CHAPTER 1
EXECUTIVE SUMMARY

1.1 Introduction to the Revised Draft Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan

This Revised Draft Environmental Impact Report (EIR) has been prepared to evaluate the potential environmental impacts that may result from implementation of the Chula Vista Bayfront Master Plan (CVBMP) Proposed Project. This EIR revises, updates, and expands the Draft EIR for the Proposed Project, which previously was circulated for a 60-day public review period from September 29, 2006, to November 27, 2006. In response to multiple requests for additional review time, the public review period was extended an additional 45 days to January 11, 2007, bringing the total public review period to 105 days. Since that time, the San Diego Unified Port District (Port) has received numerous public comments and substantial additional information concerning the Proposed Project and its environmental review. The Port has prepared this Revised EIR in a good faith effort to respond to the public comments, to provide additional information concerning the design of specific development projects, and to address changes that have been made to various aspects of the Proposed Project.

This Revised EIR contains numerous changes to the previously circulated Draft EIR. Although revised and updated information is contained throughout this Revised EIR, the revisions to the previously circulated Draft EIR may be summarized as follows:

- Additional information is provided concerning the design of the resort hotel and convention center project proposed for development on Parcel H-3 in the Harbor District during Phase I of the Proposed Project. See *Chapter 3, Project Description*, of this Revised EIR.
- Additional information is provided concerning the design of the residential and ancillary retail project proposed for development on Parcels H-13 and H-14 in the Harbor District during Phase I of the Proposed Project. See *Chapter 3, Project Description* of this Revised EIR.
- No residential development will occur in the Otay District. Residential development will occur only on Parcels H-13 and H-14 in the Harbor District and will be limited to 1,500 units. The proposed land exchange will not include any parcels in the Otay District. See *Chapter 3, Project Description* of this Revised EIR.
- No new power plant will occur in the Otay District. Parcel O-4 in the Otay District will not be designated as an "Energy/Utility" zone and the proposal to develop a new power plant, which was a separate project subject to the exclusive jurisdiction of the California Energy Commission, has been withdrawn. See *Chapter 3, Project Description* of this Revised EIR.

- Parcel O-4 in the Otay District will be designated for "Industrial Business Park" use under the Port Master Plan, which would generally be consistent with the uses presently allowed by the existing "Industrial" use designation under the City of Chula Vista Local Coastal Program. See *Chapter 3, Project Description* of this Revised EIR.
- The first 200 feet of the buffer zone proposed for Parcel SP-1 in the Sweetwater District has been designated a "no touch" zone. See *Chapter 3, Project Description* of this Revised EIR.
- The phasing plan for implementation of the Proposed Project has been expanded from three to four phases and changes have been made to the phases in which the development of various parcels is anticipated to occur. See *Chapter 3, Project Description* of this Revised EIR.
- The development proposed in Phase I of the Proposed Project, including the resort hotel and conference center project on Parcel H-3 and the residential and ancillary retail project on Parcels H-13 and H-14, is analyzed at a project level of detail. This Revised EIR is intended to serve as a project EIR for the development proposed in Phase I.
- The development proposed in Phases II, III, and IV of the Proposed Project is analyzed at a program level of detail. This Revised EIR is intended to serve as a program EIR for the development proposed in Phases II, III, and IV.
- The range of alternatives to the Proposed Project has been revised. The Modified Sweetwater Alternative, Reduced Residential Density Alternative, and Modified Land Exchange Alternative have been eliminated in light of changes made to the project description. A new alternative has been added to address the change in circumstances, which would occur on Parcel HP-5 if the remediation of existing contamination under the jurisdiction of the Regional Water Quality Control Board (RWQCB) requires filling, rather than removal and restoration, of the affected area. See *Chapter 7, Other Required Considerations* of this Revised EIR.
- The discussion of many of the Proposed Project's potential environmental impacts and feasible mitigation measures has been revised, updated, and expanded. See *Sections 4.1* through *4.17* of this Revised EIR.
- The issue of global climate change, also known as global warming, has become an important issue, since the passing of California Assembly Bill 32 in late 2006, which warrants evaluation in this Revised EIR. See *Sections 4.5, Hydrology/Water Quality,* and *4.6, Air Quality,* of this Revised EIR.
- Many of the technical reports and studies on which the analysis of potential environmental effects is based have been revised, updated, and expanded. The revised technical reports and studies are identified in *Sections 4.1* through *4.17* of this Revised

EIR and are either attached as appendices to this Revised EIR or are available for public review at the Port.

BECAUSE THE REVISIONS DESCRIBED ABOVE ARE SUBTANTIAL, THE PORT HAS DETERMINED TO RECIRCULATE THIS ENTIRE REVISED EIR FOR PUBLIC REVIEW AND COMMENT. PUBLIC COMMENTS ON THE PREVIOUSLY CIRCULATED DRAFT EIR WILL BE INCLUDED IN THE ADMINISTRATIVE RECORD, BUT THE PORT WILL NOT PROVIDE WRITTEN RESPONSES TO THEM IN THE FINAL EIR. THEREFORE, PURSUANT TO CEQA GUIDELINES SECTION 15088.5(f)(1), REVIEWERS OF THIS REVISED EIR ARE ADVISED THAT NEW COMMENTS MUST BE SUBMITTED ON THIS REVISED EIR AND THE PORT WILL RESPOND IN WRITING IN THE FINAL EIR ONLY TO THOSE COMMENTS SUBMITTED IN RESPONSE TO THIS REVISED DRAFT EIR.

The Chula Vista Bayfront is located on the southeastern edge of San Diego Bay in the City of Chula Vista. In 2002, the San Diego Unified Port District (Port) and the City of Chula Vista (City) joined together to create a master plan for the approximately 556-acre Bayfront and reconfigure its 497 acres of land and 59 acres of water uses, connecting them in a way that would promote public access to and engagement with the water while enhancing the quality and protection of key habitat areas, with the ultimate goal of creating a world-class bayfront through strong planning and design, economic feasibility, and community outreach.

Key components of this project, known as the Chula Vista Bayfront Master Plan (CVBMP) or Proposed Project, include the following:

- A Signature Park, open space areas, and cultural use
- Improved visual corridors to the San Diego Bay
- A Resort and Convention Center and other hotels
- Residential and mixed-use office/commercial recreation uses
- Waterfront retail uses and public gathering spaces around the harbor
- A new commercial harbor and improved navigation channel
- A public promenade and bike trail through the entire Bayfront
- Large buffer zones to protect adjacent sensitive resources.

As this is a joint planning effort covering a large area of land and water, a number of jurisdictional issues must be addressed and resolved. The Port currently has jurisdiction over much of the land and water areas, while the City currently exercises jurisdiction over some of the inland portions of the planning area. In addition, a number of parcels that the Port wishes to

develop into visitor-serving uses are currently held under option by Pacifica Companies, a private residential developer. For this reason, the CVBMP proposes an exchange of lands between the Port and Pacifica Companies, as well as corresponding adjustments to the jurisdictional boundaries of the Port and City. Such land exchange would require approval by the State Lands Commission, which oversees "public trust" lands like those that the Port manages along the Bayfront.

The extensive redrawing of land uses in the project area requires changes to the Port and City jurisdictional boundaries and various planning documents that the Port and City use to guide development in this part of San Diego Bay. Specifically, the Port proposes to amend its Port Master Plan to reflect the new land and water uses and to account for the land exchange. Likewise, the City proposes to amend its General Plan and Local Coastal Program, which includes the Land Use Plan and Bayfront Specific Plan, all of which would be affected by the newly designated land uses.

The purpose of this Revised EIR is to analyze the potential environmental impacts of various actions of the Port and City. This EIR describes the Proposed Project and the existing physical and regulatory environment, thereby placing the project in its proper environmental context; it analyzes the project's potential impacts on the environment; and it identifies opportunities to minimize significant impacts through mitigation measures and reasonable alternatives, in accordance with the California Environmental Quality Act (CEQA). This EIR is also a public accountability and disclosure document designed to inform the public, as well as decision makers, about the potential environmental impacts of the project. The Port welcomes your comments and participation at the public meetings and Board of Port Commissioners certification hearing.

This *Executive Summary* provides a brief synopsis of the project description, project alternatives considered, and summary of the environmental analysis contained in this Revised Draft EIR. This summary does not contain the extensive background and analysis found in the document; therefore, the reader should review the entire document to fully understand the project and its environmental consequences.

1.2 Public Outreach and Participation

Some years ago, the Port and the City recognized the need to revitalize the Chula Vista Bayfront by providing greater public amenities and a more synergistic mix of land and water uses. However, such a vast, complex, and important master planning project could not be devised without community input. Therefore, for more than two years beginning in January 2003, the Port and City engaged in an intensive, award-winning public outreach program for the CVBMP.

As part of this two-phase public outreach program, the Port and the City established two Citizens Advisory Committees and conducted approximately 40 public meetings between January 2003 and July 2005. The Port formed the South Bay Power Plant Working Group, which met several times between December 2003 and April 2004 to address issues specific to the planned uses at the power plant site. In addition, the Port and City conducted six public workshops and held four joint Board of Port Commissioners/Chula Vista City Council meetings to discuss the project. The Port and City also conducted more broad-based outreach efforts, including 45 community presentations and a number of focused discussions with affected public agencies and organizations. For those who could not attend any of these presentations or meetings, and to keep the public apprised of the progress of the CVBMP planning effort, the Port published newsletters and regularly updated its CVBMP webpage.

Phase I of the master planning process, which began in January 2003 and ended in May 2004, resulted in the development of two land use plans then referred to as Option C (which has evolved into the Harbor Park Alternative) and Option B (which has evolved into the No Land Trade Alternative). Phase II, which began in June 2004 and ended in August 2005, built upon the Phase I planning efforts and resulted in the development of master plan concepts that identified locations and development program/height ranges and phasing for specific land uses. At their August 9, 2005 joint meeting, the Board and City Council/Redevelopment Agency received a presentation on the master plan concepts and authorized staff to proceed with the environmental review process for the CVBMP. At that meeting, the Board/City Council authorized staff to include the following three plans in the CVBMP EIR: Plan A (referred to in this EIR as the Harbor Park Alternative), Plan A Option 2 (referred to in this EIR as the Proposed Project or Sweetwater Park Plan), and Plan B (referred to in this EIR as the No Land Trade Alternative).

1.3 Project Objectives

As a result of the extensive CVBMP public outreach effort, the Port and City were able to build from their original vision for the Bayfront and incorporate features recommended by members of the public. To meet the ultimate goal of creating a world-class bayfront, the Port and City developed the following 10 objectives during the master plan process:

- Consistency with tidelands trust requirements and restrictions
- Broad community input into the planning process and support of the master plan
- Development of a master plan that protects and enhances environmental resources
- Seamless integration with adjoining properties
- Development of a visionary master plan that is economically sustainable, provides revenue generation, and would encourage private sector participation

- Development of a plan that creates future market opportunities and defines the market rather than simply responding to the existing market
- Development of a plan that eliminates or reduces barriers to linking the Bayfront to the rest of western Chula Vista
- Development of a plan that enhances a culturally diverse community and integrates the Bayfront with the rest of Chula Vista
- Development of a comprehensive funding program
- Development of a master plan that includes recreational, public art, and open space opportunities as significant components of the plan.

In addition, the CVBMP urban design consultant team developed the following design principles during the master planning process:

- Create one unified Chula Vista Bayfront
- Celebrate the serenity and Hispanic culture of Chula Vista's Bayfront setting
- Extend Chula Vista all the way to the Bayfront
- Take advantage of deep water at the harbor to create an active boating environment
- Create a Bayfront park system that marries ecological habitats and the recreational needs of the community
- New development should reinforce the sense of place at the Bayfront.

In the course of adopting these project objectives, it became evident that the current jurisdictional lines would have to be redrawn and that it would be desirable for the Port to exchange some of its public trust property with Pacifica Companies. Without such a land exchange, the land use potential of the project planning area could not be optimized. As is discussed throughout this EIR, the proposed land exchange is a fundamental component of the Proposed Project and would require approval by the State Lands Commission.

1.4 The Four Phases of the Proposed Project

The approximately 556-acre CVBMP project area is divided into three districts: the northern 130-acre Sweetwater District; the central 282-acre Harbor District; and the southern 144-acre Otay District. The CVBMP project is proposed to be developed in four phases over an approximately 24-year period. Construction of Phase I and II components would begin upon project approval and conclude approximately five years later. Phase I components are envisioned to consist of high-quality development and public improvements that would be concentrated in the Harbor and Sweetwater Districts and would be a catalyst for surrounding public and private

development. Phase III would start in 2013 with an expected completion date of 2017. Phase IV is anticipated to conclude in 2031.

The proposed construction phasing schedule for the CVBMP represents a "best-case scenario" and will be contingent upon and subject to many factors, including availability and timing of public financing and construction of public improvements, terms of existing long-term leases, actual market demand for and private financing of proposed development, lease negotiations, approvals for and demolition and/or relocation of existing uses, approvals for new uses, and other approvals. The Port and City plan to enter into an agreement for the purpose of financing and development of the Proposed Project.

Phase I components of the Proposed Project, as well as proposed roadway and infrastructure improvements in the Sweetwater and Harbor Districts, are analyzed in this report at a project-specific level and the Phase II, III, and IV components are analyzed at a programmatic level. The nature and extent of additional environmental review, which may be required for the Phase II, III, and IV components, will be determined pursuant to State CEQA Guidelines Section 15168.

1.5 The Proposed Project

The Proposed Project, or Sweetwater Park Plan, is composed of the following components:

- Amendments to the Port Master Plan, the City of Chula Vista General Plan, and the City's Local Coastal Program (which includes the Land Use Plan and Bayfront Specific Plan), and the Chula Vista Multiple Species Conservation Plan (MSCP) Subarea Plan.
- A land exchange between the Port and Pacifica Companies (a private developer).
- Implementation of the CVBMP through redevelopment of the Sweetwater, Harbor, and Otay Districts with a variety of uses, including park, open space, ecological buffers, cultural, recreational, residential, hotel and conference space, mixed-use office/commercial recreation, and retail. The CVBMP includes specific development projects such as the Resort Conference Center (RCC) proposed by Gaylord Entertainment and residential development proposed by Pacifica Companies. CVBMP redevelopment also includes proposed in-water uses, including a reconfigured marina basin and boat slips, a new commercial harbor, and realignment of the existing navigation channel.
- Redevelopment of the roadway and sewer and water infrastructure system to serve the Proposed Project area.
- Demolition and/or relocation of existing uses to allow for the above redevelopment to occur subject to lease agreements.

The Sweetwater, Harbor, and Otay planning districts are each divided into proposed parcels. A diverse range of uses is proposed for development on these parcels. *Figure 1-1* depicts the parcel

plan map and development phases for the Proposed Project. As shown on *Figure 1-1*, parcel numbers that begin with "S" are located in the Sweetwater District, "H" in the Harbor District, and "O" in the Otay District. A district-by-district description of project components is set forth below. This summary provides a brief synopsis of the project description. The reader should refer to *Chapter 3, Project Description*, for more detail.

1.5.1 Sweetwater District Components

The Sweetwater District consists of approximately 130 acres. In the Sweetwater District, the project proposes the lowest-intensity development of the three districts and focuses on lower scale, environmentally sensitive, and environmentally themed uses, including a large ecological buffer; a signature park; a bike path; pedestrian trails; other open space areas; and low-intensity uses such as office/retail, hotel, parking for the Chula Vista Nature Center, and roadway and infrastructure improvements.

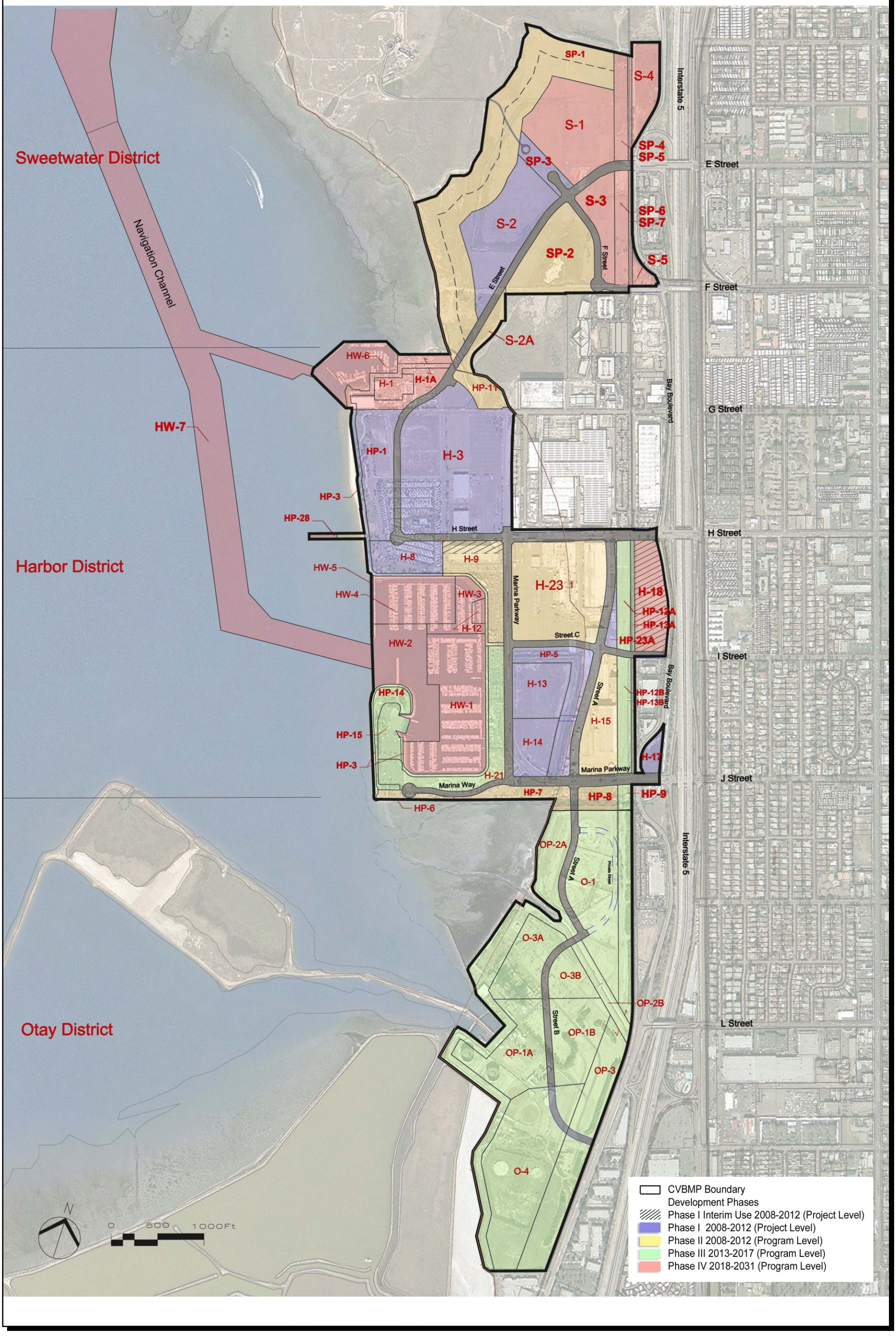
1.5.1.1 Phase I Projects

The project proposes to construct an approximately 18-acre Signature Park that would be connected to the existing Chula Vista Greenbelt. As currently planned, it would be constructed as a passive-use, meadow-type park, with pedestrian and bicycle trails, tot lots, picnic areas, benches, interpretive signage, restrooms, and landscaping. In addition, a 100-space asphalt parking lot and realigned Gunpowder Point Drive access road for the Chula Vista Nature Center are proposed in Phase I on a vacant, approximately 3-acre parcel located in the center of the Sweetwater District. This parking lot (on Parcel SP-3) would permanently replace the existing Chula Vista Nature Center parking lot located off the I-5 off-ramp at E Street.

Table 1-1 summarizes the proposed development for the Sweetwater District during Phase I for the Proposed Project.

TABLE 1-1
Proposed Phase I Development for the Sweetwater District

Parcel Number	Proposed Use	Proposed Development
SP-3	Nature Center Parking and Access Road	3 acres
S-2	Signature Park/Open Space	18 acres



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SOURCE: Port of San Diego

Revised Draft Environmental Impact Report (EIR) for the Chula Vista Bayfront Master Plan

Proposed Project Parcel Plan & Development Phases

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1-1

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1.5.1.2 Phase II Projects

Several Sweetwater District components have been moved from Phase I to Phase II, including SP-1 Ecological Buffer, SP-2 Seasonal Wetland, and S-2A Open Space.

The project proposes to establish a 400-foot-wide ecological buffer zone surrounding the northern and western edges of the Sweetwater District and consisting of approximately 40 acres of undeveloped land. This buffer would protect the adjacent Sweetwater Marsh National Wildlife Refuge (NWR) from impacts associated with development in the Sweetwater District. From west to east, the buffer would consist of a 200-foot-wide No Use Zone, within which public access would be prohibited; wetland and upland habitat mitigation areas; a 100-foot-wide limited use zone, composed of revegetated open space areas with outlooks and trails; and a 100-foot-wide transitional use zone that would accommodate increased recreational uses such as picnic areas and trails and revegetated open space. There will be no lookouts on the western 200 feet of the buffer; the western portion will generally be used for potential upland and wetland mitigation.

An additional buffer, approximately 50 feet in width, would be constructed around the seasonal wetland that currently exists in the Sweetwater District (Parcel SP-2). This buffer would further protect the wetland from planned development.

Approximately 3 acres of land that are partially an existing street and partially vacant is proposed for open space and/or mitigation opportunities (see *Section 4.8, Terrestrial Biological Resources*) between the new E Street extension and F & G Street Marsh. It is likely that the existing street segment between F and G Streets would be demolished after the proposed E Street extension is completed.

Table 1-2 summarizes the proposed development for the Sweetwater District during Phase II.

TABLE 1-2
Proposed Phase II Development for the Sweetwater District

Parcel Number	Proposed Use	Proposed Development
SP-1	Ecological Buffer	41 acres
SP-2	Seasonal Wetland	14 acres
S-2A	Open Space	3 acres

1.5.1.3 Phase III Projects

There is no Sweetwater District development planned for Phase III.

1.5.1.4 Phase IV Projects

The Sweetwater District components that were in Phase III in the previous Draft EIR have been moved to Phase IV in the Revised EIR, including S-3, S-4, S-5, SP-4, SP-5, SP-6, and SP-7. In addition, the S-1 Resort Hotel was moved from Phase I in the previous Draft EIR to Phase IV in the Revised EIR. Parcel S-5 will remain as an existing park/open space.

The project proposes to construct mixed-use office and commercial recreation in Phase IV on two separate parcels. The S-4 office will include a 100-foot buffer on the north end. In addition, approximately 11 acres of open space would be constructed. Development proposed in the Sweetwater District in Phase IV also includes a 500-room to 750-room resort hotel. *Table 1-3* summarizes the proposed development for the Sweetwater District during Phase IV.

TABLE 1-3
Proposed Phase IV Development
for the Sweetwater District

Parcel Number	Proposed Use	Proposed Development
S-1	Resort Hotel	500−750 rooms, 2−8 stories, 40−100 feet high
SP-4, SP-5, SP-6, SP-7, S-5	Parks/Open Space	11 acres
S-3	Mixed-Use Office/Commercial Recreation	60,000−120,000 square feet, 2−3 stories, 30−45 feet high
S-4	Office	120,000 square feet, 8 stories, 125 feet high

1.5.2 Harbor District Components

The Harbor District is most directly accessible to downtown Chula Vista and would be redeveloped to provide a significant link from the City to the Bayfront. It is composed of approximately 223 acres of land and 59 acres of water. The Harbor District proposes the highest intensity development of the Proposed Project and encourages an active, vibrant mix of uses, including hotels and conference space; park and other open space areas; a bike path; a continuous waterfront promenade; residential uses; mixed-use retail, office, and cultural space; piers; and new roadways and infrastructure. Also proposed is a reconfiguration of the existing harbor to create a new commercial harbor, and realignment of the navigation channel. Construction and development for project components in the Harbor District would occur in all four phases.

1.5.2.1 Phase I Projects

Of the various Phase I development projects proposed for the Harbor District, the most prominent is the Resort and Convention Center (RCC). Located on a 39-acre parcel, the RCC

would be an entertainment-themed resort with 1,500 to 2,000 rooms; 415,000 square feet of net meeting space; and hotel support space. In addition, the RCC would include restaurants, retail shops, swimming pools, a spa, sports bars, gardens, a nightclub, a business center, and expansive open space areas.

To better integrate the RCC with the greenbelt established in the Sweetwater District, the project proposes extending the Signature Park southward and wrapping the park around the RCC. This extension, consisting of approximately 17 acres of land, would enable the Signature Park to connect with the smaller Chula Vista Bayside Park that currently exists in the Harbor District to create one continuous park of approximately 40 acres.

The Proposed Project also includes construction of approximately 1,500 mid-rise and high-rise residential units, subject to a land exchange between the Port and a private developer. An existing "L"-shaped drainage channel on HP-5 (referred to as an L-Ditch in this EIR) containing wetland habitat that borders the proposed residential development on two sides would not be developed, and would contain an average 50-foot-wide buffer from the delineated wetland edge on either side to protect against encroachment into the wetlands, other than for the proposed bridge crossing.

The Proposed Project includes an approximately 12,000-linear-foot, continuous shoreline promenade or "baywalk" from the existing boatyard south, around the marinas, and ending at the shoreline north of the J Street Marsh, which would provide visitors with visual and physical access to the water. Parts of the promenade will be built in each phase, with the portion abutting HP-1 and H-8 built in Phase I. The promenade in the Harbor District would be connected to the Sweetwater District by a multiuse trail.

Interim uses are proposed on Parcels H-9 and H-18. Parcel H-9 would contain approximately 2 acres of interim park/landscaping within its northern boundary along H Street. H-18 would consist of a 1,100-space interim surface parking lot. The Proposed Project includes the acquisition of Parcel H-17 by the City.

As part of the Proposed Project, a fire station shall be constructed on Parcel H-17 at the corner of J Street and Bay Boulevard. This property is currently within the Port's jurisdiction and will be acquired by the City prior to any use as a fire station.

Table 1-4 summarizes the proposed development for the Harbor District in Phase I.

TABLE 1-4
Proposed Phase I Development for the Harbor District

Parcel Number	Proposed Use	Proposed Development
HP-1, H-8	Signature Park	17 acres
HP-3	Shoreline Promenade (abutting HP-1 and H-8)	3 acres
HP-5	Wetlands and Buffer	9 acres
H-3	Resort Conference Center	1,500–2,000 hotel rooms; 415,000 square feet net conference space; 100,000 square feet restaurant; 20,000 square feet retail; 300 feet high
H-9	Interim Park/Landscaping	2 acres
H-13, H-14	Residential	1,500 units; 19 stories; 220 feet high
H-13, H-14	Ancillary Retail	15,000 square feet
H-17	Bayfront Fire Station	9,500 square feet; 2 stories; 27 feet high
H-18	Interim Surface Parking Lot	1,100 parking spaces
HP-23A	Industrial Business Park Use	1 acre

1.5.2.2 Phase II Projects

To complement park development in the Harbor District during Phase I, the Proposed Project would establish approximately 8 acres of parks and open space in Phase II.

Another major aspect of the Harbor District development plan is the reuse of the former Goodrich South Campus parcels with 420,000 square feet of mixed-use office/commercial recreation use and a 250-room hotel with ancillary facilities. The project also proposes a second hotel consisting of 500 rooms, conference areas, restaurants, open space, other ancillary uses, and up to 200,000 square feet of cultural and/or retail space.

Consistent with the goal of improved public access, the project also proposes to construct the first half of a new 36,000 square foot pier at the end of the newly extended H Street corridor. Construction of the Shoreline Promenade will continue in Phase II, during which the portion abutting Parcel H-9 will be built.

The project also proposes the development of approximately 50,000 square feet of visitor-serving retail and commercial recreation facilities around the northern end of the harbor.

Table 1-5 summarizes the proposed development for the Harbor District in Phase II.

TABLE 1-5
Proposed Phase II Development for the Harbor District

Parcel Number	Proposed Use	Proposed Development
HP-6, HP-7, HP-8,	Parks/Open Space	8 acres
H-9	Retail/Commercial Recreation and Marina Support	25,000–50,000 square feet; 1–2 stories; 15–30 feet high
H-15	Mixed-Use Office/Commercial Recreation	420,000 square feet; 90–130 feet high
H-15	Hotel	250 rooms, 90–130 feet high
H-23	Resort Hotel	500 rooms, 300 feet high
H-23	Cultural/Retail	200,000 square feet; 30−65 feet high
HP-3	Shoreline Promenade (abutting H-9)	1 acre
HP-28	H Street Pier (first half)	0.4 acre

1.5.2.3 Phase III Projects

The project proposes approximately 150,000 square feet of retail/commercial recreation around the southern end of the harbor.

Construction of the Shoreline Promenade would continue in Phase III, during which the portion abutting Parcels HP-14, HP-15, and H-21 (approximately 3 acres) would be built.

Table 1-6 summarizes the proposed development for the Harbor District in Phase III.

TABLE 1-6
Proposed Phase III Development for the Harbor District

Parcel Number	Proposed Use	Proposed Development
HP-3	Shoreline Promenade (abutting HP-14, HP-15, and HP-21)	3 acres
HP-9, HP-12, HP-13, HP-14, HP-15	Park/Open Space	18 acres
H-21	Retail/Commercial Recreation	75,000–150,000 square feet; 1−2 stories; 15−30 feet high

1.5.2.4 Phase IV Projects

The Proposed Project would establish approximately 5 acres of parks in Phase IV on the northern end of the Harbor District, completing the continuous signature park, totaling approximately 40 acres at build-out.

A portion of the former Goodrich land areas would also be redeveloped with 100,000 square feet of mixed-use office/commercial recreation use and a 1,100 to 3,000 space collector parking garage. This was moved from Phase I in the previous Draft EIR to Phase IV.

Currently, the Chula Vista Harbor, which contains two marinas with approximately 900 boat slips, lacks an active commercial harbor that encourages and enhances public access to the water and boating activity in the water. To facilitate the creation of an active commercial harbor, the existing marina slips would be reconfigured during Phase IV. Envisioned for this new commercial harbor are water taxis, dinner boats, harbor cruises, visiting historic vessels, and boat rentals. The commercial harbor would include a ferry terminal and second-story restaurant. The ferry terminal would provide alternative transportation for commuters and tourists traveling to the Bayfront. Also proposed in Phase IV is the realignment of the existing navigation channel, which would be straightened westward to make it easier for boats to enter the harbor from the San Diego Bay. The realignment would also place the boating channel further away from sensitive resources along the shoreline. Another major component of the Phase IV harbor project is the completion of the H Street Pier extension.

Construction of the Shoreline Promenade would continue in Phase IV, during which the portion abutting Parcels H-1 and H-1A (approximately 2 acres) would be built. The final Phase IV component includes a community boating center with 200 boat slips.

Table 1-7 summarizes the proposed development for the Harbor District in Phase IV.

TABLE 1-7
Proposed Phase IV Development for the Harbor District

Parcel Number	Proposed Use	Proposed Development
H-1	Community Boating Center	10,000-20,000 square feet; 1−2 stories; 15−30 feet high
H-1A	Signature Park	5 acres
H-18	Mixed-Use Office/Commercial Recreation	100,000 square feet; 6−10 stories; 85−155 feet high
H-18	Collector Parking Garage	1,100–3,000 parking spaces; 6–10 stories; 85–155 feet high
HP-3	Shoreline Promenade (abutting H-1 and H-1A)	2 acres
HW-6	Marina (see H-1)	200 slips
HW-7	Navigation Channel	60 acres
H-12	Ferry Terminal/Restaurant	10,000–25,000 square feet; 2 stories; 30−40 feet high
HW-1, HW-2, HW-3, HW-4	Marinas, Boat Navigation Area, Commercial Harbor	50 acres, 700 slips

1.5.3 Otay District Components

The Otay District is composed of approximately 144 acres, and proposes medium-density development that consists of industrial business park use, a recreational vehicle park, a new South Park, as well as other open space areas, an ecological buffer, bike path, pedestrian trails, and new roadways and infrastructure.

1.5.3.1 Phase I Projects

All of the Otay District components are proposed in Phase III. No construction in this district is proposed in Phase I.

1.5.3.2 Phase II Projects

All of the Otay District components are proposed in Phase III. No construction in this district is proposed in Phase II.

1.5.3.3 Phase III Projects

All Phase II Otay District components in the previous Draft EIR have been moved to Phase III. The project proposes a recreational vehicle park with approximately 236 RV parking spaces and ancillary facilities. Industrial Business Park uses are proposed on the northernmost and southernmost Parcels O-1 and O-4 in the Otay District, previously proposed for residential and Energy Utility Zone uses in the previous Draft EIR. No new power plant, Energy Utility Zone, or residential uses are proposed in the Otay District.

As with the Sweetwater and Harbor Districts, the Otay District would also include new parkland use. Specifically, a new passive South Park, composed of approximately 24 acres is proposed, as well as 27 acres of other open space areas on the eastern edge of the district. Like the Sweetwater District, the Otay District would have a buffer that would include a 170-foot-wide to 200-foot-wide No Use Zone that could be used for habitat mitigation opportunities. Finally, development in the Otay District would involve improvements to the existing concrete-lined drainage channel at Telegraph Creek within the Proposed Project limits to accommodate projected storm flows.

Table 1-8 summarizes the proposed development for the Otay District in Phase III.

TABLE 1-8
Proposed Phase III Development for the Otay District

Parcel Number	Proposed Use	Proposed Development
OP-1A, OP-1B, OP-3	South Park/Open Space	51 acres
OP-2A, OP-2B	Ecological Buffer/Telegraph Creek Channel	27 acres
O-1	Industrial Business Park Use	18 acres
O-3A, O-3B	RV Park	175–236 RV spaces, 1–2 stories, 15–35 feet high
O-4	Industrial Business Park Use	28 acres

1.5.3.4 Phase IV Projects

All of the Otay District components are proposed in Phase III. No construction in this district is proposed in Phase IV.

1.5.4 Roadway System and Infrastructure

Over the course of the 24-year Proposed Project, roadways would be demolished, improved, realigned, or constructed anew to support development of the designated land uses. The proposed road improvements that serve the associated development for a particular phase would be constructed with all required utility systems so that the infrastructure is in place before individual development projects commence operation. The improvements for roadway system components, storm drains, water mains and connections, and sewers are summarized below.

1.5.4.1 Roadway System Components

In the Sweetwater District, E Street would be realigned and extended. A new bridge and bike path would be built over the inlet that flows into the F & G Street Marsh. F Street/Lagoon Drive would terminate in a new cul-de-sac, and a new F Street segment would be constructed. The abandoned segment of the existing F Street would remain in place but would be accessible to only emergency vehicles, pedestrians, and bicycles. The realignment of Gunpowder Point Drive and a new parking lot for the Chula Vista Nature Center are also proposed. All of the roadway improvements in the Sweetwater District, as with all of the districts, will be constructed as mitigation measures in accordance with *Section 4.2, Traffic and Circulation*; however, should funding be available, some street and utility improvements may be installed earlier. The one exception would be surface improvements for a new F Street segment, which would be constructed in Phase IV.

In the Harbor District, E and H Streets would be extended and H Street would serve as the primary entry to the RCC. J Street/Marina Parkway and Marina Way would be realigned. Bay Boulevard would remain open and would not be removed as was proposed in the previous Draft EIR. A newly constructed Street A and Street C would also provide access to Proposed Project components in the Harbor District. All proposed roadway improvements in the Harbor District would occur in Phase I.

In the Otay District, a new Street A and Street B would be built during Phase III to accommodate the new uses. No other roadways in the Otay District are proposed.

Intersections throughout the project site and off site would be improved during all phases of the Proposed Project. These improvements would include through lanes and turning lanes, all-way and two-way stop-controlled intersections, and traffic signals. In addition, the project proposes enhanced pedestrian access within developed and open space areas, enhanced public access to the waterfront, and a bikeway loop connecting the Bayshore Bikeway with the various activity centers and elements of the Proposed Project.

1.5.4.2 Storm Drains

The additional outfalls and connections for the proposed storm drain system would be constructed during Phases I, II, and III. The primary storm drain infrastructure required for the Sweetwater District would be developed during Phase I, for the Harbor District during Phase I, and for the Otay District during Phase III.

1.5.4.3 Water

On-site and off-site water facility improvements would be required for the Sweetwater and Harbor Districts during Phase I and for the Otay District during Phase III. The Proposed Project would replace existing on-site water mains, except for a water main located in Lagoon Drive. The new on-site water facilities would consist of water mains that extend in the proposed streets with metered connections and fire services for each parcel within each district.

1.5.4.4 Sewer

The Proposed Project would require construction of new and replacement sewer facilities on the project site. The Proposed Project would require gravity sewer mains in the streets, sewer force mains, sewer lift stations, and connections to the existing City sewer system. The sewer system for the Sweetwater and Harbor Districts would be constructed during Phase I. The improvements and facilities for the Otay District would be constructed in Phase III.

1.6 Project-Related Impacts

Although designed to be sensitive to both the human and natural environment, the Proposed Project includes dramatic changes to the existing conditions at the site, resulting in a variety of impacts. This EIR evaluates the project's potential to adversely affect a wide range of resources and impact categories, including the following:

- Land/Water Use Compatibility
- Traffic and Circulation
- Parking
- Aesthetics/Visual Quality
- Hydrology/Water Quality
- Air Quality
- Noise
- Terrestrial Biological Resources

- Marine Biological Resources
- Cultural Resources
- Paleontological Resources
- Hazards and Hazardous Materials/Public Safety
- Public Services
- Public Utilities
- Seismic/Geologic Hazards
- Energy
- Population and Housing

This EIR also analyzes the Proposed Project's growth-inducing and cumulative impacts.

The complete analysis of the potential impacts and recommended mitigation measures is set forth in *Chapter 4, Environmental Analysis*, of this report. A summary of the impacts associated with the Proposed Project, recommended mitigation measures, and the level of impact significance after mitigation is provided in *Table 1*-9, located at the end of this chapter.

1.6.1 Insignificant Impacts

As explained in this EIR, the relevant available data shows that the Proposed Project would have less than significant impacts on parking, cultural resources, and population and housing.

1.6.2 Significant Impacts

This EIR indicates that the project has the potential to create significant adverse impacts on: land/water use compatibility, traffic and circulation, aesthetics/visual quality, hydrology/water quality, air quality, energy, noise, terrestrial biological resources, marine biological resources, paleontological resources, hazards and hazardous materials/public safety, public services, public utilities, and seismic/geologic hazards. These impacts would require mitigation to reduce or avoid impacts.

1.6.3 Impacts Not Mitigated to Insignificant Level

The following project impacts would remain significant even after mitigation: traffic impacts on local freeway segments; visual impacts from the height and mass of buildings to be constructed in the Harbor District; and air quality impacts from emissions of nitrogen oxides, carbon monoxide, reactive organic gas, and particulate matter.

1.6.4 Cumulative Impacts

Cumulative impacts are considered less than significant for land/water use, parking, water quality, noise, cultural resources, paleontological resources, hazards and hazardous materials, parks and recreation, integrated waste management, seismic/geologic hazards, energy, and population and housing.

Cumulative impacts on biological resources are reduced to less than significant with implementation of regional habitat conservation plans, as well as project-specific mitigation measures to be implemented on a project-by-project basis. Cumulative impacts on public services and utilities (e.g., fire protection, law enforcement, schools, library services, sewer and wastewater capacity) would also require appropriate mitigation to reduce or avoid impacts.

During Phase II and IV construction of the marina, pier, and navigation channel, the Proposed Project could cause significant cumulative impacts on open water resources. These impacts were analyzed at the program level; therefore, prior to implementation of these project components, the Port will conduct additional review of cumulative impacts pursuant to CEQA Section 15168.

When combined with the environmental effects of other past, present, and reasonably foreseeable future projects, the Proposed Project's cumulative impacts on traffic and circulation, aesthetics/visual quality, and air quality would be **significant and unmitigated** despite measures to reduce impacts.

1.6.5 Growth-Inducing Impacts

The plan is expected to contribute greatly to the economy of the Chula Vista region in terms of jobs, personal income, and tax revenues. New development, including hotel and office uses, visitor-serving retail, residential, parkland and open space, would increase activity and use of the waterfront. Construction of additional housing would accommodate regional population projections. The Proposed Project would increase demand on public services and require more retail businesses, ultimately creating new jobs that could be filled from within and outside the community.

While development intensity would be shifted from areas adjacent to sensitive wildlife areas to central areas of the Bayfront, the Proposed Project could encourage or facilitate other activities in the south San Diego Bay area. These activities, either individually or cumulatively, could significantly affect the environment; therefore, the Proposed Project or its alternatives would have a significant impact on growth in the area.

1.7 Project Alternatives

1.7.1 CEQA Requirements Regarding Alternatives

Under CEQA (California Public Resources Code Section 21000 et seq.), an EIR must assess a reasonable range of alternatives, including a No Project Alternative, and thereby provide the public and decision makers with the means to compare the Proposed Project with other potentially suitable options. In order to merit consideration in the EIR, an alternative should meet all or most of the identified project objectives and should reduce one or more significant impacts of the Proposed Project. Due to the nature of the Proposed Project as a master plan for this specific geographic area, an alternative location was not included as part of this EIR.

CEQA recognizes that an EIR's assessment of an alternative's potential impacts would necessarily be less in depth than the assessment performed for the Proposed Project. This EIR discusses five alternatives. The Proposed Project EIR follows the standard protocol in respect to three of the proposed alternatives: the No Project Alternative, the Reduced Overall Density Alternative, and the Alternate L-Ditch Remediation Alternative. Although not legally required by CEQA, the Harbor Park Alternative and the No Land Trade Alternative are analyzed in greater detail. This was done to fulfill the Port's long-standing commitment to the community groups and resource agencies that have participated in planning efforts. The various alternatives to the Proposed Project are summarized below.

1.7.2 No Project Alternative

Under the No Project Alternative, no changes to existing or planned uses would occur, and there would be no land exchange. The Port Master Plan Precise Plan for District 7 would be retained in the Port lands. As a result, the lands could be developed pursuant to the existing Port Master Plan. Those parcels within the City's jurisdiction would be developed pursuant to the existing General Plan and Local Coastal Program (including the Land Use Plan and Specific Plan). These documents contemplate intense development of residential units in the Sweetwater District, as well as commercial, professional, recreation-oriented, public, and industrial uses throughout the project area.

Under this alternative, no residences would be constructed in either the Harbor or Otay Districts. As a result, the risk of human exposure to hazardous substances in these areas would be reduced.

The main biological benefit of this alternative is that it does not contemplate construction of a 300-foot-high hotel and high-rise residential in the Harbor District; therefore, it would likely result in fewer bird strikes in that district.

Although this alternative would not create conflicts with existing development plans, it would concentrate intense development adjacent to key sensitive areas, such as the F & G Street Marsh and the Sweetwater Marsh NWR. In addition, this alternative would not meet the objectives of the Port and the City to create a vibrant waterfront that attracts visitors and activates the economic potential of this part of the San Diego Bay.

1.7.3 Harbor Park Alternative

In contrast to the Proposed Project, the Harbor Park Alternative would place an RCC on a parcel further removed from the Bayfront and would establish the Signature Park and a lower-scale, 350-room to 500-room hotel on parcels nearest the water in the Harbor District. In the Sweetwater District, a 400-room conference hotel with a maximum height of 60 feet would be constructed.

Up to 420,000 square feet of mixed-use office/commercial recreation and 50,000 square feet of cultural use would be built in the Sweetwater District in Phase IV. A 500-room hotel with a maximum height of 65 feet and a 200-slip marina would replace the community boating center in the Harbor District. Up to 100,000 square feet of retail would be built around the northern portion of the harbor, instead of up to 50,000 square feet of retail as in the Proposed Project. The E Street extension/Marina Parkway alignment within Sweetwater would be modified to direct traffic easterly as the road enters the Harbor District. In all other relevant respects, the Harbor Park Alternative is similar to the Proposed Project and would require Port and State Lands Commission approval of the proposed land exchange

The impacts associated with this alternative would be similar to those identified for the Proposed Project. However, the relocation of the RCC would incrementally reduce direct and indirect impacts to biological resources as compared to the Proposed Project. This alternative proposes locating less intensive uses closer to the open space areas. The road network would also be pushed back to serve the RCC; this would reduce impacts on the shoreline. In general, the Harbor Park Alternative would locate fewer intense uses adjacent to sensitive park and habitat areas, such as the F & G Street Marsh, and thus would generate fewer and/or less intense impacts on these resources.

1.7.4 No Land Trade Alternative

In addition to the No Project Alternative discussed above, this EIR evaluates the No Land Trade Alternative, which would keep the RCC in the Harbor District. The Sweetwater District would not be a part of the project; however, under existing entitled uses under the Midbayfront LUP/LCP, high-density residential units, a hotel, and ancillary retail and commercial uses in the Sweetwater District could be developed. Under this alternative, the proposed land trade would not take place. Tidelands trust properties in the Project Area would remain within the Port's

jurisdiction. Parcels held under option by private developers would remain within the City's jurisdiction.

Impacts, including traffic, services, and utilities, would be similar to that expected with the Proposed Project, although impacts at specific intersections would differ slightly. Visual impacts to the adjacent Sweetwater Marsh NWR would be greater than for the Proposed Project, as more intensive residential, commercial, and retail development would be constructed in the Sweetwater District instead of the Harbor and Otay Districts. However, school impacts would be reduced, as the number of residential units, and therefore the number of potential students, is fewer under this alternative than under the Proposed Project.

1.7.5 Reduced Overall Density Alternative

The Reduced Overall Density Alternative (30 percent reduction) was selected for consideration to provide a development alternative that would reduce overall building mass and height and intensity of uses in order to reduce overall impacts. Because this alternative would develop 450 fewer residential units and reduce the square footage of all other proposed uses by one-third, this alternative would reduce the following significant impacts of the Proposed Project: traffic/circulation, aesthetics/visual quality, hydrology/water quality, air, noise, paleontological resources, hazards, public services, public utilities, seismic/geologic hazards, and energy.

The Reduced Overall Density Alternative retains all uses proposed for the project but provides for a 30 percent overall reduction of floor area/residential units throughout all development areas.

Given that this alternative calls for an across-the-board reduction in density, it would result in fewer and/or less intense impacts than those associated with the Proposed Project. This is true of virtually every resource or impact category. For this reason, the Reduced Overall Density Alternative has been identified as the Environmentally Superior Alternative, as required under CEQA Guidelines (14 CCR 15126.6(e)(2)). This alternative also assumes Port and State Lands Commission approval of the proposed land exchange.

1.7.6 Alternate L-Ditch Remediation Alternative

Cleanup and Abatement Order (CAO No. 98-08; revised April 2, 1998), issued by the RWQCB, requires the cleanup of existing contamination on the former Goodrich South Campus, including the L-Ditch on a portion of Parcel HP-5. Remediation of the contamination pursuant to the CAO is a regulatory enforcement action subject to the jurisdiction of the RWQCB, which is proceeding independently of the Proposed Project (see *Section 3.4.9.2, Goodrich South Campus Remediation*, of this document). The Proposed Project assumes that the remedial action plan approved by the RWQCB will require the L-Ditch to be remediated in place and will result in the

L-Ditch retaining its status as a wetland area after the remediation is completed. The Alternative L-Ditch Remediation Alternative is based on the alternate assumption that the remedial action plan ultimately approved by the RWQCB would require the L-Ditch to be remediated and filled. Under this assumption, the L-Ditch would no longer be considered a wetland after the remediation is completed. This alternative analyzes the potential environmental impacts of a development plan for Parcels HP-5, H-13, and H-14, which may occur in the event the L-Ditch is filled pursuant to the CAO. This alternative assumes that all other aspects of development in all phases would be the same as the Proposed Project.

1.8 Project Approval Process

For purposes of CEQA, the Port is the lead agency for the Proposed Project, and therefore has the principal responsibility for carrying out and approving the project and is responsible for the preparation of this EIR. With the help of the City, the Port prepared this Draft EIR and has now made it available to the public for review and comment. The Port will issue a Notice of Completion and circulate the Revised EIR for a 45-day public review period. Once the public comment period is closed, the Port will prepare responses to the CEQA-related questions, issues, and concerns raised by members of the public and the various agencies charged with reviewing this EIR.

In addition, to the extent that the comments identify areas where the EIR must be modified or augmented, such changes will be made during the process of finalizing the document. When the Final EIR is ready for certification, the Port will hold a formal public hearing to consider whether to certify the EIR and approve the Proposed Project. If the project is approved, the Port will also adopt Findings of Fact, a Mitigation Monitoring and Reporting Program, and, if necessary, a Statement of Overriding Considerations. As part of this process, the Port may also approve its Port Master Plan Amendment, as well as the Phase I components of the project.

The City will likewise hold noticed public hearings to discuss the proposed amendments to its General Plan and Local Coastal Program (Land Use Plan and Specific Plan). Although the City, as a Responsible Agency under CEQA, is not required to formally certify the Final EIR, it will nevertheless rely on the document to support its decisions on the plan amendments and the specific Phase I projects that would take place within its jurisdiction.

The State Lands Commission will consult the Final EIR during its deliberations on the proposed land exchange between the Port and Pacifica Companies. Finally, the California Coastal Commission will use this EIR to determine whether the proposed amendments to the Port Master Plan and Local Coastal Program are consistent with the California Coastal Act. Such consistency determinations are required before the amendments can be formally implemented.

1.9 Conclusion

From the beginning, the CVBMP has been shaped by public needs, preferences, and concerns. During the planning process, the Port and the City have solicited and received public input on the project. The Port, as lead agency, encourages all interested persons to review the document carefully for completeness and accuracy.

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
4.1: LAND USE/WATER COMPATIBILITY		
Significant Impact 4.1-1: During Phase III, the Proposed Project could impact CCC wetlands on HP-13B, through development within the Coronado Railroad ROW, and on HP-7 during Phase II. These impacts would be significant.	Mitigation Measure 4.1-1 Port: Prior to the issuance of the first grading permit for activities that could impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall consult with the CCC to determine if the proposed impact is allowed under the Coastal Act. If the impact is not allowed, then a design shall be developed that avoids impacts to CCC jurisdictional wetlands. In the event that the CCC concurs that the impact to CCC jurisdictional wetlands is allowed, the Port or Port tenants, as appropriate, shall prepare a restoration plan to detailing the measures needed to create/restore CCC wetlands to provide 2:1 mitigation for the impact to CCC wetlands on Parcels HP-13B and HP-7. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.	Less than significant
Significant Impact 4.1-2: There is a small seasonal pond located on Parcels O-1 and OP-3 in the Otay District near Soil Test Pits 9 and 10 that are considered CCC wetlands. These areas are designated for Industrial Park Use and Open Space, respectively, during Phase III of the Proposed Project. Phase III development at Parcel O-1 could result in a significant impact. Development of an industrial business park that	Mitigation Measure 4.1-2 (Mitigation Measure 4.1-2 will reduce Significant Impacts 4.1-2 and 4.1-3 to below a level of significance.)	Less than significant

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
impacts these wetlands would be considered significant.	Port: The Port or Port tenants, as appropriate, will need to mitigate impacts to the areas identified as seasonal pond, mapped as a CCC wetland at a 2:1 ratio. The Port or Port tenants, as appropriate, shall confer with CCC in order to determine whether drainages mapped as a potential CCC wetland falls under CCC jurisdiction. If this area is not subject to CCC jurisdiction, no additional mitigation would be required. If CCC does assert jurisdiction over these areas, the final development design must mitigate impacts at a 2:1 ratio. Prior to the issuance of the first clearing and grubbing permit or grading permit for projects that could impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall consult with the CCC to determine if the proposed impact is allowed under the Coastal Act. If the impact is not allowed, then a design shall be developed that avoids impacts to CCC jurisdictional wetlands. In the event that the CCC concurs that the impact to CCC jurisdictional wetlands is allowed, the Port or Port tenants, as appropriate, shall prepare a restoration plan to detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.	
Significant Impact 4.1-3: The former industrial facility sites occupy approximately 8.82 acres on Parcels O-1, OP2-A, O-4, and proposed Streets A and B. If it is determined that these	See Mitigation Measure 4.1-2 above.	Less than significant

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
areas are subject to Coastal Commission jurisdiction, the development proposed at these locations on Parcel O-1 and Streets A and B would be significant. The proposed restoration on Parcel OP-2A would not result in significant impacts because temporary impacts to CCC jurisdictional resources for restoration is allowed under Section 30233 of the Coastal Act.		
Significant Impact 4.1-4: The Proposed Project would be inconsistent with Land Use and Transportation objective LUT 11 in the City's adopted General Plan in regard to aesthetics and visual resources. This inconsistency would be a significant impact.	No feasible mitigation beyond redesign of the project as identified as a project alternative would reduce this impact to view quality. See *Chapter 5, Alternatives*, for a discussion of design options that would allow for an overall reduction in height and bulk of the proposed development.	Significant and unmitigated
Significant Impact 4.1-5: The Proposed Project would be inconsistent with Public Facilities and Services objective PFS 11 in the City's adopted General Plan in regard to library services and facilities. This inconsistency would be a significant impact.	Mitigation Measure 4.1-3 City: Prior to the approval of a building permit for any residential project, the applicant shall pay a PFDIF or equivalent fee in an amount calculated according to the City's PFDIF program in effect at the time of permit issuance. Due to existing deficiency in library service in the City, the impact would remain significant.	Significant and unmitigated
Significant Impact 4.1-6: The Proposed Project would not conform to the adopted MSCP Subarea Plan unless an HLIT Permit is obtained for the development on Parcels H-13, H-14, H-15, and HP-5.	Mitigation Measure 4.1-4 City: Prior to issuance of any permit for clearing, grubbing, or grading within the jurisdiction of the City of Chula Vista, the project applicant shall be required to obtain an HLIT Permit pursuant to Section 17.35 of the Chula Vista Municipal Code for impacts to Covered Species and Vegetation Communities protected under the City's MSCP Subarea Plan.	Less than significant
4.2: TRAFFIC AND CIRCULATION		
Significant Impact 4.2-1: Development of the project components without adequate access and frontage would result in a significant impact related to roadway design.	Mitigation Measure 4.2-1 Prior to the issuance of any certificates of occupancy for any development on H-3 in Phase I, the Port or Port tenant, as appropriate, shall:	Less than significant

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	• Construct H Street west of Marina Parkway as a 2-lane Class III Collector • Construct E Street as a two-lane Class III Collector along Parcel H-3. This would provide a connection to Lagoon Drive via Marina Parkway. • Construct a traffic signal at H Street and Gaylord Truck Driveway. Prior to the issuance of building permits for any development on H-13 or H-14 in Phase I, the applicant shall: • Rebuild Marina Parkway between E Street and J Street as a three-lane Class II Collector with excess ROW used for pedestrian facilities • Construct Street A north of J Street would be constructed as a two-lane Class III Collector.	
Significant Impact 4.2-2: The Phase I roadway segment of Lagoon Drive/F Street (Marina Parkway to Bay Boulevard) will experience congested LOS F conditions and will require mitigation.	Mitigation Measure 4.2-2 Prior to the issuance of any certificates of occupancy for any development on H-3 in Phase I, Port or Port tenants, as appropriate, shall construct H Street from I-5 to Marina Parkway as a four-lane Major Street. At the completion of the H Street extension, the Port or Port tenants, as appropriate, shall also restrict access along the segment of Lagoon Drive/F Street (between Parcel H-3 and the BF Goodrich access on F Street) to emergency vehicle access only. This mitigation would reduce Significant Impact 4.2-2, 4.2-4, 4.2-6, 4.2-7, and 4.2-11 to below a level of significance.	Less than significant
Significant Impact 4.2-3: The Phase I roadway segment of H Street (west of Marina Parkway) will experience congested LOS F conditions and will require mitigation.	Mitigation Measure 4.2-3 Prior to the issuance of any certificates of occupancy for any development on H-3 in Phase I, Port or Port tenants, as appropriate, shall widen H Street west of Marina Parkway from a 2-lane Class III Collector to a 3-lane Class II Collector. This mitigation would reduce Significant Impact 4.2-3 to below a level of significance.	Less than significant
Significant Impact 4.2-4: The Phase I roadway segment of Marina Parkway (Lagoon Drive to G Street) will experience congested LOS F conditions and will require mitigation.	See Mitigation Measure 4.2-2 above.	Less than significant
Significant Impact 4.2-5: The Phase I roadway segment of Bay Boulevard (E Street to F Street) will experience congested LOS F conditions and will require mitigation.	Mitigation Measure 4.2-4 Prior to the issuance of certificates of occupancy for development on H-3 and building permits for any development on H-13 or H-14 in Phase I, the Port, Port tenants, or applicant, as appropriate, shall widen Bay Boulevard between E Street and F Street from a 2-lane Class III Collector to a 2-lane Class II Collector, or secure such widening to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-5 to below a level of significance.	Less than significant

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-6: The intersection of E Street and I-5 Southbound off-ramps will be characterized by LOS F conditions during PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	See Mitigation Measure 4.2-2 above.	Less than significant
Significant Impact 4.2-7: The intersection of F Street and Bay Boulevard will be characterized by LOS F conditions during PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	See Mitigation Measure 4.2-2 above.	Less than significant
Significant Impact 4.2-8: The intersection of J Street and Bay Boulevard will be characterized by LOS F conditions during both AM and PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	Mitigation Measure 4.2-5 Prior to the issuance of building permits for any development on H-13 or H-14 in Phase I, the applicant shall construct a traffic signal at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-8 and 4.2-14 to below a level of significance.	Less than significant
Significant Impact 4.2-9: The intersection of L Street and Bay Boulevard will be characterized by LOS F conditions during both AM and PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	Mitigation Measure 4.2-6 Prior to the issuance of certificates of occupancy for development on H-3 or building permits on H-13 or H-14 for any development in Phase I, the Port, Port tenants, or applicants, as appropriate, shall construct a traffic signal at the intersection of L Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-9 and 4.2-15 to below a level of significance.	Less than significant
Significant Impact 4.2-10: The intersection of I-5 southbound ramps and Bay Boulevard will be characterized by LOS F conditions during PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.	Mitigation Measure 4.2-7 Prior to the issuance of certificates of occupancy for development on H-3 or building permits on H-13 or H-14 for any development in Phase I, the Port, Port tenants, or applicants, as appropriate, shall construct a traffic signal at the intersection of I-5 southbound ramps and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-10 and 4.2-16 to below a level of significance.	Less than significant
Significant Impact 4.2-11: The intersection of J Street and Marina Parkway will be characterized by LOS E conditions	See Mitigation Measure 4.2-2 above	Less than significant

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
during PM peak hours under Phase I Baseline Plus Project conditions, resulting in direct project impacts that would require mitigation.		
Significant Impact 4.2-12: The addition of Phase I traffic would result in a direct project impact to the freeway segment of I-5 between SR-54 and E Street, resulting in LOS F during both AM and PM peak hours and would require mitigation.	Mitigation Measure 4.2-8 (Implementation of Mitigation Measure 4.2-11 would mitigate Significant Impacts 4.2-12, 4.2-17, 4.2-18, 4.2-29, 4.2-30, 4.2-35 through, 4.2-37, and 4.2-46 through, 4.2-50,, but not to below a level of significance.) The Port and the City shall participate in a multijurisdictional effort conducted by Caltrans and SANDAG to assist in developing a detailed I-5 corridor level study that will identify transportation improvements along with funding, including federal, state, regional, and local funding sources and phasing that would reduce congestion management with Caltrans standards on the I-5 South corridor from the SR-54 interchange to the Otay River (the "I-5 South Corridor") (hereafter referred to as the "Plan"). Local funding sources identified in the Plan shall include fair share contributions related to private and/or public development based on nexus as well as other mechanisms. The Plan required by this mitigation shall include the following: a) The responsible entities (the Entities) included in this effort will include, but may not be limited to, the City, other cities along I-5, the Port, SANDAG, and Caltrans. Other entities will be included upon the concurrence of the foregoing Entities. b) The Plan will identify physical and operational improvements to I-5 adjacent to the project area, relevant arterial roads and transit facilities (the Improvements), that are focused on regional impacts and specific transportation impacts from the project, and will also identify the fair share responsibilities of each Entity for the construction and financing for each Improvement. The Plan will include an implementation element that includes each Entity's responsibilities and commitment to mitigate the impacts created by Phases I, II, III and IV of the Proposed Project. c) The Plan will set forth a timeline and other agreed upon relevant criteria for implementation of each Improvement. d) The Plan will identify the total estimated design and construction cost for each Improvement and the responsibility of each Entity for both implementation and funding of such costs.	Significant and unmitigated

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	e) The Plan will include the parameters for any agreed upon fair-share funding to be implemented, that would require private and/or public developers to contribute to the costs, in a manner that will comply with applicable law. f) In developing the Plan, the Entities shall also consider ways in which the Improvements can be coordinated with existing local and regional transportation and facilities financing plans and programs, in order to avoid duplication of effort and expenditure; however, the existence of such other plans and programs shall not relieve the Entities of their collective obligation to develop and implement the Plan as set forth in this mitigation measure. Nothing in the Plan shall be construed as relieving any Entity (or any other entity) from its independent responsibility (if any) for the implementation of any transportation improvement. g) The Port shall seek adoption of the Plan before the Port Board of Commissioners and the City shall seek adoption of the Plan before the City Council upon the completion of the multijurisdictional effort to develop the Plan. The Port and the City shall report, to their respective governing bodies regarding the progress made to develop the Plan within six months of the first meeting of the entities. Thereafter, the Port and the City shall report at least annually regarding the progress of the Plan, for a period of not less than five years, which may be extended at the request of the City Council and/or Board of Commissioners. h) The Plan shall also expressly include each Entity's pledge that it will cooperate with each other in implementing the Plan. i) Prior to issuance of certificates of occupancy or building permits for any development of individual projects within the Chula Vista Bayfront Master Plan, the Port and the City shall require project applicants to make their fair share contribution toward mitigation of cumulative freeway impacts within the City's portion of the I-5 South Corridor by participating in the City's Western Traffic Development Impact Fee or equivalent funding program. The failure or refusal of any Entity other than the Port or the City to cooperate in the implementation of this mitigation measure shall not constitute failure of the Port or the City to implement this mitigation measure; however, the Port and the City shall each use its best efforts to obtain the cooperation of all responsible Entities to fully participate, in order to achieve the goals of mitigation measure. However, because implementation of the physical improvements needed to reduce significant impact to the affected freeway segments is within the jurisdiction and control of Caltrans and not the Port or the	

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	City, the Port and the City cannot ensure that the necessary improvements will be constructed as needed. Accordingly, the Proposed Project's impacts to freeway segments are considered significant and unmitigated.	
Significant Impact 4.2-13: The intersection of H Street and Gaylord Driveway will be characterized by LOS E conditions during the PM peak hours as a result of Phase I conditions with closure of F Street, extension of H Street, and partial extension of E Street, and will require mitigation.	Mitigation Measure 4.2-9 Prior to the issuance of certificates of occupancy for any development on H-3 in Phase I, the Port or Port tenant, as appropriate, shall construct a westbound lane along H Street/Gaylord Driveway, which would result in widening H Street west of Marina Parkway to a three-lane Class II Collector. This mitigation would reduce Significant Impact 4.2-13 to below a level of significance.	Less than significant
Significant Impact 4.2-14: The intersection of J Street and Bay Boulevard will be characterized by LOS F conditions during the PM peak hours as a result of Phase I conditions with closure of F Street, extension of H Street and partial extension of E Street, and will require mitigation.	See Mitigation Measure 4.2-5 above.	Less than significant
Significant Impact 4.2-15: The intersection of L Street and Bay Boulevard will be characterized by LOS F conditions during both the AM and PM peak hours as a result of Phase I conditions with closure of F Street, extension of H Street and partial extension of E Street, and will require mitigation.	See Mitigation Measure 4.2-6 above.	Less than significant
Significant Impact 4.2-16: The intersection of the I-5 southbound ramps and Bay Boulevard will be characterized by LOS F conditions during the PM peak hours as a result of Phase I conditions with closure of F Street, extension of H Street and partial extension of E Street, and will require mitigation.	See Mitigation Measure 4.2-7 above.	Less than significant
Significant Impact 4.2-17: The addition of Phase I traffic with the closure of F Street, extension of H Street, and partial extension of E Street would result in a direct project impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F during AM peak hours northbound with the project and PM peak hours southbound, with or without the project, and would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-18: The addition of Phase I traffic with the closure of F Street, extension of H Street, and partial extension of E Street would result in a direct project impact to the freeway segment of I-5 from E Street to H Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
Significant Impact 4.2-19: The E Street and H Street intersections affected by an at-grade trolley crossing would experience additional delay along the arterial and at adjacent intersections from between 17 and 40 seconds per vehicle (depending on the direction and time of day), causing a deterioration in the LOS by at least one level.	Mitigation Measure 4.2-10 Prior to issuance of certificates of occupancy for Parcel H-3 or building permits for any development within the City, the Port and the City shall require project applicants to make their fair share contribution toward mitigation of intersection impacts at H Street and E Street within the City's jurisdiction by participating in the City's Western Traffic Development Impact Fee or equivalent funding program. The failure or refusal of any Entity other than the Port or the City to cooperate in the implementation of this mitigation measure shall not constitute failure of the Port or the City to implement this mitigation measure; however, the Port and the City shall each use its best efforts to obtain the cooperation of all responsible Entities to fully participate, in order to achieve the goals of mitigation measure. However, because implementation of the physical improvements needed to reduce the significant impacts to the affected intersections will require funding from other sources in addition to the WTDIF, such as local, state and federal funds, and such funding is not certain or under the control of the Port or the City, the Port and the City cannot ensure that the necessary improvements will be constructed as needed or that they will be constructed within any known time schedule. Accordingly, the Proposed Project's impacts to the E Street and H Street intersections affected by an at-grade trolley crossing are considered significant and unmitigated.	Significant and unmitigated
Significant Impact 4.2-20: Development of Phase II components without adequate roadway access and frontage would result in a significant impact.	Mitigation Measure 4.2-11 Prior to the issuance of certificates of occupancy for development on Parcel H-23, the Port, Port tenant, or applicant, as appropriate, shall construct Street A between H Street to Street C as a two-lane Class III Collector, and shall construct Street C between Marina Parkway and Street A as a two-lane Class II Collector. Implementation of this mitigation measure would reduce Significant Impact 4.2-20 to below a level of significance.	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-21: The Phase II roadway segment of H Street (Street A to I-5 ramps) will experience congested LOS F conditions and will require mitigation.	Mitigation Measure 4.2-12 Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall widen H Street between Street A and I-5 Ramps to a 5-lane Major Street, or secure such construction to the satisfaction of the City Engineer The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-21 to below a level of significance.	Less than significant
Significant Impact 4.2-22: The Phase II roadway segment of J Street (Street A to Bay Boulevard to I-5 ramps) would experience congested LOS D conditions and would require mitigation.	Mitigation Measure 4.2-13 Prior to the issuance of certificates of occupancy for any development in Phase II, the Port, Port tenant, or applicant, as appropriate, shall widen J Street between Street A to I-5 Ramps to a 6-lane Major Street, or secure such construction to the satisfaction of the City Engineer The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-22 to below a level of significance.	Less than significant
Significant Impact 4.2-23: The Phase II roadway segment of Street A (Street C to J Street) would experience congested LOS F conditions and would require mitigation.	Mitigation Measure 4.2-14 Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, Port tenant, or applicant, as appropriate, shall widen Street A between Street C and J Street to a 4-lane Class I Collector or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-23 to below a level of significance.	Less than significant
Significant Impact 4.2-24: As a result of Phase II conditions, the intersection of H Street and Gaylord Drive would be characterized by LOS E conditions during PM peak hours and would require mitigation.	Mitigation Measure 4.2-15 Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal and add an exclusive left-turn lane at each approach at the intersection of H Street and Gaylord Driveway, or secure such construction to the satisfaction of the City Engineer. The traffic signal and left-turn lanes shall be built to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-24 to below a level of significance.	Less than significant
Significant Impact 4.2-25: As a result of Phase II conditions, the intersection of J Street and Bay Boulevard would be characterized by LOS E conditions during PM peak hours and would require mitigation.	Mitigation Measure 4.2-16 Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, Port tenant, or applicant, as appropriate, shall construct a westbound and eastbound through lane along J Street at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-25 to below a level of significance.	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-26: As a result of Phase II conditions, the intersection of H Street and Street A would be characterized by LOS F conditions during PM peak hours and would require mitigation.	Mitigation Measure 4.2-17 Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal at the intersection of H Street and Street A, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-26 to below a level of significance.	Less than significant
Significant Impact 4.2-27: As a result of Phase II conditions, the intersection of J Street and Marina Parkway would be characterized by LOS F conditions during PM peak hours and would require mitigation.	Mitigation Measure 4.2-18 Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal at the intersection of J Street and Marina Parkway, or secure such construction to the satisfaction of the City Engineer. The traffic signal shall be constructed and operate to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-27 to below a level of significance.	Less than significant
Significant Impact 4.2-28: As a result of Phase II conditions, the intersection of J Street and Street A would be characterized by LOS F conditions during both AM and PM peak hours and would require mitigation.	Mitigation Measure 4.2-19 Prior to the issuance of certificates of occupancy for any development in Phase II of the development, the Port, Port tenant, or applicant, as appropriate, shall construct a traffic signal at the intersection of J Street and Street A and add an exclusive westbound right-turn lane along J Street and an exclusive southbound right-turn lane along Street A, or secure such construction to the satisfaction of the City Engineer. The traffic signal and turning lanes shall operate and be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-28 to below a level of significance.	Less than significant
Significant Impact 4.2-29: The addition of Phase II traffic would result in a direct project impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
Significant Impact 4.2-30: The addition of Phase II traffic would result in a direct project impact to the freeway segment of I-5 from E Street to F Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
Significant Impact 4.2-31: Development of Phase III components without adequate roadway access and frontage would result in a significant impact.	Mitigation Measure 4.2-20 Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate shall construct the segment of Street A that would continue south	

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	from J Street, connecting to the proposed Street B in the Otay District, as a two-lane Class III Collector. In addition, prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, as appropriate shall construct the segment of Street B that would connect to the proposed Street A, bridge over the Telegraph Canyon Creek Channel, and continue south to Bay Boulevard, as a 2-lane Class III Collector. This mitigation would reduce Significant Impact 4.2-31 to below a level of significance	
Significant Impact 4.2-32: As a result of Phase III conditions, the Street A roadway segment from H Street to Street C would experience congested LOS D conditions and would require mitigation.	Mitigation Measure 4.2-21 Prior to the issuance of certificates of occupancy for any development in Phase III of the development, the Port, Port tenant, or applicant, as appropriate, shall widen Street A between H Street and Street C to a 4-lane Class I Collector, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-32 to below a level of significance.	Less than significant
Significant Impact 4.2-33: As a result of Phase III conditions, the intersection of J Street and Bay Boulevard would be characterized by LOS E conditions during PM peak hours and would require mitigation.	Mitigation Measure 4.2-22 Prior to the issuance of certificates of occupancy for any development in Phase III of the development, the Port, Port tenant, or applicant, as appropriate, shall construct an exclusive eastbound right-turn lane along J Street at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The turning lane shall be built to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-33 to below a level of significance.	Less than significant
Significant Impact 4.2-34: As a result of Phase III conditions, the intersection of J Street and I-5 northbound ramps would be characterized by LOS E conditions during PM peak hours and would require mitigation.	Mitigation Measure 4.2-23 Prior to the issuance of certificates of occupancy for any development in Phase III of the development, the Port, Port tenant, or applicant, as appropriate, shall construct an exclusive westbound right-turn lane along J Street at the intersection of J Street and I-5 northbound ramps, or secure such construction to the satisfaction of the City Engineer. The turning lane shall be built to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-34 to below a level of significance.	Less than significant
Significant Impact 4.2-35: The addition of Phase III traffic would result in a direct project impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F in both directions, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
Significant Impact 4.2-36: The addition of Phase III traffic would result in a direct project impact to the freeway segment of I-5 from E Street to H Street, resulting in LOS F in both	See Mitigation Measure 4.2-8 above.	Significant and unmitigated

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Impact	Mitigation	Significance After Mitigation
directions, with or without the project. This impact would require mitigation.		
Significant Impact 4.2-37: The addition of Phase III traffic would result in a direct project impact to the freeway segment of I-5 from H Street to J Street, resulting in LOS F in both directions, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
Significant Impact 4.2-38: Without additional improvements to H Street, conditions on H Street from Street A to I-5 would degrade to LOS F.	Mitigation Measure 4.2-24 Prior to the issuance of certificates of occupancy for any development in Phase III, the Port, Port tenants, or applicant, as appropriate, shall construct E Street from the Gaylord Driveway to Bay Boulevard as a two-lane Class III Collector. This mitigation would reduce Significant Impact 4.2-38 to below a level of significance	Less than significant
Significant Impact 4.2-39: Development of Phase IV components without adequate roadway access and frontage would result in a significant impact.	Mitigation Measure 4.2-25 Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall construct a new F Street segment between the proposed terminus of the existing F Street and the proposed E Street extension, ending at the SP-3 Chula Vista Nature Center parking lot, as a two-lane Class III collector street, which shall also contain a Class II bike lane on both sides of the street. This mitigation would reduce Significant Impact 4.2-39 to below a level of significance.	Less than significant
Significant Impact 4.2-40: As a result of Phase IV conditions, the E Street roadway segment from F Street to Bay Boulevard would experience congested LOS F conditions and would require mitigation.	Mitigation Measure 4.2-26 (Implementation of Mitigation Measure 4.2-30 would reduce Significant Impacts 4.2-40 and 4.2-41 to below a level of significance.) Prior to the issuance of certificates of occupancy for any development in Phase IV of the development, the Port, Port tenant, or applicant, as appropriate, shall widen E Street between F Street and Bay Boulevard to a 4-lane Class I Collector, or secure such construction to the satisfaction of the City Engineer. The additional roadway capacity would facilitate the flow of project traffic. Also, the widening of this segment of E Street would facilitate the flow of project traffic on Bay Boulevard between E Street to F Street.	Less than significant
Significant Impact 4.2-41: As a result of Phase IV conditions, the Bay Boulevard roadway segment from E Street to F Street would experience congested LOS D conditions and would require mitigation.	See Mitigation Measure 4.2-26 above.	Less than Significant

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Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-42: As a result of Phase IV conditions, the H Street segment from I-5 to Broadway will experience congested LOS F conditions and would require mitigation.	Mitigation Measure 4.2-27 Prior to the issuance of certificates of occupancy for any development in Phase IV, the Port, Port tenant, or applicant, as appropriate, shall widen H Street between I-5 Ramps and Broadway to a 6-lane Gateway Street. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 4.2-42 to below a level of significance. The off-site traffic improvements described in this mitigation measure for direct traffic impacts would create secondary traffic impacts. Improvements associated with these secondary impacts would be required as a result of cumulative and growth-related traffic overall, of which the Proposed Project would be a component. The Western Chula Vista TDIF identifies these improvements in a cumulative context and attributes fair share contributions according to the impact. Therefore, the Proposed Project would be responsible for a fair share contribution and would not be solely responsible for implementation of necessary secondary impact improvements	Less than significant
Significant Impact 4.2-43: Under Phase IV Plus Project conditions, the intersection of E Street and Bay Boulevard would be characterized by LOS F conditions during PM peak hours and would require mitigation.	Mitigation Measure 4.2-28 Prior to the issuance of certificates of occupancy for any development in Phase IV of the development, the Port, Port tenant, or applicant, as appropriate, shall construct an eastbound through lane and an exclusive eastbound right-turn lane along E Street at the intersection of E Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-39 to below a level of significance.	Less than significant
Significant Impact 4.2-44: Under Phase IV Plus Project conditions, the intersection of J Street and Bay Boulevard would be characterized by LOS E conditions during PM peak hours and would require mitigation.	Mitigation Measure 4.2-29 Prior to the issuance of certificates of occupancy for any development in Phase IV of the development, the Port, Port tenant, or applicant, as appropriate, shall construct an exclusive southbound right-turn lane along Bay Boulevard at the intersection of J Street and Bay Boulevard, or secure such construction to the satisfaction of the City Engineer. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-40 to below a level of significance.	Less than significant
Significant Impact 4.2-45: Under Phase IV Plus Project conditions, the intersection of J Street and Street A would be characterized by LOS F conditions during PM peak hours and would require mitigation.	Mitigation Measure 4.2-30 Prior to the issuance of certificates of occupancy for any development in Phase IV of the development, the Port, Port tenant, or applicant, as appropriate, shall construct a dual southbound left-turn lane along Street A, or secure such construction to the satisfaction of the City Engineer. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 4.2-41 to below a level of significance.	Less than significant

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Impact	Mitigation	Significance After Mitigation
Significant Impact 4.2-46: The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
Significant Impact 4.2-47: The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from E Street to H Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
Significant Impact 4.2-48: The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from H Street to J Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
Significant Impact 4.2-49: The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from J Street to L Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
Significant Impact 4.2-50: The addition of Phase IV traffic would result in a direct project impact to the freeway segment of I-5 from L Street to Palomar Street, resulting in LOS F in both directions during both AM and PM peak hours, with or without the project. This impact would require mitigation.	See Mitigation Measure 4.2-8 above.	Significant and unmitigated
4.3 PARKING		
There were no significant impacts to parking identified for the Proposed Project.	No mitigation is required.	N/A

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Impact	Mitigation	Significance After Mitigation
4.4 AESTHETICS/VISUAL QUALITY		
Significant Impact 4.4-1: The Pacifica Residential and Retail project will change the scale and character of the waterfront as the proposed buildings exceed the scale of the existing waterfront development. A moderate impact to the character of the view scene would result and would be considered significant under CEQA guidelines.	No feasible mitigation beyond redesign of the project as identified as a project alternative would reduce this impact to view quality. See *Chapter 5, Alternatives*, for a discussion of design options that would allow for an overall reduction in height and bulk of the proposed towers.	Significant and unmitigated
Significant Impact 4.4-2: The amount of blockage caused by the Pacifica project would be substantial, especially at the south end where views of the water exist. The Pacifica development will result in a moderate impact to view quality, which would be considered significant under CEQA guidelines.	No feasible mitigation beyond redesign of the project as identified as a project alternative would reduce this impact to view quality. See *Chapter 5, Alternatives*, for a discussion of design options that would allow for an overall reduction in height and bulk of the proposed towers.	Significant and unmitigated
Significant Impact 4.4-3: The Proposed Project would affect the view of the western tideland's/water's edge from the Sweetwater Marsh NWR, which is a regionally important public viewing scene. This would be a significant impact on view quality.	Mitigation Measure 4.4-1 (Mitigation Measure 4.4-1 would mitigate Significant Impacts 4.4-3, 4.4-4, 4.4-5, 4.4-7, and 4.4-8 to below a level of significance.) Port: A. *View Protection:* As a condition for issuance of Coastal Development Permits, buildings fronting on H Street shall be designed to step away from the street. More specifically, design plans shall protect open views down the H Street Corridor by ensuring that an approximate 100-foot ROW width (curb–curb, building setbacks and pedestrian plaza/walkway zone) remains clear of buildings, structures, or major landscaping. Visual elements above six feet in height shall be prohibited in this zone if the feature would reduce visibility by more than 10 percent. Placement of trees should take into account potential view blockage. This mitigation should not be interpreted to not allow tree masses; however, trees should be spaced in order to ensure "windows" through the landscaping. Trees should also be considered to help frame the views and they should be pruned up to increase the views from pedestrians and vehicles, underneath the tree canopy. In order to reduce the potential for buildings to encroach into view corridors, and to address the scale and massing impact, buildings shall step back at appropriate intervals or be angled to open up a broader view corridor at the groundplane to the extent feasible. All plans shall be subject to review and approval by the Port. All future development proposals shall conform to Port design guidelines and standards to the satisfaction of the Port.	Less than significant

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Impact	Mitigation	Significance After Mitigation
	Port: B. *Height and Bulk:* Prior to issuance of Coastal Development Permits for projects within the Port's jurisdiction, the project developer shall ensure that design plans for any large scale projects (greater than two stories in height) shall incorporate standard design techniques such as articulated facades, distributed building massing, horizontal banding, stepping back of buildings, and varied color schemes to separate the building base from its upper elevation and color changes such that vertical elements are interrupted and smaller scale massing implemented. These plans shall be implemented for large project components to diminish imposing building edges, monotonous facades and straight-edge building rooflines and profiles. This shall be done to the satisfaction of the Port. City: C. *Height and Bulk:* Prior to design review approval for properties within the City's jurisdiction, the project developer shall ensure that design plans for any large scale projects (greater than two stories in height) shall incorporate standard design techniques such as articulated facades, distributed building massing, horizontal banding, and varied color schemes to separate the building base from its upper elevation and color changes such that vertical elements are interrupted and smaller scale massing implemented. These plans shall be implemented for the large project components to diminish imposing building edges, monotonous facades and straight-edge building rooflines and profiles. This shall be done to the satisfaction of the City of Chula Vista Planning Director. Port/City: D. *Landscaping*: Prior to final approval of Phase I infrastructure design plans, the Port and City shall collectively develop a master landscaping plan for the project's public components and improvements. The plan shall provide sufficient detail to ensure conformance to streetscape design guidelines and that future developers/tenants, as applicable, provide screening of parking areas. Streetscape landscaping shall be designed to enhance the visitor experience for both pedestrians and those in vehicles. Specifically, detailed landscaping plans shall be developed to enhance Marina Parkway, a designated scenic roadway and shall provide, where appropriate, screening of existing industrial uses and parking areas until such time as these facilities are redeveloped.	

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Impact	Mitigation	Significance After Mitigation
	Street landscaping design shall be coordinated with a qualified biologist or landscape architect to ensure that proposed trees and other landscaping are appropriate for the given location. For instance, vegetation planted adjacent to open water/shoreline areas must not provide raptor perches. Landscaping shall be drought tolerant or low water use, and invasive plant species shall be prohibited. City: E. *Landscaping*: Prior to approval of a tentative map or site development plan for future residential development, the project developer shall submit a landscaping design plan for on-site landscaping improvements that is in conformance to design guidelines and standards established by the City of Chula Vista. The plan shall be implemented as a condition of project approval. Port/City: F. *Gateway Plan*: Concurrent with the preparation of Phase I infrastructure design plans for "E and H" Street, a Gateway plan shall be prepared for "E and H" Streets. Prior to issuance of occupancy for any projects within the Port's jurisdiction in Phase I, the "E and H" Street Gateway plan shall be approved by the Port and City's Directors of Planning and Building. The "E and H" Street Gateway plan shall be coordinated with the Gateway plan for J Street. City: G. *Gateway Plan*: Concurrent with development of H-13 and H-14, the applicant shall submit a Gateway plan for "J" Street for City Design Review consideration. Prior to issuance of any building permits, the "J" Street Gateway plan shall be approved by the Director of Planning and Building in coordination with the Port's Director of Planning. The "J" Street Gateway plan shall be coordinated with the Gateway plan for "E and H" Streets.	
Significant Impact 4.4-4: The Proposed Project would affect the background views of the Bay from the Silver Strand, which is a regionally important public viewing scene. This would be a significant impact on view quality.	See Mitigation Measure 4.4-1 above.	
Significant Impact 4.4-5: The Proposed Project would affect views of the San Diego Bay, a locally and regionally significant public resource, from within the project boundary. This would be a significant impact on view quality.	See Mitigation Measure 4.4-1 above.	

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Impact	Mitigation	Significance After Mitigation
Significant Impact 4.4-6: Proposed Project may have a negative impact on sensitive light receptors or sensitive receptors affected by high levels of glare. The light and glare that may be associated with the Proposed Project elements may affect the viewing scene, views of the site or views of the area. A moderate impact to views associated with light and glare would be expected, which would be considered significant under CEQA guidelines.	Mitigation Measure 4.4-2 Port/City: Prior to design review approval, lighting design plans with specifications for outdoor lighting locations and other intensely lighted areas shall be submitted to the Port and City for review and approval. The specifications shall identify the lighting intensity needs and design light fixtures to direct light toward intended uses. Outdoor and parking lot lighting shall be shielded and directed away from adjacent properties, wherever feasible and consistent with public safety. Consideration shall be given to the use of low-pressure sodium lighting or the equivalent. The lighting plan shall illustrate the location of the proposed lighting standards and type of shielding measures. The lighting plan shall incorporate specific design features including, but not limited to, the following: • Where lighting must be used for safety reasons (FAA 2000 Advisory Circular), minimum intensity, maximum off-phased (3-second between flashes) white strobes shall be used. • All event lighting shall be directed downward and shielded unless directed downward or shielded to minimize light spill beyond the area for which illumination is required. • Exterior lighting shall be limited to that necessary and appropriate to ensure general public safety and way finding, including signage for building identification and way finding. • Exterior lighting shall be directed downward and shielded to prevent upward lighting and to minimize light spill beyond the area for which illumination is required. • Office space, residential units and hotel rooms shall be equipped with motion sensors, timers or other lighting control systems to ensure that lighting is extinguished when the space in unoccupied. • Office space, residential unit and hotel rooms shall be equipped with blinds, drapes or other window coverings that may be closed to minimize the effects of interior night lighting. • Reflective glass or the application of reflective coatings shall not be used on any glass surface, except as may be required for low emittance (low e) coating for energy efficiency under Title 24 of the California Code of Regulations.	Less than significant
Significant Impact 4.4-7: The Pacifica Residential and Retail project will highly contrast with the scale of the surrounding development and the existing patterns of development in the surrounding area. The most northern of the buildings associated with the Pacifica development will increase the	See Mitigation Measure 4.4-1 above.	Less than significant

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Impact	Mitigation	Significance After Mitigation
scale issue. Existing structures will most likely be overpowered by the scale of the new buildings, and will have limited ability to blend with the proposed development. A moderate impact to visual character associated with height and massing would be expected for this project and would be considered significant under CEQA guidelines.		
Significant Impact 4.4-8: Due to the disparity in scale between the proposed Gaylord RCC development and the existing structures on the project site, the project will contrast with the existing patterns of development in the surrounding area. The most eastern of the buildings associated with the Gaylord RCC, the Convention Center facility next to the Gaylord Hotel Tower, is the primary source of scale differential. A moderate impact to visual character associated with height and massing would be expected for this project and would be considered significant under CEQA guidelines.	See Mitigation Measure 4.4-1 above.	Less than significant
4.5 HYDROLOGY/WATER QUALITY		
Significant Impact 4.5-1: The increased pedestrian activity and debris-generating businesses on the waterfront, such as carryout food, would increase the potential for wind-blown litter entering the Bay. In addition to pollutants carried in runoff, wind blown litter has the potential to result in a significant impact on Bay water quality.	Mitigation Measure 4.5-1 Port/City: As a condition of approval of a Tenant Design Plan for projects within the Port's jurisdiction and a condition of the approval of a Final Map for projects within the City's jurisdiction, the project applicant shall include trash control measures that include trash containers with attached lids and trash control enclosures to prevent litter from being wind blown off site to the satisfaction of the Port/City as appropriate pursuant to their water quality technical reports.	Less than significant
Significant Impact 4.5-2: Construction-related dewatering (as required during the construction of utilities, excavation of the wet wells and emergency storage vaults for the sewer lift stations) would withdraw water from the aquifer, which may be contaminated, depending on the location in the plan area. The potential to contaminate runoff conflicts with the Basin Plan and the water quality objectives for the Bay. The project's	Mitigation Measure 4.5-2 Port/City: A. Prior to the issuance of a grading permit, the applicant shall notify the RWQCB of dewatering of contaminated groundwater during construction. If contaminated groundwater is encountered, the project developer shall treat and/or dispose of the contaminated groundwater (at the developer's expense) in accordance with NPDES permitting requirements, which includes obtaining a permit	Less than significant

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Impact	Mitigation	Significance After Mitigation
potential to disturb contaminated soils and groundwater during construction activities would be a significant impact.	from the Industrial Wastewater Control Program to the satisfaction of the RWQCB. B. Prior to the discharge of contaminated groundwater for all construction activities, should flammables, corrosives, hazardous wastes, poisonous substances, greases and oils and other pollutants exist on site, a pretreatment system shall be installed to pre-treat the water to the satisfaction of the RWQCB before it can be discharged into the sewer system.	
Significant Impact 4.5-3: Although not expected to occur, a spill or unintentional discharge of fuel, lubricants, or hydraulic fluid from the equipment used during construction, including dredge and fill activities and construction of the H Street Pier, in a worst-case scenario would result in significant impacts on water quality.	Mitigation Measure 4.5-3 Port/City: Prior to the issuance of a grading, excavation, dredge/fill, or building permit for any Parcel, the applicant shall submit a Spill Prevention/Contingency Plan for approval by the Port or City as appropriate. The plan shall: • Ensure that hazardous or potentially hazardous materials (e.g., cement, lubricants, solvents, fuels, other refined petroleum hydrocarbon products, wash water, raw sewage) that are used or generated during the construction and operation of any project as part of the Proposed Project shall be handled, stored, used, and disposed of in accordance with NPDES permitting requirements and applicable federal, state, and local policies; • Include material safety data sheets; • Require 40 hours of worker training and education as required by the Occupational Safety and Health Administration; • Minimize the volume of hazardous or potentially hazardous materials stored at the site at any one time; • Provide secured storage areas for compatible materials, with adequate spill contaminant; • Maintain all required records, manifest and other tracking information in an up-to-date and accessible form or location for review by the Port or City; and • Demonstrate that all local, state, and federal regulations regarding hazardous materials and emergency response have been or will be complied with.	Less than significant
Significant Impact 4.5-4: Dredge and fill operations and in-water construction activities associated with improvements for the H Street Pier, the existing South Bay Boatyard Marina, Chula Vista Marina, and the realignment of the navigation channel could result in significant impacts to water quality and biological communities, including marine resources, if	Mitigation Measure 4.5-4 Port: A. Prior to issuance of a permit by USACE for dredge and/or fill operations in the Bay or Chula Vista Harbor, the applicant shall conduct a focused sediment investigation and submit it to USACE and RWQCB for review and approval. The applicant shall then determine the amount of bay sediment	Less than significant

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Impact	Mitigation	Significance After Mitigation
contaminated sediments are exposed, redistributed, or released into the water column.	that requires remediation and develop a specific work plan to remediate bay sediments in accordance with permitting requirements of the RWQCB. The work plan shall include but not be limited to: dredging the sediment, allowing it to drain, and analyzing the nature and extent of any contamination. Pending the outcome of the analytical results, a decision by RWQCB shall prescribe the requirements for disposition of any contaminated sediment. B. Prior to issuance of a grading permit for marina redevelopment on HW-1 and HW-4, the developer shall submit a work plan for approval by the RWQCB and Port/City that requires the implementation of BMPs, including the use of silt curtains during in-water construction to minimize sediment disturbances and confine potentially contaminated sediment if contaminated sediment exists. If a silt curtain should be necessary, the silt curtain shall be anchored along the ocean floor with weights (i.e., a chain) and anchored to the top with a floating chain of buoys. The curtain shall wrap around the area of disturbance to prevent turbidity for traveling outside the immediate project area. Once the impacted region resettles the curtains shall be removed. If the sediment would be suitable for ocean disposal, no silt curtain shall be required. However, if contaminants are actually present, the applicant would be required to provide to the RWQCB and Port/City an evaluation showing that the sediment would be suitable for ocean disposal.	
Significant Impact 4.5-5: The dredge and fill activities and pile driving necessary for navigation channel realignment and harbor construction, and removal/placement of riprap, bulkheads, sheet pile, and construction of the H Street Pier would temporarily suspend bottom sediments into the water column. Suspension of sediments reduces water clarity, increases nutrients, and decreases dissolved oxygen available to marine organisms. Water clarity and dissolved oxygen concentrations would return to pre-construction conditions upon completion of these construction activities. These temporary impacts would be significant.	Mitigation Measure 4.5-5 Port: Prior to the commencement of in-water construction for all phases of development, the Port or Port tenants shall adhere to regulatory requirements including the use of BMPs, which shall include use of silt curtains during all sediment suspension activities.	Less than significant
4.6 AIR QUALITY		
Significant Impact 4.6-1: Construction activities would result in significant air quality impacts for each of the criteria pollutants for all phases of the Proposed Project. Unmitigated	Mitigation Measure 4.6-1	Significant and unmitigated

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Impact	Mitigation	Significance After Mitigation
PM_{10} and $PM_{2.5}$ emissions are projected to exceed the standard during mass grading operations for each project phase. Construction emissions are projected to exceed the standards for NO_x and reactive organic gases (ROG) during some years of construction, but not during others. These impacts would be potentially significant.	(Mitigation Measure 4.6-1 would reduce impacts to air quality identified in Significant Impacts 4.6-1 and 4.6-6.) Port/City: Prior to the commencement of any grading activities, the following measures shall be placed as notes on all grading plans, and shall be implemented during grading of each phase of the project to minimize construction emissions. These measures shall be completed to the satisfaction of the Port and the Director of Planning and Building for the City of Chula Vista (These measures were derived, in part, from Table 11-4 of Appendix 11 of the SCAQMD CEQA Air Quality Handbook, and from SCAQMD Rule 403). See Mitigation Measure 4.6-1 in *Section 4.6, Air Quality* for a list of Best Available Control Measures for Specific Construction Activities.	
Significant Impact 4.6-2: Operational emissions projected for Phase I of development are anticipated to exceed the standard for each criteria pollutant except SO_2 and $PM_{2.5}$. The exceedance of the standard for criteria pollutants (ROG, NO_x CO, and PM_{10}) would be a significant impact for Phase I development.	Mitigation Measure 4.6-2 City: A. For development within the City's jurisdiction, applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City. This plan shall demonstrate "the best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled". There are two options to meet the AQIP requirement. The applicant shall either evaluate the project using the Chula Vista CO_2 Index Model including any necessary site plan modifications, or participate in the GreenStar Building Energy Program. Port/City: B. Prior to the issuance of buildings permits, the applicant shall demonstrate that the Proposed Project complies with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements along with the following measures shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City:	Significant and unmitigated

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Impact	Mitigation	Significance After Mitigation
	• Use of low-NO_x emission water heaters • Installation of energy efficient and automated air conditioners when air conditioners are provided • Energy efficient parking area lights • Exterior windows shall be doublepaned	
Significant Impact 4.6-3: Operational emissions projected for Phase II of development are anticipated to exceed the standard for each criteria pollutant except SO_2 and $PM_{2.5}$. The exceedance of the standard for criteria pollutants (ROG, NO_x CO, and PM_{10}) would be a significant impact for Phase II development.	Mitigation Measure 4.6-3 City: A. For development within the City's jurisdiction, the applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City of Chula Vista. This plan shall demonstrate "the best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled. There are two options to meet the AQIP requirement. The applicant shall either evaluate the project using the Chula Vista CO_2 Index Model including any necessary site plan modifications, or participate in the GreenStar Building Energy Program. Port/City: B. Prior to the issuance of buildings permits, the applicant shall demonstrate that the Proposed Project complies with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements along with the following measures shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City: • Use of low-NOx emission water heaters • Installation of energy efficient and automated air conditioners when air conditioners are provided • Energy efficient parking area lights • Exterior windows shall be doublepaned.	Significant and unmitigated
Significant Impact 4.6-4: Operational emissions projected for Phase III of development are anticipated to exceed the	Mitigation Measure 4.6-4	Significant and unmitigated

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Impact	Mitigation	Significance After Mitigation
standard for each criteria pollutant except SO_2, PM_{10} and $PM_{2.5}$. The exceedance of the standard for criteria pollutants (ROG, NO_x and CO) would be a significant impact for Phase III development.	City: A. For residential, as well as mixed-use/commercial development within the City's jurisdiction, the applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City of Chula Vista. This plan shall demonstrate "the best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled. There are two options to meet the AQIP requirement. The applicant shall either evaluate the project using the Chula Vista CO_2 Index Model including any necessary site plan modifications, or participate in the GreenStar Building Energy Program. Port/City: B. Prior to the issuance of buildings permits, the applicant shall demonstrate that the Proposed Project complies with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements along with the following measures shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City: • Use of low-NOx emission water heaters • Installation of energy efficient and automated air conditioners when air conditioners are provided • Energy efficient parking area lights • Exterior windows shall be doublepaned.	
Significant Impact 4.6-5: Operational emissions projected for Phase IV of development are anticipated to exceed the standard for each criteria pollutant except SO_2, CO, PM_{10}, and $PM_{2.5}$. The exceedance of the standard for criteria pollutants (ROG and NO_x) would be a significant impact for Phase IV development.	Mitigation Measure 4.6-5 City: A. For residential, as well as mixed-use/commercial development within the City's jurisdiction, the applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City of Chula Vista. This plan shall demonstrate "the best available design to reduce vehicle trips,	Significant and unmitigated

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Impact	Mitigation	Significance After Mitigation
	maintain or improve traffic flow, and reduce vehicle miles traveled. There are two options to meet the AQIP requirement. The applicant shall either evaluate the project using the Chula Vista CO_2 Index Model including any necessary site plan modifications, or participate in the GreenStar Building Energy Program. Port/City: B. Prior to the issuance of buildings permits, the applicant shall demonstrate that the Proposed Project shall comply with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements along with the following measures shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City: • Use of low-NOx emission water heaters • Installation of energy efficient and automated air conditioners when air conditioners are provided • Energy efficient parking area lights • Exterior windows shall be doublepaned.	
Significant Impact 4.6-6: Construction of Phases II through IV would have the potential to affect additional sensitive receptors located on site once previous phases are complete. Because construction emissions during these phases would exceed the significance thresholds for ROG, NOx, CO, PM_{10}, and $PM_{2.5}$, impacts to sensitive receptors during construction of subsequent phases would be significant, albeit temporary. At the program level for the Proposed Project, impacts to sensitive receptors during construction of Phases II, III, and IV would be a significant impact.	Same as Mitigation Measure 4.6-1 above. See Mitigation Measure 4.6-1 in *Section 4.6, Air Quality* for a list of Best Available Control Measures for Specific Construction Activities.	Significant and unmitigated
Significant Impact 4.6-7: Program level components of the Proposed Project have not reached the design stage that enables the development of PDFs. As such no PDFs have been assigned to Phase II through Phase IV components of the Master Plan. The Program Master Plan developments will	Mitigation Measure 4.6-6 Port/City: Development of Program Level components of the Chula Vista Bayfront Master Plan (Phases II through IV) shall implement measures to reduce GHG emissions. Specific measures related to energy efficiency,	Less than significant

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Impact	Mitigation	Significance After Mitigation
be required as conditions of approval to adopt GHG emission reduction measures similar to those adopted by the Gaylord Resort and Conference Center and the Pacifica Residential and Retail Development. New, more effective design features may become available prior to the initiation of the program phases, and would be required of the project and would be identified in subsequent environmental analyses.	renewable energy, water conservation and efficiency, solid waste measures, and transportation and motor vehicles are outlined in Mitigation Measure 4.6-6 in *Section 4.6, Air Quality* of this report. See Mitigation Measure 4.6-6 in *Section 4.6, Air Quality,* for a list of measures to reduce GHG emissions.	
4.7 NOISE		
Significant Impact 4.7-1: Noise from project construction on the Pacifica project site would be expected to exceed the wildlife noise threshold of 60 dB(A) Leq during the breeding season at habitat in the J Street Marsh, which could have an adverse affect on nesting birds within the marsh. This would be considered a significant impact.	Mitigation Measure 4.7-1 City: Construction-related noise shall be limited adjacent to the J Street Marsh during the typical breeding season of January 15 to August 31. Construction activity adjacent to these sensitive areas must not exceed 60 dB(A) Leq at any active nest within the marsh. Prior to issuance of a building permit, the project developer shall prepare and submit to the City for review and approval an acoustical analysis and nesting bird survey to demonstrate that the 60 dB(A) Leq noise level is maintained at the location of any active nest within the marsh. If the noise threshold is anticipated to be exceeded at the nest location, the project developer shall construct noise barriers or implement other noise control measures to ensure that construction noise levels do not exceed the threshold.	Less than significant
Significant Impact 4.7-2: Future noise levels at the outdoor usable areas for the Pacifica development could exceed 65 dB(A), resulting in a potentially significant impact.	Mitigation Measure 4.7-2 City: Prior to the approval of Design Review for the Pacifica project, the applicant shall submit a site plan for the project demonstrating to the satisfaction of the Director of Planning and Building of the City that outdoor use areas are not exposed to noise levels in excess of 65 dB(A) CNEL. Applicants shall submit project plans demonstrating that outdoor usable residential areas conform to the standards set by the City of Chula Vista General Plan. City: Prior to issuance of building permits, the developer shall install noise barriers that would reduce sound levels to 65 dB(A) CNEL or below at outdoor usable areas on the Pacifica site. To preserve a view, glass or Plexiglas with a minimum density of 3.5 pounds per square foot may be substituted for other	Less than significant

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Impact	Mitigation	Significance After Mitigation
	construction materials. The barrier locations, heights, and lengths for the Pacifica development, as summarized in *Table 4.7-15* and illustrated on *Figure 4.7-10* of *Section 4.7, Noise* would achieve these necessary reductions.	
Significant Impact 4.7-3: Future noise levels at the building façades of the Pacifica development could exceed 60 dB(A) CNEL; therefore, interior noise levels due to exterior sources could exceed 45 dB(A) CNEL even with standard construction practices. This would result in a potentially significant impact.	Mitigation Measure 4.7-3 City: Prior to the issuance of building permits for residential units adjacent to circulation element roadways in the Harbor District, the applicant shall perform and submit an acoustical analysis to the City demonstrating that the proposed building plans provide interior noise levels due to exterior sources are 45 dB(A) CNEL or less in any habitable room. The analysis must also identify Sound Transmission Loss (STL) rates of each window.	Less than significant
Significant Impact 4.7-4: Noise levels from the operation of the mechanical equipment for the Pacifica development, could exceed the sound level limits for noise sensitive receptors along Marina Parkway, Street C, J Street and Street A, resulting in a potentially significant impact.	Mitigation Measure 4.7-4 City: Prior to the approval of Design Review for the Pacifica project, the applicant shall submit a design plan for the project demonstrating to the satisfaction of the City's Director of Planning and Building that the noise level from operation of mechanical equipment will not exceed 50 dB(A) Leq at any property line. Noise control measures may include, but are not limited to, the selection of quiet equipment, equipment setbacks, silencers, and/or acoustical louvers. Such measures must be designed and installed so as to achieve a cumulative sound level from mechanical equipment that does not exceed 40 dB(A) at 50 feet from the building façades adjacent to Marina Parkway, Street C and J Street; or 54 dB(A) at 50 feet from the building façades facing Street A. City: Prior to the approval of Design Review for the Pacifica project, the applicant shall prepare and submit to the City for review and approval an acoustical analysis and nesting bird survey to demonstrate that operation of mechanical equipment will not exceed the 60 dB(A) Leq noise level at the location of any active nest within the J Street Marsh. If the noise threshold is anticipated to be exceeded at the nest location, the project developer shall construct noise barriers and/or implement noise control measures to maintain operational noise levels below the threshold.	Less than significant
Significant Impact 4.7-5: Construction activity occurring within 800 feet of noise-sensitive wildlife habitat located in the	Mitigation Measure 4.7-5	Less than significant

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Impact	Mitigation	Significance After Mitigation
F&G Street Marsh to the northeast of the project site during the breeding season would result in a significant impact and would require mitigation.	Port/City: To avoid significant impacts to the F&G Street Marsh and reduce the construction noise level to 60 dB(A) or below, the developer shall install and place a 20-foot-high temporary noise barrier or wall along the northeast project property line and returns along the east and west property lines. This mitigation would be necessary for construction activity occurring within 800 feet of the habitat during the extended breeding season. As demonstrated on *Figure 4.7-11*, the barrier must be of solid construction, with no gaps or cracks through or below the wall, and have a minimum density of 3.5 pounds per square foot. The barrier must block line-of-sight between the source and receiver and be long enough to prevent flanking around the ends. Port/City: Prior to the start of construction, upon selection of a contractor and once specific equipment models and locations, phasing, and operational duration are known, a detailed analysis shall be conducted by the project developer and approved by the Port and/or City to determine proper placement of the temporary noise barrier.	
Significant Impact 4.7-6: Traffic on area roadways would be expected to generate noise levels at ground-level sensitive receptors in excess of the City's residential exterior standard of 65 dB(A) CNEL. Future noise levels at noise sensitive areas in excess of 65 dB(A) would result in a potentially significant impact.	Mitigation Measure 4.7-6 Port/City: Prior to the approval of Design Review, the applicant shall submit a site plan for the project demonstrating to the satisfaction of the Director of Planning and Building of the City and the Port, that outdoor use areas are not exposed to noise levels in excess of 65 dB(A) CNEL. As part of CEQA review for subsequent execution of actions associated with project construction phases, applicants shall submit project plans demonstrating that outdoor usable residential areas conform to the standards set by the City of Chula Vista General Plan. Port/City: Prior to the issuance of building permits or certificates of occupancy, the developer shall install noise barriers that would reduce sound levels to 65 dB(A) CNEL or below at ground-level noise sensitive receptors on the project site. To preserve a view, glass or Plexiglas with a minimum density of 3.5 pounds per square foot may be substituted for other construction materials.	Less than significant
Significant Impact 4.7-7: Exterior noise levels at proposed residential sites would exceed 60 dB(A) CNEL; therefore,	See Mitigation Measure 4.7-3 above.	Less than significant

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Impact	Mitigation	Significance After Mitigation
interior noise levels due to exterior sources could exceed 45 dB(A) CNEL even with standard construction practices. This would be a significant impact.		
Significant Impact 4.7-8: The segment of E Street between Gaylord Driveway and F Street would experience a future noise level of 64 dB(A) at 50 feet. The highest noise level at the habitat would be approximately 62 dB(A). This noise level exceeds the wildlife noise threshold of 60 dB(A) during breeding season at habitat in the F&G Street Marsh, resulting in a significant impact.	Mitigation Measure 4.7-7 Port/City: To avoid significant impacts to the F&G Street Marsh and reduce the noise level at habitat to 60 dB(A) or below, the developer shall install a 3-foot-high noise barrier along the east right-of-way of E Street for the extent of the habitat, as shown on *Figure 4.7-12* in *Section 4.7, Noise,* of this report. The barrier must be of solid construction, with no gaps or cracks through or below the wall, and have a minimum density of 3.5 pounds per square foot. The barrier must block line-of-sight between the source and receiver and be long enough to prevent flanking around the ends.	Less than significant
Significant Impact 4.7-9: Construction of off-site improvements such as water mains in Phase I could result in noise impacts that would affect residents along J Street between Bay Boulevard and Broadway, L Street between Bay Boulevard and Broadway, and Broadway between J Street and Main Street. These noise impacts would be considered significant.	Mitigation Measure 4.7-8 Port/City: To avoid significant construction-related noise impacts, the following measures shall be followed: • Construction activity shall be prohibited Monday through Friday from 10:00 P.M. to 7:00 A.M., and Saturday and Sunday from 10:00 P.M. to 8:00 A.M., pursuant to the Chula Vista Municipal Code Section 17.24.050 (Paragraph J).	Less than significant
Significant Impact 4.7-10: Construction noise during subsequent phases of the project could affect the sensitive uses established through the development of Phase I. Subsequent analysis of construction noise impacts would be needed during the CEQA review process of Phases II through IV. Because subsequent phases of development could result in noise impacts that would affect uses created during Phase I of development, noise impacts are significant.	• All stationary noise generating equipment, such as pumps and generators, shall be located as far as possible from noise sensitive receptors, as practicable. Where practicable, noise-generating equipment shall be shielded from noise sensitive receptors by attenuating barriers or structures. Stationary noise sources located less than 200 feet from sensitive receptors shall be equipped with noise reducing engine housings. Water tanks, equipment storage, staging, and warm-up areas shall be located as far from noise sensitive receptors as possible. • All construction equipment powered by gasoline or diesel engines shall have sound control devices at least as effective as those originally provided by the manufacturer; no equipment shall be permitted to have an unmuffled exhaust. • Any impact tools used during demolition of existing infrastructure shall be shrouded or shielded, and mobile noise generating equipment and machinery shall be shut off when not in use.	Less than significant

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Impact	Mitigation	Significance After Mitigation
	• Construction vehicles accessing the site shall be required to use the shortest possible route to and from I-5 provided the route does not expose additional receptors to noise. • Construction equipment shall be selected as those capable of performing the necessary tasks with the lowest sound level and the lowest acoustic height possible to perform the required construction operation. • Construction equipment shall be operated and maintained to minimize noise generation. Equipment shall be kept in good repair and fitted with "manufacturer-recommended" mufflers.	
Significant Impact 4.7-11: The construction activities in the Sweetwater District would occur between an area as far away from the Sweetwater Marsh National Wildlife Refuge as 1,320 feet to a location adjacent to the refuge. The projected noise levels at the edge of the refuge could be as high as 77 dB. During the breading season, this would be a significant impact.	Mitigation Measure 4.7-9 Port/City: Construction-related noise shall be limited during the typical breeding season of January 15 to August 31 adjacent to the Sweetwater Marsh NWR and F&G Street Marsh. The current accepted noise threshold is 60 dB(A) L_{eq}; thus construction activity shall not exceed this level, or ambient noise levels if higher than 60 dB(A) during the breeding season. If construction does occur within the breeding season or adjacent to the marshes, the project developer shall prepare and submit an acoustical analysis to the Port and/or City that shall determine whether noise barriers would be required to reduce the expected noise levels below the threshold. If noise barriers, construction activities, or other methods are unable to result in a level of noise below the threshold, construction in these areas shall be delayed until the end of the breeding season.	Less than significant
4.8 TERRESTRIAL BIOLOGICAL RESOURCES		
Significant Impact 4.8-1: There is potential for raptors to nest on site during the nesting season of January 15 to July 31 within all districts during all phases of construction. All active raptor nests, regardless of state or federal listing status, are protected under the California Fish and Game Code Section 3503.5. Direct impacts to nesting raptors due to the removal of an active nest would be significant.	Mitigation Measure 4.8-1 Port/City: Prior to construction in any areas with suitable nesting locations for raptors (such as trees, utility poles, or other suitable structures), and if grading or construction occurs during the breeding season for nesting raptors (January 15 through July 31), the project developer(s) within the Port's or City's jurisdiction shall retain a qualified, Port or City-approved biologist, as appropriate, who shall conduct a pre-construction survey for active raptor nests. The pre-construction survey must be conducted no more than 10 calendar days prior to the start of construction, the results of which must be submitted to the Port or City, as appropriate, for review and approval. If an active nest is found, an appropriate setback distance will be determined in consultation with the applicant, Port or City, USFWS, and CDFG. The construction setback shall be implemented until the young are completely independent of the nest, or, the nest is	Less than significant

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Impact	Mitigation	Significance After Mitigation
	relocated with the approval of the USFWS and CDFG. A bio-monitor shall be present on site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. Depending on the sensitivity of the resources, the City and/or Port shall define the frequency of field inspections. The bio-monitor shall send a monthly monitoring letter report to the City and/or Port detailing observations made during field inspections. The bio-monitor shall also notify the City and/or Port immediately if clearing is done outside of the permitted project footprint.	
Significant Impact 4.8-2: Impacts to the western burrowing owl or any burrowing owl burrows may occur during implementation of program-level components in the Otay District on parcels in both the Port's and City's jurisdiction. The impacts would consist of the loss of burrowing owls and/or their nests, which may result from grading and construction activities during development of the Otay District. The potential loss of western burrowing owls and/or their nests would be a significant impact.	Mitigation Measure 4.8-2 Port/City: Prior to construction in any areas with suitable nesting habitat for burrowing owl, and if grading or construction occurs during the breeding season for the burrowing owl (April 15 through July 15), the project developer(s) within the Port's or City's jurisdiction, as appropriate, shall retain a qualified biologist, who shall be approved by the Port or City, respectively, to conduct a pre-construction survey within all suitable habitat prior to any grading activities. The pre-construction survey must be conducted no more than 10 calendar days prior to the start of construction, the results of which must be submitted to the Port or City, as appropriate, for review and approval. If an active burrow is detected during the breeding season of April 15 to July 15 construction setbacks of 300 feet from occupied burrows shall be implemented until the young are completely independent of the nest. If an active burrow is found outside of the breeding season, or after an active nest is determined to no longer be active by a qualified biologist, the burrowing owl would be passively relocated according to the guidelines provided by CDFG (1995) and in coordination with CDFG. A bio-monitor shall be present on site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. Depending on the sensitivity of the resources, the City and/or Port shall define the frequency of field inspections. The bio-monitor shall send a monthly monitoring letter report to the City and/or Port detailing observations made during field inspections. The bio-monitor shall also notify the City and/or Port immediately if clearing is done outside of the permitted project footprint.	Less than significant
Significant Impact 4.8-3: There is a potential for a number of birds protected by the MBTA to nest within the open space and	Mitigation Measure 4.8-3	Less than significant

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Impact	Mitigation	Significance After Mitigation
trees in the Port's and City's jurisdiction. Destruction or removal of active nests during the breeding season could occur during construction or grading activities. These impacts would be significant.	Port/City: If grading or construction occurs during the breeding season for migratory birds (January 15 through July 31), the project developer(s) shall retain a qualified biologist, approved by the Port/City depending on the jurisdiction, to conduct a pre-construction survey for nesting migratory birds. The pre-construction survey must be conducted no more than 10 calendar days prior to the start of construction, the results of which must be submitted to the Port or City, as appropriate, for review and approval. If active nests are present, the Port will consult with USFWS and CDFG to determine the appropriate construction setback distance. Construction setbacks shall be implemented until the young are completely independent of the nest, or, relocated with the approval of the USFWS and CDFG. A bio-monitor shall be present on site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. Depending on the sensitivity of the resources, the City and/or Port shall define the frequency of field inspections. The bio-monitor shall send a monthly monitoring letter report to the City and/or Port detailing observations made during field inspections. The bio-monitor shall also notify the City and/or Port immediately if clearing is done outside of the permitted project footprint.	
Significant Impact 4.8-4: During Phase I of the Proposed Project, impacts would occur to the inlet of the F & G Street Marsh as a result of the construction of the extension of E Street and development of Sweetwater Park. Direct impacts to the light-footed clapper rail and loss of foraging habitat for the species could occur. Construction activity within the inlet would potentially impact clapper rails directly if circumstances prevented the birds from escaping back to the protected marsh habitat during construction. Impacts to the inlet would reduce the amount of available foraging habitat and could directly impact the light-footed clapper rail.	Mitigation Measure 4.8-4 Port/City: Prior to construction in any areas of suitable nesting or foraging habitat for light-footed clapper rail, and if grading or construction within these areas occurs during the breeding season for light-footed clapper rail (February 15 through July 31), the project developer(s) shall retain a qualified biological monitor who shall be approved by the Port or City, as appropriate, and shall be present during removal of southern coastal salt marsh vegetation within the inlet to the F & G Street Marsh to ensure that there are no direct impacts to foraging light-footed clapper rails. If a light-footed clapper rail is encountered, construction will be temporarily halted until the bird leaves the area of construction. A bio-monitor shall be present on site during initial grubbing and clearing of vegetation to ensure that perimeter construction fencing is being maintained. A bio-monitor shall also perform periodic inspections of the construction site during all major grading to ensure that impacts to sensitive plants and wildlife are minimized. Depending on the sensitivity of the resources, the City and/or Port shall define the frequency of field inspections. The bio-monitor shall send a monthly monitoring letter report to the City and/or Port detailing observations made	Less than significant

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Impact	Mitigation	Significance After Mitigation
	during field inspections. The bio-monitor shall also notify the City and/or Port immediately if clearing is done outside of the permitted project footprint.	
Significant Impact 4.8-5: Project construction could potentially impact the following MSCP-covered species within the City's jurisdiction during all phases of development: salt marsh skipper, orange-throated whiptail, northern harrier, Cooper's hawk, peregrine falcon, light-footed clapper rail, long-billed curlew, western burrowing owl, and Belding's savannah sparrow. Of these species, only the northern harrier, Cooper's hawk, and western burrowing owl were observed on or directly adjacent to City jurisdiction during the current surveys; therefore, impacts to northern harrier, Cooper's hawk, and western burrowing owl would be significant.	Mitigation Measure 4.8-5 City: Prior to issuance of any clearing and grubbing, or grading permits within the jurisdiction of the City, the project applicant within the City's jurisdiction shall be required to obtain a HLIT Permit pursuant to Section 17.35 of the Chula Vista Municipal Code for impacts to Covered Species and Vegetation Communities protected under the City's MSCP Subarea Plan. In addition, the MSCP requires additional protective measures for the western burrowing owl, as identified in Mitigation Measure 4.8-2 above.	Less than significant
Significant Impact 4.8-6: Because of the proximity of the proposed project to the F & G Street Marsh and the Sweetwater Marsh National Wildlife Refuge, there is a potential for impacts to special status bird species including California least tern, light-footed clapper rail, and western snowy plover. Impacts could result from the increased predation on special status bird species as a result of the creation of perch sites in areas that do not naturally contain such vantage points. Indirect effects would be significant because they would potentially result in increased predation, abandonment of nests or degradation of nesting and foraging habitat for the light-footed clapper rail, Belding's savannah sparrow, all raptor species, and migratory birds, which can ultimately cause a drop in population numbers of these species.	Mitigation Measure 4.8-6 Port/City: A. Construction-related noise shall be limited adjacent to the F & G Street Marsh, and the J Street Marsh during the typical breeding season of January 15 to August 31. Construction activity adjacent to these sensitive areas must not exceed 60 dB(A) L_{eq}, or ambient noise levels if higher than 60 dB(A), during the breeding season. The project developer(s) shall prepare and submit to the Port/City for review and approval an acoustical analysis and nesting bird survey to demonstrate that the 60 dB(A) L_{eq} noise level is maintained at the location of any active nest within the marsh. If the noise threshold is anticipated to be exceeded at the nest location, the project developer(s) shall construct noise barriers to maintain construction noise levels below the threshold. Because potential construction noise levels above 60 dB(A) L_{eq} have been identified at the F & G Street Marsh, specific noise attenuation measures have been identified and are addressed in *Section 4.7, Noise,* of the EIR. B. The following design criteria shall be incorporated into all building and landscape plans within 500 feet of the preserves to reduce the potential for raptors to perch and prey on sensitive bird species: • Light posts shall have anti-perching spike strips along any portions that would be accessible to raptors.	Less than significant

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Impact	Mitigation	Significance After Mitigation
	• The top edge of buildings shall be rounded with sufficient radius to reduce the amount of suitable perching building edges. • If building tops are hard corners, spike strips shall be used to discourage raptors from perching and building nests. • Decorative eaves, ledges, or other protrusions shall be designed to discourage perching by raptors. C. Prior to the issuance of a Coastal Development Permit, the project developer shall prepare a raptor nest management plan to be implemented once the project is built. A biologist retained by the project developer and approved by the Port and/or City shall be responsible for monitoring the buildings and associated landscaping to determine if raptor nests have been established on Port or City lands within 500 feet of the Preserves. If a nest is discovered, the nest would be removed in consultation with USFWS, CDFG, and the Port/City outside of the raptor breeding season of January 15 to July 31. D. Lighting. The following mitigation measure is required during all phases of development to ensure that outdoor lighting throughout the project area is minimized upon any of the habitat buffers, Preserve areas, habitats, or open water. Prior to issuance of a building permit, each applicant within the Port's or City's jurisdiction shall prepare a lighting design plan, including a photometric analysis, to be reviewed by the Port or City, as appropriate. Each plan shall include the following features, as appropriate to the specific locations: • All exterior lighting shall be directed away from the habitat buffers, Preserve Areas, habitats, or open water, wherever feasible and consistent with public safety. Where necessary, lighting of all developed areas adjacent to the habitat buffers, Preserve Areas, habitats, or open water shall provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the habitat buffers, Preserve Areas, habitats, or open water and sensitive species from night lighting. The light structure themselves shall have shielding (and incorporate anti-raptor perching criteria); but the placement of the light structures shall also provide shielding from wildlife habitats and shall be placed in such a way as to minimize the amount of light reaching adjacent habitat buffers, Preserve Areas, habitats, or open water.	

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Impact	Mitigation	Significance After Mitigation
	This includes street lights, pedestrian and bicycle path lighting, and any recreational lighting. • All exterior lighting immediately adjacent to habitat buffers, Preserve Areas, habitats, or open water shall be low pressure sodium lighting or other approved equivalent. • No sports field lights shall be planned on the recreation fields near the J Street Marsh or the Sweetwater Marsh. E. Noise. *Construction Noise.* Mitigation Measure 4.8-6, and the measures outlined in *Section 4.7, Noise,* shall be implemented in order to reduce potential indirect construction-noise impacts to sensitive species within the F & G Street Marsh, and J Street Marsh. In order to further reduce construction noise, equipment staging areas shall be centered away from the edges of the project and construction equipment shall be maintained regularly and muffled appropriately. *Operational Noise.* Noise levels from loading and unloading areas, rooftop heating, ventilation, and air conditioning facilities, and other noise generating operational equipment shall not exceed 60 dBA Leq at the boundaries of the F & G Street Marsh, and the J Street Marsh during the typical breeding season of January 15 to August 31. F. Invasives. All exterior landscaping plans shall be submitted to the Port or City, as appropriate, for review and approval to ensure that no plants listed on the California Invasive Plan Council (Cal-IPC) List of Exotic Pest Plants of Greatest Ecological Concern in California or the list included in Appendix N of the City's MSCP Subarea Plan shall be planted throughout the plan area during project construction and operation. The Cal-IPC list is contained in *Appendix 4.8-11* of this report. G. Toxic Substances and Drainage. Implementation of general water quality measures outlined in Mitigation Measures 4.5-2 through 4.5-4 identified *in Section 4.5, Hydrology/Water Quality* would reduce impacts associated with the release of toxins, chemicals, petroleum products and other elements that might degrade or harm the natural environment to below a level that is significant, and would provide benefits to wetland habitats. As a reference, these mitigation measures are repeated below and apply to the Port and City:	

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Impact	Mitigation	Significance After Mitigation
	• If contaminated groundwater is encountered, the project developer shall treat and/or dispose of the contaminated groundwater (at the developer's expense) in accordance with NPDES permitting requirements, which includes obtaining a permit from the Industrial Wastewater Control Program to the satisfaction of the RWQCB. The project developer(s) shall demonstrate satisfaction of all permit requirements prior to issuance of a grading permit. • Prior to the discharge of contaminated groundwater for all construction activities, should flammables, corrosives, hazardous wastes, poisonous substances, greases and oils and other pollutants exist on site, a pretreatment system shall be installed to pre-treat the water to the satisfaction of the RWQCB before it can be discharged into the sewer system. • Prior to the issuance of a grading, excavation, dredge/fill, or building permit for any parcel, the applicant shall submit a Spill Prevention/Contingency Plan for approval by the Port or City as appropriate. The plan shall: i. Ensure that hazardous or potentially hazardous materials (e.g., cement, lubricants, solvents, fuels, other refined petroleum hydrocarbon products, wash water, raw sewage) that are used or generated during the construction and operation of any project as part of the Proposed Project shall be handled, stored, used, and disposed of in accordance with NPDES permitting requirements and applicable federal, state, and local policies; ii. Include material safety data sheets; iii. Require 40 hours of worker training and education as required by the Occupational Safety and Health Administration; iv. Minimize the volume of hazardous or potentially hazardous materials stored at the site at any one time; v. Provide secured storage areas for compatible materials, with adequate spill contaminant; vi. Maintain all required records, manifest and other tracking information in an up-to-date and accessible form or location for review by the Port or City; and vii. Shall demonstrate compliance with all local, state, and federal regulations regarding hazardous materials and emergency response. • Prior to issuance of a permit by USACE for dredge and/or fill operations in the Bay or Chula Vista Harbor, the applicant shall conduct a focused sediment investigation and submit it to USACE, EPA, and RWQCB for review and approval. The applicant shall then determine the amount of bay sediment that requires remediation and develop a specific work plan to	

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Impact	Mitigation	Significance After Mitigation
	remediate bay sediments in accordance with permitting requirements of the RWQCB. The work plan shall include but not be limited to: dredging the sediment, analyzing the nature and extent of any contamination, and allowing it to drain. Pending the outcome of the analytical results, the RWQCB and the Port shall prescribe the appropriate method for disposition of any contaminated sediment. • Prior to issuance of a grading permit for marina redevelopment on HW-1 and HW-4, the developer shall submit a work plan for approval by the RWQCB and Port/City that requires the implementation of BMPs, including the use of silt curtains during in-water construction to minimize sediment disturbances and confine potentially contaminated sediment if contaminated sediment exists. If a silt curtain should be necessary, the silt curtain shall be anchored along the ocean floor with weights (i.e., a chain) and anchored to the top with a floating chain of buoys. The curtain shall wrap around the area of disturbance to prevent turbidity for traveling outside the immediate project area. Once the impacted region resettles the curtains shall be removed. If the sediment would be suitable for ocean disposal, no silt curtain shall be required. However, if contaminants are actually present, the applicant would be required to provide to the RWQCB and Port/City an evaluation showing that the sediment would be suitable for ocean disposal. H. Public Access. In addition to site-specific measures designed to prevent or minimize the impact to adjacent open space preserve areas from humans and domestic animals, the following would prevent or minimize the impact to adjacent open space preserve areas from humans and domestic animals. *Buffers:* All buffers shall be established and maintained by the Port/City. Appropriate signage will be provided at the boundary and within the buffer area to restrict public access. Within the western 200-foot-width of SP-1, a portion of the buffer areas would be re-contoured and restored to provide habitat consistent with the native vegetation communities in the adjacent open space preserve areas and to provide mitigation opportunities for project impacts. *Appendix 4.8-12* provides more specific detail of the mitigation opportunities available within the buffer area included within the Proposed Project. *Table 4.8-5* provides a breakdown of the available maximum mitigation acreage that is available within the buffer. *Figure 4.8-23* depicts the conceptual mitigation opportunities within the Sweetwater District. *Figures 4.8-24* and *4.8-25* display the cross section of the buffer	

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Impact	Mitigation	Significance After Mitigation
	zones in the Sweetwater District indicated on the conceptual illustration. *Figure 4.8-26* depicts the conceptual mitigation opportunities within the Otay District. The proposed restoration includes creating and restoring coastal salt marsh and creating riparian scrub vegetation communities. In addition, the coastal brackish marsh, disturbed riparian habitat, and wetland would be enhanced. Impacts to disturbed coastal sage scrub would be mitigated by the restoration of a coastal sage scrub/native grassland habitat also within this buffer. There is the potential to provide a maximum of 20.71 acres of mitigation credit for impacts to wetland habitats and 22.21 acres for impacts to upland habitats. This would exceed the required mitigation needed for impacts within the Port's and City's jurisdiction. A detailed coastal sage scrub (CSS) and maritime succulent scrub (MSS) restoration plan that describes the vegetation to be planted shall be prepared by a Port or City-approved biologist and approved by the Port or City, as appropriate. The City or Port shall develop guidelines for restoration in consultation with USFWS and CDFG.	
Significant Impact 4.8-7: The Proposed Project would result in potential indirect impacts on preserve areas adjacent to the project site from lighting, noise, invasives, toxic substances and public access. These impacts would be significant.	See Mitigation Measure 4.8-6 above.	Less than significant
Significant Impact 4.8-8: Within the Port's jurisdiction, the construction of the H Street Pier could reduce surface water foraging habitat in the Bay by approximately 36,000 square feet, or 0.8 acre, which would result in the reduction of foraging area for birds. This impact would be significant based on the USFWS policy of no-net-loss of habitat.	Mitigation Measure 4.8-7 Port: Prior to construction of the H Street Pier, the Port shall create 0.96 acre of eelgrass habitat to mitigate for the loss of surface water foraging habitat in accordance with the Southern California Eelgrass Mitigation Policy. The creation of eelgrass habitat shall be conducted in accordance with Mitigation Measures 4.9-1 and 4.9-2 in *Section 4.9, Marine Biological Resources*.	Less than significant

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Impact	Mitigation	Significance After Mitigation
Significant Impact 4.8-9: Detailed plans are not available for program-level components such as reconfiguration of the marinas, or for dredging and filling of the navigation channels. Removal of some existing facilities and construction of new facilities would result in changes to existing surface water habitat, which would impact surface water foraging habitat. The above impacts from program-level components would result in a total net loss of approximately 1.61 acre of surface water foraging habitat and would be significant based on the USFWS policy of no-net-loss.	Mitigation Measure 4.8-8 Port: A. Prior to completion in harbor work in Phase IV, the Port shall create 1.93 acres of eelgrass habitat. The creation of eelgrass habitat shall be conducted in accordance with Mitigation Measure 4.9-2 in *Section 4.9, Marine Biological Resources*. B. When project specific designs are proposed for the remaining project components affecting 1.61 acres of surface water foraging habitat and intertidal mudflats, the mitigation of impacts shall be re-evaluated by the Port during subsequent environmental review pursuant to State CEQA Guidelines Section 15168 to determine accurate net loss and mitigation for the loss of foraging habitat.	Less than significant
Significant Impact 4.8-10: The grading for project-level, Phase I elements within the Port's jurisdiction would impact disturbed coastal sage, non-native grassland, mulefat scrub/riparian scrub, and southern coastal salt marsh. These impacts are significant.	Mitigation Measure 4.8-9 Port: A. Prior to the commencement of grading for development in each phase that impacts riparian habitat or sensitive vegetation communities, the Port or Port tenants, as appropriate, shall prepare and initiate implementation of a restoration plan for impacts to riparian habitat and sensitive vegetation communities in accordance with the mitigation requirements presented in *Table 4.8-6*. Prior to the commencement of Phase I grading that impacts riparian habitat or sensitive vegetation communities, the Port shall coordinate with the wildlife agencies for the preparation and approval of a detailed restoration plan within the Port's jurisdiction. The restoration plan shall be prepared by a qualified biologist and the Plan shall be approved by the Port. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance	Less than significant

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Impact	Mitigation	Significance After Mitigation
	and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies. B. Prior to initiating any construction activities in each phase that would affect riparian habitat or sensitive vegetation communities, including clearing and grubbing associated with program-level phases, an updated project level assessment of potential impacts shall be made based on a specific project design. The Port, or project developer(s) as appropriate, shall retain a qualified, Port-approved biologist to update appropriate surveys, identify the existing conditions, quantify impacts, and provide adequate mitigation measures to reduce impacts to below a level of significance. This updated assessment shall be submitted to the Port for review and approval.	
Significant Impact 4.8-11: Grading for program-level elements within the Port's jurisdiction would impact disturbed coastal sage scrub, non-native grassland, disturbed riparian, and disturbed seasonal pond. These impacts are significant.	See Mitigation Measure 4.8-9 above.	Less than significant
Significant Impact 4.8-12: Approximately 1.52 acre of southern coastal salt marsh in the Port's jurisdiction would be impacted during program-level activities. These impacts are significant.	See Mitigation Measure 4.8-9 above.	Less than significant
Significant Impact 4.8-13: Approximately 17.42 acres of non-native grassland in the City's jurisdiction would be impacted in the Harbor District during Phase I. These impacts are significant.	Mitigation Measure 4.8-10 City: A. Prior to issuance of any clearing and grubbing or grading permits within the City's jurisdiction that would affect riparian habitat or sensitive vegetation communities, the project developer(s) shall acquire mitigation credits or prepare and initiate implementation of a restoration plan for impacts to riparian habitats and sensitive vegetation communities in accordance with the acreages identified in *Table 4.8-7.*	Less than significant

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Impact	Mitigation	Significance After Mitigation
	Mitigation credits shall be secured in a City-approved mitigation bank or land acquisition shall be provided at an approved location. Verification of mitigation credits or an approved restoration plan shall be provided to the City for review and approval prior to issuance of any clearing and grubbing or grading permits. The project developer(s) shall prepare and implement a detailed restoration plan to the satisfaction of the City and the regulatory agencies. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. B. Prior to issuance any clearing and grubbing or grading permits within the City's jurisdiction that affects riparian habitat or sensitive vegetation communities associated with the program-level development phases, an updated assessment of potential impacts shall be made based on a specific project design. The project developer(s) shall retain a City-approved biologist to update appropriate surveys, identify the existing conditions, quantify impacts, and provide adequate mitigation consistent with the City's MSCP Subarea Plan. This updated assessment shall be submitted to the City for review and approval. C. Prior to issuance of any clearing and grubbing or grading permits within the City's jurisdiction that affects riparian habitat or sensitive vegetation communities, the project applicant within the City's jurisdiction shall be required to obtain an HLIT Permit pursuant to Section 17.35 of the Chula Vista	

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Impact	Mitigation	Significance After Mitigation
	Municipal Code for impacts to Covered Species and Vegetation Communities protected under the City's MSCP Subarea Plan.	
Significant Impact 4.8-14: Approximately 0.03 acre of southern coastal salt marsh in the City's jurisdiction would be permanently impacted within the Sweetwater District during project-level activities.	See Mitigation Measure 4.8-10 above.	Less than significant
Significant Impact 4.8-15: Approximately 0.03 acre of mulefat scrub/riparian scrub in the City's jurisdiction would be permanently impacted within the Sweetwater District during program-level activities. The Proposed Project would permanently impact a total of 0.25 acre of disturbed coastal sage scrub (Tier II – uncommon uplands) in program-level activities of the Sweetwater District. Grading and construction activities during development of the Proposed Project will directly remove these sensitive vegetation communities. Impacts to mulefat/riparian scrub and disturbed coastal sage scrub would be significant.	See Mitigation Measure 4.8-10 above.	Less than significant
Significant Impact 4.8-16: The circulation roads and bridges proposed within the Port's jurisdiction in the Sweetwater and Harbor Districts would permanently impact 0.55 acre of USACE wetlands and non-wetland waters of the U.S. Impacts would be significant.	Mitigation Measure 4.8-11 Port: A. The Port or Port tenants, as appropriate, shall mitigate for permanent and temporary impacts to USACE jurisdictional waters at the following ratios: 1:1 for permanent impacts to non-wetland waters of the U.S.; 4:1 for impacts to wetlands; and 1:1 for all temporary impacts. A minimum of 1:1 mitigation must be created in order to achieve the no-net-loss requirement of the CWA. *Table 4.8-8* provides a breakdown of the required mitigation acreages for all USACE impacts within the Port's jurisdiction, which totals 2.12 acres. Mitigation for impacts from the Bay and Marina components of the proposed project will be established through USACE regulations once final designs for this work in Phases II through IV are finalized. Prior to the commencement of grading activities for any projects that impact USACE jurisdictional waters, the Port or Port tenants, as appropriate, shall prepare and initiate implementation of a restoration plan detailing the measures needed to achieve the necessary mitigation. The guidelines	Less than significant

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Impact	Mitigation	Significance After Mitigation
	for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies. City: B. Prior to the issuance of the first clearing and grubbing or grading permit for activities that impacts USACE jurisdictional waters, the project developer(s) within the City's jurisdiction shall prepare a restoration plan to detailing the measures needed to create/restore impacts to USACE jurisdictional waters within the City's jurisdiction in accordance with the acreage identified in *Table 4.8-9*. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met	

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	in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The project developer(s) shall be required to implement the restoration plan subject to the oversight and approval of the City. Port/City C. Prior to issuance of the first clearing and grubbing or grading permit for activities that impacts USACE jurisdictional waters, the Port or Port tenants, as appropriate, and project developer(s) within the City's jurisdiction shall obtain a Section 404 permit from USACE. The permit application process would also entail approval of the restoration plan from the USACE as described above, in regards to areas that fall under the jurisdiction of USACE.	
Significant Impact 4.8-17: Program-level development within the Port's jurisdiction would disturb a total of 1.24 acre of non-wetland waters of the U.S. and 0.42 acre of impacts to USACE wetlands. These impacts would be significant.	See Mitigation Measure 4.8-11 above.	Less than significant
Significant Impact 4.8-18: The establishment of an ecological buffer on Parcel OP-2A would result in temporary impacts to 0.03 acre of non-wetland waters of the U.S. through restoration activities.	See Mitigation Measure 4.8-11 above.	Less than significant
Significant Impact 4.8-19: The reconfiguration of the harbor and marina could impact an additional 61.96 acres of USACE jurisdictional waters within the Harbor District during program-level activities. This impact would be significant.	See Mitigation Measure 4.8-11 above.	Less than significant
Significant Impact 4.8-20: The bridges proposed on Parcel HP-5 in the Harbor District would permanently impact 0.02 acre of USACE wetland within the City's jurisdiction. This impact would be significant.	See Mitigation Measure 4.8-11 above.	Less than significant
Significant Impact 4.8-21: The Proposed Project would disturb a total of 1.1 acres of CDFG streambed and associated riparian habitat during program-level activities in the Harbor and Otay Districts within the Port's jurisdiction. This includes	Mitigation Measure 4.8-12	Less than significant

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permanent impacts to 0.14 acre within the Harbor District and permanent (0.72 acre) and temporary (0.23 acre) impacts in the Otay District. Permanent and temporary removal of riparian habitat is a significant impact.	Port: The Port or Port tenants, as appropriate, shall mitigate for permanent and temporary impacts to CDFG jurisdictional areas at a 2:1. *Table 4.8-8* provides a breakdown of the required mitigation acreages for all CDFG impacts within the Port's jurisdiction. Prior to the issuance of the first grading permit that may impact CDFG jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare and initiate implementation of a restoration plan detailing the measures needed to achieve the necessary mitigation. The plan shall outline the timeline and procedures for restoring/enhancing the potential enhancement/mitigation sites, which include the native buffer areas and the F & G Street Marsh. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including CDFG. Prior to issuance of the first grading permit that may impact CDFG jurisdictional areas, the Port, or Port tenants, as appropriate, shall obtain permits from CDFG. The permit application process would also entail approval of the restoration plan as described above, in regards to areas that fall under the jurisdiction of CDFG. Pursuant to Fish and Game Code 1602, the Port and other applicants are required to obtain a Streambed Alteration Agreement for impacts to streambeds and associated riparian habitat that fall within CDFG's jurisdiction.	

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Impact	Mitigation	Significance After Mitigation
Significant Impact 4.8-22: The E Street road improvements proposed in the Sweetwater District would directly and permanently impact 0.07 acre of CCC wetland located within the road easement and Parcel S-1 adjacent to the roadway at Bay Boulevard and E Street (near Soil Test Pits 22 and 23). This wetland is composed of mulefat scrub. Development at this location would result in a significant impact.	Mitigation Measure 4.8-13 Port: A. Mitigation for permanent direct and indirect (from bridge shading) impacts would be at a 2:1 ratio as detailed in *Table 4.8-8.* Prior to the commencement of grading activities for projects that impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare a restoration plan detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC. City: B. Mitigation for permanent direct and indirect (from bridge shading) impacts would be at a 2:1 ratio as detailed in *Table 4.8-9.* Prior to the issuance of the first grading permit for projects that impact CCC jurisdictional areas, the project applicants within the City's jurisdiction shall prepare a restoration plan detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The City shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the City in consultation with the regulatory agencies, including the CCC.	
Significant Impact 4.8-23: The Port would also construct a bridge on E Street over the inlet to the F & G Street Marsh as part of the circulation element. The bridge would span the wetland and would indirectly impact approximately 0.01 acre of CCC wetland through shading. This impact would be significant.	See Mitigation Measure 4.8-13 above.	Less than significant
Significant Impact 4.8-24: During implementation of program-level components, the Port/City would construct two additional bridges in the Otay District. This includes the Street A Bridge over the J Street Channel and the Street B Bridge over the Telegraph Canyon Channel. These bridges would result in indirect permanent impacts from shading to 0.05 acre of CCC wetland. These impacts would be significant.	Mitigation Measure 4.8-14 Port: Mitigation for permanent direct and indirect (from bridge shading) impacts from circulation road construction/improvements and the riprap removal and bulkhead replacement totaling 0.51 acre, would be at a 2:1 ratio as detailed in *Table 4.8-8*. This would require a total mitigation of 1.02 acres. Mitigation for temporary impacts within Parcel OP-2B from the re-channelization of the Telegraph Canyon Channel would require mitigation at a ratio of 1:1 as detailed on *Table 4.8-8* for a total of 0.16 acre. Prior to the commencement of grading activities, the Port or Port tenants, as appropriate, shall prepare a restoration plan detailing the measures needed to create/restore CCC wetlands. The guidelines for this	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC. Prior to approval of grading permits for projects impacting CCC wetlands, the Port or Port tenants, as appropriate, shall obtain permits and/or approvals from CCC.	
Significant Impact 4.8-25: The riprap removal and bulkhead placement proposed as a component to the Chula Vista Marina improvements, would permanently impact approximately 0.46 acre of CCC wetlands on Parcels HW-1, HW-3, and H-12 within the Harbor District. Impacting CCC wetlands for the purpose of improving navigation and harbor access would be consistent with the Coastal Act; however, the biological impacts would be significant.	See Mitigation Measure 4.8-14 above.	Less than significant
Significant Impact 4.8-26: The Telegraph Canyon Channel in the Otay District would be re-channelized within the program-level phases of development. This would temporarily impact 0.16 acre of CCC wetland. This would be significant. This temporary impact to re-contour a pre-existing channelized drainage would be allowed under the Coastal Act.	See Mitigation Measure 4.8-14 above.	Less than significant

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Impact	Mitigation	Significance After Mitigation
Significant Impact 4.8-27: The establishment of an ecological buffer on Parcel OP-2A would result in temporary impacts to 0.05 acre of CCC wetland, 0.04 acre of potential CCC wetlands, and 1.50 acres of former industrial areas in the process of remediation. Impacts to the 0.05 acre of CCC wetlands would be significant. The impacts to the 1.54 acres of areas of former industrial areas in the process of remediation would only be significant if the CCC asserts jurisdiction. Impacts for restoration purposes are allowed under the Coastal Act.	Mitigation Measure 4.8-15 Port: Mitigation for temporary impacts from the restoration of the ecological buffer would require mitigation at a ratio of 1:1 as detailed on *Table 4.8-8*. The ecological buffer area supports 0.05 acre that has been mapped as a CCC wetland and will require 0.05 acre of mitigation. There is an additional 0.04 acre that is mapped as a potential CCC wetland and 1.50 acres that are former industrial areas in the process of remediation. The Port or Port tenants, as appropriate, will need to confer with CCC in order to determine whether the areas of potential jurisdiction, totaling 1.54 acres actually fall under CCC jurisdiction. If these areas are not subject to CCC jurisdiction, no additional mitigation would be required. If CCC does assert jurisdiction over these areas, the restoration will need to include the creation/enhancement of an additional 1.54 acres of CCC wetlands. Prior to the issuance of the first grading permit for activities that impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare a restoration plan to detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.	Less than significant
Significant Impact 4.8-28: Additional road extensions are proposed in the Otay District. This includes Street A	Mitigation Measure 4.8-16	Less than significant

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Impact	Mitigation	Significance After Mitigation
improvements, which would permanently impact 0.55 acre of the former industrial site in the process of remediation, and Street B improvements, which would impact 0.03 acre of potential CCC wetland. If CCC claims jurisdiction over these two areas, impacts would be significant. If CCC does not assert jurisdiction over these areas, these impacts would not be significant.	Port: The Port or Port tenants, as appropriate, shall confer with CCC in order to determine whether the 0.58 acre of areas fall under CCC jurisdiction. If these areas are not subject to CCC jurisdiction, no additional mitigation would be required. If CCC does assert jurisdiction over these areas, the Port will need to mitigate the impacts at a ratio of 2:1 as detailed in *Table 4.8-8* for a total mitigation of 1.16 acres. Prior to the issuance of the first grading permit for projects that impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare a restoration plan to detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.	
Significant Impact 4.8-29: The Port could impact CCC wetland on HP-13B and CCC wetland on HP-7. These impacts would be significant.	Mitigation Measure 4.8-17 Port: Prior to the issuance of the first grading permit for activities that impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare a restoration plan to detailing the measures needed to create/restore CCC wetlands to provide 0.32 acre of mitigation for the 0.16 acre impact to CCC wetlands on Parcels HP-13B and HP-7. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to	Less than significant

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Impact	Mitigation	Significance After Mitigation
	sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.	
Significant Impact 4.8-30: The development of a park on Parcel OP-1B would impact 0.16 acre of a drainage that has been mapped as a CCC potential wetland site. If the Coastal Commission asserts jurisdiction, the development proposed on Parcel OP-1B in the Otay District would be significant.	Mitigation Measure 4.8-18 Port: The Port or Port tenants, as appropriate, shall confer with CCC in order to determine whether the 0.16 acre of areas identified as potentially CCC jurisdictional areas actually fall under CCC jurisdiction. If these areas are not subject to CCC jurisdiction, no additional mitigation would be required. If CCC does assert jurisdiction over these areas, the Port will need to mitigate the impacts at a ratio of 2:1 as detailed in *Table 4.8-8* for a total mitigation of 0.32 acres. Prior to the issuance of the first grading permit for projects that impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare a restoration plan to detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover.	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.	
Significant Impact 4.8-31: Program component development on Parcel O-4 could result in significant impacts to the 0.10-acre pond, and 2.37 acres of potential CCC wetland. Impacts to the potential CCC wetland would only be significant if CCC asserts jurisdiction.	Mitigation Measure 4.8-19 Port: The Port or Port tenants, as appropriate, will need to mitigate impacts to the 0.10-acre seasonal pond, mapped as a CCC wetland at a 2:1 ratio. The Port or Port tenants, as appropriate, shall confer with CCC in order to determine whether the 2.37 acre depressed area that exists where the LNG plant was formerly located, mapped as a potential CCC wetland, falls under CCC jurisdiction. If this area is not subject to CCC jurisdiction, no additional mitigation would be required. If CCC does assert jurisdiction over these areas, the final Phase II design of this parcel must mitigate impacts the 2.37-acre depressed area at a 2:1 ratio. Prior to the issuance of the first grading permit for projects that impact CCC jurisdictional areas, the Port or Port tenants, as appropriate, shall prepare a restoration plan to detailing the measures needed to create/restore CCC wetlands. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative	Less than significant

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Impact	Mitigation	Significance After Mitigation
	assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The Port shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the Port in consultation with the regulatory agencies, including the CCC.	
Significant Impact 4.8-32: There would be 0.03 acre of permanent impact in the Sweetwater District during Phase I from improvements to the existing E Street along the road easement and SP-4. These impacts would be significant.	See Mitigation Measure 4.8-13 above.	Less than significant
Significant Impact 4.8-33: A bridge is proposed to cross the HP-5 drainage ditch in the Harbor District. This development would result in a permanent indirect impact from bridge shading to 0.03 acre within the City's jurisdiction. This impact would be significant.	See Mitigation Measure 4.8-13 above.	Less than significant
Significant Impact 4.8-34: RWQCB has jurisdiction over all waters of the U.S and isolated waters of the state as mandated by both the federal CWA and the California Porter-Cologne Water Quality Control Act. RWQCB will verify the extent of area under their jurisdiction as part of the permitting process. Impacts to waters under the jurisdiction of RWQCB are significant.	Mitigation Measure 4.8-20 Port: A. Prior to the commencement of grading activities for project components impacting RWQCB jurisdictional waters, the Port or Port tenants, as appropriate, shall prepare and implement a restoration plan detailing the measures needed to create/restore RWQCB jurisdictional waters in accordance with the acreage identified in *Table 4.8-8.* City: B. Prior to the issuance of the first grading permit for project components impacting RWQCB jurisdictional waters, the project developer(s) within the City's jurisdiction shall prepare and implement a restoration plan detailing the measures needed to create/restore RWQCB jurisdictional waters in accordance with the acreage identified in *Table 4.8-8* to the satisfaction of the City. The guidelines for this plan will be developed in consultation with the regulatory agencies. Port/City: C. Prior to the commencement of grading activities for project components impacting RWQCB jurisdictional waters, the Port or Port tenants, as appropriate, and applicants within the City's	Less than significant

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Impact	Mitigation	Significance After Mitigation
	jurisdiction shall obtain permits from RWQCB. The permit application process would also entail approval of the restoration plan as described above. Pursuant to the CWA, the Port and other applicants are required to obtain a Section 401 Water Quality Certification permit from RWQCB. Port/City: D. Prior to the commencement of grading activities for project components impacting RWQCB jurisdictional waters, including clearing and grubbing, the Port or Port tenants, as appropriate, and the project developer(s) within the City's jurisdiction shall consult with the RWQCB to determine if Waste Discharge Requirements from the RWQCB shall be required for impacts to isolated waters of the State.	
Significant Impact 4.8-35: The bridge proposed to cross the HP-5 drainage ditch in the Harbor District would result in 0.03 acre of permanent indirect impact to southern coastal salt marsh. This impact would be significant. There would be 0.11 acre of permanent impact in the Sweetwater District during Phase I from improvements to the existing E Street. This consists of impact to 0.06 acre of mulefat/riparian scrub and 0.02 acre of southern coastal salt marsh from development within the road easement and 0.02 acre of mulefat/riparian scrub on Parcel SP-4. These impacts would be significant.	Mitigation Measure 4.8-21 City: A. Prior to issuance of any clearing and grubbing or grading permits for projects that impact City of Chula Vista designated wetlands, the project developer(s) shall acquire mitigation credits or prepare and initiate implementation of a restoration plan for Phase I impacts to mulefat scrub/riparian scrub at a ratio of 2:1 and southern coastal salt marsh at a ratio of 4:1. Mitigation credits shall be secured in a City-approved mitigation bank or other approved location. Verification of mitigation credits or an approved restoration plan shall be provided to the City prior to issuance of any clearing and grubbing or grading permits. Alternatively, completion of Mitigation Measure 4.8-11 will satisfy this mitigation measure as well. The project developer(s) shall prepare and implement a detailed restoration and enhancement plan to the satisfaction of the City for impacts to wetland resources protected under the City's MSCP Subarea Plan. The guidelines for this plan will be developed in consultation with the regulatory agencies. The plan shall summarize the approach taken to avoid and minimize impacts to sensitive habitats, detail the target functions and values, and address the approach to restoring those functions and values. Typically, the restoration plan shall detail the site selection process and propose site preparation techniques, planting palettes, implementation procedures, monitoring and maintenance practices, and establish a performance criteria for each mitigation site. Typical success criteria may include percent canopy cover, percent of plant survival, and percent of native/non-native canopy cover. A minimum five-year maintenance and monitoring period would be	Less than significant

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Impact	Mitigation	Significance After Mitigation
	implemented following installation to ensure each area is successful. The restoration plan shall address monitoring requirements and specify when annual reports are to be prepared and what they shall entail. Qualitative and quantitative assessments of the site conditions shall be included. If the mitigation standards have not been met in a particular year, contingency measures shall be identified in the annual report and remediation will occur within three months or the start of the growing season. The City shall be responsible for ensuring that all of the success criteria are met to the satisfaction of the City in consultation with the regulatory agencies. B. Prior to issuance of any clearing and grubbing or grading permits for areas that impact jurisdictional waters, the project developer(s) shall provide evidence to the City that all required regulatory permits, such as those required under Section 1602 of the California Fish and Game Code and the California Water Code Section 13260, have been obtained.	
Significant Impact 4.8-36: the following project components in both Port and City jurisdiction could potentially impact avian flight patterns and habitat use along the project frontage: construction of the RCC on H-3, construction of residential development on H-13 and H-14, construction of a hotel up to 300 feet in height on H-23, and construction of buildings between 90 and 130 feet high on Parcel H-15. Although there are no studies in which it has been identified specific to the West Coast in regards to bird strike impacts, studies conducted in other areas indicate that construction of buildings over 100-feet in height on a project of this size may result in a potentially significant increase in bird strikes within the project area. This impact to both Port and City jurisdiction is significant.	Mitigation Measure 4.8-22 Port/City: Prior to issuance of any building permits, building plans shall be reviewed by a qualified biologist retained by the developer and approved by the Port or the City, to verify that the proposed building has incorporated specific design features to avoid or to reduce the potential for bird strikes, including but not limited to the following: Lighting • No solid red or pulsating red lights shall be installed on or near the building unless required by the Federal Aviation Administration (FAA). • Where lighting must be used for safety reasons (FAA 2000 Advisory Circular), minimum intensity, maximum off-phased (3-second between flashes) white strobes shall be used. • No solid spot lights or intense bright lights shall be used during bird migration periods in the spring (March–May) and fall (August–October). All event lighting shall be directed downward and shielded unless directed downward or shielded to minimize light spill beyond the area for which illumination is required.	Less than significant

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Impact	Mitigation	Significance After Mitigation
	• Exterior lighting shall be limited to that necessary and appropriate to ensure general public safety and way finding, including signage for building identification and way finding. • Exterior lighting shall be directed downward and shielded to prevent upward lighting and to minimize light spill beyond the area for which illumination is required. • Office space, residential units and hotel rooms shall be equipped with motion sensors, timers or other lighting control systems to ensure that lighting is extinguished when the space in unoccupied. • Office space, residential unit and hotel rooms shall be equipped with blinds, drapes or other window coverings that may be closed to minimize the effects of interior night lighting. Glass and Reflection • Reflective glass or the application of reflective coatings shall not be used on any glass surface, except as may be required for low emittance (low e) coating for energy efficiency under Title 24 of the California Code of Regulations. • Buildings shall incorporate measures to the satisfaction of the Port or the City to indicate to birds that the glass surface is solid by creating visual markers and muting reflection. These measures may include but are not limited to the following: • Glass surfaces that are non-reflective • Glass surfaces that are tilted at a downward angle • Glass surfaces that use fritted or patterned glass • Glass surfaces that use vertical or horizontal mullions or other fenestration patterns • Glass surfaces that are fitted with screening, decorative grills or louvers • Glass surfaces that use awnings, overhangs, bris sole or other exterior sun shading devices • Glass surfaces that use external films or coatings perceivable by birds • Artwork, drapery, banners, and wall coverings that counter the reflection of glass surfaces or block “see-through” pathways. Building Articulation • Design features that reduce or avoid the potential for bird strikes, such as stepped-back building design, protruding balconies, recessed windows, and mullioned glazing systems shall	

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Impact	Mitigation	Significance After Mitigation
	be incorporated to the extent feasible. • Design features that increase the potential for bird strikes, such as walkways constructed of clear glass and "see-through" pathways through lobbies, rooms, and corridors, shall be avoided to the extent feasible. Landscaping • Exterior trees and landscaping shall be located and glass surfaces shall incorporate measures so that exterior trees and landscaping are not reflected on building surfaces. • In small exterior courtyards and recessed areas, the building's edge shall be clearly defined with opaque materials and non-reflective glass. • Interior plants shall be located a minimum of ten feet away from glass surfaces to avoid or reduce the potential for attracting birds. Public Education • The owner or operator of each building shall implement an on-going procedure to the satisfaction of the Port or the City to encourage tenants, residents and guests to close their blinds, drapes or other window coverings to reduce or avoid the potential for bird strikes. • The owner or operator of each building shall enroll in the Fatal Light Awareness Program's "Bird-Friendly Building Program" and shall implement on-going tenant, resident and guest education strategies, to the satisfaction of the Port or the City, to reduce or avoid the potential for bird strikes, such as elevator and lobby signage and educational displays, e-mail alerts and other bulletins during spring and fall migratory seasons, and other activities designed to enlist cooperation in reducing bird collisions with the building. Monitoring • For Phase I projects, the project applicant shall retain a qualified biologist to design a protocol and schedule, in consultation with the U.S. Department of Fish and Wildlife and subject to the approval of the Port or City, as appropriate depending on jurisdiction, to monitor bird strikes that may occur during the first twelve months after the completion of construction. Within sixty days after completion of the monitoring period, the qualified biologist shall submit a written report to the Port or the City, which shall state the biologist's findings and recommendations regarding any bird strikes that occurred. Based on the findings of those reports, the Port or the	

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Impact	Mitigation	Significance After Mitigation
	City, as appropriate depending on jurisdiction, in coordination with the U.S. Department of Fish and Wildlife, will evaluate whether further action is required, which may include further monitoring.	
Significant Impact 4.8-37: Construction of buildings between 100 and 200 feet high within the program-level phases of development, could potentially impact avian flight patterns and habitat use along the project frontage, as well as result in a potential significant increase in the number of bird strikes within the project area. These impacts would be significant.	See Mitigation Measure 4.8-22 above.	Less than significant
4.9 MARINE BIOLOGICAL RESOURCES		
Significant Impact 4.9-1: Construction of the H Street Pier project (in Phase II) would impact 0.4 acre of eelgrass habitat in South Bay from the driving of piles for pier support into shallow subtidal benthic habitat where eelgrass is known to occur, as well as the increased shading that would possibly result in a loss of eelgrass habitat in the area. Impacts to eelgrass are significant and would require mitigation at a ratio of 1.2:1 to reduce impacts to below a level of significance. The project impacts to eelgrass would also conflict with the INRMP and SCEM.	Mitigation Measure 4.9-1 (Mitigation Measure 4.9-1 would mitigate Significant Impacts 4.9-1, 4.9-2 and 4.9-4.) Port: A. Prior to construction of the H Street Pier during Phases II and IV or work within Parcel HW-4, a pre-construction eelgrass survey shall be conducted by a qualified marine biologist to confirm the exact amount of eelgrass to be affected at the time of pile driving operations. The pre-construction survey must be conducted during the period of March through October and would be valid for a period of no more than 60 days, with the exception that surveys conducted in August through October would be valid until the following March 1st. B. Prior to construction of the H Street Pier during Phases II and IV or work within Parcel HW-4, the Port shall establish and implement a plan to create new eelgrass habitat. The loss of eelgrass habitat must be mitigated at a 1.2:1 ratio as described in the SCEMP (NMFS 1991, Revision 11). Impacts to approximately 0.4 acre of eelgrass shall require the creation of approximately 0.48 acre of eelgrass to mitigate losses caused by construction of the H Street Pier.	Less than significant

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Impact	Mitigation	Significance After Mitigation
	C. Prior to or concurrent with the completion of the H Street Pier or within Parcel HW-4, the Port shall create new eelgrass habitat at a ratio of 1.2:1 for the actual amount of impacts. This shall be done by removing the existing eelgrass currently located at the proposed H Street Pier site and transplanting it at an appropriate location within the filled area of the existing navigation channel, to the satisfaction of a qualified marine biologist. D. Subsequent to construction of the H Street Pier during Phases II and IV or Parcel HW-4, a post-construction eelgrass survey shall be conducted by a qualified biologist. The post-construction survey shall be conducted within 30 days of the cessation of construction activities to confirm the exact amount of eelgrass affected. The difference between the pre-construction and post-construction eelgrass surveys shall determine the amount of required mitigation. In addition, the Port shall: • Conduct transplant reports following construction (Initial Report). • Conduct monitoring reports at 6, 12, 24, 36, 48, and 60 months post-transplant. Specific milestones and criteria for success are directed in the SCEMP along with guidelines for remedial actions if the success criteria are not met, which would require (based on the absence of other mitigating environmental considerations) a Supplementary Transplant Area to be constructed and monitored for an additional five years. • Initiate mitigation within 135 days of project inception; projects requiring more than 135 days to complete would result in additional mitigation.	
Significant Impact 4.9-2: Construction of the H Street Pier is planned for completion in Phase IV. Although design plans have not been completed, the additional work would result in an increase of 18,000 square feet, or an additional 0.4 acre, of eelgrass impacts if constructed as currently planned. This increased impact to 0.4 acre of eelgrass during Phase IV would be significant. The project impacts to eelgrass would also conflict with the INRMP and SCEM.	See Mitigation Measure 4.9-1 above.	Less than significant
Significant Impact 4.9-3: As part of the navigation channel realignment in Phase IV, channel dredging and filling would temporarily affect approximately 62 acres of soft subtidal	Mitigation Measure 4.9-2	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
habitat, resulting in the loss of 45.9 acres of eelgrass and shallow-water habitat. This loss of eelgrass and shallow-water habitat would be significant and would require mitigation at a ratio of 1.2:1 for eelgrass and 1:1 for shallow-water habitat to reduce impacts to below a level of significance. The project impacts to eelgrass would also conflict with the INRMP and SCEM.	Port: A. An estimated 83 acres of the existing navigation channel shall be filled to -3 to -5.5 feet MLLW. The fill would modify deep and moderately deep open-water habitat to create approximately 83 acres of shallow-water habitat. This area would provide enough transplantable habitat at a depth ideal for eelgrass in this section of the Bay to mitigate for the loss of eelgrass from the channel realignment and completion of the H Street Pier. B. A mitigation plan with an implementation schedule shall be prepared 30 days prior to any construction or dredge activities. The loss of eelgrass habitat shall be mitigated at a 1.2:1 ratio as described in the SCEMP (NMFS 1991, Revision 11). Based on this formula, impacts to 45.9 acres of eelgrass would require approximately 55.1 acres of eelgrass restoration. C. Prior to the commencement of in-water work on the channel realignment, a pre-construction eelgrass survey shall be conducted to confirm the exact area of impact at the time of dredging and fill operations. The pre-construction survey shall be conducted during the period of March through October and would be valid for a period of no more than 60 days, with the exception that surveys conducted in August through October would be valid until the following March 1. D. Subsequent to dredge and fill operations a post-construction eelgrass survey shall be conduced by a qualified biologist. The post-construction survey shall be conducted within 30 days of the cessation of construction activities to confirm the exact area of eelgrass affected. The difference between the pre-construction and post-construction eelgrass surveys shall determine the amount of required mitigation. In addition, the Port shall: • Conduct transplant reports following construction (Initial Report). • Conduct monitoring reports at 6, 12, 24, 36, 48, and 60 months post-transplant. Specific milestones and criteria for success are directed in the SCEMP along with guidelines for remedial actions if the success criteria are not met, which would require (based on the absence of other mitigating environmental considerations) a Supplementary Transplant Area to be constructed and monitored for an additional five years. • Initiate mitigation within 135 days of project inception; projects requiring more than 135 days to complete would result in additional mitigation.	

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.9-4: Reconfiguration of the Chula Vista Harbor in Phase IV would result in a potential loss of up to 775 square feet, or approximately 0.02 acre, of eelgrass during construction of the harbor on Parcel HW-4. Impacts to eelgrass are significant and would require mitigation at a minimum ratio of 1.2:1 to reduce impacts to below a level of significance. The project impacts to eelgrass would also conflict with the INRMP and SCEM.	See Mitigation Measure 4.9-1 above.	Less than significant
Significant Impact 4.9-5: Reconfiguration of the Chula Vista Harbor in Phase IV would involve bulkhead placement on Parcel HW-3 and would result in the loss of about 1,200 square feet (0.03 acre) of intertidal mudflat inside the Marina. In addition, bulkhead placement on the northern side of the Chula Vista Marina would impact approximately 53.82 square feet (less than 0.001 acre) of the existing pickleweed. The project impacts to approximately 0.001 acre of pickleweed, specifically from reconfiguration of the Chula Vista Harbor, would also conflict with the INRMP.	Mitigation Measure 4.9-3 Port: A. Prior to the commencement of harbor improvements on Parcel HW-3, which includes the placement of bulkheads, the Port or Port tenants, as appropriate, shall prepare and initiate implementation of a plan to create new habitat at a ratio of 2:1. Impacts to approximately 0.03 acre of intertidal mudflat shall require the creation of approximately 0.06 acre and less than .001 acre of pickleweed shall require creation of approximately .002 acre of comparable habitat. B. Restoration shall occur in accordance with *Appendix 4.8-12*. At the time project specific designs are proposed for the Phase IV harbor reconfiguration, the mitigation for impacts to intertidal mudflat and pickleweed shall be re-evaluated by the Port during subsequent environmental review pursuant to State CEQA Guidelines Section 15168 to identify the total impact area and required mitigation for the loss of intertidal mudflat and pickleweed. C. Restoration shall occur in accordance with Mitigation Opportunities, *Appendix 4.8-12* to this report, which includes the creation of additional mudflat through the removal of riprap on the Bay shore in the Sweetwater District. As detailed in Mitigation Opportunities, this created habitat would be dominated by pickleweed (*Salicornia virginica*) with subdominants including saltwort (*Batis maritime*), fleshy Jaumea (*Jaumea carnosa*), alkali heath (*Frankenia salina*), and others as list in *Table 4* of *Appendix 4.8-12*. Currently, the mitigation opportunities detailed in *Appendix 4.8-12* are anticipated to be implemented during Phase I. The Port shall verify that the creation of intertidal mudflat satisfies the required mitigation once the final impacts are verified.	Less than significant

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.9-6: Construction of phased improvements for the H Street Pier, the existing South Bay Boatyard Marina, Chula Vista Marina, and the realignment of the navigation channel could increase turbidity by disturbing sediments, which may be contaminated. Increased turbidity and unintentional release of contaminated material can result in temporary direct impacts to water quality and marine resources. Impacts from these construction activities would also conflict with the INRMP and indirectly with the SCEM.	Mitigation Measure 4.9-4 Port: A. Prior to issuance of a permit by USACE for dredge and/or fill operations in the Bay or Chula Vista Harbor, the applicant shall conduct a focused sediment investigation and submit it to USACE and RWQCB for review and approval. The applicant shall then determine the amount of bay sediment that requires remediation and develop a specific work plan to remediate bay sediments in accordance with permitting requirements of the RWQCB. The work plan shall include but not be limited to: dredging the sediment, allowing it to drain, and analyzing the nature and extent of any contamination. Pending the outcome of the analytical results, a decision by RWQCB shall prescribe the requirements for disposition of any contaminated sediment. B. Prior to issuance of a grading permit for marina redevelopment on HW-1 and HW-4, the developer shall submit a work plan for approval by the RWQCB and Port/City that requires the implementation of BMPs, including the use of silt curtains during in-water construction to minimize sediment disturbances and confine potentially contaminated sediment if contaminated sediment exists. If a silt curtain should be necessary, the silt curtain shall be anchored along the ocean floor with weights (i.e., a chain) and anchored to the top with a floating chain of buoys. The curtain shall wrap around the area of disturbance to prevent turbidity for traveling outside the immediate project area. Once the impacted region resettles the curtains shall be removed. If the sediment would be suitable for ocean disposal, no silt curtain shall be required. However, if contaminants are actually present, the applicant would be required to provide to the RWQCB and Port/City an evaluation showing that the sediment would be suitable for ocean disposal.	Less than significant
Significant Impact 4.9-7: Construction of the South Bay Boatyard Marina (at Parcel HW-6) during Phase IV, harbor reconfiguration and marina access navigation channel realignment would require dredging of material that may contain contaminants necessitating storage to enable testing and potential alternative disposal. No storage area for the dredged material, if contaminated, has been identified. This impact would be significant.	Mitigation Measure 4.9-5 Port: For the in-water construction components to be completed in Phase IV, the amount of dredging shall be determined during final design of the marinas and harbor reconfiguration. Prior to any dredging, the Port shall develop and implement a plan for the dredging and storage of material to the satisfaction of responsible resource agencies, including USACE. The storage and/or landside disposal of dredge material shall be performed in accordance with the provisions of Mitigation Measure 4.6-6 and all applicable federal, state, and local regulations.	Less than significant

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.9-8: Construction and operation of the proposed marinas would result in increased artificial lighting compared to existing conditions. The increase in lighting over water areas is considered a significant indirect impact to marine resources, including sensitive species such as eelgrass and turtles within the Bay. This would also conflict with the INRMP and indirectly with the SCEM.	Mitigation Measure 4.9-6 Port: Prior to issuance of Coastal Development Permits, applicants shall submit a lighting plan and photometric analysis to the Port for review and approval. Lighting of all developed areas adjacent to open water shall be directed away from the water, wherever feasible and consistent with public safety. Lighting fixtures shall provide adequate shielding to protect the aquatic habitat and marine life from night lighting. The lighting plan shall illustrate the location of the proposed lighting standards and type of shielding measures. Low-pressure sodium lighting or the equivalent shall be used if feasible and shall be subject to the approval of the Port.	Less than significant
4.10 CULTURAL RESOURCES		
There were no significant impacts to cultural resources identified for the Proposed Project.	No mitigation is required.	N/A
4.11 PALEONTOLOGICAL RESOURCES		
There were no significant impacts to paleontological resources identified for the Proposed Project.	No mitigation is required.	N/A
4.12 HAZARDS AND HAZARDOUS MATERIALS/PUBLIC SAFETY		
Significant Impact 4.12-1: During excavation, construction and demolition activities associated with the Proposed Project, hazardous materials may be encountered within or adjacent to the boundaries of the site in the vicinity of several on-site areas of concern and three off-site areas of concern. Although excavation, demolition, and construction activities are short-term, the potential to encounter contamination during such activities associated with the proposed project is considered a significant impact.	Mitigation Measure 4.12-1 (Implementation of Mitigation Measure 4.12-1 would reduce Significant Impacts 4.12-1, 4.12-3, 4.12-7, 4.12-12, 4.12-13, 4.12-17, and 4.12-18 to below a level of significance.) Port/City: Prior to the issuance of any permit for excavation, demolition, grading, or construction activities in the area described in the relevant permit based on the planned future use, the following shall occur: A. The applicant shall contact the lead regulatory agency (RWQCB/DEH/DTSC) to discuss the appropriate course of action for the area of concern described in the permit based on the planned future site use. Remediation of contaminated soil and/or groundwater in these areas shall meet cleanup requirements established by the local regulatory agency based on the planned future use of the area and shall be protective of human health with regard to future occupants of these areas. The	Less than significant

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	applicant shall submit documentation showing that contaminated soil and/or groundwater in the area covered by the permit shall have been avoided or remediated to meet cleanup requirements established by the local regulatory agencies (RWQCB/DEH/DTSC). B. The applicant shall obtain written authorization from the regulatory agency (RWQCB/DEH/DTSC) confirming the completion of any remediation required for development of the site, exclusive of any on-going monitoring obligations. A copy of the authorization shall be submitted to the Port and City to confirm meeting all requirements acceptable to the governing agency and that the proposed development parcel has been cleaned up or is in process to the satisfaction of the regulatory agency. In the situation where previous contamination has occurred on a site that has a previously closed case or on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, the DEH shall be notified of the proposed land use. C. A Soil and Water Management Plan (SWMP) for Phase I activities shall be developed to provide procedures for addressing unknown contamination and subsurface equipment (e.g., pipes and tanks) or debris encountered during construction and excavation. A SWMP for subsequent phases shall be prepared prior to construction and excavation for such development. The plan shall be developed by a qualified environmental consultant and shall identify notification, monitoring, sampling, testing, handling, storage, and disposal of contaminated media or substances (soil, groundwater) measures to avoid or reduce impacts associated with hazardous materials contamination to a less than significant impact. The SWMP shall be approved by the Port and/or City prior to commencement of excavation, grading, demolition or construction. A qualified environmental consultant shall monitor excavations, grading, and construction activities in accordance with the plan. Any excess soil generated by construction shall be characterized to determine disposal options. If indications of contamination are encountered during construction, a qualified environmental consultant shall be retained to observe the contamination, consult with the regulatory oversight agency, perform environmental media (soil, soil gas, and groundwater) sampling and analysis as necessary, report the result, and provide recommendations for further action.	

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	In areas that have been identified as being contaminated, appropriate observation by a qualified environmental professional and sampling is required to characterize soil prior to off-site disposal. Contaminated soil shall be properly disposed of at an off-site facility. Fill soils shall be sampled to ensure that imported soil is free of contamination. Within one month of completion of cleanup activities, a report summarizing the results of monitoring shall be submitted by the applicant to the satisfaction of the Port and/or City. D. In the event that grading or construction activities result in the discovery of hazardous waste, the Port and/or City shall ensure compliance with State of California CCR Title 23 Health and Safety Regulation. Excavated soils impacted by hazardous materials or waste shall be characterized and disposed of in accordance with CCR Title 14 and 22. The San Diego Regional Water Quality Control Board shall be contacted regarding provisions for possible reuse as backfill of soils impacted by hydrocarbons. Excavated soils shall be lined and covered with an impermeable material to prevent spread of contaminated material. The applicant must have an Industrial Hygienist registered in the State of California on site while working in areas where contamination is encountered. The responsibility of this professional would be to monitor the work site for contamination and to implement mitigation measures as needed to prevent exposure to the workers or public. These measures may include signage and dust control. Dewatering activities during construction shall be limited to the extent practicable and water generated by dewatering shall be tested to determine treatment and disposal options in accordance with all applicable laws and regulations.	
Significant Impact 4.12-2: Although not expected to occur, a spill or unintentional discharge of fuel, lubricants, or hydraulic fluid from the transportation of construction materials and/or the equipment used during construction, including dredge and fill activities would result in significant impacts on water quality in a worst-case scenario.	Mitigation Measure 4.12-2 Port/City: Prior to construction, all contractor and subcontractor project personnel shall receive training regarding the appropriate work practices necessary to effectively comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures.	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	Hazardous materials shall not be disposed of or released onto the ground, the underlying groundwater, or any surface water. Totally enclosed containment shall be provided for all trash. All construction waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials shall be removed to a hazardous waste facility permitted or otherwise authorized to treat, store, or dispose of such materials. The Port of San Diego shall require that a Business Emergency Plan (BEPP) is prepared for the construction of the Proposed Project, if not covered under their approved SWPPP. The plan shall identify all hazardous materials (e.g., fuels and solvents) that would be present on any portion of the construction area and project site. Contingency analysis and planning shall be presented to identify potential spill or accident situations, how to minimize their occurrence, and how to respond should they occur. The plan shall also identify spill response materials (e.g., absorbent pads, shovels) to be kept at the construction site and their locations. Hazardous materials spill kits shall be maintained on site for small spills.	
Significant Impact 4.12-3: Dewatering activities associated with trenching, boring, and excavation may result in potential exposure of contaminated groundwater and/or soils. This would be considered a significant impact.	See Mitigation Measure 4.12-1 above.	Less than significant
Significant Impact 4.12-4: Dredge and fill activities and in-water construction could release contaminants into the subtidal areas of the harbor basin, which would potentially upset and suspend or release hazardous contaminants into the marine environment. The suspension and/or release of contaminants in the water could create a significant hazard to the marine resources living at this location and in the surrounding area.	Mitigation Measure 4.12-3 In-water construction activities shall be conducted in accordance with Mitigation Measure 4.5-4 in *Section 4.5, Hydrology/Water Quality*, which is repeated below: Port: A. Prior to issuance of a permit by USACE for dredge and/or fill operations in the Bay or Chula Vista Harbor, the applicant shall conduct a focused sediment investigation and submit it to USACE and RWQCB for review and approval. The applicant shall then determine the amount of bay sediment that requires remediation and develop a specific work plan to remediate bay sediments in accordance with permitting requirements of the RWQCB. The work plan shall include but not be limited to: dredging the sediment, allowing it to drain, and analyzing the nature and extent of any	Less than significant

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	contamination. Pending the outcome of the analytical results, a decision by RWQCB shall prescribe the requirements for disposition of any contaminated sediment. B. Prior to issuance of a grading permit for marina redevelopment on HW-1 and HW-4, the developer shall submit a work plan for approval by the RWQCB and Port/City that requires the implementation of BMPs, including the use of silt curtains during in-water construction to minimize sediment disturbances and confine potentially contaminated sediment if contaminated sediment exists. If a silt curtain should be necessary, the silt curtain shall be anchored along the ocean floor with weights (i.e., a chain) and anchored to the top with a floating chain of buoys. The curtain shall wrap around the area of disturbance to prevent turbidity for traveling outside the immediate project area. Once the impacted region resettles the curtains shall be removed. If the sediment would be suitable for ocean disposal, no silt curtain shall be required. However, if contaminants are actually present, the applicant would be required to provide to the RWQCB and Port/City an evaluation showing that the sediment would be suitable for ocean disposal.	
Significant Impact 4.12-5: Due to the previous uses throughout the project site, both existing and undocumented USTs are located throughout the site and may require removal during construction activities. The potential to encounter contaminated soils associated with removal of identified and unidentified USTs is considered a significant impact.	Mitigation Measure 4.12-4 Port/City: In event of removal of USTs, the soil and groundwater within the vicinity of the USTs shall be adequately characterized and remediated, if necessary, to a standard that would be protective of water quality and human health, based on future site use. In areas to be redeveloped, a geophysical survey shall be conducted by the applicant to evaluate if there are any previously unidentified USTs or piping still existing in areas to be redeveloped. In the event that USTs are not identified in the HMTS or undocumented areas of contamination are encountered during grading activities (as indicated by odors, discolored soil), all work shall cease until appropriate health and safety procedures are implemented. The applicant shall prepare a contingency plan to address contractor procedures for such an event, to minimize the potential for construction delays. In addition, the lead regulatory agency (DEH or RWQCB, depending on the nature of the contamination) shall be notified regarding the contamination. Each agency and program within the respective agency has its own mechanism for initiating an investigation. The applicant shall conduct contamination remediation and removal activities in accordance with pertinent local, state, and federal regulatory guidelines, under the oversight of the appropriate regulatory agency.	Less than significant

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.12-6: Demolition of existing structures within the Sweetwater, Harbor, and Otay Districts could result in a potential exposure to hazardous substances, including asbestos-containing materials (ACMs), lead-based paints (LBPs) and other hazardous materials. This is considered a significant impact.	Mitigation Measure 4.12-5 Port/City: Prior to the issuance of a demolition permit for buildings scheduled for demolition that have not been surveyed to date for ACMs and LBPs, the applicant shall conduct a survey to determine the locations and amounts of ACMs and LBPs present, as well as other miscellaneous hazardous materials, such as potential mercury-containing thermostats and switches, light ballasts and switches that might contain PCBs, fluorescent light tubes that might contain mercury vapor, exit signs that might contain a radioactive source, air conditioning systems, lead-acid batteries and batteries associated with emergency lighting systems, and Freon™-containing refrigeration systems. Should ACMs, LBPs, or other miscellaneous hazardous building materials be encountered in the site structures, the applicant shall obtain a licensed abatement contractor to remove the hazardous materials in accordance with all applicable federal, state, and local laws, regulations, and permitting requirements prior to initiation of demolition activities. Prior to any proposed demolition activities, the applicant shall conduct a thorough inspection of the facilities that have permits to store hazardous materials to confirm whether a release of hazardous materials at these facilities has impacted the underlying soil and/or groundwater. The facilities that currently store hazardous materials are located at 596 Sandpiper Way, 997 G Street, and 979 G Street. If indications of contamination are encountered during demolition, a qualified environmental consultant shall be retained to observe the contamination, consult with the regulatory oversight agency, perform environmental media (soil, soil gas, and groundwater) sampling and analysis as necessary, report the result and provide recommendations for further action.	Less than significant
Significant Impact 4.12-7: Construction workers and individuals working on site and within proximity to hazardous materials and contaminated soil conditions may be exposed to contaminated soil, soil gas, and/or groundwater. This is considered a significant impact.	Mitigation Measure 4.12-6 Port/City: Prior to construction, remediation activities for known contamination shall be performed to be protective of construction workers on the project site as required by Mitigation Measure 4.12-1.	Less than significant
Significant Impact 4.12-8: In regards to operation of the signature park throughout the site, fertilizers and landscape chemicals may be used for regular maintenance activities. The	Mitigation Measure 4.12-7	Less than significant

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
potential for hazardous irrigation runoff to contaminate surface waters and/or habitat areas is considered a significant impact.	Port/City: Management of the parks throughout the project site must be required to comply with the Port and City's Integrated Pest Management Policies (IPM). IPM shall be used on all landscaped areas. In addition, fertilizers must be minimized and only non-toxic products used. Runoff from irrigation sprinklers into surface waters must be minimized and use of mulching and drip irrigation, where needed, maximized. Measures shall be employed to ensure that landscape chemicals and wastes do not get into surface waters or habitat areas.	
Significant Impact 4.12-9: In the Sweetwater District, it would be necessary to prevent exposure to future site occupants from pesticides/herbicides in the soil and groundwater. Given the existing hazardous materials conditions throughout the project site, operation of the Proposed Project could result in exposure to residents and/or users of the site to health risks, depending on type of contamination and the proposed use of the site. Methods of exposure can be via dermal exposure, ingestion, and/or inhalation. This impact would be considered significant.	Mitigation Measure 4.12-8 Port/City: For development in the Sweetwater District that would result in exposure of any soil containing pesticides/herbicides, excavation and disposal of the contaminated soils at an appropriately licensed facility, shall be conducted as required by applicable law, to reduce potential for future site occupants' exposure. Otherwise, soil capping shall be implemented. Capping could be performed by placement of a clean soil fill layer over the impacted soil, which in turn could be overlain by other surface covers (i.e., turf and other vegetative cover and pavement).	Less than significant
Significant Impact 4.12-10: An assessment of human health risk associated with future development in the Sweetwater, Harbor, and Otay Districts in subsequent phases has not been determined for all parcels and for all land use types. The potential for development in Phases II through IV of the Proposed Project to expose residents and/or users of the site to health risks would be a significant impact.	Mitigation Measure 4.12-9 Port/City: At the time project specific designs are proposed for any development in Phases II through IV, a site assessment must be conducted by a qualified expert satisfactory to the City and/or Port to determine concentrations of contaminants in soil, soil gas and groundwater on the parcel proposed for development. Further site assessment may be required a part of subsequent environmental review pursuant to State CEQA Guidelines. Port/City: A Human Health Risk Assessment (HHRA), or other means of evaluation, must be prepared for any new development in Phases II through IV, analyzing each parcel proposed for development within the Proposed Project area. If the calculated risk from the HHRA (or other means of evaluation) is considered to be significant for a receptor in a parcel, mitigation measures shall be implemented to reduce the risk to below a level of significance. These measures may include one or both of the following:	Less than significant

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	• Remediating the contaminant sources and impacts in the respective media (i.e., soil, soil gas, groundwater) to levels below the health-based remediation criteria • Implementing institutional and/or engineering controls to eliminate the pathway of concern or attenuate the contaminant exposure to levels below the health-based remediation criteria	
Significant Impact 4.12-11: No sources of contamination were identified on the H-3 area and the only direct exposure pathway identified was potential vapor intrusion into indoor air spaces of structures to be built on H-3. Although inhalation risk from intrusion of CVOC vapors into future building is less than significant, the uncertainty with regard to future migration of CVOCs from the former Goodrich North Campus beneath H-3 presents a significant impact.	Mitigation Measure 4.12-10 (Implementation of Mitigation Measure 4.12-10 would reduce Significant Impacts 4.12-11, 4.12-16, 4.12-19, and 4.12-20 to below a level of significance.) Port/City: Prior to the approval of Design Review for development on Parcels H-3, H-13, H-14, H-15 and HP-5, the applicant shall submit a design plan for the project demonstrating to the satisfaction of the City and/or Port that proposed buildings shall be designed so as to prevent a risk to human health associated with intrusion of CVOC vapors into future buildings on these parcels. Such design measures may include vapor barriers or passive vent systems.	Less than significant
Significant Impact 4.12-12: Chemicals of potential concern were considered "non-detect" for all locations on Parcel H-3. Although excavation, demolition, and construction activities would be short-term, the potential to encounter contamination during such activities associated with development of the Gaylord RCC is considered a significant impact.	See Mitigation Measure 4.12-1 above.	Less than significant
Significant Impact 4.12-13: Dewatering activities associated with trenching, boring, and excavation on Parcel H-3 may result in potential exposure of contaminated groundwater and/or soils. This would be considered a significant impact.	See Mitigation Measure 4.12-1 above.	Less than significant
Significant Impact 4.12-14: There are three exposure areas (EAs) that are within or overlapping into HP-5 have COPC concentrations in soil that exceed health-based remediation criteria. The existence of soils on Parcel HP-5 that exceed health-based remediation criteria is considered a significant impact.	Mitigation Measure 4.12-11 (Implementation of Mitigation Measure 4.12-11 would mitigate Significant Impacts 4.12-14 and 4.12-15 to below a level of significance.)	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	Port/City: A. Remediation in soil locations identified as exceeding health-based remediation criteria shall be performed prior to redevelopment as targeted "hotspot" removal with confirmation sampling to demonstrate that the COPCs have been removed and concentrations in remaining soil are less than the remediation criteria. B. Remediation of the areas of HP-5 that contain COPCs at concentrations exceeding remediation criteria shall be completed prior to construction activities depending on the design of proposed development and the potential for workers to be exposed to contamination in these areas. C. Remediation of the areas of HP-5 that contain concentrations of CVOCs may be performed by various methods, including soil vapor extraction and treatment. Any required remediation shall be performed prior to construction activities in order to protect construction workers in these areas.	
Significant Impact 4.12-15: There are three exposure areas (EAs) near or overlapping onto HP-5 with concentrations of CVOCs in soil gas that exceed health-based remediation criteria. The existence of soils on Parcel HP-5 that exceed health-based remediation criteria is considered a significant impact.	See Mitigation Measure 4.12-11 above.	Less than significant
Significant Impact 4.12-16: groundwater is impacted with CVOCs beneath HP-5, H-13, and H-14. One EA on the northeast corner of HP-5 exceeds health-based remediation criteria. The location of CVOCs at this EA is relatively shallow (A zone). The route of exposure to CVOCs in shallow A zone is through volatilization to indoor air. The uncertainty with regard to future migration of CVOCs from the northeast corner of HP-5 presents a significant impact.	See Mitigation Measure 4.12-10 above.	Less than significant
Significant Impact 4.12-17: The potential to encounter contamination during excavation, demolition and related construction activities associated with development of Parcels H-13 or H-14 would be considered a significant impact.	See Mitigation Measure 4.12-1 above.	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.12-18: Dewatering activities associated with trenching, boring, and excavation on Parcels H-13 and H-14 may result in potential exposure of contaminated groundwater and/or soils. This would be considered a significant impact.	See Mitigation Measure 4.12-1 above.	Less than significant
Significant Impact 4.12-19: Two overlapping EAs with concentrations of CVOCs in soil gas that exceed health-based remediation criteria exist on Parcel H-15. Both of these EAs are near or overlap onto the adjacent HP-5 parcel. The uncertainty with regard to future migration of CVOCs from the EAs on H-15 presents a potentially significant impact.	See Mitigation Measure 4.12-10 above.	Less than significant
Significant Impact 4.12-20: Groundwater beneath H-15 is impacted with CVOCs, primarily beneath the southern portion of former Building 30 and the northern half of former Building 5. The uncertainty with regard to future migration of CVOCs in groundwater on Parcel H-15 presents a significant impact.	See Mitigation Measure 4.12-10 above.	Less than significant
4.13 PUBLIC SERVICES		
4.13.1 Fire Protection		
Significant Impact 4.13.1-1: Construction of the new fire station on Parcel H-17 could result in potentially significant impacts to air quality, water quality, noise, hazards, and geology and soils unless mitigated.	The mitigation measures outlined in *Section 4.5, Hydrology/Water Quality*; *Section 4.6, Air Quality; Section 4.7, Noise; Section 4.12, Hazards and Hazardous Materials/Public Safety*; and *Section 4.15, Geology and Soils* are required to reduce Significant Impact 4.13.1-1 to below a level of significance. Specifically, Mitigation Measures 4.5-2, 4.5-3, 4.6-1, 4.7-5, 4.7-9, 4.12-1, 4.12-2, 4.12-4, 4.12-6, and 4.15-1 will reduce these impacts to below a level of significance.	Less than significant
4.13.2 Police Protection		
There were no significant impacts to police protection identified for the Proposed Project.	No mitigation is required.	N/A
4.13.3 Parks and Recreation		
Significant Impact 4.13.3-1: Development of the Proposed Project would result in temporary, short-term significant impacts to park and recreation levels of service due to temporary closure of existing area parks during project construction.	Mitigation Measure 4.13.3-1 Port: Prior to reconstruction and/or reconfiguration of existing parks within the Project, the Port shall post a public notice at each affected park site at least 30 days prior to commencement of construction activity and maintain the posting throughout reconstruction of each affected park. Said public notice shall identify	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	the duration of park closure and information related to optional locations for public park and recreational facilities.	
Significant Impact 4.13.3-2: The introduction of residential units and hotel rooms within the City's jurisdiction in the project area would result in potentially significant impacts due to an increase in demand for developed parkland and recreation facilities.	Mitigation Measure 4.13.3-2 City: Prior to approval of a building permit for any project within the City's jurisdiction, the applicant shall pay all applicable recreation and park fees, including those set forth in Chapters 3.50 and 17.10 in the City's Municipal Code.	Less than significant
4.13.4 Schools		
Significant Impact 4.13.4-1: The addition of 819 students during Phase I would have a significant impact on CVESD and SUHSD.	Mitigation Measure 4.13.4-1 City: Prior to the issuance of building permits for any residential project, the applicant shall pay required school mitigation fees. The fees set forth in Government Code Section 65996 constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of projects (Government Code Section 65996(a)). They are "deemed to provide full and complete school facilities mitigation" (Government Code Section 65996(b)). Once the statutory school mitigation fee (sometimes referred to as a "developer fee") is paid, the impact would be deemed mitigated as a matter of law.	Less than significant
Significant Impact 4.13.4-2: Because the location of a school site within the jurisdiction of the school district is currently unknown, the evaluation of the environmental effects of the provision of the school is speculative and beyond the scope of this analysis.	See Mitigation Measure 4.13.4-1 above.	Less than significant
4.13.5 Library Services		
Significant Impact 4.13.5-1: The need for additional library square feet to serve the Proposed Project would place substantial pressure on existing library facilities and would worsen the present shortfall in library square footage and books per capita.	Mitigation Measure 4.13.5-1 City: Prior to the approval of a building permit for any residential project, the applicant shall pay a PFDIF or equivalent fee in an amount calculated according to the City's PFDIF program in effect at the time of permit issuance.	Significant and unmitigated

TABLE 1-9
Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	Because the service demand for libraries is only applied to residential use, and there is no residential use within the Port's jurisdiction, no mitigation by the Port is required.	
Significant Impact 4.13.5-2: Until new library facilities are constructed or existing facilities are expanded to meet the increased demand, a significant impact to library services would exist.	See Mitigation Measure 4.13.5-1 above.	Significant and unmitigated
4.14 PUBLIC UTILITIES		
4.14.1 Water Supply and Availability		
Significant Impact 4.14.1-1: Construction of off-site water system improvements during Phase I within J Street between Bay Boulevard and 2nd Avenue would result in noise impacts that would affect residents in those areas. These noise impacts would be significant.	Mitigation Measure 4.14.1-1 Port/City: Construction activity shall be prohibited Monday through Friday from 10:00 p.m. to 7:00 a.m., and Saturday and Sunday from 10:00 p.m. to 8:00 a.m., pursuant to the Chula Vista Municipal Code Section 17.24.050 (Paragraph J). All stationary noise generating equipment, such as pumps and generators, shall be located as far as possible from noise sensitive receptors. Where practicable, noise-generating equipment shall be shielded from noise sensitive receptors by attenuating barriers or structures. Stationary noise sources located less than 200 feet from sensitive receptors shall be equipped with noise reducing engine housings. Water tanks, equipment storage, staging, and warm-up areas shall be located as far from noise sensitive receptors as possible. All construction equipment powered by gasoline or diesel engines shall have sound control devices at least as effective as those originally provided by the manufacturer; no equipment shall be permitted to have an unmuffled exhaust. Any impact tools used during demolition of existing infrastructure shall be shrouded or shielded, and mobile noise generating equipment and machinery shall be shut off when not in use. Construction vehicles accessing the site shall be required to use the shortest possible route to and from I-5 provided the route does not expose additional receptors to noise.	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.14.1-2: Construction of off-site water system improvements during Phases II and III would result in noise impacts that could affect the sensitive uses established through the development of Phase I. Subsequent analysis of construction noise impacts would be needed during the CEQA review process of Phases II and III. Noise impacts would be significant.	See Mitigation Measure 4.14.1-1 above.	Less than significant
Significant Impact 4.14.1-3: Construction and operational noise from off-site water system improvements would have the potential to adversely affect birds nesting and foraging in the Sweetwater Marsh NWR located north of the Project site. Projected noise levels at the edge of the refuge resulting from construction could be as high as 77 dB. During the breeding season, this would be a significant impact.	Mitigation Measure 4.14.1-2 Port/City: Construction-related noise from off-site water improvements shall be limited during the typical breeding season of January 15 to August 31 adjacent to the Sweetwater Marsh NWR. The current accepted noise threshold is 60 dB(A) Leq; thus construction activity shall not exceed this level, or ambient noise levels if higher than 60 dB(A) during the breeding season. If construction does occur within the breeding season or adjacent to the marshes, the Project developer shall prepare and submit an acoustical analysis to the Port and/or City, which shall determine whether noise barriers would be required to reduce the expected noise levels below the threshold. If noise barriers or construction activities are unable to result in a level of noise below the threshold, construction in these areas shall be delayed until the end of the breeding season.	Less than significant
Significant Impact 4.14.1-4: Construction of major infrastructure on and off site would also result in temporary traffic impacts. Depending on the location (on site and off site), equipment, and type of work being performed, vehicular and pedestrian traffic may have to be rerouted, and/or slowed. This would be a temporary but significant impact for road segments and ROWs within the Project area and outside of the Project boundaries.	Mitigation Measure 4.14.1-3 Port/City: A. Prior to commencement of grading activities for all Phase I projects, the applicant(s) shall submit a traffic control plan for review and approval by the Port (for development on Port properties) and City Engineer and the Director of Public Works (for development on property and ROWs within the City's jurisdiction). B. Prior to commencement of grading activities for all subsequent phases, the applicant(s) shall submit a traffic control plan for review and approval by the Port (for development on Port properties) and City Engineer and the Director of Public Works (for development on property and ROWs within the City's jurisdiction).	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
4.14.2 Sewer		
Significant Impact 4.14.2-1: As the City does not have capacity for future sewage generation, the City would not have adequate capacity to serve the additional 1.328 MGD generated by the Proposed Project. Although additional capacity is being negotiated in the MWWD sewer interceptor, the capacity is currently not available. This is a significant impact.	Mitigation Measure 4.14.2-1 City: Prior to the approval of a building permit for any development, the City shall verify that it has adequate sewer capacity to serve the proposed development. In the event the City does not have adequate sewer capacity to serve the proposed development, no building permit shall be approved for the proposed development until the City has acquired adequate sewer capacity to serve the proposed development.	Less than significant
Significant Impact 4.14.2-2: Construction of sewer system improvements during Phase II would result in noise impacts that could affect the sensitive uses established through the development of Phase I. Subsequent analysis of construction noise impacts would be needed during the CEQA review process of Phase II. Noise impacts would be significant.	Mitigation Measure 4.14.2-2 Port/City: To avoid significant construction-related noise impacts, the following measures shall be followed: • Construction activity shall be prohibited Monday through Friday from 10:00 P.M. to 7:00 A.M., and Saturday and Sunday from 10:00 P.M. to 8:00 A.M., pursuant to the Chula Vista Municipal Code Section 17.24.050 (Paragraph J). • All stationary noise-generating equipment, such as pumps and generators, shall be located as far as possible from noise sensitive receptors. Where practicable, noise-generating equipment shall be shielded from noise sensitive receptors by attenuating barriers or structures. Stationary noise sources located less than 200 feet from sensitive receptors shall be equipped with noise reducing engine housings. Water tanks, and equipment storage, staging, and warm-up areas shall be located as far from noise sensitive receptors as possible. • All construction equipment powered by gasoline or diesel engines shall have sound control devices at least as effective as those originally provided by the manufacturer; no equipment shall be permitted to have an unmuffled exhaust. • Any impact tools used during demolition of existing infrastructure shall be shrouded or shielded, and mobile noise generating equipment and machinery shall be shut off when not in use. • Construction vehicles accessing the site shall be required to use the shortest possible route to and from I-5, provided the route does not expose additional receptors to noise. • Construction equipment shall be selected as those capable of performing the necessary tasks with the lowest sound level and the lowest acoustic height possible to perform the required construction operation.	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Significant Impact 4.14.2-3: Construction and operational noise from sewer system improvements would have the potential to adversely affect birds nesting and foraging in the Sweetwater Marsh NWR located north of the Project site. Projected noise levels at the edge of the refuge resulting from construction could be as high as 77 dB. During the breeding season, this would be a significant impact.	Mitigation Measure 4.14.1-3 Port/City: Construction-related noise from off-site water improvements shall be limited during the typical breeding season of January 15 to August 31 adjacent to the Sweetwater Marsh NWR. The current accepted noise threshold is 60 dB(A) Leq; thus construction activity shall not exceed this level, or ambient noise levels if higher than 60 dB(A) during the breeding season. If construction does occur within the breeding season or adjacent to the marshes, the Project developer shall prepare and submit an acoustical analysis to the Port and/or City, which shall determine whether noise barriers would be required to reduce the expected noise levels below the threshold. If noise barriers or construction activities are unable to result in a level of noise below the threshold, construction in these areas shall be delayed until the end of the breeding season.	Less than significant
Significant Impact 4.14.2-4: Construction of major infrastructure on and off site would also result in temporary traffic impacts. Depending on the location (on site and off site), equipment, and type of work being performed, vehicular and pedestrian traffic may have to be rerouted, and/or slowed. This would be a temporary but significant impact for road segments and ROWs within the Project area and outside of the Project boundaries.	Mitigation Measure 4.14.1-4 Port/City: A. Prior to commencement of grading activities for all Phase I projects, the applicant(s) shall submit a traffic control plan for review and approval by the Port (for development on Port properties) and City Engineer and the Director of Public Works (for development on property and ROWs within the City's jurisdiction). B. Prior to commencement of grading activities for all subsequent phases, the applicant(s) shall submit a traffic control plan for review and approval by the Port (for development on Port properties) and City Engineer and the Director of Public Works (for development on property and ROWs within the City's jurisdiction).	Less than significant
Significant Impact 4.14.2-5: Temporary dewatering during construction of the sewer improvement system would be required during the excavation of the wet wells and emergency storage vaults for the sewer lift stations due to the close proximity to the Bay and high groundwater. Construction-related dewatering would withdraw water from the aquifer, which could be contaminated, depending on the location in the plan area. The potential to contaminate runoff conflicts with the	Mitigation Measure 4.14.4-5 Port/City: A. Prior to the issuance of a Coastal Development Permit for Properties within the Port's jurisdiction and prior to the issuance of a grading permit for properties within the City's jurisdiction, the applicant shall notify the RWQCB of dewatering of contaminated groundwater during construction. If contaminated groundwater is encountered, the Project developer shall treat and/or dispose of the contaminated groundwater (at the developer's expense) in accordance with NPDES permitting	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Basin Plan and the water quality objectives for the Bay, as well as policies relating to the discharge of contaminated water to the sewer system. The Project's potential to disturb contaminated soils and groundwater during construction activities would be a significant impact.	requirements, which includes obtaining a permit from the Industrial Wastewater Control Program to the satisfaction of the RWQCB. B. Prior to the discharge of contaminated groundwater for all construction activities, should flammables, corrosives, hazardous wastes, poisonous substances, greases and oils and other pollutants exist on site, a pretreatment system shall be installed to pre-treat the water to the satisfaction of the RWQCB before it can be discharged into the sewer system.	
4.14.3 Solid Waste Management		
There were no significant impacts to solid waste management identified for the Proposed Project.	No mitigation is required.	N/A
4.15 SEISMIC/GEOLOGIC HAZARDS		
Significant Impact 4.15-1: There is potential for strong ground motions to occur at the project site; therefore, impacts associated with strong motion and surface rupture are significant and apply to all development phases.	Mitigation Measure 4.15-1 (Mitigation Measure 4.15-1 would mitigate Significant Impacts 4.15-1 through 4.15-6.) Port/City: Prior to the grading of parcels for specific developments, the applicant shall provide a comprehensive site-specific geotechnical evaluation, including subsurface exploration and laboratory testing showing that individual parcels are suitable for proposed development work and that on-site fill materials and soils can support proposed structures. The applicant shall submit a geotechnical design report to the Port or City, depending on jurisdiction, for approval showing site-specific measures to be employed. As applicable, these measures shall include: • Conformance to the California Building Code Seismic Zone 4 Design Parameters, as detailed in Table 1 of the geotechnical study (see *Appendix 4.15-1*) • Design capable of withstanding strong seismic accelerations • Earthwork procedures, including removal, moisture conditioning, and recompaction of existing fills on the site • Selective grading, densification of the subsurface soils, and/or deep foundations	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	• Removal, moisture conditioning, and compaction of bay deposits/alluvial soils. Deep foundations shall be used for structural support in areas of relatively thick bay deposits/alluvium • Removal or deep burial of expansive soils during grading, moisture conditioning, or specially designed foundations and slabs • Removal, moisture conditioning, and compaction of the topsoil on site.	
Significant Impact 4.15-2: Loose granular soils (i.e., fill materials and bay deposits/alluvium) underlie portions of the site combined with a relatively shallow groundwater table. The project proposes development on these areas during Phases I, II, and III. These soils have a moderate to high potential for liquefaction and settlement to occur during an earthquake and are not considered suitable for structural support. The potential of lateral spreading in the liquefiable soil below the groundwater table is considered an adverse impact to the proposed development on the existing boat yard on G Street and in the immediate vicinity of the Chula Vista Harbor. Therefore, impacts associated with liquefaction and seismically induced settlement are significant.	Mitigation Measure 4.15-2 Port/City: For all phases, the project applicant shall prepare a site specific geotechnical study. Mitigation of potential hazards due to liquefaction may include the densification or removal of the potentially liquefiable soil and placement of surcharge fills within building areas, or the use of deep foundation systems and mat slabs, which still provide acceptable structural support should liquefaction occur. Soil densification can be accomplished by surcharging, compaction grouting, vibrocompaction, soil mixing, and deep dynamic compaction. Deep foundation systems may be used to transmit structural loads to bearing depths below the liquefiable zones and may consist of driven piles or drilled piles.	Less than significant
Significant Impact 4.15-3: Groundwater could be a factor in development in liquefaction remediation, deep foundation design and construction, design and construction of subterranean parking structures, and utility installation on the Pacifica project site. This is a significant impact.	Mitigation Measure 4.15-3 Port/City: Prior to the grading of parcels for the Pacifica development, the applicant shall adhere to the site-specific geotechnical evaluation prepared for the project or any amendment as approved by the Port/City (*Appendix 4.15-5*, Geocon Preliminary Geotechnical Investigation prepared for Pacifica Companies (February 2008), Sections 7 and 8 Conclusions and Preliminary Recommendations), which outlines general requirements and specific recommendations regarding soil and excavation, seismic design criteria, grading, consolidation settlement, ground improvement methods, slope stability, temporary slopes and shoring, groundwater and dewatering, shallow and deep foundations, subterranean	Less than significant

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Impact	Mitigation	Significance After Mitigation
	structures, concrete slabs-on-grade, concrete flatwork, retaining walls and lateral loads, pavement, and drainage and maintenance. See also Mitigation Measure 4.15-1 above.	
Significant Impact 4.15-4: There are layers of loose sand within the bay deposits in the western portion of the Pacifica site that have a potential for liquefaction and which may result in seismically induced settlement. In general, these liquefiable soils are approximately 6 to 8 feet thick and are overlain by about 7 to 10 feet of non-liquefiable cover. A preliminary evaluation of liquefaction settlement indicates 2 to 3 inches of ground surface settlement may occur over portions of the site. Therefore, impacts as a result of seismically induced settlement are potentially significant.	See Mitigation Measure 4.15-3 above.	Less than significant
Significant Impact 4.15-5: There is a high potential for liquefaction to occur within scattered layers in the undocumented fill and bay deposits/alluvium below the groundwater table within a depth of 50 feet from the existing ground surface on the Gaylord RCC project site. Adverse impacts could include lateral spreading, ground rupture and/or sand boils, and settlement of the liquefiable layers. This is a potentially significant impact.	Mitigation Measure 4.15-4 Port/City: Prior to the grading of parcels for the Gaylord development, the applicant shall adhere to the site-specific geotechnical evaluation prepared for the project or any amendment as approved by the Port/City (*Appendix 4.15-4*, Geocon Geotechnical Investigation prepared for Gaylord Hotels (January 2008), Section 6. Conclusions and Recommendations), which outlines general requirements and specific recommendations regarding soil and excavation, seismic design criteria, grading, temporary slopes and shoring, groundwater and dewatering, hotel/convention center/parking structure/flex space foundation, ancillary structure foundation, concrete slabs-on-grade, retaining walls and lateral loads, preliminary pavements, and drainage and maintenance. See also Mitigation Measure 4.15-1 above.	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
4.16 ENERGY		
Significant Impact 4.16-1: The increased demand for energy resulting from development of the Proposed Project and the potential to exceed the available supply would result in a significant impact.	Mitigation Measure 4.16-1 Port/City: Prior to issuance of certificates of occupancy or building permits, the project applicant shall demonstrate that the Proposed Project complies with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements, along with the following measures, shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City: • Use of low-NOx emission water heaters • Installation of energy efficient and automated air conditioners when air conditioners are provided • Energy efficient parking area lights • Exterior windows shall be double paned. Implementation of these measures along with the SDG&E efforts for long-term energy supply as outlined in their filing with the CPUC that proposes a mix of conservation, demand response, generation, and transmission (http://www.sdenergy.org/uploads/7-9-04SDG&E_LTRP.pdf) would reduce the potential significant impact to below a level of significance.	Less than significant
4.17 POPULATION AND HOUSING		
There were no significant impacts to population and housing identified for the Proposed Project.	No mitigation is required.	N/A
6 CUMULATIVE IMPACTS		
Significant Impact 6.5-1: The addition of Phase I traffic would result in a cumulative impact to the freeway segment of I-5 between E Street and H Street, resulting in LOS F during both AM and PM peak hours and would require mitigation.	Mitigation Measure 6.5-1 (Mitigation Measure 6.5-1 would mitigate for Significant Impacts 6.5-1, 6.5-2, 6.5-3 6.5-4, 6.5-5, 6.5-6, 6.5-7, 6.5-8, 6.5-9, 6.5-10, 6.5-14, 6.5-15, 6.5-21, 6.5-22, 6.5-23, 6.5-24 and 6.5-25, but not to below a level of significance.) Port/City: The Port and the City shall participate in a multijurisdictional effort conducted by Caltrans and SANDAG to assist in developing a detailed I-5 corridor level study that will identify transportation improvements	Significant and unmitigated

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Impact	Mitigation	Significance After Mitigation
	along with funding, including federal, state, regional, and local funding sources and phasing that would reduce congestion management with Caltrans standards on the I-5 South corridor from the SR-54 interchange to the Otay River (the "I-5 South Corridor") (the "Plan"). Local funding sources identified in the Plan shall include fair share contributions related to private and/or public development based on nexus as well as other mechanisms. The Plan required by this mitigation shall include the following: a) The responsible entities (the Entities) included in this effort will include, but may not be limited to, the City, other cities along I-5, the Port, SANDAG, and Caltrans. Other entities will be included upon the concurrence of the foregoing Entities. b) The Plan will identify physical and operational improvements to I-5 adjacent to the project area, relevant arterial roads and transit facilities (the Improvements), that are focused on regional impacts and specific transportation impacts from the project, and will also identify the fair share responsibilities of each Entity for the construction and financing for each Improvement. The Plan will include an implementation element that includes each Entity's responsibilities and commitment to mitigate the impacts created by Phases I, II, III and IV of the Proposed Project. c) The Plan will set forth a timeline and other agreed upon relevant criteria for implementation of each Improvement. d) The Plan will identify the total estimated design and construction cost for each Improvement and the responsibility of each Entity for both implementation and funding of such costs. e) The Plan will include the parameters for any agreed upon fair-share funding to be implemented, that would require private and /or public developers to contribute to the costs, in a manner that will comply with applicable law. f) In developing the Plan, the Entities shall also consider ways in which the Improvements can be coordinated with existing local and regional transportation and facilities financing plans and programs, in order to avoid duplication of effort and expenditure; however, the existence of such other plans and programs shall not relieve the Entities of their collective obligation to develop and	

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Impact	Mitigation	Significance After Mitigation
	implement the Plan as set forth in this mitigation measure. Nothing in the Plan shall be construed as relieving any Entity (or any other entity) from its independent responsibility (if any) for the implementation of any transportation improvement. g) The Port shall seek adoption of the Plan before the Port Board of Commissioners and the City shall seek adoption of the Plan before the City Council upon the completion of the multijurisdictional effort to develop the Plan. The Port and the City shall report, to their respective governing bodies regarding the progress made to develop the Plan within 6 months of the first meeting of the entities. Thereafter, the Port and the City shall report at least annually regarding the progress of the Plan, for a period of not less than five years, which may be extended at the request of the City Council and/or Board of Commissioners. h) The Plan shall also expressly include each Entity's pledge that it will cooperate with each other in implementing the Plan. i) Prior to issuance of certificates of occupancy or building permits for any development of individual projects within the Chula Vista Bayfront Master Plan, the Port and the City shall require project applicants to make their fair share contribution toward mitigation of cumulative freeway impacts within the City's portion of the I-5 South Corridor by participating in the City's Western Traffic Development Impact Fee or equivalent funding program. The failure or refusal of any Entity other than the Port or the City to cooperate in the implementation of this mitigation measure shall not constitute failure of the Port or the City to implement this mitigation measure; however, the Port and the City shall each use its best efforts to obtain the cooperation of all responsible Entities to fully participate, in order to achieve the goals of mitigation measure.	
Significant Impact 6.5-2: The addition of Phase I traffic would result in a cumulative impact to the freeway segment of I-5 between H Street to J Street resulting in LOS F during both AM and PM peak hours and would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-3: The addition of Phase I traffic would result in a cumulative impact to the freeway segment of	See Mitigation Measure 6.5-1 above.	Significant and unmitigated

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Impact	Mitigation	Significance After Mitigation
I-5 between J Street to L Street resulting in LOS F during both AM and PM peak hours and would require mitigation.		
Significant Impact 6.5-4: The addition of Phase I traffic would result in a cumulative impact to the freeway segment of I-5 between L Street to Palomar Street resulting in LOS F during both AM and PM peak hours and would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-5: The addition of Phase I traffic with the closure of F Street, extension of H Street, and partial extension of E Street would result in a cumulative impact to the freeway segment of I-5 from H Street to J Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-6: The addition of Phase I traffic with the closure of F Street, extension of H Street, and partial extension of E Street would result in a cumulative impact to the freeway segment of I-5 from J Street to L Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-7: The addition of Phase I traffic with the closure of F Street, extension of H Street, and partial extension of E Street would result in a cumulative impact to the freeway segment of I-5 from L Street to Palomar Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-8: The addition of Phase II traffic would result in a cumulative impact to the freeway segment of I-5 from H Street to J Street, resulting in LOS F during both AM	See Mitigation Measure 6.5-1 above.	Significant and unmitigated

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
and PM peak hours in both directions, with or without the project. This impact would require mitigation.		
Significant Impact 6.5-9: The addition of Phase II traffic would result in a cumulative impact to the freeway segment of I-5 from J Street to L Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-10: The addition of Phase II traffic would result in a cumulative impact to the freeway segment of I-5 from L Street to Palomar Street, resulting in LOS F during both AM and PM peak hours in both directions, with or without the project. This impact would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-11: The addition of Phase III traffic would result in a cumulative impact on the roadway segment of H Street between Street A to the I-5 Ramps, resulting in LOS D conditions. This impact would require mitigation.	Mitigation Measure 6.5-2 In assessing the impact of the project on the Phase III network, it was determined that H Street between Street A and the I-5 Ramps was already widened in Phase II to accommodate growth in traffic and it would be difficult to widen more due to right-of-way constraints. To accommodate traffic from the project and to provide another route to I-5, the Port shall extend E Street from the Gaylord Driveway to west of Bay Boulevard. The segment shall be built as a 2-lane Class III Collector prior to the issuance of either a building permit or final map for a Phase II project. This mitigation would reduce Significant Impact 6.5-11 to below a level of significance.	Less than significant
Significant Impact 6.5-12: The addition of Phase III traffic with the extension of E Street would result in a cumulative impact on the intersection of H Street and I-5 Southbound ramps, resulting in LOS E conditions during the PM peak hours. This impact would require mitigation.	Refer to Mitigation Measure 6.5-2 above.	Less than significant
Significant Impact 6.5-13: The addition of Phase III traffic with the extension of E Street would result in a cumulative impact on the intersection of J Street and I-5 northbound ramps, resulting in LOS E conditions during the PM peak hours. This impact would require mitigation.	Mitigation Measure 6.5-3 Prior to issuance of a certificate of occupancy for any Phase III project, the Port shall construct an exclusive westbound right-turn lane at the intersection of J Street and I-5 northbound ramps. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 6.5-13 to below a level of significance.	Less than significant

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Impact	Mitigation	Significance After Mitigation
Significant Impact 6.5-14: The addition of Phase III traffic would result in a cumulative impact to the freeway segment of I-5 from J Street to L Street, resulting in LOS F during AM northbound direction, with or without the project. This impact would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-15: The addition of Phase III traffic would result in a cumulative impact to the freeway segment of I-5 from L Street to Palomar Street, resulting in LOS F during PM peak hours in SB direction, with or without the project. This impact would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-16: The addition of Phase III traffic with the extension of E Street would result in a cumulative impact on the roadway segment of E Street (west of Bay Blvd). This segment will experience congested LOS D conditions and would require mitigation.	Mitigation Measure 6.5-4 Prior to issuance of a certificate of occupancy for any Phase III project, the Port shall widen E street between the Gaylord Driveway and Bay Boulevard to a 2-lane Class II Collector. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 6.5-16 to below a level of significance.	Less than significant
Significant Impact 6.5-17: The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the roadway segment of Street A (H Street to Street C). This segment would experience congested LOS F conditions and would require mitigation.	Mitigation Measure 6.5-5 Prior to issuance of a certificate of occupancy for any Phase III project, the Port shall widen Street A between H Street and Street C to a 4-lane Class I Collector. The additional roadway capacity would facilitate the flow of project traffic. This mitigation would reduce Significant Impact 6.5-17 to below a level of significance.	Less than significant
Significant Impact 6.5-18: The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the intersection of E Street and Bay Boulevard. This intersection would be characterized by LOS F conditions during the PM peak hours and would require mitigation.	Mitigation Measure 6.5-6 Prior to issuance of a certificate of occupancy for any Phase III project, the Port shall construct southbound left- and right-turn lanes at the intersection of E street and Bay Boulevard. The lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 6.5-18 to below a level of significance.	Less than significant
Significant Impact 6.5-19: The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the intersection of J Street and Bay Boulevard. This intersection would be characterized by LOS E conditions during the PM peak hours and would require mitigation.	Mitigation Measure 6.5-7 Prior to issuance of a certificate of occupancy for any Phase III project, the Port shall construct an exclusive eastbound right-turn lane at the intersection of J Street and Bay Boulevard. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 6.5-19 to below a level of significance.	Less than significant
Significant Impact 6.5-20: The addition of Phase III traffic with the extension of E Street would result in a cumulative	Mitigation Measure 6.5-8 Prior to issuance of a certificate of occupancy for any Phase III project, the Port shall construct an	Less than significant

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
impact to the intersection of J Street and I-5 northbound ramps. This intersection would be characterized by LOS E conditions during the PM peak hours and would require mitigation.	exclusive westbound right-turn lane at the intersection of J Street and I-5 northbound ramps. The lane shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 6.5-20 to below a level of significance.	
Significant Impact 6.5-21: The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the freeway segment of I-5 from SR-54 to E Street, resulting in LOS F during AM peak hours northbound with the project and PM peak hours southbound, with or without the project, and would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-22: The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the freeway segment of I-5 from E Street to H Street, resulting in LOS F during AM peak hours northbound with the project and PM peak hours southbound, with or without the project, and would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-23: The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the freeway segment of I-5 from H Street to J Street, resulting in LOS F during AM peak hours northbound with the project and PM peak hours southbound, with or without the project, and would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-24: The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the freeway segment of I-5 from J Street to L Street, resulting in LOS F during AM peak hours northbound with the project and PM peak hours southbound, with or without the project, and would require mitigation.	See Mitigation Measure 6.5-1 above.	Significant and unmitigated
Significant Impact 6.5-25: The addition of Phase III traffic with the extension of E Street would result in a cumulative impact to the freeway segment of I-5 from L Street to Palomar Street, resulting in LOS F during AM peak hours northbound	See Mitigation Measure 6.5-1 above.	Significant and unmitigated

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Impact	Mitigation	Significance After Mitigation
with the project and PM peak hours southbound, with or without the project, and would require mitigation.		
Significant Impact 6.5-26: The addition of Phase IV traffic would result in a cumulative impact to the intersection of H Street and Woodlawn Avenue. This intersection would be characterized by LOS F conditions during both the AM PM peak hours and would require mitigation.	Mitigation Measure 6.5-10 Prior to the issuance of certificates of occupancy for any development in Phase IV of the development, the Port shall construct an eastbound and westbound through lane along H Street (as part of roadway segment mitigation) and a westbound right-turn lane at the intersection of H Street and Woodlawn Avenue. The additional lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 6.5-26 to below a level of significance.	Less than significant
Significant Impact 6.5-27: The addition of Phase IV traffic would result in a cumulative impact to the intersection of H Street and Broadway. This intersection would be characterized by LOS F conditions during the PM peak hours and would require mitigation.	Mitigation Measure 6.5-11 Prior to the issuance of certificates of occupancy for any development in Phase IV of the development, the Port shall construct a westbound through and right-turn lane along H Street at the intersection of H Street and Broadway. The lane shall be constructed to the satisfaction of the City Engineer. With mitigation this intersection would still operate at LOS E during the PM peak-hour. This is consistent with the result from the Chula Vista Urban Core traffic study, which concluded that no additional mitigation is desired at this location. This mitigation would reduce Significant Impact 6.5-27 to below a level of significance.	Less than significant
Significant Impact 6.5-28: The addition of Phase IV traffic would result in a cumulative impact to the intersection of J Street and I-5 northbound ramps. This intersection would be characterized by LOS E conditions during the PM peak hours and would require mitigation.	Mitigation Measure 6.5-12 Prior to the issuance of certificates of occupancy for any development in Phase IV of the development, the Port shall construct a dual eastbound left-turn lane along J Street at the intersection of J Street and I-5 northbound ramps. The additional lanes shall be constructed to the satisfaction of the City Engineer. This mitigation would reduce Significant Impact 6.5-28 to below a level of significance.	Less than significant
Significant Impact 6.6-1: The Proposed Project would add to the intensification of land use and further change the character of the area. The Proposed Project would result in a cumulative impact related to view protection, height and bulk, landscaping, gateways, and lighting.	Mitigation Measure 6.6-1 Port: A. *View Protection:* As a condition for issuance of Coastal Development Permits, buildings fronting on H Street shall be designed to step away from the street. More specifically, design plans shall protect open views down the H Street Corridor by ensuring that an approximate 100-foot ROW width (curb–curb, building setbacks and pedestrian plaza/walkway zone) remains clear of buildings, structures, or major landscaping. Visual elements above six feet in height shall be prohibited in this zone if the feature would reduce visibility by more than 10 percent. Placement of trees should take into account potential view blockage. This mitigation should not be interpreted to not allow tree	Significant and unmitigated

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	masses; however, trees should be spaced in order to ensure "windows" through the landscaping. Trees should also be considered to help frame the views and they should be pruned up to increase the views from pedestrians and vehicles, underneath the tree canopy. In order to reduce the potential for buildings to encroach into view corridors, and to address the scale and massing impact, buildings shall step back at appropriate intervals or be angled to open up a broader view corridor at the groundplane to the extent feasible. All plans shall be subject to review and approval by the Port. All future development proposals shall conform to Port design guidelines and standards to the satisfaction of the Port. Port: B. *Height and Bulk:* Prior to issuance of Coastal Development Permits for projects within the Port's jurisdiction, the project developer shall ensure that design plans for any large scale projects (greater than two stories in height) shall incorporate standard design techniques such as articulated facades, distributed building massing, horizontal banding, stepping back of buildings, and varied color schemes to separate the building base from its upper elevation and color changes such that vertical elements are interrupted and smaller scale massing implemented. These plans shall be implemented for large project components to diminish imposing building edges, monotonous facades and straight-edge building rooflines and profiles. This shall be done to the satisfaction of the Port. City: C. *Height and Bulk:* Prior to design review approval for properties within the City's jurisdiction, the project developer shall ensure that design plans for any large scale projects (greater than two stories in height) shall incorporate standard design techniques such as articulated facades, distributed building massing, horizontal banding, and varied color schemes to separate the building base from its upper elevation and color changes such that vertical elements are interrupted and smaller scale massing implemented. These plans shall be implemented for the large project components to diminish imposing building edges, monotonous facades and straight-edge building rooflines and profiles. This shall be done to the satisfaction of the City of Chula Vista Planning Director.	

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	Port/City: D. *Landscaping*: Prior to final approval of Phase I infrastructure design plans, the Port and City shall collectively develop a master landscaping plan for the project's public components and improvements. The plan shall provide sufficient detail to ensure conformance to streetscape design guidelines and that future developers/tenants, as applicable, provide screening of parking areas. Streetscape landscaping shall be designed to enhance the visitor experience for both pedestrians and those in vehicles. Specifically, detailed landscaping plans shall be developed to enhance Marina Parkway, a designated scenic roadway and shall provide, where appropriate, screening of existing industrial uses and parking areas until such time as these facilities are redeveloped. Street landscaping design shall be coordinated with a qualified biologist or landscape architect to ensure that proposed trees and other landscaping are appropriate for the given location. For instance, vegetation planted adjacent to open water/shoreline areas must not provide raptor perches. Landscaping shall be drought tolerant or low water use, and invasive plant species shall be prohibited. City: E. *Landscaping*: Prior to approval of a tentative map or site development plan for future residential development, the project developer shall submit a landscaping design plan for on-site landscaping improvements that is in conformance to design guidelines and standards established by the City of Chula Vista. The plan shall be implemented as a condition of project approval. Port/City: F. *Gateway Plan*: Concurrent with the preparation of Phase I infrastructure design plans for E and H Street, a Gateway plan shall be prepared for E and H Streets. Prior to issuance of occupancy for any projects within the Port's jurisdiction in Phase I, the E and H Street Gateway plan shall be approved by the Port and City's Directors of Planning and Building. The E and H Street Gateway plan shall be coordinated with the Gateway plan for J Street.	

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	City: G. *Gateway Plan*: Concurrent with development of H-13 and H-14, the applicant shall submit a Gateway plan for J Street for City Design Review consideration. Prior to issuance of any building permits, the J Street Gateway plan shall be approved by the Director of Planning and Building in coordination with the Port's Director of Planning. The J Street Gateway plan shall be coordinated with the Gateway plan for E and H Streets.	
Significant Impact 6.8-1: Because of the air basin's non-attainment status for ozone, $PM_{2.5}$, and $PM_{10,}$ the potential increase in residential units and the construction activities associated with the proposed project, the project would contribute to cumulative *construction*-related air quality impacts	Mitigation Measure 6.8-1 Port/City: Prior to the commencement of any grading activities, the following measures shall be placed as notes on all grading plans, and shall be implemented during grading of each phase of the project to minimize construction emissions. These measures shall be completed to the satisfaction of the Port and the Director of Planning and Building for the City of Chula Vista (These measures were derived, in part, from Table 11-4 of Appendix 11 of the SCAQMD CEQA Air Quality Handbook, and from SCAQMD Rule 403). See Mitigation Measure 6-8-1 in *Chapter 6, Cumulative Impacts* for a list of Best Available Control Measures for Specific Construction Activities.	Significant and unmitigated
Significant Impact 6.8-2: Because of the air basin's non-attainment status for ozone, $PM_{2.5}$, and $PM_{10,}$ the potential increase in residential units and the construction activities associated with the proposed project, the project would contribute to cumulative *operational* air quality impacts	Mitigation Measure 6.8-2 City: A. For residential, as well as mixed-use/commercial development within the City's jurisdiction, the applicants shall submit an AQIP with any Tentative Maps submitted to the City in accordance with Municipal Code Section 19.09.050B, and the applicant shall demonstrate that air quality control measures outlined in the AQIP pertaining to the design, construction, and operational phases of the project have been implemented to the satisfaction of the Director of Planning and Building for the City of Chula Vista. This plan shall demonstrate "the best available design to reduce vehicle trips, maintain or improve traffic flow, and reduce vehicle miles traveled. There are two options to meet the AQIP requirement. The applicant shall either evaluate the project using the Chula Vista CO_2 Index Model including any necessary site plan modifications, or participate in the GreenStar Building Energy Program.	Significant and unmitigated

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
	Port/City: B. Prior to the issuance of buildings permits, the applicant shall demonstrate that the Proposed Project shall comply with Title 24 of the California Energy Efficient Standards for Residential and Nonresidential buildings. These requirements along with the following measures shall be incorporated into the final project design to the satisfaction of the Port and the Director of Planning and Building for the City: • Use of low-NOx emission water heaters • Installation of energy efficient and automated air conditioners when air conditioners are provided • Energy efficient parking area lights • Exterior windows shall be doublepaned	
Significant Impact 6.8-3: The program level components of the Master Plan would potentially contribute to a result in a significant impact to global climate change because they would potentially conflict with the goals or strategies of AB 32 or related Executive Orders, which would be considered a cumulatively significant impact to global climate change.	Mitigation Measure 6.8-3 Port/City: Development of Program Level components of the Chula Vista Bayfront Master Plan (Phases II through IV) shall implement measures to reduce GHG emissions. Specific measures related to energy efficiency, renewable energy, water conservation and efficiency, solid waste measures, and transportation and motor vehicles are outlined in Mitigation Measure 4.6-6 in *Section 4.6, Air Quality,* of this report. See Mitigation Measure 6.8-3 in *Chapter 6, Cumulative Impacts* for a list of measures to reduce GHG emissions.	Less than significant
Significant Impact 6.11-1: The 0.1 acre of impact from the Glorietta Bay project combined with the 45.9 acres of impacts resulting from the construction of the pier and the realignment of the access channel amounts to a total of 46.0 acres of impact. These impacts to eelgrass, combined with potential impacts from the Wharf Extension project, would be cumulatively considerable.	Mitigation Measure 6.11-1 Port: A. Prior to construction of any program-level components of the project that impact eelgrass, a pre-construction eelgrass survey shall be conducted by a qualified biologist to confirm the exact extent of the impact at the time of pile driving operations. The pre-construction survey must be conducted during the period of March through October and would be valid for a period of no more than 60 days, with the exception that surveys conducted in August through October would be valid until the following March 1st.	Less than significant

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Impact	Mitigation	Significance After Mitigation
	B. Prior to the construction of any program-level components of the project that impact eelgrass, the Port shall establish and implement a plan to create new eelgrass habitat at a ratio of 1.2:1. The Port shall create new eelgrass habitat by removing the existing eelgrass currently located in the impacted areas and transplanting it at the new location. Identification and planting of the restoration site shall be completed to the satisfaction of the Port prior to commencement of construction. C. Subsequent to construction of any program-level components of the project that impact eelgrass, a post-construction eelgrass survey shall be conducted by a qualified biologist. The post-construction survey shall be conducted within 30 days of the cessation of construction activities to confirm the exact amount of eelgrass affected. The difference between the pre-construction and post-construction eelgrass surveys shall determine the amount of required additional mitigation. In addition, the Port shall: • Conduct transplant reports following construction (Initial Report). It would take 1 to 2 years for all of the fine sediment to dissipate in the water column for the movement of such a large amount of sediment. Based on this, eelgrass transplant success would not be possible for 1 to 2 years. Mitigation would be required for additional time delays. • Conduct monitoring reports at 6, 12, 24, 36, 48, and 60 months post-transplant. Specific milestones and criteria for success are directed in the SCEMP along with guidelines for remedial actions if the success criteria are not met, which would require (based on the absence of other mitigating environmental considerations) a Supplementary Transplant Area to be constructed and monitored for an additional 5 years. • Initiate any potential additional mitigation within 135 days of project inception; projects requiring more than 135 days to be completed may result in further additional mitigation. D. If an appropriate mitigation site is not available at the time of construction of the program components that would impact eelgrass, mitigation habitat shall be created through fill or appropriate habitat in the Bay. Any delays to eelgrass planting after the impact occurs would require additional mitigation of 7 percent per month of additional eelgrass.	

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Summary of Impacts and Mitigation

Impact	Mitigation	Significance After Mitigation
Significant Impact 6.15.2-1: Proposed Project would increase the demand for sewage treatment. While the City currently has adequate capacity available in the Metro system, by the year 2030 there would be a short-fall; the Proposed Project represents a cumulatively considerable contribution to that short-fall.	Mitigation Measure 6.15.2-1 Port/City: Prior to the approval of a building permit for any phase of development, the City shall verify that it has adequate sewer capacity to serve the proposed development. In the event the City does not have adequate sewer capacity to serve the proposed development, no building permit shall be approved for the proposed development until the City has acquired adequate sewer capacity to serve the proposed development. Prior to approval of a building permit, the applicant shall pay its fair share portion for the acquisition of 2.578 MGD of Metro treatment capacity as determined by and to the satisfaction of the City. In accordance with Section 15130(a)(3), a significant cumulative impact would be rendered less than cumulatively considerable, and thus, is not significant when the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The requirement for the contribution to provide a fair share contribution to the provision of the needed sewer service mitigates the cumulative impact to below significance.	Less than significant
Significant Impact 6.15.6-1: The additional students created by the Proposed Project, the Urban Core Specific Plan, and the other specific plans called for in the General Plan Update would result in significant cumulative impacts to the existing school districts, which are currently at or near capacity.	Mitigation Measure 6.15.6-1 Port\City: Prior to the issuance of a building permit, the applicant shall pay all required school mitigation fees. Payment of statutory school fees would ensure that project impacts to school services remain below a level of significance. As indicated above, the fees set forth in Government Code Section 65996 constitute the exclusive means of both "considering" and "mitigating" school facilities impacts of projects (Government Code Section 65996(a)). Once the statutory school mitigation fee (sometimes referred to as a "developer fee") is paid, the impact would be deemed mitigated as a matter of law. Therefore, this mitigation measure would reduce the cumulative impact to schools to below a level of significance.	Less than significant
Significant Impact 6.15.7-1: Development of the Proposed Project would increase demands on the existing library services in the project area to serve its residents. As identified in Section 4.13.5 of this report, the project would contribute an incremental demand on libraries services and facilities.	Mitigation Measure 6.15.7-1 City: For Phase I residential project, prior to the approval of a building permit, the applicant(s) shall pay a Public Facilities Development Impact Fee (PFDIF) or other equivalent fee in an amount calculated according to the City's PFDIF program in effect at the time of permit issuance.	Significant and unmitigated

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Impact	Mitigation	Significance After Mitigation
	Implementation of Mitigation Measure 6.15.7-1 would provide funds that can be used to construct new facilities, as required, to meet the need resulting from project development. Due to existing library deficiency and inability to demonstrate that fees would fully mitigate, implementation of the measure would not reduce the significant impact to library services to a level below significance.	
Significant Impact 6.17-1: Due to the uncertain nature of long-term energy supply, energy impacts are cumulatively significant	Mitigation Measure 6.17-1 Port/City: Encourage compact development featuring a mix of uses that locate residential areas within reasonable walking distance to jobs, services, and transit. • Promote and facilitate transit system improvements in order to increase transit use and reduce dependency on the automobile. • Encourage innovative energy conservation practices and air quality improvements in new development and redevelopment projects consistent with the City's AQIP Guidelines or its equivalent, pursuant to the City's Growth Management Program. Despite the fact that the Proposed Project would result in adoption of these conservation measures, the cumulative impact relative to energy supply would remain significant and unmitigated because of the uncertainty of the future supply of energy, which is within the responsibility and control of SDG&E and not the Port or the City.	Significant and unmitigated