

## CHAPTER 9.0 CUMULATIVE IMPACTS

### 9.1 Definition of Cumulative Impacts

Section 15355 of the CEQA Guidelines defines cumulative impacts as:

*"...two or more individual effects which when considered together, are considerable or which compound or increase other environmental impacts."*

Section 15355 further describes potential cumulative impacts as:

- "(a) The individual effects may be changes resulting from a single project or a number of separate projects.*
- (b) The cumulative impacts from several projects are the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."*

Cumulative impacts refer to two or more individual impacts which, when considered together, are considerable or which compound or increase other impacts. The individual effects may be changes resulting from a single project or from a number of projects. A cumulative impact refers to the degree of change in the environment resulting from a particular project, plus the incremental impacts created by other closely related past, present and reasonably foreseeable future projects. Cumulative impacts may reveal that relatively minor impacts associated with a particular project may contribute to more significant impacts when considered collectively with other projects taking place over a period of time.

### 9.2 Cumulative Projects

Section 15130(b)(1) of the CEQA Guidelines provides two options for considering potentially significant cumulative adverse impacts. This analysis can be based on either:

- "(A) A list of past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or*
- (B) A summary of projections contained in an adopted General Plan or related planning document, or in a prior environmental document which has been adopted and certified, which described or evaluated regional or areawide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency."*

The cumulative impacts analysis requires consideration of other projects in an area, in conjunction with the proposed project, to assess the potential for significant adverse cumulative impacts. For this Draft EIR, the potential environmental effects of the proposed Pacific Coast Highway/Del Prado Avenue Improvement Project were considered in conjunction with the potential environmental effects of buildout anticipated for the project area. Several projects were identified by the City of Dana Point as proposed (i.e., under review) and/or approved projects. These projects, summarized in Table 9-1, were evaluated in the traffic analysis conducted for the proposed project and are also considered in the assessment of cumulative impacts

presented in this section. The projects outlined in Table 9-1 represent the status of those projects at the time the Notice of Preparation (NOP) was issued in June 2010.

**Table 9-1**  
**Related Projects**  
**Pacific Coast Highway/Del Prado Avenue Phase I Improvement Project**

Related Project	Location/Address	Description
Headlands Specific Plan	Pacific Coast Highway between Selva Road and Golden Lantern	118 single-family detached residential dwelling units, a 65-room Seaside Inn that includes meeting/function space, restaurant and lounge, related amenities amounting to 13,000 square feet of visitor/recreation commercial uses, park and recreation areas, visitor recreation (community) facilities, recreation/open space and visitor/recreation commercial area of up to 40,000 square feet.
Dana Point Harbor Revitalization	Dana Point Harbor	Establish a Commercial Core and replace/remodel all existing retail and restaurant buildings.
Dana Point Town Center	Pacific Coast Highway between Blue Lantern and Golden Lantern	A combination of land use regulatory and zoning changes to allow mixed-use and transportation capital improvements. Potential (net) development consists of 192,165 square feet of retail/restaurant floor area, 31,224 square feet of office space, 237 dwelling units (condominiums/townhomes), and 50,000 square feet of institutional space (City Hall).
South Coast Water District Sewer, Water, and Recycled Water Lines	Dana Point Town Center including PCH and Del Prado Avenue from Green Lantern to Copper Lantern and an area north to La Plaza	New water, sewer, and recycled water pipelines to serve ambient long-term expected increases in development intensity within the Dana Point Town Center.
SOURCE: City of Dana Point		

### 9.3 Cumulative Impact Analysis

#### 9.3.1 Land Use and Planning

The proposed project is consistent with the long-range goals, policies and objectives articulated in the relevant elements of the Dana Point General Plan as well as the policies of the Town Center Plan that was adopted by the City to guide development. The proposed project is also compatible with the existing land uses in the area and it will comply with the applicable land use and circulation regulations prescribed by the City for the Town Center. As a result, project implementation will not contribute to potentially significant land use compatibility or policy conflicts when considering other projects approved in the area.

#### 9.3.2 Population and Housing

Project implementation does not include any residential development and would not result in any loss of housing or displacement of residents. The roadway improvements will not, therefore, contribute to any potential cumulative impacts to population and housing.

#### 9.3.3 Geology and Soils

The proposed project encompasses only roadway improvements; no habitable structures are proposed that would be subject to the effects of adverse soils conditions and/or seismic activity. Nonetheless, the

roadways and related facilities will be designed in accordance with City standards to avoid project-related and cumulative impacts. Due to the lack of habitable structures and only limited exposure to geologic and seismic constraints, the proposed project would not contribute to any potentially significant cumulative impacts that would occur as a result of other planned and approved development occurring in the region.

#### **9.3.4 Hydrology and Water Quality**

After the circulation improvements are implemented, it is anticipated that the amount of impervious surfaces in the Town Center area, which has been extensively developed, will be reduced with landscaped zones approximately 28,700 square feet. As a result, the quantity and quality of the surface water runoff that will be generated will be improved from that occurring at the present time. Therefore, it is not anticipated that there would be any increase in the amount, or reduction in the quality of, surface runoff that would contribute to potentially significant cumulative impacts associated with other planned and/or approved project. Project implementation would result in beneficial drainage and water quality impacts due to the upgraded storm drain facilities and incorporation of water quality features.

#### **9.3.5 Air Quality**

Project implementation will result in only temporary, construction emissions; however, the daily emissions do not exceed the thresholds established by the South Coast AQMD. These short-term impacts are reduced further through the implementation of measures required to be implemented by the regulatory agencies. As a result, these impacts are both short-term/temporary in nature and they do not exceed the established significance thresholds, they would be expected to contribute to the degradation of the South Coast Air Basin. Implementation of the proposed project will not occur concurrently with the infrastructure improvements (i.e., sewer, water and recycled water facilities), which have been approved and will be undertaken by the South Coast Water District. Therefore, project implementation will avoid potentially significant cumulative air quality impacts. With regard to other planned and approved projects, no development/construction phasing for those projects has not been identified and cannot be accurately assessed. However, because the proposed project would contribute only short-term emissions and because the construction impacts were determined to be less than significant and, furthermore, because measures have been incorporated into the project to minimize those short-term impacts, potentially significant cumulative air quality impacts would not occur as a result of project implementation. No long-term pollutant emissions would be generated by the project. The indirect effect of redistributing the traffic along the arterial system resulting from the proposed project would also not significantly affect the CO "hot spot" concentrations because none of the concentrations forecast at the affected intersections, which reflect long-range traffic forecasts, would exceed the significance thresholds established by both State and federal agencies. Therefore, no significant project-related cumulative impacts are anticipated.

#### **9.3.6 Traffic and Circulation**

Project implementation would result in some short-term traffic impacts associated with the construction activities required to improve Del Prado Avenue and PCH. These short-term impacts include potential delays caused by lane closures and related work within the rights-of-ways of each affected roadway. As indicated above, the SCWD infrastructure improvement project, which includes the replacement and/or upgrade of sewer, water, and recycled water facilities in both Del Prado Avenue and PCH, would not be undertaken concurrently with the proposed project. Therefore, no cumulative short-term traffic and circulation impacts would occur. In addition, because the timing of other project is not currently known, it is difficult to anticipate the effect of similar construction in the Dana Point Town Center; however, each project, including the proposed street improvement project proposed by the City of Dana Point, will be required to implement measures to address the effects of their respective construction activities where such activities would affect vehicular circulation. Therefore, potentially significant cumulative traffic and circulation impacts would be avoided.

The proposed project will not result in any additional operational traffic (i.e., traffic generated as a result of development). As indicated in Section 4.2, project-related traffic impacts are limited to those that would occur during construction only (i.e., lane closures, etc.) that affect traffic operations for short periods of time. Future development projected for the area, including that resulting from buildout of the City's General Plan and development within the Town Center, can be accommodated by the proposed roadway improvements. All of the roadway segments and intersections in the Town Center environs are forecast to operate at acceptable levels of service with the implementation of the proposed improvements. No significant cumulative impacts are anticipated and no additional mitigation measures are required.

### **9.3.7 Biological Resources**

Because the project area (i.e., roadway rights-of-way) is covered with impervious surfaces that characterize Del Prado Avenue and Pacific Coast Highway, it has no potential to support plant species considered to be of special interest by the U.S. Fish and Wildlife Service, California Department of Fish and Game, and California Native Plant Society due to both the exotic (i.e., non-native) nature of the plant species observed, and the overall highly disturbed nature of the habitats within the survey area. The entire project areas are improved. As a result, the proposed project would not result in any impacts to important biological resources and, therefore, would not contribute to the cumulative degradation and/or loss of such resources. Therefore, project implementation would not result in any potentially significant cumulative impacts to biological resources.

### **9.3.8 Mineral Resources**

No significant impacts to mineral resources are anticipated. No mineral resources are known to exist within the right-of-way limits of either arterial roadway that would be adversely impacted by development of the site as proposed. Further, project implementation would not directly impact any existing mineral resource areas either in the City of Dana Point, the region, or the State of California. Although the proposed project would require the use of mineral resources (e.g., sand and gravel, concrete, etc.) in order to implement the roadway improvements, these are either renewable or are in abundant supply. Therefore, when compared to other projects in the area, the project would not contribute to the incremental loss of mineral resources; and no significant cumulative impacts to mineral resources will occur.

### **9.3.9 Hazards and Hazardous Materials**

Project implementation will not result in any potentially significant health risks. No hazards and/or hazardous conditions will be created by the proposed project that would contribute to potential hazardous conditions.

### **9.3.10 Noise**

Cumulative noise impacts occur when multiple sources of noise, though individually not substantial, combine and lead to excessive cumulative noise exposure at noise-sensitive uses.

#### Temporary Construction Activities

Cumulative construction noise impacts have the potential to occur when multiple construction projects in the local area generate noise within the same time frame and contribute to the local ambient noise environment. Like stationary-source noise, cumulative construction noise and vibration impacts are confined to a localized area of impact. Consequently, cumulative impacts would only occur if other projects were being constructed in the vicinity of the project at the same time as construction of the project. The traffic impact analysis prepared by Linscott, Law and Greenspan Engineers (June 2010) has identified future projects that would occur in the vicinity of the proposed project. According to the traffic study, related projects with the potential to contribute to cumulative construction noise include those identified in Table 9-1. However, none of those projects are anticipated to occur concurrently with the

proposed street improvement project. Specifically, the SCWD infrastructure improvements would occur separate from the proposed improvements to Del Prado Avenue and PCH and would not, therefore, contribute to increased noise levels along those roadways that would have a potentially adverse impact on the adjacent properties. Although other development that is planned and/or approved for area could contribute to the ambient noise levels, the timing and scope of such potential individual projects are not known, and therefore, effects from potential overlapping operations with the proposed project's construction activities are speculative.

#### Mobile-Source Noise

Because no development is proposed, project implementation would not result in direct increases to the ambient noise levels associated with increased traffic volumes. As indicated in Section 4.5, future noise levels that reflect short-term (i.e., 2015) and long-term (i.e., 2035 General Plan "buildout) volumes would not result in significant noise impacts. It is anticipated that while some noise levels are forecast to increase along segments of the two roadways, other segments would be characterized by decreases; however, the noise levels forecast for the area would be in the low to mid 60 dB range. The noise level increases are associated with future development within the Town Center and elsewhere in the City and nearby areas; however, no significant long-term cumulative impacts are associated with the proposed project.

#### **9.3.11 Public Services**

The project is located in an area of the City of Dana Point that is adequately served by public services and facilities, including police and fire protection. The proposed roadway improvements will not significantly affect the existing level of service of either police or fire protection. The potential (less than significant) construction-related impacts associated with the proposed project would not alter the ability of either the Orange County Fire Authority or Orange County Sheriff Department from providing an adequate level of service in the project environs. The related projects identified in Section 9.2 (refer to Table 9-1) have been evaluated by both the Orange County Fire Authority and Orange County Sheriff's Department to ensure that adequate levels of service can be provided and no significant impacts would occur. These projects are within the long-range projections identified in the City's General Plan and, therefore, would not adversely affect the City's ability to provide an adequate level of protection. Because the proposed projects includes only roadway improvements and does not include residential development, project implementation will not contribute cumulatively to the impacts anticipated to school and parks/recreation facilities.

#### **9.3.12 Utilities and Service Systems**

Project implementation will not result in any direct impacts associated with demands for utilities, including sewer, water, and/or recycled water because no development is proposed with the roadway improvements proposed by the City of Dana Point. However, the South Coast Water District approved plans to implement several improvements to the existing water, wastewater, and recycled water systems provided by that agency. These improvements are proposed within the rights-of-way of several roadways in the Town Center area, including Del Prado Avenue, Pacific Coast Highway, Violet Lantern, Ruby Lantern, etc., and have been designed based on the circulation improvements proposed by the City of Dana Point for the affected roadways. Therefore, potentially significant cumulative impacts to utilities and/or service systems within the Town Center area are not anticipated. In addition, several mitigation measures were included in the Mitigation Negative Declaration prepared for the SCWD project, including the preparation of a construction traffic management plan for work within public roads, repair of all roadways affected by the construction activities, and the maintenance of emergency access during the construction phases of that project. Similar measures are also included in the proposed project to ensure that no significant cumulative impacts occur.

### **9.3.13 Aesthetics**

Project implementation will not result in any significant landform alterations that would contribute to cumulative adversely affect the aesthetic character of the existing roadway and/or the Pacific Ocean and other important scenic resources. No heritage trees or significant rock outcroppings exist between Copper Lantern and Blue Lantern and no historic buildings or structures that exist along either arterial roadway that would be adversely affected by the proposed circulation improvements; therefore, no significant cumulative aesthetic impacts would occur.

### **9.3.14 Cultural/Scientific Resources**

No significant excavation and/or grading activities that would affect areas that have not previously been altered by grading and/or development is required in order to implement the proposed roadway improvements. As a result, the proposed project would have no effect on archaeological/cultural, paleontological, and/or historic resources and no significant cumulative impacts would occur.

### **9.3.15 Climate Change/Greenhouse Gas**

As indicated for air quality (refer to Section 9.3.5, project implementation will result in only temporary, construction GHG emissions. These impacts are both short-term/temporary in nature and they do not exceed the recommended significance thresholds for GHG. Furthermore, the infrastructure improvements approved by the SCWD will not occur at the same time as the proposed street improvements, thereby avoiding potential cumulative climate change/greenhouse gas emissions. As indicated previously, the timing of other projects is unknown. Therefore, because project-related GHG impacts and short-term, ceasing upon completion of the improvements and, furthermore, do not exceed the significance thresholds, no potentially significant short-term cumulative impacts would occur as a result of project implementation. No long-term GHG emissions would be generated by the project because no development is proposed. The indirect effect of redistributing the traffic along the arterial system resulting from the proposed project would also not significantly affect the CO<sub>2</sub>e. Therefore, no significant project-related cumulative impacts are anticipated.

### **9.3.16 Recreation**

The proposed project does not include any residential development or other development that would generate new residents resulting in demands for recreational facilities. Therefore, the proposed roadway improvements would have no direct or indirect demand that would result in any impacts on recreation either within Dana Point or south Orange County. Therefore, the project would not contribute to any potentially significant cumulative impacts.