under modern monitoring and control at generally accepted 2,000 vehicles/lane/hour. The data below includes "the rest of the story" for total freeway performance. Typically, arguments for managed lanes are based primarily on higher volumes and vehicle occupancy in the express lanes compared to the GP lanes without quantifying the total freeway throughput. The LA County presentation, Ref. 1, is an example. For direct comparison with its managed lanes favorable message, its illustrative conservative numerical fuel and CO2 values are used in this evaluation. In short: Typically at high freeway demand, a majority of people are at vehicle speeds too high for efficiency in the underused HOT lanes. Nearly half are at speeds, or non smooth flow, at well below efficient speeds in the crowded GP lanes. See Picture.

Actual So. California and Florida freeway examples in Table 1 are used for 6 lanes, one direction comparisons. The peak demand hour total freeway MPG and CO2 Grams/mile are used as supporting summary with emphasis on the negative environmental impact created by managed lanes at high demand:

Environment Quality, people flow X MPG is illustrated further in the Discussion section.

	SR-91	I-95	I-110	Freeflow
Vehicle Flow	6464	9069	7946	12000
MPG	19.5	23.2**	15	22
CO2 Gms/Mi	565	498**	660	510
Environment	202	286**	189	304
Quality (1000)				

\*\* See text later

CAPACITY DEFICIRNCIES:

Average lane flow rate is only 53% to 76% of demonstrated free flow capacity. Total vehicle flows/hr range between 6464 and 9069 compared to 12,000 for the recommended alternative Freeflow design. HOT lanes below capacity to attract HOV and toll SOV users augment GP lanes congestion from this overflow.

Environmental Impact: Higher emissions at off optimum and non-steady flows. Increased land use to meet travel demand

FUEL/EMISSONS ENVIRONMENTAL DEFICIENCIES:

Typical excess gallons fuel used at peak demand hour rate for same vehicle miles: 4,100/+13% To 15,200/+47% compared to Freeflow.

\*\* Despite its 2,029 vehicle/hr capacity deficiency, I-95 illustrates how a small fuel savings of 1,186/6% gallons for the same vehicle miles traveled. CO2 level averages 498 grams/mile.

This I-95 favorable performance is operational superiority proof for the recommended Freeflow design. Moderate peak demand produces speeds in the "flat" efficient range, generally 35 to 60 mph according to EPA/USDOT data. (Ref.2). HOT lanes/GP lanes speeds are 61/41 mph respectively.

Replacing HOT lanes with 2,000 capacity flow at ~60 mph, and bringing the other 4 lanes to ~60mph and similar mpg, the I-95 evidence provides confidence of environmental advantage for freeflow 12,000 vehicles.hr.

Thus the question; at its peak hour demand level, of why I-95 has gone to the expense and complexity of managed lanes?

Total freeway mpg values provide simple summary illustrations as noted above:

	SR-91	I-95	I-110	Free flow
MPG	19.5	23.2	15	22
CO2 ms/Mi	565	498	660	510

SUMMARY:

At peak demand hours, where highest capacity is needed, at large expense and complexity, managed lanes, all factors evaluated, are unnecessarily detrimental to air quality, fossil fuel consumption, and increase congestion.

#### DISCUSSION:

Without managed lanes barriers, shoulders, etc, 2 addition conventional lanes can be added; 7 each direction in the same total right of way to further reduce wasteful congestion.

Agreeing with the SANDAG and others' slogan; "Move people not just cars", but for the HOV/SOV mixes encountered, analysis based on occupancy can be uncertain. Some total people throughput estimates/hour however, for the cases above: HOT lanes 2.2/veh. GP lanes 1.05/Veh.

SR-91	I-95	I-110	Free flow
-------	------	-------	-----------

10,630	12,850	12,500	13,000
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Environmental value parameter adjusting for fuel used in each lane set;  
people/hr X MPG: (1,000s)

202	296	189	304
-----	-----	-----	-----

+51%	+3%	+61%	Freeflow advantage.
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While increased people/vehicle values are desirable they do not reflect the environmental "price" for off optimum utilization in managed lanes at high demand. The added cost and complexity does not warrant managed lanes, and their environmental detriment, if achieving only about the same total people throughput as Freeflow..

The HOT lanes and separate access are attractive to bus operators. Uniform speed Freeflow lanes also permit the valuable predictable travel time.

Freeflow lanes are adaptable to the various toll approaches, applied uniformly to all lanes. If needed, pricing applied to all lanes can control to lower speeds for more energy and emissions reduction, or by hour of day to smooth peaks.

For a one to one comparison with the LA County Managed Lanes presentation, Ref 1, as noted, its conservative values are used for this overall assessment. They will show significant future improvement without changing relative rankings. As an example, freeway mpg if EPA/USDOE values for just light vehicles; in order above: (Ref. 3)

SR-91	I-95	I-110	Freeflow
26.3	28.6	22.7	28

Higher total throughput means shorter delays at access ramps for the same demand. Priority ramp lanes for buses, etc can be arranged.

#### CONCLUSION:

Energy and emissions reductions come from steady vehicle operation in the speed band for most efficient clean operation.

Application of modern methods for speed and flow control, including ramp metering provide a more straightforward less complex way to achieve superior capacity with significant improvement to the environment.

Reference 1: Managed Lanes in Los Angeles County.

Reference 2: MPG For Speed.Com.

Reference 3: Real World Carbon Dioxide Impacts of Traffic Congestion.

Matthew Barth and Kanok Boriboonsoms

Walt Brewer

catcar38@verizon.net

Picture 1.

Managed Lanes' Impact on the  
Environment and Congestion.

California SR-91 Managed Lanes; High Demand

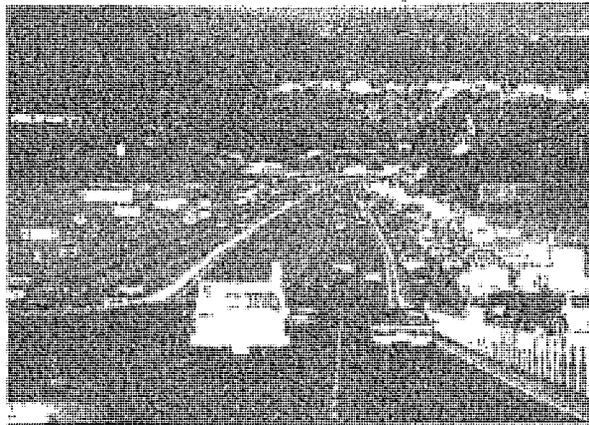


TABLE 1

TOTAL FREEWAY THROUGHPUT PERFORMANCE  
COMPARISONS

	SR-91	I-95	I-110	Freeflow
Topic	Orange Co.	Miani	LA	
Veh/Ln/Hr				
2 HOT Lanes	3343	2894	3620	4000
Speed/ MPG	59/23	61/21	75/15	60/22
4 Gn Purpose Lns	3121	6175	4326	8000
Speed/MPG	10/10	41/25	18/15	60/22
6 Lanes Total	6464	9069	7946	12000
Ave per lane	1077	1515	1324	2000
Ave. MPG	19.5	23.2	15	22
CO2 Ave. Gms/Mile	565	498	660	510
Excess Fuel, same				
FFlow miles, gallons	4139	+1186	15273	0
<45moh veh hrs delay	170	NA	133	0
Environment Quality	202	296	189	304
People/hr X MPG(1000)				
Fwy Occupants/Veh	2.1	1.5	1.7	1.15
to match Ff=1.15				

Sources: Caltrans PEMS,

LA County Managed Lanes Presentation

w.Brewer 12/13

## PUBLIC UTILITIES COMMISSION

320 W. 4<sup>th</sup> Street, Suite 500  
Los Angeles, CA 90013



February 11, 2014

Gabriel Buhr  
California Coastal Commission  
[Gabriel.Buhr@coastal.ca.gov](mailto:Gabriel.Buhr@coastal.ca.gov)

**SENT VIA E-MAIL**

Re: PWP/TREP and Railroad Crossing Safety

Dear Mr. Buhr:

The California Public Utilities Commission (CPUC) is the state agency with jurisdiction over railroad crossings. This letter is a response from CPUC's Safety and Enforcement Division staff regarding the "Interstate 5 North Coast Corridor Public Works Plan/Transportation and Resource Enhancement Program" (PWP/TREP) for the North Coast Corridor in San Diego County.

There have been a number of collisions between trains and the public along this corridor. The long-term plan should consider additional investment to provide safe crossings of the railroad tracks. Such investment should address not only new crossing locations, but significant safety improvements at existing crossings.

Current conditions present safety concerns. There are approximately 15 at-grade railroad crossings between Oceanside and Del Mar. There are a many other crossing points used by the public that are not authorized. The railroad corridor under review has passenger trains traveling at up to 90 MPH. Many pedestrians and cyclists use the crossings for local, beach, and rail station access.

Over time, there may be an increase in safety concerns along the railroad corridor due to various factors:

- Additional tracks at crossings.
- More trains traveling through the crossing.
- Increases in train speeds.
- General policies (public transit, smart growth) that increase the number of people at the crossings.

To address the safety concerns at the railroad crossings, there should be a plan to fund improvements.

- There should be a stated goal to reduce the number of at-grade mainline railroad crossings. This is the state-level policy of CPUC, and is consistent with the federal policy of the Federal Railroad Administration. This should be pursued through construction of grade separations to replace existing crossings to the extent feasible.

EXHIBIT NO. 29
APPLICATION NO. PWP-6-NCC-13-0203-1
General Letters
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California Coastal Commission

Coastal Commission  
PWP/TREP and Railroad Crossing Safety  
February 11, 2014  
Page 2

- Where there is a significant need but no established crossing, a new grade-separated crossing should be considered to provide a safe, legal location for people to cross.
- Some at-grade railroad crossings will remain due to a variety of constraints. To address these crossings there should be a plan to develop and implement safety upgrades including pedestrian gates, channelization, and additional flashing light signals. (The particular improvements required at each location would should be evaluated by a diagnostic team review.)
- Channelization and vandal-resistant fencing should be considered at many locations along the corridor to encourage the use of established crossing points.

Thank you for consideration of these comments. Additional information about the CPUC Rail Crossings Engineering Section can be found on our website at: <http://www.cpuc.ca.gov/crossings/>

I can be contacted at [kevin.schumacher@cpuc.ca.gov](mailto:kevin.schumacher@cpuc.ca.gov) or by phone at 415-310-9807.

Sincerely,

Kevin Schumacher

Rail Crossings Engineering Section  
Safety and Enforcement Division

cc: John Haggerty, SANDAG  
Laynie Weaver, NCTD  
Gwendolyn Denny, Caltrans D11  
Anton Garabetian, CPUC