5.10 COASTAL ACT POLICY CONFLICT RESOLUTION

PWP/TREP Conflicts with Existing Local Coastal Program Policies

The PWP/TREP includes multiple projects, each of which includes multiple project elements. Some of the PWP/TREP project elements conflict with one (or more) of three recurring types of local coastal program (LCP) policies that govern development in the areas where those elements are proposed to occur. This is true within each of the five cities where the PWP/TREP projects would occur. As detailed in Chapter 5 (Sections 5.4, 5.5, and 5.9), the PWP/TREP improvements would result in fill of wetlands, impacts to Environmental Sensitive Habitat Areas (ESHAs), and impacts to agricultural resources potentially inconsistent with LCP policies requiring protection of such resources, and would also conflict with Coastal Act Sections 30233, 30240, and 30242.[1]

The Third-Party-Initiated Local Coastal Program Amendment Process for the PWP/TREP Project

As described in Chapter 1, Section 30515 of the Coastal Act establishes a procedure whereby anyone authorized to undertake a public works project that meets certain criteria can request that a local government amend its LCP to make the proposed PWP/TREP approvable. The North Coast Corridor (NCC) PWP/TREP meets the criteria for this process. The PWP/TREP projects are public works projects necessary to meet the needs of the entire NCC and beyond; and, thus, the needs of an area greater than that included within the certified LCPs for any of the NCC's four cities. In addition, project needs were not anticipated by the California Department of Transportation/San Diego Association of Governments (Caltrans/SANDAG) at the time the LCPs were before the California Coastal Commission (Coastal Commission) for certification. Caltrans and SANDAG can therefore invoke the third-party-initiated LCP amendment procedure provided for in Section 30515 of the Coastal Act. The eligibility of these projects for the 30515 process is further confirmed by California Streets and Highways Code Section 103(d)(1), which was adopted as part of California Senate Bill 468 (SB 468, a bill specifically related to this project) in 2011. Section 103(d)(1) states that the Legislature finds as follows:

> …it is the California Coastal Commission's role to apply a regional or statewide perspective to land use debates where the use in question is of greater than local significance. To that end, the California Coastal Commission is authorized to utilize Section 30515 of the Public Resources Code for the north coast corridor project and the process referenced in that section may be streamlined pursuant to agreement between the California Coastal Commission and those jurisdictions with an approved local coastal program.

Conflicts between Coastal Act Policies and the Conflict Resolution Process

The four sets of LCP Amendments (LCPAs) for the cities with certified LCPs (San Diego, Encinitas, Carlsbad and Oceanside) are now before the Coastal Commission as a combined package of LCPAs; however, the Coastal Commission cannot approve them without invoking yet another extraordinary Coastal Act procedure because the aspects of the PWP/TREP projects that conflict with the LCP policies of the four cities generally conflict with analogous Coastal Act policies as well (primarily Sections 30233, 30240, and 30242). Thus, under normal circumstances, the Coastal Commission could not certify the LCPAs that would be necessary to authorize the PWP/TREP, as the Coastal Commission could not find the proposed LCPAs consistent with applicable Chapter 3 policies. If the

[1] As discussed further in Section 5.10.3, the PWP/TREP may be found consistent with the Coastal Act as potential project impacts would occur for purposes the Coastal Act allows and/or because the PWP/TREP complies with Chapter 3 policies to the extent necessary to achieve the basic state goals specified in Sections 30001 and 30001.5 of the Coastal Act. However, it is acknowledged a different conclusion could be reached regarding the PWP/TREP's consistency with Coastal Act policies that limit uses within and impacts to wetlands, ESHAs, and agricultural resources. Accordingly, the PWP/TREP is evaluated pursuant to the Coastal Act conflict resolution policies in this section.

Coastal Commission were simply to deny the LCPAs, such action would necessarily result in the denial of the PWP/TREP.

However, as discussed in more detail in the following sections, although elements of the PWP/TREP are inconsistent with the Chapter 3 policies listed above, inherent in some of those same elements are aspects of them that would benefit coastal resources in a manner mandated by the Coastal Act. Accordingly, in the case of the NCC PWP/TREP, denying or modifying the PWP/TREP to eliminate the potential LCP and Coastal Act policy inconsistencies would conflict with other Coastal Act policies that mandate protection of coastal resources by 1) minimizing energy consumption and vehicle miles traveled (VMT) and protecting air quality; 2) concentrating new development in or adjacent to areas able to accommodate growth; 3) providing and enhancing transit and non-automobile circulation, and ensuring that the potential for public transit is provided for high-intensity uses; and 4) protecting and enhancing public access to the coast and enhancing shoreline and upland recreation areas in the Coastal Zone. Accordingly, approving the LCPAs and PWP/TREP for purposes of addressing the NCC's mobility, public access, and coastal resource needs is the approach that, on balance, is the most protective of significant coastal resources.

When the Coastal Commission determines that denial of a project due to its inconsistency with one or more Chapter 3 policies would result in Coastal Zone effects inconsistent with some other Chapter 3 policy(ies), and there is no alternative project that would achieve both the essential project purpose and the mandated benefits without conflicting with any Chapter 3 policies, the Coastal Commission has identified a conflict between Coastal Act policies that must be resolved. The Coastal Act mandates that such conflicts be resolved "in a manner which on balance is the most protective of significant coastal resources." PRC §§ 30007.5 and 30200(b). Because denial of the LCPAs would result in denial of the PWP/TREP, and denial of the PWP/TREP would result in Coastal Zone effects inconsistent with multiple Chapter 3 policies, the Coastal Commission is required to consider the conflict-resolution process in its consideration of the LCPAs pursuant to Coastal Act Sections 30007.5 and 30200(b):

> Coastal Act Section 30007.5
>
> 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)
>
> 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.

SB 468 once again provides guidance here, clarifying the Legislature's intent that this conflict-resolution process is appropriate in the case of the NCC PWP/TREP. California Streets and Highways Code Section 103(f)(2) (adopted as part of SB 468) states:

> Nothing in this section shall be construed to narrow the authority of the California Coastal Commission, at any stage of the approval or review process, to resolve policy conflicts pursuant to Section 30200 of the Public Resources Code.

In addition, project alternatives that were analyzed but rejected are presented in Section 5.10.2.4. These alternatives were removed from further consideration for a number of reasons including cost-effectiveness, logistical hurdles, impacts to environmental and coastal resources, or other compromising factors.

5.10.1 Potential Conflicts with Chapter 3 Coastal Act Policies

As summarized below, the PWP/TREP improvements are potentially inconsistent with LCP policies requiring protection of wetlands, ESHA and agricultural resources, and with Coastal Act Section 30233 (use limitations in wetlands), Section 30240 (use limitations in ESHAs), and Section 30242 (protection and preservation of agricultural resources). However, denying or modifying the PWP/TREP to eliminate these potential policy conflicts would conflict with other important Coastal Act policies, including Section 30253 (minimizing energy consumption and protecting of air quality), Section 30250 (concentrating new development in or adjacent to areas able to accommodate growth), Section 30252 (providing and enhancing transit and non-automobile circulation, and assuring that the potential for public transit is provided for high-intensity uses), and Sections 30210, 30211, 30212, 30212.5, 30213, 30223, 30252, and 30254 (protecting and enhancing public access to the coast and enhancing shoreline and upland recreation areas in the Coastal Zone).

5.10.1.1 PWP/TREP Potential Inconsistency with Coastal Act Policies Related to Wetland, ESHA and Agricultural Resources

Wetlands (Section 30233)

As described in Section 5.4, though several project elements integral to the PWP/TREP would enhance lagoon water quality and wetland resources (i.e. bridge optimization), the existing location of the developed NCC Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail and I-5 highway facilities would require that the 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. The PWP/TREP improvements include rail and roadway expansions which would increase the capacity of the subject transportation facilities and therefore potentially fall outside of the incidental public service improvement provision of applicable LCP policies and Section 30233 of the Coastal Act, which allows for wetland fill only for the limited uses enumerated under Section 30233(a)(4). As such, PWP/TREP improvements resulting in direct impacts to wetlands and found not to constitute incidental public services are potentially inconsistent with the limited uses permitted in wetlands as required by applicable LCP policies and Section 30233 of the Coastal Act.[2]

Environmentally Sensitive Habitat Areas (Section 30240)

As described in Section 5.5, a number of proposed PWP/TREP trail improvements, potential community enhancement projects (improvements for nature centers) and contemplated habitat restoration plans are considered resource-dependent uses and therefore are permitted uses in ESHAs. However, the majority of the PWP/TREP improvements consist of public facility improvements, which

[2] The PWP/TREP improvements may be found to constitute incidental public services. In *Bolsa Chica Land Trust v. Superior Court* (1999) 71 Cal.App.4th493, the Court of Appeal stated that roadway expansions may qualify as incidental public services but only when needed to maintain existing traffic capacity. However, this portion of the opinion was not necessary for the decision, and is *dicta*. Moreover, the facts in *Bolsa Chica* are distinguishable from the facts here: in *Bolsa Chica*, the road widening appears to have been necessary to accommodate a specific non-public project located in the Coastal Zone. Here, in contrast, the PWP/TREP improvements would be needed to serve the public regardless of whether additional development is approved in the Coastal Zone. As such, fill of wetlands resulting from proposed PWP/TREP improvements may be permitted pursuant to Section 30233(a)(4) of the Coastal Act as long as there is no feasible, less environmentally damaging alternative and feasible mitigation measures have been provided to minimize adverse environmental effects.

are not typically considered resource-dependent uses. As such, PWP/TREP improvements that do not consist exclusively of resource-dependent uses are potentially inconsistent with the limited uses permitted in ESHAs as required by applicable LCP policies and Section 30240 of the Coastal Act.

Agricultural Resources (Section 30242)

As described in Section 5.9, potential impacts of the proposed highway improvements to non-prime coastal agricultural resources would occur from direct displacement of agricultural lands or operations due to expanded or modified facility footprints and/or due to temporary displacement resulting from construction/assembly and construction staging areas that may be proposed within an area currently used for agricultural production. Proposed rail improvements would occur within the existing, developed rail corridor right-of-way and, therefore, impacts to any adjacent agricultural lands are not anticipated.

Although none of the affected agricultural parcels meet the Coastal Act standards for prime agricultural land, Coastal Act Section 30242 protects all other lands suitable for agriculture and prohibits their conversion to nonagricultural uses unless agricultural use is not feasible or conversion would preserve prime agricultural land or concentrate development in existing developed areas. As discussed in Section 5.2, most of the NCC is considered nearly fully developed with urban uses, with only 5% of the land area remaining potentially developable within the six NCC cities. Within the cities of Carlsbad and Encinitas, where the NCC PWP/TREP projects would result in impacts to agricultural lands protected pursuant to Coastal Act Section 30242, remaining developable land consists of only 6% and 7% of the cities' total land area, respectively. As such, all of the PWP/TREP improvements are located within an urban corridor, are located immediately adjacent to and contiguous with the existing transportation facilities in close proximity to existing developed areas, and as discussed in Section 5.2, would serve to concentrate future development within the urban corridor by supporting Smart Growth. However, the proposed PWP/TREP improvements would nonetheless result in conversion of portions of lands used for agriculture, resulting in impacts potentially inconsistent with applicable LCP policies and Section 30242 of the Coastal Act.

5.10.1.2 Denial of the PWP/TREP Would Be Inconsistent with Other Chapter 3 Coastal Act Policies that Mandate Resource Protection or Enhancement and is Fully Consistent with Such Policies

Denial of the PWP/TREP would conflict with several Chapter 3 Coastal Act policies. The PWP/TREP would extend transit service, facilitate Smart Growth, reduce congestion on the existing transportation system and provide and improve multimodal transportation in the corridor, all of which inherently serve to minimize energy consumption, VMT, and air quality impacts. The proposed mobility improvements would also protect, promote and enhance public access and recreational resources in the corridor as mandated by the Coastal Act.

Protection and Enhancement of Public Access and Recreational Resources (Sections 30210, 30211, 30212, 30212.5, 30213, 30220, 30223, 30252, and 30254)

The coastal access and recreation policies of the Coastal Act mandate that maximum public access and recreational opportunities in the Coastal Zone be provided for all people, consistent with the need to protect public safety, private property and natural resources. These policies further require that public facilities are to be provided throughout an area so as to mitigate impacts of overcrowding or overuse by the public of any single area, and that low-cost visitor and recreational facilities be protected, encouraged, and where feasible, provided. Furthermore, the Coastal Act requires upland areas necessary to support coastal recreational uses to be reserved for such uses, where feasible.

The PWP/TREP would eliminate existing impediments to coastal access opportunities for residents and visitors and would substantially benefit coastal access and recreation as mandated by Sections 30210, 30211, 30212, 30212.5, 30213, 30220, 30223, 30252 and 30254 of the Coastal Act.

Coastal resources in the corridor include the beaches, parks, lagoons, upland trails, and activity and recreational centers such as the Del Mar Fairgrounds and Racetrack. As demand for these resources continues to increase, the corridor improvements in the PWP/TREP will reduce or eliminate access impediments for residents and visitors alike. As described in Section 5.3, LOSSAN rail improvements would enhance access to the coast by increasing capacity and reliability, reducing travel time, and expanding service areas. Furthermore, as the primary means for the public to reach shoreline access points and recreational destinations in the corridor, I-5 serves as the gateway to the entire San Diego coastal area and provides a unique scenic recreational traveling experience. As travel demand in the I-5 highway corridor continues to increase, so does the existing coastal access impediment of traffic congestion. Proposed PWP/TREP improvements focusing on Express Lanes would give priority to ride-sharing, public transit, and single-occupancy vehicles (SOV) when capacity allows, while reducing overall congestion, protecting and facilitating public access, and funding transit investments. Both the I-5 highway and LOSSAN rail corridor projects focus on increasing the efficient movement of people, rather than just vehicles.

In addition, bicycle and pedestrian routes that are incomplete, not built to current standards or plans, or not available for access to coastal areas in the NCC would be upgraded and/or connected. Facilitating and encouraging non-automobile transportation with new and improved multimodal options will provide access to the coast and recreation areas with alternative modes of transportation (trails, bike paths, and transit). The PWP/TREP projects will add and improve sidewalks and bicycle lanes at I-5 highway and LOSSAN rail crossings throughout NCC communities, providing access to coastal amenities including Coast Highway, the Coastal Rail Trail, and the California Coastal Trail. The proposed improvements would improve not only travel choices, but also substantially enhance recreational opportunities in the corridor by completing linkages among communities and inland and coastal areas, and by providing access opportunities to the NCC's regionally significant natural resource and recreation areas. The PWP/TREP improvements for bicycle and pedestrian routes and trails would enhance an extensive network that provides access to the beaches, lagoons, open spaces, and coastal communities. In addition, the PWP/TREP establishes and constructs significant portions of a new I-5 North Coast Bike Trail—a continuous, non-motorized access trail along the length of the corridor that would complement the existing Coast Highway, Coastal Rail Trail, and the California Coastal Trail. Missing links of the long-planned Coastal Rail Trail within, adjacent to, or in close proximity to the LOSSAN rail right-of-way would also be implemented.

Denial or modification of the proposed PWP/TREP to fully resolve potential inconsistencies with the Coastal Act would eliminate PWP/TREP improvements, which would serve to affirmatively implement the coastal access and recreation policies of the Coastal Act. Denial or modification of the proposed PWP/TREP to fully resolve project inconsistencies would result in continued, adverse impacts to public access and recreational resources, which is inconsistent with the access and recreation policies of the Coastal Act. Absent the proposed PWP/TREP improvements, traffic congestion, travel delays, inadequate and infrequent transit facilities and services, and incomplete bike and pedestrian networks would continue to limit the ability for people to access the coast and coastal upland recreational areas.

Energy, Vehicle Miles Traveled and Air Quality (Section 30253)

Coastal Act Section 30253 requires that new development minimize energy consumption and VMT, and that new development be consistent with air pollution requirements.

Among the fundamental purposes of the PWP/TREP are extending transit service and providing the infrastructure needed to reduce SOV ridership, facilitate new transit service and Smart Growth, in order to reduce congestion on the existing transportation system and provide and improve multimodal transportation in the corridor. As described in Section 5.1, the proposed PWP/TREP improvements would increase alternative transportation choices to minimize VMT, which would reduce energy consumption and emissions (including greenhouse gases) and would be consistent with requirements of the San Diego County Air Pollution Control District or the California Air Resources Board. Proposed rail improvements would reduce service delays and therefore reduce energy consumption and emissions from idling locomotives. The rail improvements would also allow increased frequencies of operation and reduced travel times, which are correspondingly expected to increase ridership on LOSSAN passenger services. Though the proposed rail improvements would allow more rail trips, which would produce emissions, the rail improvements would likely reduce net overall emissions by reducing train idling time and shifting commuters from inefficient SOVs to rail travel.

Proposed I-5 highway improvements, including Express Lanes, would have the following benefits that would reduce energy consumption, VMT, and air emissions:

- Reduce congestion and indirect, inefficient routing.
- Increase high-occupancy vehicles (HOVs) and bus rapid transit (BRT). Proposed highway improvements would concentrate existing and anticipated increased demand in highway travel on HOVs and BRT, thereby improving the competitiveness of these modes versus SOVs. Additional auxiliary and Express Lanes, new and enhanced park-and-ride facilities, improved bicycle and pedestrian features, ramp metering, and an improved transit-highway interface would improve traffic conditions, encourage alternative transportation modes, and reduce energy consumption and emissions as more people carpool or choose other modal options.
- Reduce the demand for new parallel roads or parallel road expansions in the Coastal Zone. I-5 would continue to become more congested without improvements, which would likely cause demand for new parallel roads and exacerbate “spillover” traffic in local communities. The PWP/TREP would substantially reduce or eliminate demand for new parallel or arterial facilities in the Coastal Zone.

In addition, the PWP/TREP includes trails, bike paths, and pedestrian improvements that would facilitate non-motorized circulation across the transportation facilities throughout the corridor, which would further reduce VMT, energy consumption, and emissions.

Collectively, proposed transportation improvements would reduce traffic congestion and encourage alternative modes of travel to SOVs, which would lead to more efficient use of fuel, reduced idling times, and corresponding energy and air pollution reductions in the corridor. Transportation-related greenhouse gas emissions are in large part determined by the sum of individual travel choices, as well as other important factors like land use patterns and vehicle fuel efficiency. Additional Express Lanes, new and enhanced park-and-ride facilities offering electric vehicle charging stations, improved bicycle and pedestrian features, ramp metering, and an improved transit-highway interface would be anticipated to improve traffic conditions and encourage alternative transportation modes, and thus reduce energy consumption, as more people carpool or choose other modal options. By accommodating current and projected growth in traffic demand in the existing transportation corridor, indirect and inefficient routing on parallel roads would be reduced. Finally, the PWP/TREP includes a program of multimodal transportation enhancements including trails, bike paths, and pedestrian improvements that would facilitate non-motorized circulation across the transportation facilities throughout the corridor.

Denial or modification of the proposed PWP/TREP to fully resolve potential project inconsistencies with the Coastal Act would eliminate PWP/TREP improvements that are critical to protecting coastal resources by minimizing energy consumption and VMT as required by Coastal Act Section 30253. Travel demand in the corridor has degraded, and would continue to degrade the existing transportation infrastructure and services. Absent the proposed PWP/TREP improvements, existing and future deficiencies in the transportation facilities would result in reduced rail and auto reliability, increased travel time and corridor congestion, continued deficiencies in infrastructure for bicycle and pedestrian circulation, and increased energy consumption and corresponding air emissions associated with travel.

Concentrating New Development, Provision of Public Transit and Nonautomobile Circulation (Sections 30250 and 30252)

Coastal Act Section 30250 requires new development to occur in already developed areas, and areas with adequate public services to concentrate development away from undeveloped rural areas to avoid significant adverse effects, either individually or cumulatively, on coastal resources. Coastal Act Section 30252 requires the provision and enhancement of transit, including the potential for public transit for high-intensity uses, and encourages the development of non-automobile circulation.

As described in Section 5.2, both the proposed rail and highway projects would increase capacity for travel in the corridor thereby reducing travel times and improving quality of service. The corridor is largely built-out and constrained by natural borders including the Pacific Ocean to the west, Camp Pendleton to the north, the dense UTC/Golden Triangle and Downtown San Diego to the south and the I-15 travel shed to the east; therefore, the proposed improvements would not induce growth. Corridor population and travel are expected to increase over the next 20 years with or without the PWP/TREP improvements. The proposed PWP/TREP improvements are located primarily within existing transportation right-of-way and within a developed urban area and are intended to provide safe and adequate travel circulation for growth that is already planned and anticipated.

The NCC contains more than a dozen planned and potential Smart Growth areas that are located at each of the LOSSAN rail corridor stations, with the exception of Sorrento Valley Station. Smart Growth areas are planned for higher-density, mixed-use development that is pedestrian-friendly and transit oriented. However, Smart Growth must be supported by sufficient public services and when it comes to travel, successful Smart Growth efforts largely depend on the availability of a sustainable, multimodal transportation system that is interconnected with supportive development patterns. Accordingly, the Smart Growth development pattern planned for the corridor will be difficult to achieve without a robust multimodal transportation infrastructure that offers a variety of transportation choices to support it. The corridor's existing transportation infrastructure is currently inadequate to support Smart Growth policies, and the corridor is in need of an improved transportation system that includes cost-effective transit improvements, high-occupancy highway improvements, and expansion of bicycle and pedestrian facilities to improve access and mobility within the NCC and beyond. The proposed PWP/TREP transportation infrastructure is a critical element to supporting Smart Growth efforts to accommodate future development within existing communities by ensuring that roads, bike routes, sidewalks, and other facilities offer safe, appealing, and comfortable travel to transit and activity centers.

The proposed PWP/TREP includes transportation/transit infrastructure and service improvements intended to specifically serve the corridor's planned Smart Growth areas to help avoid increased traffic congestion, reduced mobility, and a deteriorating quality of life. Allowing approved and concentrated growth to occur in the already urban corridor, supported by sufficient public infrastructure and services, would limit development sprawl into undeveloped or rural areas. Proposed PWP/TREP improvements intended to increase capacity and ridership on the existing LOSSAN rail corridor, add Express Lanes on I-5 that allow for BRT and encourage HOVs, and develop bike lanes, sidewalks and trails would

encourage alternative modes of transportation in areas of concentrated urban growth where corresponding travel demands can be more readily accommodated. Focusing investment on these facilities would further support development of identified Smart Growth areas.

Section 5.2 further describes the multimodal transportation program that would be implemented with PWP/TREP improvements to enhance public transit, including the improvement of public transit for Smart Growth areas, and providing for non-automobile circulation. The proposed PWP/TREP multimodal program focuses on implementing transportation improvements that would facilitate various modes of transportation to meet regional needs including rail, bicycle, and pedestrian improvements. Planned improvements to the corridor would provide and improve public transit service access to the rail and highway facilities and provide for non-automobile circulation within the corridor.

The efficiency of a transportation system can be measured by the mobility benefits it provides in relation to its costs. Because each vehicle on a highway contributes to congestion, maximum efficiency is achieved when every vehicle is carrying the greatest amount of people or goods possible. The I-5 highway's Express Lanes and direct access ramps (DARs) would provide priority service for buses and other transit vehicles as well as HOVs. SANDAG 2012 regional modeling data show that vehicle loads in HOV lanes or Express Lanes average 2.13 people per vehicle, compared to 1.28 people per vehicle in general-purpose lanes, with each lane able to accommodate up to 2,000 vehicles per hour. Therefore, at capacity, Express Lanes can be expected to carry approximately 4,300 people per hour, while general-purpose lanes would carry 2,600 people per hour. This demonstrates the efficiency of Express Lanes in providing additional capacity with minimal footprint expansion: During peak conditions one Express Lane can carry nearly 70% more people than one general-purpose lane. Express Lanes, therefore, prioritize the movement of people over the movement of vehicles, and achieve both better mobility, and higher lane capacity, per dollar spent.

In addition, because the pricing for SOVs increases as traffic volumes on the Express Lanes increase, those lanes are managed to guarantee free-flow travel for HOVs and buses, resulting in predictable and reliable travel for those vehicles. Free-flow lanes are essential to the success of transit services like BRT and highway express buses. Express Lanes on I-5 would provide the necessary facility for these future mass transit modes, while revenue generated by paying SOV users of the Express Lanes could provide millions of dollars annually toward the support of transit services and other transportation improvements in the corridor.

Finally, the ability to manage the use and vehicle composition of Express Lanes provides great flexibility for changing the way they are used in the future. Changes could respond to shifts in technology, higher-density land use, travel patterns, travel demand, economic conditions, and other travel characteristics; examples include requiring higher vehicle occupancy, requiring greater use of transit in the lanes, or designating certain lanes as truck routes during certain times of day.

With regard to non-motorized transportation, the PWP/TREP incorporates a number of regional and community enhancements that would support bicycle and pedestrian activities within the corridor, including construction of a number of facilities critical to success of the I-5 North Coast Bike Trail and the Coastal Rail Trail. These facilities include smaller trail connections as well as larger trail portions intended to connect north-south trail segments. These sections within or in close proximity to Caltrans/SANDAG right-of-way would only be constructed with project approval and are lynchpin elements to the overall non-motorized transportation system. Proposed improvements to pedestrian crossings across the rail and highway facilities, and new or improved corridor bike and hiking trails would provide safe, non-automobile dependent routes to and from the Coastal Zone and to coastal recreation areas.

Denial or modification of the proposed PWP/TREP to fully resolve potential inconsistencies with the Coastal Act would eliminate PWP/TREP improvements, which would, on balance, provide for the greatest protection of coastal resources as is required by Coastal Act Sections 30250 and 30252. Absent the proposed PWP/TREP improvements, existing and future deficiencies in the transportation system would discourage anticipated and planned growth from occurring in the urban corridor and designated Smart Growth areas. Continued degradation in transportation infrastructure, reduced mobility, and associated environmental impacts result in a deteriorating quality of life, and encourage development outside the urban area for those seeking improved quality of life in undeveloped and rural areas. In addition, absent the proposed PWP/TREP improvements designed to enhance public transit on the LOSSAN rail and I-5 highway facility and provide for non-automobile circulation throughout the corridor, coastal resources would continue to degrade, particularly as it relates to maintaining and enhancing mobility in the corridor to provide access to coastal communities, the corridor shoreline and upland recreational resources.

5.10.2 Coastal Act Consistency Analysis

Balanced against the inherent coastal resource benefits of the PWP/TREP is the competing fact that components of the LOSSAN rail and I-5 highway improvements included in the PWP/TREP would affect wetlands, ESHAs, and agricultural resources. However, these impacts need to be evaluated in context as the PWP/TREP would positively affect coastal resources, including wetlands and ESHAs.

The project would minimize impacts to these resources to the extent feasible through proposed project design, including by avoiding the most sensitive resource areas. In addition, site-specific alternatives analyses for both rail and highway corridor improvements would ensure that impacts to wetlands, ESHAs, and agricultural resources are minimized and the least environmentally damaging feasible alternative adopted.

In addition, the PWP/TREP would enhance coastal resources over existing conditions. As discussed above, the PWP/TREP would improve conditions for coastal resources subject to an affirmative mandate by improving public transit and non-motorized transportation alternatives that reduce energy consumption and air emissions, resulting in improved air quality. The PWP/TREP would support Smart Growth and would implement improvements to the existing transportation system that eliminate existing impediments and enhance coastal access opportunities for residents and visitors. In addition (detailed in Sections 5.4 and 5.5 and summarized below), although PWP/TREP improvements would result in impacts to wetlands and ESHA, impacts would be minimized and mitigated to the maximum extent feasible. Finally, the project includes a Resource Enhancement and Mitigation Program (REMP; described in detail in Chapter 6B) that would both offset impacts to and enhance and improve upon water quality, wetlands and ESHA resources in the corridor as compared to existing conditions.

5.10.2.1 Wetlands

As discussed in Section 5.4, and based on recommendations contained within regional lagoon optimization studies, the proposed bridge replacement projects (highway and/or rail) at San Elijo, Batiquitos and Buena Vista Lagoons would improve hydrology and water quality and accommodate projected sea level rise. The design of these longer bridge spans with wider channels would remove fill and better convey flood waters and allow for improved tidal flushing, thus improving water quality and wetland habitat. In addition, the rail, bicycle, and pedestrian improvements would also minimize VMT on roadways, which would reduce roadway pollution and improve the quality of roadway runoff. Any reduction in VMT resulting from implementation of the multimodal improvements—in conjunction with the proposed highway improvements that would specifically target improved water quality on I-5

through implementation of treatment Best Management Practices (BMPs) such as bioswales, detention/retention basins, wet basins, first flush flow diversions and/or porous pavement as feasible—would reduce and better treat the pollutant burden in stormwater runoff from the PWP/TREP project area when compared to existing conditions.

PWP/TREP Resource Enhancement and Mitigation Program

The PWP/TREP includes a comprehensive REMP that would significantly improve water quality and wetland resources within the affected lagoon systems—beyond what is required to mitigate the project's impacts. The REMP includes strategically acquiring and implementing establishment and restoration opportunities (including wetland habitats), preserving existing ESHAs and lagoon buffers, and enhancing lagoon system function and values through optimized design of transportation facility infrastructure improvements that maximize hydraulic functions, minimize fill, improve wildlife connectivity and tidal circulation, and facilitate large-scale lagoon restoration efforts. Proposed improvements at currently constrained bridge crossings would significantly improve water quality and the ecological value of the lagoons and adjacent areas to better support sensitive habitat area, special-status species, and wildlife. Lengthened bridges and reduced footprints from structural supports would restore water and tidal circulation of lagoons, improve conveyance of stream flow and sediment transport from inland areas, facilitate passage of fish and other aquatic species, and restore natural shoreline processes, thereby enhancing biological productivity of marine resources. The REMP also establishes an endowment to increase the capacity for long-term maintenance of Los Peñasquitos and Batiquitos Lagoons through inlet dredging and maintenance, which is deemed necessary to sustain tidal and fluvial flows and to reduce sedimentation within the lagoons, thereby sustaining ongoing lagoon restoration efforts in perpetuity.

Policies, Design/Development Strategies and Implementation Measures

The PWP/TREP would ensure that marine resources are maintained, enhanced, and where feasible, restored. Project-level analysis for potential water quality and marine habitat impacts of proposed improvements would be conducted and subject to review during subsequent project-specific environmental and federal-consistency review, as applicable, to assess and identify all potential permanent or temporary impacts to water quality and marine habitats and any additional mitigation measures needed to ensure project consistency with Coastal Act policies 30230, 30231 and 30233. Project-level analysis would include performing field surveys of potential surface water quality impacts; identifying potentially substantial alteration of in-water flow and drainage patterns (i.e., increased storm water runoff, increased groundwater discharge or reduction of groundwater recharge); determining acceptable designs and construction techniques that would minimize adverse impacts of increased sedimentation; analyzing additional impervious surface and increase in surface runoff for different alignment options; determining impacts and benefits of removing existing earthen fill from lagoon crossing structures; investigating new structure design options to improve coastal hydrology and hydrodynamics in tidal lagoons; and analyzing future sea level rise scenarios. In addition, potential minimization and mitigation measures, as well as project construction schedules, would be developed in consultation with resource agencies and lagoon restoration efforts.

The PWP/TREP requires that improvements incorporate measures to minimize impacts to coastal waters. The measures include provisions for site design and planning and incorporation of BMPs designed to control the volume, velocity, and pollutant load of stormwater leaving the developed area. Critical to the successful function of post-construction BMPs in removing pollutants in stormwater to the maximum extent practicable is the application of appropriate design standards for sizing BMPs. The PWP/TREP improvement program would upgrade I-5 highway corridor facilities with current treatment BMPs to the maximum extent practicable. Approved treatment BMPs could include biofiltration

systems, infiltration devices, detention devices, dry weather flow diversions, gross solid removal devices, media filters, and wet basins.

Construction BMPs would be implemented for all facility improvements, which would reduce pollutants in storm water discharges and eliminate non-storm water discharges. Project-level review would also include Storm Water Pollution Prevention Plan and National Pollutant Discharge Elimination System permits, where applicable. In addition, design pollution prevention BMPs would be implemented for all facility improvements to prevent downstream erosion, which would stabilize disturbed soil areas and maximize vegetated surfaces. Maintenance BMP preventative measures would be implemented for all facility improvements to ensure that maintenance activities are conducted in a manner that reduces the amount of pollutants discharged to surface waters via existing storm water drainage systems. The PWP/TREP also requires maintenance BMPs to be implemented for the life of the facility in accordance with the Storm Water Quality Handbook–Maintenance Staff Guide, which includes litter removal, toxics control, street sweeping, and other approved measures.

The PWP/TREP further requires submittal of construction phasing and staging plans with future project-specific Notices of Impending Delivery (NOIDs) or other project-specific submittals (federal-consistency review or coastal development permit) to ensure that proposed construction activities do not significantly affect downstream site stability caused by changes in the rate and volume of runoff, and sediment load potentially caused by modification of existing drainage patterns, or other potential hydraulic changes from waterbody encroachments, crossings or realignment.

Furthermore, impacts to lagoon, riparian, or other isolated wetland habitats would be fully mitigated pursuant to the REMP as it relates to no net loss of habitat through establishment, habitat enhancement, restoration/preservation, and comprehensive lagoon restoration and enhancement.

5.10.2.2 Environmentally Sensitive Habitat Areas

As described in Section 5.5, the PWP/TREP includes a comprehensive, corridorwide REMP to restore ESHA and wetland habitat along the 30-mile NCC coastline. The proposed REMP includes acquisition, preservation, and restoration of upland and wetland habitat areas throughout the corridor and would facilitate major lagoon restoration programs for the San Elijo and Buena Vista Lagoon systems through expenditure of *TransNet* Environmental Mitigation Program (EMP) funds. No other funding alternatives on the scale of the EMP exist, and EMP funds are tied to development of the transportation improvements by way of the *TransNet* ordinance; accordingly, the REMP commits significant resources to preserving, restoring and creating approximately 170 acres of sensitive coastal habitat in the NCC and ensuring a healthy future for the corridor's six coastal lagoons. The REMP would provide a coordinated, strategic and comprehensive program for corridorwide mitigation that will exceed the value provided by traditional and often fragmented project-specific mitigation, thereby significantly improving water quality and the ecological value of the lagoons and adjacent habitat areas to better support ESHAs, special-status species, and wildlife.

PWP/TREP Resource Enhancement and Mitigation Program

The PWP/TREP includes a comprehensive REMP that has been developed to identify compensatory mitigation measures to address unavoidable ESHA impacts, and to implement resource enhancement opportunities that exceed the benefits of standard compensatory mitigation programs. The REMP employs a combination of measures to mitigate for ESHA impacts resulting from implementation of the NCC transportation improvements and community enhancement projects. In addition to the REMP projects and funding elements that will enhance and maintain ESHA associated with the NCC's coastal lagoons and inland waterways, upland habitat mitigation parcels would be purchased in consideration

of the sites' contribution to protecting and enhancing NCC lagoon system and watershed functions and the sites' ability to meet no net loss of sensitive upland habitat through establishment, restoration, and preservation, and to support special-status plant and animal species. In addition, the REMP approach to advancing habitat establishment, restoration, and preservation mitigation projects ahead of PWP/TREP impacts, and designing transportation facility infrastructure improvements to avoid and minimize project impacts—thereby inherently enhancing lagoon system function and values, where feasible—results in greater benefits to coastal resources on a corridorwide level than if only ratio-based, project- and site-specific mitigation were employed.

In addition, the PWP/TREP would facilitate the implementation of comprehensive lagoon restoration efforts for San Elijo and Buena Vista Lagoons. These efforts would serve to substantially enhance and restore water quality in the corridor, and would restore, enhance, and protect different habitat types, and special-status species supported by those 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 enhance an integrated ecosystem providing habitat for fish, birds, and benthic organisms, which would adequately compensate for the loss of wetland and upland habitat that would occur from the PWP/TREP LOSSAN rail and I-5 highway improvements.

Policies, Design/Development Strategies and Implementation Measures

The PWP/TREP would ensure the proposed NCC transportation facility and community enhancement projects are sited and designed to ensure that ESHAs are protected against any significant disruption of habitat values. Similarly, development in areas adjacent to ESHAs would be sited and designed to prevent impacts that would significantly degrade those areas, and would ensure compatibility with the continuance of those habitat areas.

Project-level analysis for potential impacts of proposed improvements on ESHAs and special-status species would be conducted and subject to review during subsequent project-specific federal-consistency, NOID, or coastal development permit review, as applicable, to assess and identify all potential permanent or temporary impacts to ESHAs and special-status species and appropriate mitigation measures to ensure project consistency with Coastal Act Section 30240. The evaluation would include any changed site conditions that could affect ESHA values or special-status species protected by the PWP/TREP. Should ESHAs or special-status species be identified during this process that are not already considered in the PWP/TREP, all ESHA or special-status species resource protection measures included in this PWP/TREP should be applied to the newly identified resources.

Where applicable, Final Habitat Mitigation and Monitoring Plans would be prepared to specify the design and implementation of biological resources mitigation measures, including habitat replacement and revegetation, protection during construction, performance (growth) standards, maintenance criteria, and monitoring requirements to ensure the long-term viability of habitats in the project area. Mitigation strategies would address sensitive plant and wildlife species and may include preconstruction surveys, construction monitoring, relocation of plants or plant propagation, weed control, restoration of suitable breeding and foraging habitat, and consideration of wildlife corridors in design. Wildlife crossings would be of a design, shape, and size to be sufficiently attractive to encourage wildlife use. To minimize impacts to migratory birds dependent on lagoons for stop over, resting, and foraging habitats along the Pacific flyway, the PWP/TREP provides that infrastructure construction activities should not occur in more than two lagoons at any one time.

The PWP/TREP requires NCC transportation facility improvements, community enhancement projects, and associated development in areas adjacent to ESHAs to be sited and designed compatible with the continuance of those habitat and recreation areas while preventing impacts that would significantly

degrade those areas, and ensuring that ESHAs are protected against any significant disruption of habitat values.

To minimize potential impacts to sensitive communities during construction of highway, community and resource enhancement projects, the PWP/TREP requires that native habitats outside the construction limits be designated ESHAs on project maps and access within those Environmentally Sensitive Areas (ESAs) would be prohibited. Furthermore, cut slopes would be revegetated with native upland habitats with similar composition to those within the project limits and any seeding of native upland habitats would be completed between October and February to ensure the seed has proper conditions for germination. Temporary impact areas would be revegetated and restored to pre-existing conditions to reduce the permanent impact of short-term construction.

Additional measures would be employed during construction to minimize impacts to nesting migratory bird species and migratory birds dependent on lagoons. All native vegetation and non-native shrubs and trees within the impact areas would be removed outside of the breeding season (February 15 to August 31), if possible. Exclusion devices would be installed on bridge drain holes and ledges during the non-breeding season (September 1 to February 15) to stop swallows, swifts, and any other birds or bats from nesting on or within bridges which are scheduled to be removed or reconstructed. To minimize impacts to migratory birds dependent on lagoons for stop over, resting, and foraging habitats along the Pacific flyway, construction would not occur in more than two lagoons at any one time. When necessary, a qualified biologist would thoroughly survey all vegetation prior to removal to ensure there are no nesting birds on-site.

A qualified biologist would also be made available for both the preconstruction and construction phases to review grading plans, to address protection of sensitive biological resources, to monitor ongoing work, and to minimize impacts to threatened and endangered species. Other measures implemented to minimize impacts to threatened and endangered species include maintaining adequate channel width of the San Luis Rey River and lagoons to facilitate fish passage; creating detention basins to treat runoff from the freeway; use of light shielding to protect ESAs; and restricting pile driving activity outside of the breeding season to reduce construction noise impacts.

A biological evaluation of the development area, which includes the proposed development footprint and a surrounding 100-foot buffer area, would be conducted prior to construction of each project to evaluate any changed site conditions that could affect ESHA values and/or impact special-status species protected by this PWP/TREP. In the event ESHAs and/or special-status species not already considered in the PWP/TREP are identified during this process, all ESHA and/or special-status species resource protection measures included in this PWP/TREP would be applied to the newly identified resources, and uses and development would be limited in accordance with that mandated by Section 30240 of the Coastal Act.

5.10.2.3 Agricultural Resources

In addition to maintaining the primary coastal access corridor in the NCC, the proposed highway and rail improvements are critical to goods movement, which has a direct effect on the viability of agricultural operations in the region and the state. The majority of agricultural commodities in California are transported from farms to markets via ground transportation. Thus, the ability to transport local agricultural commodities to large markets through vital arteries such as the I-5 is also critical to the preservation and the continued viability of agricultural operations in the NCC and throughout the Coastal Zone. Moreover, close proximity of transportation corridors to agricultural areas reduces costs associated with transporting agricultural commodities, and the reliability of these arteries is necessary

to ensure delivery and equitable distribution of commodities and commensurate compensation to producers.

Policies, Design/Development Strategies and Implementation Measures

Potential transportation improvement impacts to agricultural resources 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 LOSSAN rail and I-5 highway corridor alignments to avoid or minimize impacts to farmland and agricultural lands, which would result in avoidance or only minimal encroachment along the edges of agricultural lands located directly adjacent to the existing facilities. For projects that result in potential impacts to coastal agricultural lands, determined pursuant to project-specific environmental and phased federal-consistency review, when applicable, appropriate site-specific mitigation measures would be implemented. Mitigation measures would focus on preserving and enhancing coastal agricultural resources within the NCC Coastal Zone and could include development and implementation of a program or projects that encourage “urban agriculture.” Types of urban agriculture could include farm-to-fork restaurants; farm-to-grocery stores; vertical farming; farmers’ markets; innovative approaches to “urban agriculture” that help to create a demonstration project; or existing agricultural operations that have been retooled to allow for vertical farming, innovative approaches to farming, or substantial reduction in water usage.

The PWP/TREP provides that unavoidable impacts to active coastal agricultural lands within the cities of Encinitas and Carlsbad are to be mitigated pursuant to a tiered approach, with the highest priority being implementation of a project-specific mitigation such as acquiring, enhancing, or restoring other non-agricultural lands for agricultural use within the Coastal Zone or by the preservation of existing agricultural lands by retiring these lands from future development potential. The second tier would be for establishing a school or community garden within the affected jurisdiction within the Coastal Zone. The third (lowest priority) tier would be for payment of an in-lieu fee under an approved Agricultural Conversion Mitigation Fee program, such as that currently implemented within the City of Carlsbad.

The PWP/TREP would provide for a number of new opportunities to preserve and maintain a variety of agricultural resources and activities in the corridor through implementation of proposed implementation measures and community enhancement features. The opportunities would range from supporting efforts to preserve large agricultural lands or operations to extending or providing new community gardens as is being proposed for the community enhancement project in Oceanside (Enhanced Pedestrian Overpass Connection on Bush Street).

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 nonagricultural use that could result in a significant economic loss to the county’s agricultural economy. In addition, plans for habitat restoration on properties supporting existing agricultural uses would be prepared and submitted with the applicable NOID for restoration activities, and would include information that specifies and quantifies any important agricultural resource areas that could be affected by restoration activities.

5.10.2.4 There Are No Feasible Alternatives to Achieve Project Objectives that Avoid a Chapter 3 Coastal Act Policy Conflict

A detailed program and design-level alternatives analysis for proposed PWP/TREP LOSSAN rail and I-5 highway improvements that affect wetlands, ESHAs, or agricultural resources is required to be conducted consistent with the Coastal Act Policy Conflict Resolution process to identify the least environmentally damaging alternative. Substantial work has been completed to-date to identify a range of feasible alternatives that meet the corridor's need and vision. A number of program and project alternatives were analyzed but rejected from further consideration for various reasons including cost-effectiveness, logistical hurdles, impacts to environmental and coastal resources, or other compromising factors, which would render the PWP/TREP infeasible as defined by Coastal Act Section 30108 because the PWP/TREP improvements could not be "accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors."

Corridor Goals and Objectives

The alternatives were evaluated and screened against the project objectives described in Table 5.10-1, and considered the characteristics and constraints of the NCC, including:

- Existing and Proposed Land Use & 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 and destination)
- Coastal Act and LCP Coastal Development Policies

TABLE 5.10-1: TRANSPORTATION OBJECTIVES FOR THE NORTH COAST CORRIDOR

Goal	Definition
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 system 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.

In addition, selection of the NCC Locally Preferred Alternative from among several viable highway options studied in the I-5 NCC EIR/EIS 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, which is defined as follows:

> "8+4 Buffer Alternative" means the addition of a multimodal managed lane facility consisting of two lanes on either side of State Highway Route 5 within the North Coast Corridor, separated from general purpose lanes by striping or other approved traffic control devices, and which, to the maximum extent feasible, is built within existing rights-of-way owned by the department. The managed lanes would give priority to high-occupancy vehicles, vanpools, and one or more bus rapid transit routes. Value pricing techniques would allow single-occupant vehicles to use the facility by paying a toll, as long as single-occupant vehicle use does not negatively impact the transit uses of the managed lanes. (Cal. Streets & Highways Code section 103)"

Feasible project alternatives for LOSSAN rail improvements potentially affecting wetlands and ESHAs were evaluated at a programmatic level in the *LOSSAN Final Program EIR/EIS* (September 2007), and, as required by the PWP/TREP, would be further analyzed in project-level analyses and during phased federal-consistency review, as applicable. The project alternative analysis for highway and community enhancement improvements potentially affecting wetlands, ESHAs, and agricultural resources is part of the *I-5 NCC Project Final EIR/EIS* (October 2013). All the LOSSAN and highway project alternatives are informed by the 2030 and 2050 Regional Transportation Plans (RTPs).

5.10.2.5 PWP/TREP Program Alternatives

There have been a multitude of transportation alternatives analyzed over the past several decades to address the current and projected travel demand in the NCC. An historical discussion of these studies and alternatives is included in Appendix J, along with the Coastal Development Policy Consistency summary related to the alternatives. These rail, transit and highway alternatives were developed and evaluated through a variety of regional and corridor-specific planning processes which considered a range of modal and design concepts. In particular, the 2000 North Coast Transportation Study and subsequent San Diego North Coast Corridor-Corridor System Management Plan (CSMP) evaluated a range of alternatives for the NCC.

North Coast Transportation Study

In December 2000, SANDAG completed a programmatic analysis of alternatives to address mobility deficiencies and enhance multimodal access throughout the NCC. A goal of the analysis was to identify and recommend a transportation program for implementation in the coastal travel corridor from SR 52 in the northern part of the City of San Diego to the Orange County line. In developing this recommendation, of which the proposed PWP/TREP is based, the North Coast Transportation Study evaluated a range of corridor alternatives. These included elevated sections of the I-5 freeway, carpool lanes, additional railroad stations and facilities, arterial streets and road expansion, and freight improvements. They are briefly summarized below.

Freeway Alternatives. Multiple freeway alternatives were evaluated that expanded I-5 from Del Mar Heights Road to the Orange County line, and I-805 from SR 52 to I-5 in Sorrento Valley. These alternatives would all add capacity to the existing I-5 and I-805 freeways, and would potentially add general purposes lanes, HOV or carpool lanes, Express Lanes, and auxiliary lanes in some locations.

In evaluating the alternatives, the study identified costs, environmental constraints, the ability to meet forecast travel demands on the freeways, and potential right-of-way requirements. In general, the most

cost-effective enhancement of the existing freeway facility was the addition of HOV lanes in the median area. The selected alternative, maintaining the freeway within the existing right-of-way, was the only alternative that accommodated demand in a cost-effective manner.

Arterial Streets and Road Expansion. The north coastal area has relatively few north-south arterial streets and roads that parallel the freeway, Coast Highway being the longest of these arterials, is the only one which runs the length of the corridor. This situation, caused in part by the fact the corridor is separated by the lagoons and topography, forces even relatively short trips onto the freeway. To remove shorter trips from the freeway, this alternative would expand the local street system with improvements calling for the addition of new lanes on existing streets; interchange and intersection improvements; new streets to close gaps in the system, and technological improvements to the signal systems serving major streets. The environmental and community impacts of this alternative raised concerns about impacts from widening streets in existing communities and building new roads across dedicated parklands and natural habitat areas. Accordingly, no arterial street improvements or road expansions were recommended for further evaluation.

Commuter Rail Alternatives. These alternatives evaluated a range of potential enhancements to the existing COASTER commuter rail service. Improvements could support significant increases in ridership through more frequent service, higher speed, improved schedule reliability and better access. The analysis of the alternatives concluded that to be able to accommodate a significant growth in ridership, double-tracking to the fullest extent possible would be required. Additionally, tunneling would be necessary to enable full double-tracking, to remove tracks from unstable bluff areas, and to improve travel times and community access. New commuter station(s) and/or expansion of existing stations, as well as special events stations were also identified.

Other Transit Alternatives. This alternative looked to provide improved transit to the growing El Camino Real corridor neighborhoods which are not directly served by the COASTER commuter rail service. Evaluation of a limited stop, regional bus service along El Camino Real was determined to provide transit service similar in speed and frequency to light rail transit. However, because of surface street congestion, it would be difficult to provide efficient shuttle services to the COASTER station, as well as safe and reliable passenger access to the shuttles themselves.

Freight Improvements. This alternative addressed whether increased freight traffic through the Port of San Diego, as well as other freight improvements, could reduce freight truck traffic on I-5 and the coastal rail line. It was determined that only a limited potential exists to reduce freight rail traffic or the number of trucks on the freeway through diverting goods movement through the Port as the railway currently excludes movement of containers, and it is unlikely that BNSF would initiate intermodal container movements outside of the Los Angeles Basin. Thus, this alternative was not explored further.

Several potential transportation alternatives were screened from further consideration based on feasibility, perceived community impacts, and cost-effectiveness conclusions of earlier studies, including an elevated monorail or “people-mover” system on the freeway or other existing transportation right-of-way, light rail or San Diego Trolley-type systems extending north to Oceanside or along the El Camino Real corridor, and ferry services for passengers along the coast. Additionally, because it lacked capacity to meet current traffic demands, the consideration of a single, reversible carpool lane on I-5 was screened from further.

San Diego North Coast Corridor CSMP

The CSMP revisited the North Coast Transportation Study and further evaluated the program of alternatives summarized above against current regional goals. Multimodal improvement scenarios were evaluated based on their ability to support the seven regional transportation goals in the 2030 Regional Transportation Plan: Pathways for the Future. The following measures were used as the evaluation criteria for the improvement scenarios:

- **Sustainability**
  - Avoids natural resource impacts.
  - Discourages sprawl.
  - Improves air quality and reduces greenhouse gas emissions.
  - Improves water quality and lagoons.
  - Maximizes people throughput.
- **Livability**
  - Limits right-of-way impacts.
  - Connects communities.
  - Reduces noise.
  - Provides coastal access.
- **Mobility**
  - Supports goods movement.
  - Decreases travel times.
  - Provides modal options.
  - Is supported by land use.
- **Efficiency**
  - Manages traffic congestion.
  - Has available resources/ funding.
  - Provides good value (throughput per $).
- **Equity**
  - Serves various demographic groups.
  - Serves various user groups.
- **Accessibility**
  - Encourages HOV ridership.
  - Encourages transit ridership.
  - Supports regional network of Express Lanes.
- **Reliability**
  - Provides consistency in travel times.
  - Provides travel options.
  - Informs travelers.

Each improvement scenario included a common set of multimodal improvements, upon which a combination of improvements was evaluated to determine support of the regional goals identified above. Those common improvements include: double-tracking of rail lines from Oceanside to central San Diego; 20-minute peak period frequencies for commuter rail services; commuter rail service extended through midday hours; Metropolitan Transit System Mid-Coast Light Rail extension from Old Town to University City; SuperLoop Rapid Bus service within University City; enhanced bus service along the El Camino Real corridor; additional park-and-ride facilities; bicycle and pedestrian routes connecting across freeways; and implementation of Transportation Demand Management (TDM) technologies resulting in a 5% reduction in traffic. Highway improvements include the Lomas Santa Fe interchange and HOV extension from Via de la Valle to Manchester Avenue.

No Build. This scenario assumed only the common set of improvements and no additional highway or multimodal improvements, and leaves the I-5 highway corridor in its current configuration consisting of eight general-purpose lanes (four each direction), separated by a median with intermittent HOV and auxiliary lanes.

Highway Emphasis. In addition to the common set of improvements, this scenario relied on additional general-purpose lanes to address forecast travel demand, with variations consisting of adding eight general-purpose lanes, or two general-purpose lanes. Both scenarios assumed no HOV would be provided.

Mobility Enhanced. The mobility-based scenarios focused on multimodal options such as addition of HOV and Express Lanes. The addition of HOV lanes represented the means to encourage carpooling and transit, while Express Lanes represented encouragement of carpooling, transit and creation of flexible resources through fee-paying single–occupancy vehicles (SOVs). All Express Lanes scenarios would be compatible with any future regional BRT.

Transit Emphasis. The transit emphasis scenarios evaluated improvement of the I-5 highway right-of-way for transit services through addition of BRT lanes and additional transit improvements, or adding elevated rail transit or other existing right-of-way expansion to accommodate passenger rail services.

The evaluations of the general-purpose lanes, HOV lanes, and transit scenarios emphasize that each modal alternative has specific attributes that on their own are important and would improve transportation within the corridor, but without a balanced combination of multimodal improvements demonstrate significant limitations in meeting the regional goals to increase sustainability, serve a wide array of people, encourage transit, provide flexibility in the system, and improve how the highway is managed. It was determined that the Express Lanes options identified within the mobility enhanced scenario address some of these limitations while maintaining key attributes. The proposed PWP/TREP improvements that incorporate the Express Lanes (along with LOSSAN rail and other transit improvements) would maximize the utilization of existing facilities, move people (not vehicles), provide reliable transportation options, improve coastal access, provide a flexible foundation for further improvements, and would be integrated with land use and activity centers.

The flexibility provided by Express Lanes meets the objectives of improving reliability of travel times and maximizing throughput, and accomplishes such while providing an incentive for transit and carpool uses. This flexibility can also be used to accommodate goods movement and the expansion of BRT in the corridor. Thus, the Express Lanes alternative(s) were selected for further evaluation within the *I-5 NCC Project Draft EIR/EIS* and the refined 8+4 Buffer Alternative (8 general-purpose lanes plus 4 Express Lanes separated by a striped buffer) was selected as the Preferred Alternative in the *NCC Project Final EIR/EIS*) because it prioritizes the movement of people over vehicles while still meeting the stated transportation needs and other identified project objectives.

2050 Regional Transportation Plan (2050 RTP)

The I-5 improvements constitute one element of a larger transportation upgrade being planned for the region. This plan is being developed by SANDAG, with support and input from other transportation agencies, as well as local planning jurisdictions such as cities and San Diego County. Building on the current transportation system with funding anticipated over the next 40 years, the 2050 RTP outlines projects for highways, rail and bus services, local streets, bicycle and pedestrian facilities, as well as systems and demand management. Based on regional growth projections, upgrades to each of these modes of travel are needed to accommodate future transportation needs. I-5 and other NCC transportation improvements are specifically identified in the 2050 RTP.

The 2050 RTP included a planning process known as the Urban Area Transit Strategy, which involved developing a range of differing transit strategies and approaches to determine what kind of transit future would be desired for the San Diego region. This process resulted in a transit network in the 2050 RTP that would nearly triple the number of transit miles in the San Diego region by 2050, and increase transit mode share (the percent of total trips taken on transit) from approximately 2% to up to 15% in the NCC during that timeframe. Transit alternatives by themselves, however, would not fully meet the objectives of the I-5 improvements. For example, transit alternatives would not adequately provide for the regional or interregional movement of goods. In addition, depending on the trip, transit is often unable to provide convenient, time-efficient travel for residents and tourists to multiple locations in dispersed directions. Nevertheless, transit is a valuable component of the multimodal transportation network and part the ultimate transportation solution for the NCC.

As part of the overall NCC transportation solution, the refined 8+4 Buffer Alternative (the Preferred Alternative) is incorporated into the 2050 RTP as the highway component of the NCC multimodal transportation system. Under this alternative, Express Lanes, DARs, and pedestrian/bicycle facilities would provide long-term flexibility to accommodate increased transit and nonmotorized transportation demand, as well as opportunities to interface with future expansions of regional/local transit and nonmotorized transportation systems.

5.10.2.6 PWP/TREP Project Design Alternatives

A number of design alternatives have been considered for PWP/TREP program elements that would result in impacts to wetland, ESHA and agricultural resources. The majority of proposed transportation improvements are either within or adjacent to a major existing transportation corridor (existing railroad or highway corridors). Use of these existing transportation corridors helps minimize potential impacts since they have already imposed a footprint/barrier and, as such, the majority of PWP/TREP facility improvements would not result in substantial impacts to adjacent wetlands, ESHAs or agricultural resources.

The most significant impacts to wetland and ESHA resources would occur where the transportation facilities cross over the corridor lagoons. For example, bridge structures that meet the requirements lagoon optimization studies would increase the tidal flow and remove some of the embankment from the lagoons. The I-5 tunnel option, if determined to be the preferred tunnel option through more detailed analysis, could also allow for the removal of the existing Los Peñasquitos rail bridge structures from the lagoon in the future. Furthermore, the PWP/TREP provides a unique opportunity to improve the coastal bluff area in Del Mar by removing the existing rail service from the bluff area and precluding further rail construction along the bluffs, thereby reducing development and maintenance activities on the bluff and shoreline, creating an opportunity to remove existing shoreline protective devices and restore coastal bluff resources. Additional design options to minimize potential impacts of rail facilities to wetlands and ESHA would be considered during project-level review.

Common Design Features

Along the highway right-of-way facility encroachments into adjacent areas have been minimized to the extent feasible by construction of retaining walls and minimizing the grading behind the walls. In addition to the programmatic analysis of project alternatives discussed above, a detailed, design-level alternatives analysis for proposed PWP/TREP rail and highway improvements that affect wetlands, upland ESHAs and agricultural resources was conducted consistent to identify the least environmentally damaging alternative. 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 hydrology and facilitation of large-scale lagoon restoration efforts that would benefit a variety of sensitive habitats and special-status species. Additional technical analysis and detailed design avoidance and minimization features for all corridor waterbodies and adjacent upland areas supporting sensitive species potentially affected by the I-5 Project Locally Preferred Alternative (LPA) are discussed at length in the *I-5 NCC Project Final EIR/EIS.* As discussed therein, to minimize impacts to all sensitive habitats, the slopes of the freeway were designed at a steeper 2:1 grade versus the standard 4:1 grade. To further minimize impacts, retaining walls were also included in the project design on cut slopes, but could not be used on fill slopes. Through analysis of lagoon sediment data from geotechnical borings, it was determined that lagoon soil liquefaction would prevent the use of retaining walls to minimize the roadbed fill in the lagoon. Soil liquefaction requires that any structures taller than approximately 6 feet have support piles that are driven to bedrock, which is located at a depth of over 100 feet. All pilings for the bridge supports would be driven to this depth, but this would not be practical for retaining walls. Riprap is used to protect the existing abutments and would also be used to protect the abutments of the proposed bridges. Due to the depth of bridge pilings, riprap is not required to armor the channel bottom.

Potential impacts from auxiliary lanes would be minimized where possible, especially in the vicinity of the lagoons. Auxiliary lanes were only included in the project design where required to relieve traffic congestion and weaving issues between on- and off-ramps. For instance, potential impacts associated with a proposed auxiliary lane between La Costa Avenue and Poinsettia Avenue across Batiquitos Lagoon were avoided, based on elimination of this potential auxiliary lane when traffic analysis determined that it would not be required.

To avoid impacts to wetlands from fill associated with creation of 12-foot-wide bike/pedestrian paths, short retaining walls (six feet or lower in height) would be used. Another impact minimization option being examined, particularly at Batiquitos Lagoon and Buena Vista Lagoon, would involve obtaining funds to replace these bridges in the first phase of construction (prior to construction of a proposed HOV lane in the median), instead of later in the construction process. This would reduce the overall bridge widths required for staging the bridge replacements, thus reducing wetland impacts by more than an acre at each lagoon. However, because auxiliary lanes in each direction are proposed at Agua Hedionda Lagoon, resulting in the need for a wider finished bridge, accelerated timing of bridge replacement would not minimize wetland impacts at this location.

Feasible project alternatives and avoidance and minimization measures for LOSSAN rail improvements potentially affecting wetlands are also addressed as part of the lagoon optimization studies at San Elijo, Batiquitos and Buena Vista lagoons, and would be determined in project-level analyses and during phased federal-consistency review, as applicable, for other lagoon crossings.

Direct Access Ramps

The most significant impacts to agricultural resources would occur from construction of a DAR at Manchester Avenue, which would provide HOVs and buses a direct connection from arterial streets to the Express Lanes, without the need to weave through the general-purpose lanes from standard on- and off-ramps. In addition to the benefits of avoided weaving maneuvers to access the Express Lanes, DARs provide significant time savings for users by avoiding meter related congestion, thus providing a time and reliability incentive that encourage a modal shift away from SOV. In the case of Manchester that times savings during the AM commute could be 10 to 20 minutes.

An analysis of proposed DAR locations was conducted throughout the corridor to determine the best location for these facilities to implement improvements to the existing transportation system that facilitate HOV and transit use and enhance overall mobility, and thus enhance coastal access opportunities for residents and visitors utilizing Express Lane and future BRT modes. Identification of feasible DAR locations is limited by several factors – including connectivity to the regional arterial system transportation system, adjacent land use, environmental constraints, vacant land, and configuration of local streets system. For example relocating the Manchester DAR to Birmingham, Lomas or Santa Fe, would not be viable due to limited connectivity to the larger arterial network. Encinitas Boulevard would not be a viable option because the location of the adjacent city street restricts the ability to add new ramp termini. Another key consideration is priority/Express Lane connectivity for future BRT service and HOV vehicles within the I-5 corridor. Over 30 DAR locations were initially reviewed based on the following criteria:

- Feasibility of traffic operations
- Potential land availability
- Proximity to activity/employment centers
- Local support
- Potential to effect Environmental Justice Populations
- Potential impacts to resources
- Potential to serve local/regional transit services
- Proximity to park-and-ride facilities
- Engineering feasibility
- Demand (local street/interchange congestion, HOV traffic volume, etc.)
- Improved coastal access

From this initial screening, only eleven sites were identified for further study, those eleven sites were further screened based on the following criteria:

- Potential impact to public parklands
- Potential impact to agricultural lands
- Environmental Justice
- Potential impact to public utilities
- Visual impacts/aesthetics
- Air quality/noise
- Engineering feasibility
- Projected traffic demand (ADT, peak hour)
- Potential impacts to local streets and roads

Based on the above criteria, the *I-5 NCC Project Draft EIR/EIS* evaluated DARs at four interchanges: Oceanside Boulevard, Cannon Road, Manchester Avenue, and Voigt Drive. Within the Coastal Zone, the initial DAR location analysis determined that a proposed DAR at Cannon Road would improve coastal access and access to other high visitor-serving and recreational land uses (Legoland amusement park, Car Country Carlsbad, Carlsbad Premium Outlets, Flower Fields of Carlsbad, etc.), and that the DAR would reduce delay of traffic on Cannon Road and Palomar Airport Road and could support multimodal connectivity on Palomar Airport Road. The DAR location analysis also determined that a proposed DAR at Manchester Avenue would support access to the proposed multi-use facility and establish the necessary access to the Express Lanes for any potential future BRT that might be implemented along I-5 and/or El Camino Real. The DAR would also support high HOV utilization on El Camino Real (serving eastern Encinitas) and would improve coastal access. The proposed DAR at Manchester Avenue was determine to be particularly important given that it is the termini of the primary parallel arterial to I-5 in the corridor, El Camino Real. In place of extending El Camino Real over San Elijo Lagoon to provide an extended parallel arterial to I-5, the region decided years ago to focus both local & regional traffic onto I-5. The DAR at Manchester Avenue would allow longer transit and HOV regional trips direct access to the Express Lanes to continue their travel through the corridor.

Following public circulation of the *I-5 NCC Project Draft EIR/EIS*, continued coordination with the Cities of Oceanside and Carlsbad resulted in the DARs at Oceanside Boulevard and Cannon Road being deleted from the project due, in part, to environmental impacts and because changes to local land use and local street circulation made it questionable as to the DAR value at these locations. Additional design-level alternatives analysis for the DARs, including detailed avoidance and minimization considerations, was also completed and is reflected within the selection of the LPA, as described in detail within the *I-5 NCC Project Final EIR/EIS.* This design detail, including a reduced project footprint throughout the corridor and for the Manchester Avenue multi-use facility and DAR, removal of the Cannon Road DAR, and other corridorwide auxiliary lane reconfigurations and/or removals, documents the reduction in overall project impacts to adjacent agricultural, upland ESHA and wetland resources.

In addition, to avoid and minimize visual open space impacts, the Manchester Avenue DAR and multi-use facility was redesigned in consideration of the sensitive visual context of the area as a scenic gateway to Encinitas, and is currently proposed as a trenched access ramp and an undercrossing to maintain views of the surrounding hillsides, open spaces, and San Elijo Lagoon, and to reduce the footprint into the adjacent agricultural area associated with the multi-use facility (the redesign of the Manchester DAR also included the reduction from 470 parking spaces to 150 at the multi-use facility). As a result of the Manchester DAR redesign, which had previously been proposed as a flyover structure with larger multi-use facility, views of the nearby coastal visual resources in the area would not be blocked and the overall design of the structure minimizes impacts to agricultural lands and impervious surfaces to reduce potential water quality impacts from stormwater runoff.

Additional impact analysis was conducted for the Manchester DAR and multi-use facility to determine impacts to coastal resources requiring further assessment pursuant to the Conflict Resolution provisions of the Coastal Act. As part of this process, Caltrans studied how elimination of the DAR in its entirety might reduce the overall width of the San Elijo bridge and corresponding impacts to adjacent wetland and ESHA resources. Caltrans also studied additional, condensed design options for the San Elijo Multi-Use Facility in an effort to further minimize the project footprint, and thereby reduce impacts to agriculture lands, overall visibility of the facility, and potential stormwater runoff from the facility.

Table 5.10-2 provides a summary comparison of the proposed Manchester Avenue improvements with and without the proposed DAR and multi-use facility and demonstrates that the DAR project feature would not substantially reduce impacts to adjacent wetland and ESHA resources. This is due to the

inability to reduce the overall width of San Elijo bridge by a corresponding amount of reduced median width associated with a no DAR alternative, as HOV bypass lanes for the interchange onramps would be required in place of not having a median DAR. The resulting wider onramps would require more length beyond the ramp meter limit line to allow for lane drops. The combination of increased ramp width and length requires additional bridge width. Additionally, in order to keep the freeway open to traffic during construction, the bridge must be widened beyond what is necessary for the ultimate freeway configuration. The construction staging has been carefully considered to minimize excess bridge width and provide the minimum required lane widths, shoulder widths and freeway geometry, while also ensuring that lagoon construction is limited to a single construction phase in coordination with the rail improvements.

TABLE 5.10-2: NCC MANCHESTER DAR/MULTI-USE FACILITY ALTERNATIVES COMPARISON SUMMARY

Vegetation	With DAR Acres	Without DAR Acres	Difference
Agriculture	7.1	0.22	6.88
Upland			
Coastal sage scrub	1.24	1.13	0.11
Disturbed coastal sage scrub	7.51	6.93	0.58
Southern maritime chaparral	0.00	0.00	0.00
Disturbed southern maritime chaparral	0.01	0.01	0.00
Total Upland	8.76	8.07	0.69
Wetland			
Coastal brackish marsh	0.01	0.01	0.00
Disturbed coastal brackish marsh	0.02		0.02
Freshwater marsh	0.01		0.01
Disturbed freshwater marsh	0.46	0.20	0.26
Coastal salt marsh	0.19	0.00	0.19
Southern willow scrub	0.13	0.15	-0.02
Disturbed southern willow scrub	0.13	0.13	0.00
Total Wetland	0.92	0.48	0.44

As indicated in Table 5.10-2, eliminating the proposed Manchester Avenue DAR and multi-use facility would reduce overall project impacts to agricultural resources (6.88 acres), upland ESHA (0.69 acres) and wetlands (0.44 acres). In addition to analyzing potential direct impacts to these resources for the DAR alternatives, the ability to reduce potential water quality impacts associated with stormwater runoff to San Elijo Lagoon by eliminating the DAR and multi-use facility as individual project elements was also studied and determined to have little effect on minimizing stormwater runoff or increasing stormwater treatment opportunities. As indicated in Section 5.4 (Tables 5.4-8A and 5.4-8B), total post-construction treatment for the San Elijo HOV project by approved BMPs and polishing would be 81% when applying standard design treatment BMPs, and would be 90% when applying heightened design treatment BMPs. Eliminating the DAR would reduce total post-construction treatment for the San Elijo HOV project by approved BMPs and polishing to 75% when applying standard design treatment BMPs, and to 85% when applying heightened design treatment BMPs (a 5-6% reduction in total post-construction treatment when applying both standard and heightened design treatment BMPs).

Eliminating the multi-use facility would result in no appreciable reduction in the total post-construction treatment for the San Elijo HOV project (only a 1% reduction in total post-construction treatment was identified when applying standard treatment BMPs and there would be no change in treatment when applying heightened design treatment BMPs.)

Removing the Manchester DAR from the suite of PWP/TREP projects to further minimize these coastal resource impacts would eliminate a project element that would be necessary to support any future BRT access to the Express Lanes. In addition, the immediate mobility benefits targeted for HOVs, carpools, and vanpools, traffic congestion reduction along Manchester Avenue, direct public access to the proposed multi-use facility for recreationist, and additional shuttles services traveling to the Del Mar Racetrack and would not be realized absent construction of the DAR in this location. These project benefits are integral to the overall goals and objectives of the PWP/TREP, and there are no alternatives to the proposed Manchester DAR location that would achieve the same project benefits. Initial DAR location screening considered alternative locations including Via de la Valle, Lomas, Birmingham, Santa Fe and Encinitas; however, none of these locations met the Traffic Operations Feasibility Criteria. In the case of Via de la Valle, DAR improvements would be expected to provide primary benefits during the intermittent and seasonal four weeks of the San Diego County Fair or the eight weeks of race track activity. The proposed location at Manchester Avenue, however, would provide year-round benefit for daily users as noted, and is a preferred location.

The proposed Manchester Avenue DAR and San Elijo Multi-Use Facility would improve freeway operations, reduce congestion, reduce travel time, promote the use of alternative modes of transportation, support future transit operations, and provide increased access to coastal and recreational resources for both motorized and nonmotorized users. Some of the benefits include:

- **Reduced Congestion and Improved Highway Operations.** The DAR would enable HOVs, transit vehicles, and permitted SOVs to connect directly to the Express Lanes, thus avoiding the need to weave across the general-purpose lanes of traffic. This reduces congestion while increasing the safety and efficiency of highway travel.
- **Time Incentive for HOVs, Carpools, and Vanpools.** With a direct way to access Express Lanes from the parking area, travelers would save time by choosing to ride in HOVs, carpools, and vanpools. The DAR not only would provide faster highway access for users coming from Encinitas, but also will allow for significantly quicker stops for carpools and vanpools that are picking up riders.
- **Reduced Congestion for Local Traffic at Manchester Avenue.** By providing a separate DAR access road for HOVs and buses, these vehicles would be removed from the Manchester Avenue intersection, improving local traffic operations and access to coastal resources.
- **Staging & Parking Area for Coastal Access and Regional Bike Routes.** Not just for commuters, the multi-use facility would also provide a staging area, equipped with parking and lockers for recreational users to access coastal resources as well as regional bike routes. Combined with planned improvements to the Manchester Avenue undercrossing, the multi-use facility would connect directly to Class II Bike Lanes that extend in both directions on Manchester Avenue, providing access to the Coastal Rail Trail, I-5 North Coast Bike Trail, California Coastal Trail, and Cardiff State Beach.
- **Trailhead Access to San Elijo Lagoon.** The trails in and around San Elijo Lagoon, which would be expanded and enhanced as part of the PWP/TREP improvements, would benefit from the additional parking and increased access provided by the DAR and multi-use facility. The facility would provide parking for recreational users, and new trails running along the lagoon and under the highway bridges will be easily accessible from this location.

- **Access to Coastal Activity Centers.** In addition to providing access to coastal resources, the Manchester DAR would provide improved access to key activity centers in the coastal region including Mira Costa College (San Elijo Campus), El Camino Real (serving eastern Encinitas), and the Cardiff and Solana Beach Town Center shopping areas.
- **Parking and Direct Express Lane Access for Shuttle Services.** Shuttles traveling to the Del Mar Racetrack and Fairgrounds currently use the campus of nearby Mira Costa College as a pickup location. The Manchester DAR and multi-use facility would provide a more convenient and efficient parking and waiting area for these shuttle services. Similarly, future shuttles serving local destinations and regional airports (currently under evaluation by local jurisdictions) would be able to use the DAR and multi-use facility.
- **Electric Vehicle (EV) Charging Station.** Caltrans is developing a plan to incorporate state-of-the-art rapid EV charging stations at all NCC park-and-ride facilities. Charging terminals for EVs would provide convenience to current users and act as an incentive for increased use of EVs in the future, potentially reducing greenhouse gas emissions associated with vehicle travel.
- **Opportunity for Future Bus Rapid Transit (BRT).** The 2050 RTP calls for at least one BRT service to be implemented on the I-5 corridor. Several other BRT lines have been evaluated for both I-5 and El Camino Real in the past and could be included in the future RTPs. The DAR would allow these BRT services to stop quickly at Manchester Avenue, and the multi-use facility would provide essential access for potential users. If these facilities are not constructed with the I-5 project, they will be very difficult and expensive to retrofit; therefore, their elimination from the PWP/TREP now may preclude these transit options in the future.

In light of the mobility, public access and recreation benefits that are inherent of the proposed Manchester DAR and multi-use facility, the substantial alternatives analysis conducted for DAR location options in the corridor, redesign efforts for the DAR and multi-use facility to minimize impacts to coastal resources to the maximum extent feasible and to fully mitigate where impacts remain, inclusion of the DAR and multi-use facility in the PWP/TREP suite of improvements is the most protective of coastal resources.

PWP/TREP Alternatives Analysis Conclusion

Based on this analysis, the program of rail and highway improvements included in the PWP/TREP has been determined to provide the least environmentally damaging, feasible project alternative to avoid or reduce impacts to coastal resources. The proposed PWP/TREP improvements consist primarily of improvements to existing transportation facilities located in previously developed and disturbed areas within existing rail and highway right-of-way. Improvements or changes to the existing rail and highway facilities are generally expansions or reconfigurations of existing facilities or, where new rail alignment tunnel options are being considered, would occur primarily below ground. Therefore, by design, the proposed PWP/TREP LOSSAN rail and I-5 highway improvements involve limited expansion or encroachment into wetlands, other sensitive habitat areas, or agricultural lands that might otherwise occur if new transportation infrastructure were to be constructed as separate and distinct facilities from the existing rail and highway right-of-way to address mobility deficiencies and enhance multimodal access throughout the corridor. Where feasible, additional alternatives analysis for proposed rail and highway improvement elements that have the potential to impact coastal resources would ensure that that all components of the PWP/TREP would be designed and implemented to minimize and mitigate potential coastal resource impacts to the extent feasible.

5.10.3 Coastal Act Policy Conflict Resolution

As noted previously, the PWP/TREP would permanently fill wetlands, remove ESHAs, and affect non-prime but active coastal agricultural lands. Should the PWP/TREP be considered inconsistent with Sections 30233, 30240, and 30242 of the Coastal Act, denial of the PWP/TREP (no project) or approving a different project would also constitute a significant conflict with the Coastal Act. Adopting the PWP/TREP is the approach that, on balance, is the most protective of significant coastal resources.

The PWP/TREP would, on balance, improve conditions for coastal resources subject to Coastal Act policy mandate by improving public transit and nonmotorized transportation alternatives that reduce energy consumption and air emissions. The PWP/TREP would support Smart Growth, implement improvements to the existing transportation system that facilitate multimodal circulation, eliminate existing impediments to multimodal circulation, and enhance coastal access opportunities for residents and visitors.

Without the proposed improvements, continued degradation of coastal recreational resources would occur. As with most other significantly populated coastal communities in California, unmet transportation demand results in conflicts between community residents, commuters, and visitors competing for limited capacity on existing transportation systems for various uses. Despite numerous coastal recreational resources and many points of coastal access in the corridor, coastal access would be hindered by disjointed, congested, or limited routes for automobile, bicycle and pedestrian routes and transit service. Therefore, approval of the PWP/TREP is necessary for maintaining and enhancing public access to the coast by 1) extending and improving rail and transit service; 2) reducing transportation congestion, particularly for the variety of coastal users in the corridor; 3) providing adequate public transportation and nonautomobile circulation that support access to coastal recreational areas; and 4) providing and/or enhancing recreational facilities. The PWP/TREP improvements would provide for a multimodal transportation system providing safe and reliable access to and from coastal-dependent industry, and coastal and upland areas in the corridor and 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.

Approval of the PWP/TREP would enhance and improve coastal resources over existing conditions. The proposed improvements would enhance multimodal access throughout the corridor and thereby maintain and enhance, wherever feasible, access to the coast and upland recreation areas. In addition, and beyond enhancements integral to the PWP/TREP, SANDAG and Caltrans propose to more than fully mitigate the adverse impacts the PWP/TREP would have on coastal resources, and would improve and enhance water quality, and wetland and ESHA resources above existing conditions with a corridorwide REMP.

No alternative exists to fully avoid or reduce impacts to coastal resources. Reduced congestion in the corridor would result in less exhaust emissions per vehicle. The Express Lanes, and the anticipated congestion reduction on corridor general-purpose lanes, would help reduce emissions per traveler and per trip in the NCC. The most recent air quality determinations for the San Diego region air basin demonstrate that there is an urgency to provide transportation options that will relieve health impacts, reduce existing congestion on I-5, and provide enhanced transit services, including nonmotorized options in the NCC. Therefore, the program of proposed PWP/TREP is the least environmentally damaging practicable alternative. The proposed PWP/TREP improvements consist primarily of improvements to existing transportation facilities located in previously developed and disturbed areas within existing rail and highway right-of-way. Improvements or changes to the existing rail and highway facilities are generally expansions or reconfigurations of existing facilities or, where new rail alignment

tunnel options are being considered, would occur primarily below ground. Therefore, by design and beyond integral enhancement elements, the proposed PWP/TREP rail and highway improvements involve limited expansion or encroachment into wetlands, other sensitive habitat areas, or agricultural lands that might otherwise occur if new transportation infrastructure were to be constructed as separate and distinct facilities from the existing rail and highway right-of-way to address mobility deficiencies and enhance multimodal access throughout the corridor.

Accordingly and on balance, approval of the PWP/TREP provides an enhanced and improved coastal recreational corridor. Together with the provision of the proposed PWP/TREP REMP, Design/Development Strategies, and Policies and Implementation Measures, approval of the PWP/TREP is more protective of coastal resources than would be denial or modification of the PWP/TREP to eliminate all impacts to wetlands, ESHAs, and agricultural resources. The identified PWP/TREP REMP, Design/Development Strategies, and Policies and Implementation Measures are necessary to ensure that adverse impacts to coastal resources are avoided, minimized or mitigated to the extent feasible; and they ensure the benefits of the PWP/TREP for coastal resource enhancement are fully realized. Therefore, approval of the PWP/TREP is most protective of coastal resources for purposes of the conflict-resolution provisions of Coastal Act Section 30007.5.

Even if it was concluded that denial of the PWP/TREP would not directly conflict with Coastal Act policies and the PWP/TREP was found to be inconsistent with Sections 30233, 30240, and 30242 of the Coastal Act, the PWP/TREP may be found consistent with the Coastal Act and should be approved as directed by Section 30001.5. Coastal Act Section 30605 states that PWPs are processed in the same manner as LCPs. Local coastal programs, in turn, must comply with Chapter 3 policies "only to the extent necessary to achieve the basic state goals specified in Section 30001.5" (Section 30512.2). Section 30001.5 contains the following policies:

> (a) Protect, maintain, and, where feasible, enhance and restore the overall quality of the Coastal Zone environment and its natural and artificial resources.
>
> (b) Assure orderly, balanced utilization and conservation of Coastal Zone resources taking into account the social and economic needs of the people of the state.
>
> (c) Maximize public access to and along the coast and maximize public recreational opportunities in the Coastal Zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.
>
> (d) Assure priority for coastal-dependent and coastal-related development over other development on the coast.
>
> (e) Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the Coastal Zone.

Even if the PWP/TREP were considered inconsistent with Sections 30233, 30240 and 30242 of the Coastal Act, it complies with the Chapter 3 policies to the extent necessary to meet these basic goals of Section 30001.5. As discussed above, the PWP/TREP protects, maintains, enhances and restores the overall quality of the Coastal Zone environment and its natural and artificial resources. Though the project would affect wetlands, ESHA, and prime farmland, the REMP ensures that the overall Coastal Zone environment—both its natural and artificial resources—would be better with the project than without it. The PWP/TREP also assures orderly, balanced utilization and conservation of Coastal Zone resources taking into account the social and economic needs of the people of the state. Improving the corridor and the I-5 would enable goods and people to move efficiently, which would promote

commerce and travel for social and educational purposes. The project would also maximize public access to and along the coast and maximize public recreational opportunities in the Coastal Zone consistent with sound resources conservation principles. The corridor is becoming overburdened, which is limiting people's ability to get to beaches and other recreational activities. This project would remedy that, and enable more people to enjoy the coast with greater ease. The project also assures priority for coastal-dependent and coastal-related development over other development on the coast by promoting Smart Growth. Finally, the project includes local initiatives in which SANDAG and Caltrans would cooperate with local jurisdictions in preparing procedures to implement coordinated planning and development for mutually beneficial uses.